PARASITES LOST? The Rockefeller Foundation and the expansion of health services in the colonial South Pacific, 1916-1939

A thesis submitted in fulfilment of the requirements for the Degree of Doctor of Philosophy in History in the University of Canterbury

by

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Abstract

A mix of economic interests, humanitarianism, and political concerns over future regional security and stability drove twentieth century attempts to counter indigenous morbidity and depopulation in the Pacific. However, chronic under-resourcing impeded colonial health developments. An opportunity for change came in 1913, when the International Health Board of the Rockefeller Foundation negotiated with the British Colonial Office for joint programmes to control hookworm disease in Britain's tropical dependencies. After surveying the health situation and potential for work in the Pacific region in 1916, a short-lived campaign followed in Fiji (1917-1918). The American philanthropy then focused on Australia, where co-operative hookworm programmes advanced the objectives of the Foundation and increased Federal involvement in public health while and also served the interests of “White Australia”. Under Dr. Sylvester Lambert, work in the Island Pacific resumed in 1920, to promote the health and economic viability of indigenous labour in the Australian territories of Papua and New Guinea. Plantation interests supported survey and treatment work in the British Solomon Island Protectorate, and in 1922 the Fiji campaign re-opened.

Lambert expanded the International Health Board’s involvement from initial hookworm survey and treatment programmes in the British and New Zealand dependencies in the South Pacific, into other aspects of public health and medical services: water supplies and latrines; a bacteriological laboratory in Suva; hospital expansion; and medical education. Integrating local initiatives, Lambert advocated a Unified Pacific Medical Service, in which key elements were centralisation, rationalisation and affordability. The most radical aspect of his plan was the development of a Central Medical School for the Pacific territories, to provide targeted professional training for indigenous medical practitioners who had a crucial (although still subservient) role in economic service delivery and the diffusion of biomedical understanding among local communities. Also controversial –
and less successful – were attempts to improve the career opportunities and standard of European Medical Officers, by creating a single medical service for the British Pacific dependencies. Attempts to achieve these goals influenced the shape and outcome of health and medical services which developed in the different island communities by 1939, when Lambert's retirement signalled an end to active Rockefeller Foundation involvement.

This thesis examines the ways in which colonial administrations, medical staff, the Rockefeller Foundation, labour and mission interests, and Pacific Islanders interacted in the introduction of the dramatically new medical concepts and practices of western science (and specifically tropical medicine) and their effect on indigenous populations.
Acknowledgements

I would like to thank Ian Campbell and Philippa Mein-Smith for their supervision and encouragement over the years. Their input and ideas have been invaluable.

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Staff at the Foreign and Commonwealth Office Archives, Milton Keynes, (repository for the Western Pacific High Commission and New Hebrides British Service records) were particularly generous with their help, especially Anne Briggs who resolved my transport problems. I have also had the assistance of archival staff at the Public Records Office, London; the American Philosophical Society Philadelphia; and the Lever-Rexona Archives, Sydney.

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# Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AJHR</td>
<td>Appendices to the Journal of the House of Representatives</td>
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<tr>
<td>APS</td>
<td>American Philosophical Society</td>
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<td>BSIP</td>
<td>British Solomon Islands Protectorate</td>
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<td>CAMSC</td>
<td>Colonial Advisory Medical and Sanitary Committee</td>
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<td>CI</td>
<td>Cook Islands</td>
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<td>CMA</td>
<td>Central Medical Authority</td>
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<td>CMO</td>
<td>Chief Medical Officer</td>
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<td>CO</td>
<td>Colonial Office</td>
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<tr>
<td>DME</td>
<td>Division of Medical Education</td>
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<td>DMS</td>
<td>Director of Medical Services</td>
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<td>DO</td>
<td>District Officer</td>
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<td>GEIC</td>
<td>Gilbert and Ellice Islands Colony</td>
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<td>IHB</td>
<td>International Health Board</td>
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<td>IHD</td>
<td><em>International Health Division</em></td>
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<td>IMO</td>
<td>Inspecting Medical Officer</td>
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<td>IMP</td>
<td>Indian Medical Practitioner</td>
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<td>IT</td>
<td>Island Territories</td>
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<tr>
<td>L.C.</td>
<td>Legislative Council (Fiji)</td>
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<td>MJA</td>
<td>The Medical Journal of Australia</td>
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<td>MO</td>
<td>Medical Officer</td>
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<td>MOH</td>
<td>Medical Officer of Health</td>
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<td>NA</td>
<td>National Archives of New Zealand</td>
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<td>NMP</td>
<td>Native Medical Practitioner</td>
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<td>NP</td>
<td>Native Practitioner</td>
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<tr>
<td>PMB</td>
<td>Pacific Manuscripts Bureau</td>
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<tr>
<td>RC</td>
<td>Resident Commissioner</td>
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<tr>
<td>RF</td>
<td>Rockefeller Foundation</td>
</tr>
<tr>
<td>RFA</td>
<td>Rockefeller Foundation Archives</td>
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<tr>
<td>SMO</td>
<td>Senior Medical Officer</td>
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<td>TMO</td>
<td>Travelling Medical Officer</td>
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<tr>
<td>VHP</td>
<td><em>Victor Heiser Papers</em></td>
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<td>WPHC</td>
<td>Western Pacific High Commission</td>
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Introduction

The long decline in island populations during the nineteenth century generated a widespread belief in the inevitable demise of Pacific races;\(^1\) by the early decades of the twentieth century, however, there were indications that populations had at least stabilised, if not begun to recover. Motivated by economic, strategic, and humanitarian concerns, and under the impetus of advances in western medicine, colonial administrations now addressed health issues in their dependencies with new vigour.\(^2\) A period of growing public and scientific interest in the health and medical conditions of Pacific cultures followed. The region was seen as a unique field for the controlled study of tropical diseases and an opportunity to apply new measures to improve health, increase the productive and reproductive capacity of the region, and maintain European control.\(^3\)

This regional development occurred within the wider framework of British imperial concerns about population health, and was encouraged by international health agencies whose rise reflected strengthening humanitarian and universalist ideals.\(^4\) Among them was the League of Nations Health Organisation, which embedded international co-operation in public and preventive health alongside commitment to trusteeship for dependent peoples.\(^5\) While the growth of such inter-governmental initiatives is a striking feature of the inter-war period, it is one

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1 The most comprehensive nineteenth-century study of population decline in the Pacific was Fiji’s Report of the Committee Appointed to Inquire into the Decrease of the Native Population, Suva, 1896. In the following three decades other influential texts included W.H.R. Rivers (ed.), Essays on the Depopulation of Melanesia, Cambridge, 1922; G.H.L.F. Fitt Rivers, The Clash of Cultures and the Contact of Races: Depopulation of the Pacific and the Government of Subject Races, London, 1927. Some, like S.H. Roberts’ Population Problems of the Pacific, (London, 1927) posited that populations were already “enervated” and declining before European contact. Into the late 1920s, extinction was considered inevitable for some island populations. R. Cilento, Causes of the Depopulation of the Western Islands of the Territory of New Guinea, Canberra, 1928, p. ix.

2 Andrew Balfour reflected this new interest in “The Outlook in Tropical Hygiene”, Journal of the Royal Sanitary Institute, 43, 1 (July, 1922).

3 In “Medical Care of South Sea Natives”, Sylvester M. Lambert argued that the effects of health work could be “measured and examined and proved as they can be in no other place and their proper values seen.” Encl. in Lambert to Heiser, 12 October 1923, RFA R.G. 1.1, Series 419L, Box 1; Fldr. 5. Researchers still consider the Pacific a model for demonstration. See Stephen Kuntz, Disease and Social Diversity: The European Impact on the Health of Non-Europeans, Oxford, 1994, pp. 44, 177. For A. Cliff and P. Haggett, “The Spread of Measles in Fiji and the Pacific: Spatial components in the transmission of epidemic waves through island communities, Canberra, 1985, p. 1), the Pacific’s oceanic islands provided a large-scale laboratory for studying the epidemiology of measles, removed from the complex interactions of continental land masses.


now easily taken for granted as a natural progression in the evolution of welfare states. However, what engenders greater surprise is the extensive, and more immediately influential, involvement of private philanthropy in the shaping of Pacific health services. In the period from 1916 to 1939 the Rockefeller Foundation and its subsidiary International Health Board (IHB) provided crucial funding for health initiatives in the British and Dominion tropical dependencies in the South Pacific.

The Pacific was not unique as a recipient of Rockefeller largesse. Rather, it was part of a world-wide network of co-operative projects with both colonial and autonomous governments, designed to inculcate a culture (practice, values and systems) of western scientific medicine. Pacific appropriations were minuscule compared to those directed to work in Asia, America, and Africa, where large populations, extremes of poverty and range of diseases were more dramatic and perceived as warranting greater attention. Pacific groups’ relative insignificance and obscurity occasionally jeopardised ongoing Rockefeller Foundation involvement. Yet the region’s particular character – archipelagic, remote, diverse, and administratively segmented – both compelled and enabled modifications to the co-operative programmes routinely organised under Foundation auspices. It was paradoxical, then, that the Foundation ultimately considered its achievements in the Pacific to be as close as any to the ideals it advanced.

Individually, imperialism, philanthropy, and medicine are powerful forces. In any combination, they are a particularly potent mix. Imperialism and medicine combined in the emergence of colonial/tropical medicine; when the Rockefeller Foundation added its unique form of philanthropy, it created new dynamics of possibility and constraint. The following identifies some key themes as a preliminary to a broader exploration of their dynamics in Pacific health developments.

The motives and effect of philanthropic programmes have long been controversial, but the large foundations that emerged during America’s progressive era raised new issues with their distinctive “scientific” approach that emphasised a broad, preventive approach to social issues compared to earlier

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forms of charity. Perhaps none of these new foundations aroused more mistrust than the Rockefeller Foundation. Public opposition peaked with an investigation into Rockefeller business and philanthropic activities in 1915, and in the interwar years, the period of interest in this study, the Foundation largely rehabilitated itself. During the 1980s, however, fresh critical studies substantiated suspicions that, beneath their claims to disinterested altruism and societal improvement, corporate philanthropies consistently perpetuated a conservative ideology that supported state and global capitalism and, mediating economic structure and social institutions, benefited existing relations of power. Robert Arnow’s description of philanthropy as “cultural imperialism” is particularly pertinent to the Rockefeller Foundation involvement with both British imperial interests and Pacific Island populations. The term may be “imprecise and rhetorical”; nevertheless, it usefully

... captures the scope and impact of foundation involvement... it denotes the ethnocentrism of an elite group from a particular class and cultural background, who arrogate the right to determine public policies in critical areas of culture not only for U.S. society but other societies as well.

Increasingly, this understanding of cultural imperialism, this “systematic shaping of ideas” has been applied to medicine and science, once thought to be both beneficial and value free. Philanthropy and medicine together can act as powerful instigators of cultural change. The rise of welfare states has obscured the historic relationship between philanthropy (or charity, in its more specific form) and medicine; the assumption is that central government assumes responsibility for the health of its citizens and obviates the need for charity. However the relationships among charity, medicine and the state have if anything become more complex, both complementary and problematic as interest groups

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8 Founder J. D. Rockefeller Sr., vilified as one of the most predatory “robber barons” who accumulated vast fortunes as America industrialised, was accused of being militantly anti-labour and corrupt. Nielson, 1972, pp. 48-52; Howe, 1980, pp. 25, 33-48.
assert their individual priorities. The Rockefeller Foundation, which began its involvement in health programmes world-wide in 1913, has contributed to this process. With the opening of the Rockefeller Foundation Archives in the 1970s, many have taken the opportunity to explore these interactions. Relevant to this work have been Mary Bullock’s study of Rockefeller-funded medical education in China, and E. R. Brown’s *Rockefeller Medicine Men: Medicine and Capitalism in America,* which both examine, from different perspectives, the role of the Foundation in promoting scientific medicine as an international model.

The concept of medicine as cultural imperialism is applicable within western society, but it is the relationship of medicine and imperialism – as the process of Western expansion – that has been critically examined in a growing body of historical work over recent years. The main themes and trends developed under the rubric of tropical and colonial medicine (which are overlapping and often interchangeable concepts) have been cogently discussed by Shula Marks, and in collections by Roy MacLeod and Milton Lewis, and David Arnold. Exploring the intersections of European contact and indigenous populations, and the introduction of disease and responses, the consensus is clear: western medical practices and concepts have been an intrinsic part of the colonising process, both in its extension and maintenance.

The initial encounter period was generally one of drastic consequences for indigenous populations, Pacific Island ones among them. For most island groups, long isolation meant few serious endemic diseases (the malaria of the south-west Pacific an exception), but greater vulnerability to new pathogens. However the actual impact of disease on Island populations has been a point of controversy,

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13. For a fascinating and lucid exploration of these themes, see the introduction in Jonathon Barry and Colin Jones (eds.), *Medicine and Charity before the Welfare State,* London, 1991. Also instructive is Paul Weindling’s chapter on “The Modernization of Charity”, and his fluent analysis of those late nineteenth-century trends in biology that enabled a “new consensus on the need for collectivist – but non-socialist – solutions to social ills”; reinforced the mutuality of philanthropy and state welfare; and promoted a more scientific, professionalised model of assistance. Ibid., pp. 201-202.


15. Patrice Pinell, for example, discusses the transfer of hygiene practices from the elite to the general population as part of the civilising mission in nineteenth-century Europe. “Modern Medicine and the Civilising Process”, *Sociology of Health and Illness,* 18, 1, (January 1996) 1-16.


outlined here because of its relevance to subsequent administrative and altruistic perceptions of medical need, as well as possibility. The "fatal impact" theory of inevitable decline has itself been denounced as serving imperial ends. Norma McArthur's comprehensive demographic analysis shows that "shattering epidemics of unfamiliar diseases" caused population decline through both direct and age-selective mortality. Steven Kunitz's research substantiates her point that the process was not universal. He demonstrates that the kind of colonial contact that occurred was significant to the effect of disease on virgin-soil populations. The degree of permanent settlement and capitalist expansion, as in Hawai‘i and New Zealand, had greatest initial impact, compared to more stable demographics in Tonga and Samoa (two of the groups that form part of this thesis); in other words, social and economic systems mediate the effect of disease. These insights were not available earlier, when perceptions of declining numbers in most Island groups generated great anxiety and varying remedial efforts.

Some of these efforts in the Pacific region have already been explored. Donald Denoon, Kathleen Dugan and Leslie Marshall move from evidence of pre-colonial patterns of health and disease, then assess colonial health services and the impact of public health practitioners on the programmes instigated in Papua New Guinea, using a political economy of health approach. Although this offers useful analytic tools, the assumption that "the colonial state directs its resources (including medical skills) towards the needs of the fledgling colonial economy" is found inadequate. Raeburn Lange made a detailed study of health and ill-health, and changing responses to European medicine, in the Cook Islands, which also demonstrates the variability of interactions. The colonial discourses that mediated European perceptions and subsequent interactions with both Fijian and Indian populations in Fiji have been explored in Vicki Lukere's thesis on Fijian motherhood and population.

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18 Kerry Howe, Where the Waves Fall, Sydney, 1984.
20 Steven Kunitz, Disease and Social Diversity: The European Impact on the Health of Non-Europeans, New York, 1994, pp. 72-74.
Significantly, such works deal with single Pacific units. Using the work of the Rockefeller Foundation in the Pacific as an "organising theme" is an opportunity to explore commonality and difference in the experience and practices of health and disease, across a broad region: the British South Pacific dependencies. The involvement of the influential philanthropy also puts colonial actions into a new perspective. In the context of the Pacific, a mix of reciprocity and contradiction is clear in the co-operation of the "big players" – the Rockefeller Foundation and imperial government – and raises interesting questions about their intent and rationale for extended medical efforts. The expressed interest of empire in labour and markets and its paternalist rhetoric of care for subject peoples were always qualified by a reluctance to finance health measures, despite the obvious benefit in doing so, while the Foundation ingenuously argued humanitarian rather than economic motives. The colonial administrations, various individual agents (including medical professionals), and Islanders (the recipients of philanthropy-enabled medical initiatives) add further dimensions to the dynamics. All need to be examined to determine the interactions of social, economic, and political ideologies, how these were expressed and transmitted, and the way they impinged on formulating and delivering health care, and on health.

In this process Dr Sylvester Maxwell Lambert, the Foundation's sole Pacific representative from 1918-1939, had a significant role. Lambert is mentioned in passing in Pacific histories related to medical efforts, but is known largely through his popular account, *A Doctor in Paradise*,24 written after he retired. However, as the archival documents made only too clear, "Institutional forms... are shaped both by the historically evolving structure... and also by the ideals and strategies of individuals."25 A handful of serendipitous encounters and relationships provided the catalyst for Lambert's developing sense of medical possibility in the Pacific, and encouraged him to push at the boundaries of both colonial and philanthropic enterprises. Although his subsequent interpretation of local needs did not always accord with his Board of Directors' clearly defined policy, Lambert managed to negotiate his way among philanthropic organisations, governments, medical departments, local populations, and the

wider scientific community, and develop some innovative measures which he saw as crucial to the future of Pacific health.

However, apathy, financial constraints and disparate priorities conspired against the full achievement of Lambert's goal, which was to integrate Pacific administrations into a unified, centralised health service that emphasised community health centres and indigenous staff. Lambert's retirement in 1939 signalled the end of Rockefeller Foundation presence. With the outbreak of World War 2 soon after and the consequent retrenchment of public health services in the colonial Pacific, inter-war American participation was largely forgotten.

This thesis examines the expansion of public health services in the British Pacific dependencies from 1913 to 1939 through a partnership between the Rockefeller Foundation and colonial administrations. These services were ostensibly based on Western biomedical principles, which focused on observable physical pathology in individual bodies rather than social, psychological and teleological explanations for disease and ill-health.\(^{26}\) During this period there were major shifts, not only in how medicine and health were practised and the systems set up to facilitate this, but also in how people perceived health and its place in the island communities. Although it is not a study of Pacific health per se, asking questions about the ways in which services developed, and their outcomes, can provide a different understanding of the importance of disease and ill-health in indigenous Polynesian and Melanesian populations.

This thesis has several aims: first, to explore the different intentions which lay behind this project; second, to consider how the application of western medical science created a new picture of disease in the Pacific; and third, to determine how successful was this philanthropically-assisted attempt to introduce a public health system based on western scientific medicine and medical education into the Pacific colonies. Fourth, it seeks to unravel the relationships and the layers of authority and control which determined health services development; and finally, it assesses the place of public health and its relationship to the tropical colonial enterprise.

My argument is that the IHB involvement in Pacific health was instrumental in enabling the colonial governments to extend their administrative control over indigenous populations, through setting out to establish health services intended

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to improve health and productivity; but that neither of these outcomes was fully realised, for a variety of reasons. Some of these were specific to Pacific conditions; others related to colonial policy, or to international economic and market contexts; still others resulted from contesting claims for power within Western medicine, through which laboratory and clinical medicine came to dominate, with preventive public health services sidelined. Again, some factors were structural, while others resulted from perceptual frameworks and preconceived agendas that worked against a comprehensive grasp of the health issues facing Pacific Islanders, and their best solution. Ultimately these combined forces meant that despite the attention given to it in colonial medical discourse, a crucial opportunity to organise an effective, affordable health service infrastructure passed by.

As an examination of Rockefeller Foundation participation in health services developed in the Pacific by colonial administrations, this thesis makes extensive use of various archival sources: the Rockefeller Foundation Archives in New York; Colonial Office papers at the Public Records Office, London; the records of the Western Pacific High Commission and New Hebrides British Service languishing in storage at the Foreign and Commonwealth Office archives in Milton Keynes; and the Island Territories and Cook Islands material in the New Zealand National Archives. This focus on the administrative record, however revealing and often surprisingly rich in human drama, inevitably gives an asymmetry to the account. Pacific Islanders' voices are not completely absent, but are generally limited to articulations which found their way into the bureaucratic record, for example, through the discussions of Fiji's Council of Chiefs. The views of indigenous elites (and even these are not extensively represented) therefore filter, in turn, any more general community response to health services and Western medicine. This study was a decade too late for interviews with contemporary indigenous medical staff, which could have provided balance and depth.²⁷

²⁷ For example, all the NMPs from this period interviewed by Raeburn Lange for his 1982 thesis on Cook Islands health have since died. New Guinean Alfred Kiki's autobiography, Ten Thousand Years in a Lifetime, (Melbourne 1970), gives a rare perspective from a CMS student, but even this is brief and relates to the 1940s.
Chapter 1
Themes

In the period between 1916 and 1939 there were major shifts, not only in medical and health practice and the systems set up to facilitate this, but also in how people perceived health and its place in the island communities of the colonial South Pacific. While individuals might have responded to their own experiences of sickness as important life events, disease and ill health were scarcely recognised as official concerns until the turn of the century. It was only when a combination of science and capital gave greater virulence to public health that it was able to spread feverishly across the Pacific.

The expansion of health services in the Pacific followed developments in Great Britain, Europe and the US. From the late nineteenth century there was increasing confidence in new medical paradigms rooted firmly in western scientific understandings of diseases as specific biological entities rather than manifestations of bodily and environmental imbalance. Research and identification of pathology-causing organisms reinforced the value of preventive measures and stimulated the discovery of new curative treatments. The apparent effectiveness of these measures, and perhaps more importantly, the perception that full human control of disease was ultimately possible, gave huge status to those involved in medicine and the newer scientific fields of bacteriology and pathology.

Imperial Expansion

These developments in medicine coincided with a surge in western, and particularly British, imperial expansion.1 Earlier pejorative connotations of “Empire” and “Imperialism” had centred on conceptions of liability and despotic

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1 In Western Medicine as Contested Knowledge, (Manchester, 1997, p. 4), Andrew Cunningham and Bridie Andrews (eds.), argue that late nineteenth century imperialism and the contemporary development of scientific medicine “were products of the same political, industrial and social forces driving the expansion of the West” with both sharing the same essential subject: power.
rule. In 1895 Joseph Chamberlain’s appointment as Secretary of State for the Colonies gave radical effect to a new period of imperial fervour with fresh pride in the responsibilities and mutual benefits to be had from Empire. Domestic overpopulation and tariff pressures, which had squeezed traditional markets and vital trade, could be relieved by acquiring extra territory in “unclaimed” tropical regions. English enthusiasts of Empire also argued their Anglo-Saxon mission to civilise the dark races. Asserting this moral justification for the Imperial idea, despite its inherent notions of racial and cultural superiority, Chamberlain took pains to stress that earlier overtly acquisitive motives had given way “to a different sentiment - the sense of obligation. We now feel that our rule ...can only be justified if we can show that it adds to the happiness and prosperity of the people...”3 British rule and *Pax Britannica* were to bring everywhere “a greater security of life and property, and a material improvement in the condition of the bulk of the population.”4

Colonial/tropical medicine

The coalescence of these three factors - the new possibilities of medicine and science to advance health, the commercial potential of colonial expansion, and the sense of moral responsibility for the “new-caught, sullen peoples” who had become the “white man’s burden”5 - gave impetus to public health and medical activity in the British tropical colonies.

The initial focus on health issues affecting the British officials in overseas service gave rise to a new medical speciality: tropical medicine. Government in the colonies required an efficient, economic bureaucracy, which in turn depended on overseas staff remaining fit and healthy despite the debilitating effects of tropical conditions. While one fifth of medical graduates served in the tropics, contemporary British medical education lacked instruction in exclusively tropical disease conditions, prevention or treatment.4 This prompted Chamberlain’s support for the establishment of the London and Liverpool Schools of Tropical

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Medicine, which both opened in 1899. The syllabi reflected scientific rivalries and self-interest in their focus on specific tropical diseases and the study of parasitology. Hygiene studies and bacteriology, rising stars in public health work because of their importance to the devastating but universal contagious diseases such as cholera, typhoid, plague, leprosy, tuberculosis, and dysentery, received scant attention. This omission had repercussions for the focus of tropical health work. Tropical medicine became a speciality in which exotic “foreign” diseases assumed major importance. The effect was to downplay or ignore basic health problems and conditions that were at least as responsible for mortality and morbidity in the tropical colonies as they were at home.5

Government began to invest pragmatically in the health of colonial staff, but was the last agency to become involved in health care and medical aid to indigenous communities. In the Pacific, this role was primarily filled by missionaries, who had increasingly recognised the evangelical potential of medical missions.6 Their clinics and native hospitals, such as those established by the Reverend Paton in the New Hebrides,7 were often the only contact point between islanders and western practices of medicine until the mass health campaigns of the 1920s. While these efforts were uncoordinated and inadequate overall, they introduced Islanders to alternative concepts of disease and possible treatments and provided some framework for later developments.8 As commercial interests relying on large-scale employment of labour moved into the tropics, they too took on a role in medical care. In the Solomon Islands, for example, Levers Pacific Plantation Limited employed medical staff to attend native labour on their copra plantations, predating any major health effort by the administration itself.9

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5 Ibid., pp. 25-30.
8 John W. Burton, Modern Missions in the South Pacific, Sydney, 1949, pp. 119-121.
9 In 1911, Levers’ manager Joseph Meek emphasised that the company had employed the first doctor in the Group and developed medical work even beyond its plantations. The Government had recently employed its first Medical Officer, but provided no accommodation, thereby limiting his usefulness. ‘Report on Solomon Islands Trip, January-February 1911’, pp. 22-23, Joseph Meek Papers, Lever Rexona Archives, Sydney.
The Colonial Office’s reluctance to become involved in health issues stemmed largely from its pragmatic approach to colonial fiscal self-sufficiency: the benefits of participating in Empire were meant to come at no cost to the British Exchequer. Income from taxes and duties in individual colonies therefore fixed the limits of expenditure, so that budget priorities were the immediate administrative and infrastructure costs that sustained or promoted trade. Commerce, rather than education and health, was seen as the key to colonial development.

It was the native races that provided the labour for the tropical enterprises fuelling imperial prosperity, and as the century turned, an earlier, generally casual acceptance of continued high levels of ill health and continuing population decline in indigenous communities changed to concern. Anxiety about control of the teeming millions turned to anxiety about improving their productive and reproductive capacities. Imperial government and colonial administrations seized on the new possibilities for controlling and treating disease, and moved to take responsibility for health care.

While a more pro-active stance began to replace acceptance of the inevitable demise of colonised races, there remained a tendency to blame disease on perceived racial weaknesses and flawed cultural practices. Indigenous people had to be protected, as much from their own fallible selves and practices, as from imported diseases. Eventual government acceptance that it had a role in health tended to emphasise these two areas as loci for action. It generally failed to take into account that its function in creating favourable conditions for capital economic expansion also contributed to creating pre-conditions for increased ill-health and that this might need to be squarely addressed in creating effective health measures.10

In the Pacific, this new concern about indigenous morbidity and mortality was potently expressed in Fiji with the appointment in 1896 of a Commission to investigate population decline.11 This attempted to identify conditions responsible for the continuing decline of population since 1875 when a disastrous measles epidemic killed 40,000 Fijians, about a quarter of the population. Subsequent efforts to reverse the trend had little effect in following decades. In

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1870 the population had been estimated at 200,000; in 1891 this was down to
105,000, and by 1905, to 87,000.\textsuperscript{12}

After 1878 indentured labour began arriving from India to ease the severe
labour shortage in the Colony of Fiji, but brought also the renewed threat of such
virulent diseases as smallpox and cholera; strict quarantine measures were begun
to protect Fiji and other Pacific groups. From 1884 selected Fijian youths were
instructed in vaccination techniques and simple medical procedures at the newly
built Colonial Hospital in Suva. Their work in the community augmented the
sparse medical services provided by a handful of European Medical Officers
(MOs). Training was informal, provided by the current Chief Medical Officer,
and therefore varied according to the degree of interest he showed in the project.
In 1902 the first designated “medical school” opened in Suva, accommodating 16
Fijian students for a three-year course. Some rudimentary lectures were given, in
Fijian, so their quality depended on the instructor’s fluency in that language. The
main instruction was through practical duties as medical dressers at the hospital,
and for those deemed most capable some training in simple dispensing. Once
qualified, practitioners were sent to the outer villages, where medical care and
surveillance had been previously impossible; or perhaps placed as residents-in-
charge at one of the small provincial hospitals that opened between 1889 and
1904.\textsuperscript{13} Other Pacific administrations were keen to set up similar medical
training, but their even smaller size, less adequate resources, and deficient
schooling precluded this.

While the Native Medical Practitioner (NMP) system was the cornerstone on
which later developments and the expansion of health services in the Pacific were
to rely so heavily, its underlying premises also demonstrate the tensions of
colonial medicine, as will later be shown. Pacific medical departments
consistently ran below suggested staffing levels, bedevilled by problems of
isolation, poor communications, inadequate financial support, and notoriously
meagre government salaries. Colonial Service MOs tended to concentrate in
areas of greatest European settlement, where they had social support and were
able to supplement their incomes with more lucrative private practice.
Alternatively, they had state approval to enter into financial arrangements with
plantation owners to provide medical care for their workers, often indentured
labour from outside the locality, and in Fiji, largely Indian. Effectively, this

\textsuperscript{12} “Fiji Medical and Health Report”, WPHC 468/1935.
\textsuperscript{13} David W. Hoodless, Central Medical School, Suva, pp. 3-4.
meant little attention to the health needs of the village communities in which most of the people lived, and which increasingly became the source of labour as indenture ended. A system of subordinate, lesser qualified and paid native medical practitioners offered the government a way to fulfil its dual responsibility, to civilise and advance the natives while maintaining the population base essential for economic development in the colonies. The Fijian service was in fact largely paid for by a capitation tax charged on Fijians alone, specifically for medical purposes.

Using highly supervised native medical staff also meant close administrative control over the introduction of western scientific medicine to islanders. NMPs were put forward as exemplars at the interface, presenting new concepts of health and ill-health in the familiar terms of local language and culture, yet their success was seen to depend on their continued subordination and unequal position in the medical hierarchy. Even those who most extolled their achievements and skill stressed the importance of maintaining this differential position for fear that otherwise NMPs would develop European aspirations which would make them as unfit and unwilling to work in remote communities as the better paid white medical officers.

The Rockefeller Foundation and Medical Philanthropy

Even as the NMP system was beginning its contribution to community care in Fiji, there were concerns elsewhere in the Empire that were to have direct consequences for the expansion of public health throughout the Pacific. These were only given shape and effective direction by the actions of an entirely different agency, an American corporate philanthropy that was to become an international leader in public health and the advance of scientific medicine.

As one commentator has observed:

In the great jungle of American democracy and capitalism, there is no more strange or improbable creature than the private foundation. Private foundations are virtually a denial of basic premises: aristocratic institutions living on the privileges and indulgence of an egalitarian society; aggregations of private wealth which, contrary to the proclaimed instincts of Economic Man, have been conveyed to public purposes. Like the giraffe, they could not possibly exist, but they do.\[^{14}\]

A conception even more curious is the association between one of the finest American philanthropic 'giraffes' - the Rockefeller Foundation - and the imperial lion of Great Britain. Yet the relationship between the British government and the Rockefeller Foundation created a legacy of medical systems, institutions, and education which impinged on the health experiences of millions worldwide.

Both were similar in their perception of their duty to advance the “backward” while stressing an ethos of self-sufficiency rather than dependence. Both sought to maximise the productive capacities and efficiency of working populations. In other ways, each had needs which dovetailed perfectly. Despite the imperial government’s new recognition that health work was one of its essential functions in the colonies, it was still unwilling to appropriate Crown finance to develop colonial health services. On the other hand, the American organisation wanted to use its money and experience of large scale public health campaigns on an international scale, co-operating with governments in joint programmes for a limited time. Its goal was the full and permanent involvement of the state, rather than private interests, in public health care services established according to the Foundation’s vision of western scientific medicine.

This Rockefeller vision for scientific health and its subsequent liaison with colonial government has its origins in the lowly medium of human excrement, through which a common parasite of the tropics and subtropics, the hookworm, is spread. Its life cycle relies on human faecal contamination of the soil, where with the right conditions of warmth and moisture, ova hatch into larvae able to bore through human skin (usually the feet) on contact. Larvae migrate through the blood stream to the lungs, where they are coughed up and swallowed, finally taking up residence in the gut, where they hook into the wall of the small intestine and begin sucking blood for nourishment. Interactions between hookworm and its human hosts are variable and complex. The nematode can cause anaemia and intestinal disorders through ulceration and toxic by-products; weakness, fatigue, and poor physical and mental development may follow, particularly when nutrition is deficient, or other conditions weaken the body. At the same time, hookworm infection itself can exacerbate the effect of other diseases by lowering bodily resistance.

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15 There are two forms of hookworm: Necator americanus, which has its origins in the New World; and Ancylostoma duodenale, the more debilitating Old World species first identified by Angelo Dubini in 1838. For early and late twentieth century overviews of hookworm disease, see Asa C. Chandler, Hookworm disease: Its Distribution, Biology, Epidemiology, Pathology, Diagnosis, Treatment and Control, London, 1929; and G.A. Schad and K.S. Warren (eds.), Hookworm disease: current status and new directions, London, 1990.
From the late nineteenth century, administrators in tropical colonies recognised the economic liability of anaemia caused by hookworm disease. However, efforts were only made to eradicate the disease when it was found to afflict the tropical New World. In 1902, parasitologist Charles Stiles identified hookworm disease in the American South, and implicated it as a major cause of "southern laziness" and low productivity. Director of John D. Rockefeller's philanthropies, Frederick Gates, heard Stiles' theory in 1908, and after a thorough investigation, seized on hookworm work as an ideal demonstration of scientific principles in the public health sphere.  

Since 1892, Gates had brought innovation and new purpose to the disposal of Rockefeller's surplus millions after the industrialist, a devout Baptist, found himself unable to keep up with individual requests for assistance. Convinced that Rockefeller had a moral duty to promote human progress with the huge fortune generated by his Standard Oil's monopoly of the oil market, Gates introduced him to the idea of 'scientific' wholesale philanthropy, with funds channelled through a series of foundations. Consequently, on the premise that education was crucial to relieving poverty and its consequent social and economic problems, especially in the southern United States, in 1903 he established the General Education Board. Later, less than satisfied with its outcome, Gates was converted to the greater possibilities offered by new medical paradigms after reading William Osler's 1892 classic, Principles and Practice of Medicine. Appalled at the current therapeutic limitations Osler revealed but convinced that scientific principles and practice were the key to all progress, Gates persuaded Rockefeller to support developments in the field, in 1901 giving US$1 million to establish the independent Rockefeller Institute for Medical Research.  

When extensive hookworm infection was diagnosed in the American South, however, it provided a focus to extend Rockefeller interests into applied medical work. Gates reasoned that as it was one of the few diseases for which a cure existed, all that was required was the rational application of this knowledge to effect dramatic improvements in the health of the people, and thereby persuade them to the benefits of scientific medicine. In 1909, Rockefeller granted US$1 million to establish the Sanitary Commission for the Eradication of Hookworm. This gift was described as:

17 By 1928, Rockefeller grants to the Institute amounted to $65 million.
unique in the annals of preventive medicine...This was the first entry of private philanthropy into the field of public health - a field now recognized as one of the most rewarding for such support in benefits to mankind. 18

An aggressive five year campaign in the southern states followed, adopting a standard three-step process of survey, cure, and prevention along with intensive education through the community, schools, and the press.

The outcome was reduced incidence of uncinariosis (hookworm disease) in the south; an improvement of public health administration with co-operation between federal, state and county agencies; a greater understanding of the role of soil pollution in a range of endemic diseases, among them typhoid fever and dysentery, as well as hookworm; and a wealth of operational experience for the Sanitary Commission. Once the campaign in the American South was showing results, both in terms of health improvements and the broader goal of community provision of health services, the Sanitary Commission became keen to apply its experience elsewhere. The successes and lessons learned here reinforced Gates' belief that disease, more than any other factor, was the source of all human misery.

In 1913, John D Rockefeller gave SUS50 million to establish his largest trust, the Rockefeller Foundation, "which had as its modest goal the well-being and advance not just of the American people, but of humankind in general, through the international "acquisition and dissemination of knowledge, ...the prevention and relief of suffering, and...the promotion of any and all the elements of human progress." Reflecting Gates' influence, the founding trustees decided that public health most fully encompassed all these objectives and, drawing on the success of the Sanitary Commission, quickly established the International Health Commission to carry hookworm eradication to the world. 19 The Colonial and Foreign Offices of the British government responded enthusiastically to its promises, and by opening their tropical colonies to Rockefeller Foundation programmes gave the organisation the capacity to influence health service developments in a vast sphere.

19 Farley, p. 74; R. Feodick, The Story of the Rockefeller Foundation, London, 1952, p. 39. After 1916 the Commission was renamed the International Health Board (IHB) which in turn became the International Health Division (IHD) when the Rockefeller Foundation was reorganised in 1927. For simplicity I have used the term "International Health Board" for the period 1913-1927.
The development of scientific medicine and education

If the practical work of hookworm eradication was the raison d'être of early IHB operations, the Foundation ultimately had more comprehensive designs for a universal system of medicine and health care. Involvement often had unintended consequences, however, and in the Pacific this was nowhere more striking than in the unanticipated development of indigenous medical education. Having entered into scientific research and education (both at the heart of medical advance) at a crucial point in their historical development, the Rockefeller Foundation asserted an authoritative leadership role, defining stringent parameters for good policy and practice in these areas. The significance of subsequent idiosyncratic development in the Pacific is most clearly highlighted by examining the historical context for the model the Foundation militantly promoted as a universal standard.

The progress of medical science in the nineteenth century was closely associated with the early nineteenth century rise of the hospital, itself a consequence of the Industrial Revolution, rapid urbanisation, and resultant poverty, overcrowding, disease and mass morbidity. This "birth of the clinic", a point of profound change in discourses of medicine,20 began in Paris, fostered by the social, political and philosophical environment of Revolutionary reform. The hospital and its inmates became a resource for teachers and students; it transformed the idea of medical education, providing students with access to huge numbers of patients for observation of disease states, as well as corpses for a more intimate anatomy of pathological processes that could then be correlated to symptoms in the living ill.21 The emphasis on clinical diagnosis of localised pathological disease entities stimulated the development of specialities, but only

surgery produced any real therapeutic advance. In the absence of curative
techniques, there was a renewed emphasis on preventive medicine and public
health.22

The failure to cure drew the scientific gaze into an even more intensive
scrutiny of the body and its workings. Interest shifted from organs and tissues to
micro-anatomical structures, facilitated by the development of the microscope
and improved techniques of chemical analysis.23 Physiology, with its focus on
the normal functioning of body mechanisms, overtook the study of pathological
states as the basis for scientific medicine. Passive clinical observation gave way
to active experimentation in a controlled environment; Germany and scientific
laboratory medicine supplanted Paris and its hospital medicine. Modernised
universities encouraged research and the pragmatic application of basic sciences,
an approach to which American students responded enthusiastically. From 1870,
German medical and scientific institutions produced a large body of American
practitioners and medical researchers24 who in turn influenced their profession’s
developments within the United States. Wealthy enough to have afforded a
foreign education, they also formed a prestigious upper stratum of physicians, or
became involved in establishing new medical research laboratories in elite
universities and medical schools.

Notable among these was Johns Hopkins Medical School, which opened in
Baltimore in 1893 and was unique in having full time research and teaching staff,
including the eminent William Osler and the Dean, William H. Welch. Both
these men were significant to the Rockefeller Foundation’s later interest in
scientific medical research.25 Graduates from these research-oriented universities

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p. 33.
23 Amongst the leading figures of the time were Rudolf Virchow, Louis Pasteur, Robert Koch. E.
24 Porter, 1998, p. 528. 15,000 Americans studied medicine in Germany from 1870-1914. Brown,
1979, p. 72.
25 Both were German-trained. Osler (later Sir), 1849-1919, left Baltimore in 1905 to become
Regius Professor of Medicine at Oxford. Hypercritical of England’s conservative, anti-scientific
approach in medical education and practice, he advocated American-style reform; paradoxically,
despite this, he relied on the ‘art’ of medicine (the physician’s empathetic relationship with the
patient) in treatment, as contemporary scientific knowledge had still not advanced therapeutics: R.
Porter, 1998, p. 682. Described as “the leading figure in American medicine”, Welch was a
founding member of the Rockefeller Sanitary Committee and the International Health Commission,
as well as President of the AMA and the Maryland State Board of Health. He spent five months in
1915 investigating conditions in China for the China Medical Board, and with Rose was
instrumental in developing the renowned School of Public Health at Johns Hopkins: L. Hackett
Ms., pp. 4, 11, RFA RG:3 Box 5 F. 28; R. Fosdick, The Story of the Rockefeller Foundation,
took new scientific methods and technology into their practices, instigating fresh expectations among their patients in a cultural environment that increasingly equated science and technology with progress. Alternatively, they were sought by medical schools vying for prestige in a competitive field, and disseminated the new approach as teachers.

Through these avenues, scientific medicine was moving closer to a position where it could assert its legitimacy over and above established but contesting paradigms such as homeopathy and hydrotherapy. E. R. Brown argues that physicians in America were finally able to gain control of the medical profession through utilising scientific medicine not just to argue technical effectiveness - by the turn of the century there were still only five of the common serious infectious diseases which could be treated with a modicum of success - but to establish an "ideology of professionalization" through which they could align themselves with the powerful groups dominating the expanding capitalist economy in post-Civil War America.  

Scientific medicine's mechanistic view of the body and the etiology of specific diseases gave it an affinity with corporate industrialists seeking to direct and control profitable production through technology, and by the turn of the century, industrialists themselves appreciated the need to maintain the productive capacity of the labour force. Treating disease and poor health was economic, increasing worker efficiency, reducing absenteeism, rationalising investments in training skilled labour, depoliticising militant criticism of industrial relations, and ensuring the next generation of workers. The result was a symbiotic relationship between corporate capitalism and scientific medicine in America, with the former strategically funding the expensive facilities required for the research to reinforce medicine's claims and physicians' professional status. For its part, scientific medicine's objectification of the body and disease focused ill health as an individual event, divorced from structural social and environmental factors; paradoxically, this gave doctors a stronger role as mediators of social relations.

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27 Brown, 1979, p. 119.
Rockefeller, the richest of the new industrialists, was also the first to invest in the new medical science, despite his own commitment to homeopathy. From 1901 his Institute for Medical Research, with Osler as president and his protégé Simon Flexner as director, established a new standard for laboratory research in medicine, as well as a model for elitist pure research which was taken up by other disciplines seeking to establish their scientific "truth". In the same year, the American Medical Association (AMA) finally managed to reorganise itself into an effective national body, with a hierarchy of professional representation from local and state medical societies to a federated national board. This reform generally united the disparate elements of a divided profession, bringing together general practitioners and specialists in a campaign to establish scientific medicine as a social and political force, concurrently improving their own economic position. To do so, the Association established a Council on Medical Education and renewed attempts to take control of the field by urging state licensing boards to raise their requirements. It also publicly reviewed and graded every medical school in the United States. These measures favoured the better funded, science-oriented medical schools, and forced closure of the smaller proprietary schools as the new, higher standards for entry qualifications, medical education and laboratory facilities undermined their financial viability and success rates in state licensing examinations.

The AMA's actions reinforced the inter-relationship of scientific medicine with corporate capitalism and its associated phenomenon, philanthropy. The medical profession as envisaged by the AMA was to be the product of a scientific education that required extraordinary capital investment in professional laboratory staff, facilities and equipment, beyond what medical schools could themselves raise. As Gates was focusing Rockefeller dollars on medical research, the Association's attention to professional education standards coincided with the interests of another of America's hugely wealthy philanthropists, Andrew Carnegie, whose rationale for disposing of his steel fortune inspired others to similar philanthropic endeavour, considered education, especially higher

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29 The debate between 'pure' and applied science is a recurring theme in the discourse of scientific knowledge/scientific society and philanthropy, as demonstrated by E. C. Lagemann's analysis of the politics of the National Research Council and the National Bureau of Economic Research (both funded by Carnegie), in The Politics of Knowledge: The Carnegie Corporation, Philanthropy, and Public Policy, Chicago/London, 1989.
education, the key to social progress. In conjunction with the heads of elite universities, Carnegie set about framing a national system of non-sectarian education by providing funds to those institutions which met criteria he determined, including abandoning the denominational affiliations under which most private education functioned. Both the example of private endowment and the consequent reform of higher education fitted with the AMA’s objectives for medical education, and it approached the Carnegie Foundation to sponsor an independent investigation of medical education in America. Abraham Flexner, a college administrator and brother of the Rockefeller Institute’s director, undertook this study, visiting and assessing every medical school in North America. His 1910 report, *Medical Education in the United States and Canada*, damned the small commercial schools and endorsed the AMA’s recommendations; though not uncontested, the report, claiming disinterest and objectivity, accelerated reforms which established medical education as expensive, socially exclusionist and elitist.

Like Gates, Flexner believed that medicine embedded in a rigorous scientific education had a central social role to play, and with the Carnegie report both had new opportunity to strengthen and influence this development. After consultation with Flexner and advice from top faculty at Johns Hopkins Medical School, which of all American institutions most closely represented their ideal, Gates proposed that the General Education Board endow medical schools willing to reorganise their clinical teaching to conform to the Rockefeller Institute research model of full-time salaried positions, without the lucrative consultancies and private practice which traditionally augmented staff incomes. Despite fierce opposition from many in the medical profession, as well as a public increasingly suspicious and hostile to the philanthropic gestures of the wealthy, the Rockefeller promise of hefty endowments proved irresistible to most of the elite private medical schools. Following the initial $1.5 million grant to Johns Hopkins in 1913, Rockefeller gave another $6 million for medical education by 1919, adding a further $45 million by 1921. As grants were conditional on matching contributions being raised elsewhere and on acceptance of Rockefeller

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32 Brown, 1979, p. 158ff. Harvard, influentially, refused Rockefeller money and conditions; ibid., p. 166.
terms, this influx of funds decisively determined the character of medical education, embedding it in the university laboratory and allied teaching hospitals and establishing medical academics with clinical and research concerns independent of practitioners, to the profession's chagrin. After 1923, the GEB and the Rockefeller Foundation began funding developments in medical facilities at state universities, where budgets and therefore facilities and programmes could not match the resources offered by private philanthropy. Though fiercely opposed by Gates, this move extended Rockefeller influence beyond the private institutions into the wider national community, where it was able to affect policy towards a rationalised national system of science and research-based medical education. In contradiction to the liberal individualist ethos of American democracy, this partnership also acknowledged both the increasing identification of the state with corporate interests and its acceptance of greater responsibility to participate in promoting the health of the population.

This process, involving as it did the multifarious factional and individual interests and perspectives of professional medical associations, university administrators and faculty, corporate philanthropists, medical researchers, and the public, did not proceed without acrimony, dispute, and unexpected consequences. The AMA's elitist aims for control of the profession - initially furthered by the Flexner Report and the replacement of many small commercial medical schools by a handful of expensive university-allied schools with demanding entry requirements - itself came under siege once Rockefeller funding secured corporate influence in medical education. In the face of opposition both from within and outside the agencies, the full-time "university model" at the core of the initial Rockefeller (and particularly Gates') philosophy and approach, gave way to less overtly intrusive control and more flexible contracts with recipient schools by the mid-1920s. By that time, however, as both Rockefeller historian Raymond Fosdick, and Rockefeller critic E. R. Brown note, the GEB and the Rockefeller Foundation felt confident that they had revolutionised medical education in America and firmly established its scientific character in ways that would benefit their vision of economic and social progress.33 Along the way, they had refined and modified policy and operation, and created a role for private philanthropy in shaping the dynamics among foundations, government, the medical profession, and academic medical faculties.

Rockefeller interest did not confine itself to the United States in asserting a "firm hand ... in defining and strengthening what the best might be" in medical education, but was carried through to authoritative involvement in other countries, beginning early and most spectacularly with China. Thwarted in its original ambition to build an influential Christian university there to promote the American model of higher education,\textsuperscript{34} the American philanthropy later modified its plans around several developments. These included the endowment of the Rockefeller Foundation, the IHB’s promotion of scientific public health in the international community, the domestic involvement with medical education, Harvard’s example of establishing its Shanghai Medical School in 1911, and not least, the extreme political volatility in China, which provided the opportunity to introduce changes that could permanently influence the nation’s future direction. Medicine, acceptable to nationalist concerns because its expressly humanitarian aspect addressed real needs among the population, also had the advantage of instructing China in the inductive method which had fuelled the West’s scientific advance, but without the ideological ramifications of religion or education which aroused Oriental opposition.\textsuperscript{35} After further research the Foundation established the subsidiary China Medical Board (CMB) in 1914. Committed to an impressive, focused demonstration of Western capability rather than piecemeal medical aid, the Board bought the London Missionary Society’s medical school in Peking and set about developing the Peking Union Medical College (PUMC) site into a training institution intended as the ‘Johns Hopkins of China’.

By the time it finally opened in 1921 with a student roll of 140 and faculty of 67, the PUMC had cost the Foundation nearly SUS11 million, more than triple the original estimates,\textsuperscript{36} and Gates’ resignation. Nevertheless, the college modelled all he envisaged for scientific medical education, and expressed the philosophy which determined all future Foundation aims in foreign medical schools. In line with the Flexner-generated American reforms, the focus was on ‘quality’ rather than ‘quantity’. Rather than addressing China’s immediate need for capable medical personnel, the school with its rigorous academic standards


\textsuperscript{35} On the introduction and progress of medical science in China and its appeal to Chinese seeking to rejuvenate their culture see P. Unschild’s Medicine in China: A History of Ideas Berkeley, 1985, pp. 229-247. The relinquishment of educational work in favour of a medical focus also reflects the Foundation’s experience in the southern USA, that health needed to be improved before a population could effectively benefit from education.

\textsuperscript{36} Brown, cf. Fosdick, p. 194 - SUS8.3 million
and course requirements as a ‘Class A’ American institution was designed to
generate an elite class of medical practitioners who would carry the modern
scientific approach into Chinese society. Teaching only in English - a decision
which allowed access to a wider medical literature but effectively restricted entry
to the school to the wealthy educated - it employed full-time western-trained staff
and provided a comprehensive centre for medical training, including laboratories,
a teaching hospital for clinical practice, and a nurse training school. With
specialist and refresher courses “ideas, standards, and techniques were seeded all
over China.”

The official Rockefeller line asserted the PUMC’s “profound impact on the
development of modern medicine in China... it became one of the leading centres
of medical training in the world...a symbol of high quality and objective
approach. ...in helping to establish the value of scientific method and inductive
reasoning it represented perhaps the most acceptable gift which the West could
offer the East.” But outcomes justified later critique of the project’s worth.
Despite Rockefeller objectives, an annual budget of $700,000 and another $12
million endowment in 1928, only 166 physicians had graduated by 1937; with
only ten graduates in practice by 1942, their impact on the actual health problems
of China’s millions could only be minimal and selective, geared to a
 technological medicine whose delivery to an elite became even more tenuous
when war destroyed China’s infrastructure.

The Foundation claimed success in this experiment in foreign medical
education. However it could not repeat such intensive investment. Medical
teaching became a priority issue, and in 1919 the Foundation established a
Division of Medical Education (DME), headed by University of Pennsylvania
professor of pathology and research medicine, Dr Richard M. Pearce.

Pearce and his small staff surveyed medical colleges throughout the world,
assessing standards and prioritising assistance according to a “policy of realistic
opportunism.” Although Rockefeller Foundation President George Vincent

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pp. 135-136. See also M. B. Bullock, An American Transplant: The Rockefeller Foundation and
the Peking Union Medical College Berkeley, 1980, for a thorough analysis of the PUMC’s role and
achievements.
39 Or would not - regarding a later invitation for the RF to develop a medical school in Siam
(Thailand), Heiser reminded a fellow staff member that “after its experience with the Peking Union
Medical College, the Foundation has no intention whatever of assuming the direction of any
medical college in the future.” Heiser to W. A. Sawyer, 17 September 1921, RFA RG. 5, Series
1.2, Box 110, Fldr. 1594.
40 Heiser to W. A. Sawyer, 16 September 1919, RFA RG. 5, Series 1.2, Box 82, Fldr. 1153.
stressed the organisation's flexibility in accepting that specific cultural factors shaped a country's approach to medical education, in practice it became more stringent in its criteria, even in those countries which it acknowledged as already superior in medical teaching to the United States. Contributions were strategically directed only to those institutions willing and able to develop the scientific research-based medical education America had developed. This generally meant independent secular institutions in leading centres with adequate educational levels, prosperous and forward-thinking enough to commit to ongoing development.\textsuperscript{41} Pearce sought the widest international impact through early appropriations to schools in Britain, Europe, and Canada, thus permeating influential "British" and "Latin" medical networks and subsequently their wider sphere of dependencies and colonies. In South America only Brazil met Pearce's conditions; in the 'East', Beirut, Hong Kong, Singapore, Sydney, and Bangkok were deemed strategic centres for assisting development of high-grade medical colleges.\textsuperscript{42} While raising professional standards could perhaps benefit those areas where an adequate infrastructure already provided a population with reasonable access to medical care, the DME's insistence that recipients conform closely to its medical education model was often detrimental to both the short- and long-term provision of health services in less developed communities.

A Foundation project in Siam (now Thailand) to create a "seeding" institution for modern medicine, as in China, clearly demonstrates how intransigently the Foundation stuck with this approach, and also provides valuable insight into the unique development of medical education in the Pacific. In 1921, following a hookworm programme in Thailand, the Foundation organised an invitation from the King to undertake reform of the existing medical school, as part of the government's drive to upgrade the health service. With a six year course, the school produced only a handful of qualified doctors annually (rather than the hundred the IHB's Director for the Orient Dr Vincent Heiser estimated was required for the population of 8 million), jeopardising planned

\textsuperscript{41} Fosdick, 1952, pp. 124-127.
\textsuperscript{42} Ibid., pp. 127-141. The medical college in Hong Kong, begun in 1883 by the founder of modern tropical medicine, Dr (later Sir) Patrick Manson, was the founding school of the University there. F. F. Russell, "The Educational Background for the Practice of Tropical Medicine", \textit{American Journal of Tropical Medicine}, 1935:15(1), p. 3. For another case study see G. Jones, "The Rockefeller Foundation and Medical Education in Ireland in the 1920s," \textit{Irish Historical Studies}, 30(120), November 1997, pp. 564-580.
medical work. Many local advisors, both European and Thai, favoured a two-tier education scheme, training a large number of 'lower level' medical practitioners in relevant sanitation and public health work to meet urgent Thai needs, rather than just a handful of highly qualified, expensive, 'Class A' physicians. Heiser himself commented:

...The academic situation is backward, and it is hard to see where the candidates for a medical school, even if provided, are to come from. The number of doctors is so woefully small that one naturally thinks of providing semi-qualified [sic] men or public health nurses. Although Pearce also recognised the value of a short practical training, he later recommended that the Foundation only agree to fund, and actively discourage anything less than, a full western-style graduate medical course. Initially supportive Thai royalty and Government ministers soon recognised this as inappropriate, but were unable to deviate from the original arrangement with their funding partner. In line with its usual practice the Foundation ceded nominal control of the school to the Thai government but asserted real leverage over the programme by controlling grants and faculty appointments and determining conditions, including raising graduates' salaries. While the latter was intended as an inducement to attract suitably qualified students away from other higher status, better paid professions, it increased medical expenditure and deterred Thais from using western-style practitioners.

Nor were Foundation officials unanimous on the principles of reorganisation, especially when they produced little improvement. In 1925 Heiser noted "the crying need for medical relief" for the masses in Thailand, as the school still produced too few doctors; but although he too believed the country needed "a larger number of fairly well-trained men such as are produced by the second grade medical schools of India", the DME continued opposing plans for training second level health practitioners even after its direct participation ended in 1930. Such training eventually began in 1935, but by then the Rockefeller medical school model was entrenched, producing an elite,

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43 Heiser to Pearce, 14 March 1921; to E. R. Embree, 23 March 1921; to W. Rose, 15 March 1921 and 25 March 1921, all in RFA RG. 5, Series 1.2 Box 124 Folder 1655. Attached to Siriraj Hospital, the Medical School had been opened in 1889.
44 Heiser to W. Rose, 25 March 1921, RFA RG. 5, Series 1.2 Box 124 Folder 1655.
46 Heiser, "Memo, Medical Sciences Conference on Siam, 10 September 31", Memos 1930-31: APS/VGH.
hospital-based, largely urban profession which had little impact on the suffering of the general population but continued to absorb most health resources.\textsuperscript{47}

These two examples, the PUMC and the Thai Medical School, are significant in demonstrating key features of the Foundation's medical education policy and the evolution of American medicine which it reflected. Along with its health work, the Rockefeller Foundation's investment in such medical schools was influential in establishing the United States' prominence in scientific medicine, after its colonial beginnings. The early medical heritage imported from Europe was modified by the American experience and conditions, developing into a diversified and competitive range of practices that defied attempts at monopoly and regulation. In the nineteenth century, scientific developments in Europe influenced American ideas of medicine, especially for an elite group of foreign educated physicians who were eventually able to assert their mechanistic interpretation of disease and the body. Biomedicine fitted within the wider framework of industrial capitalism, both in terms of scientific approach and the drive towards standardisation. Wealthy American industrialists supported medical science research for its potential to assure the ongoing productivity and acquiescence of labour. Concurrently, corporate philanthropy was reforming American higher education.

These two streams coalesced in the Flexner Report recommendations. Applying these through grants and endowments to approved institutions, the Rockefeller Foundation created a university-based system of medical education, which the directors saw as the ideal to establish their conception of the role and objectives for a scientific medical profession within society. This forced out alternative medical training models in the United States. As the Foundation came to spearhead health and medical programmes in the international arena, it also began to export its system of medical education, and, offering financial resources and expertise, successfully influenced the direction of medical education and policy in key centres so that its model came to define a universal standard. While the DME's insistence on training only a uniform high grade of scientific medical

\textsuperscript{47} As well as the above references, much of this section is drawn from P. Donaldson's analysis, "Foreign Intervention in Medical Education: A Case Study of the Rockefeller Foundation's Involvement in a Thai Medical School", in V. Navarro (ed.), Imperialism, Health and Medicine, New York, 1979, pp. 107-126 which examines the function of these historic developments in Thai medical education in relation to current underdevelopment of health services, also demonstrated by C. Naravithya, A Comparative Study of Medical and Health-Related Curricula in Thailand, Singapore, 1982. Rockefeller historian R. Fosdick considered that the "ambitious undertaking" in Thailand failed to reach its full potential because "Rapidly moving political and economic events cut across the expected pattern of growth." Fosdick, 1952, pp. 154-155.
clinician was inappropriate to the health needs of many communities - and impossible to aspire to in undercapitalised economies with low educational levels - it actively dissuaded optional training programmes as detrimental to truly scientific medicine. In this context, the development of medical education in the Pacific in the 1920s-1930s is a significant demonstration of the crucial role of regional influence and of key individuals in countering entrenched interests and pragmatically reformulating practice to suit local needs.
Chapter 2.
The reality of hookworm: the Fiji campaign to 1916

On its establishment in 1913 the International Health Commission already had firm ideas on public health work, and a clear model for how this should proceed. The new organisation had incorporated both the Rockefeller Sanitary Commission and its Director, Wickliffe Rose, who was eager to transfer four years' experience in hookworm campaigns in the USA's southern states into a world-wide demonstration of disease control. Rose was convinced that the methods and organisation developed in the American situation represented best practice for modern public health, and could be readily applied anywhere to manage other endemic and epidemic diseases. He planned to stimulate a universal public health consciousness, through hookworm control programmes, that would develop into integrated health services embedded in government at local, regional, and national levels.

In pursuit of this global objective, the Rockefeller Foundation selected the tropical colonies of the British Empire as a strategic entry point. It was a pragmatic decision: the colonies encompassed a large proportion of the world's hookworm infection belt; the British were traditionally public health oriented; and sharing a common language would facilitate operations. Besides, both parties had universalist aspirations, one for the scientific approach, the other for the civilising effect of British culture. The British responded with interest to Foundation overtures, with Fiji recommended as one of the choice sites for demonstrating the Commission's methods of hookworm eradication and the benefits that would accrue. Both negotiations and the campaign eventually organised for the Pacific colony closely followed the International Health Board

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1 Wickliffe Rose's background was education, not medicine. Before he joined the Sanitary Commission, he was Professor of Philosophy at Peabody College. He was instrumental in the Foundation's subsequent development of the School of Hygiene and Public Health at Johns Hopkins University (1918). He resigned from the International Health Board in 1923, becoming President of the Foundation's new International Education Board, but retiring in opposition to the Foundation's reorganisation in 1928. R. Fosdick, 1952, pp. 27, 58, 160-161, 174.
2 Ibid., pp. 47-50, 53-57, 303.
3 In *The English as a Colonising Nation* (Christchurch, n.d., pp. 11-12), J. Hight propounded contemporary arguments for Britain's civilising role. Britain was "the most progressive and most just of modern nations...she should guide and control the destinies of new and infant countries; to her and to no other should be committed the fate of the lower races of mankind, who are...engaged in an unequal struggle for very life with powers whose rule is not so merciful."
prototype, so the Board had every expectation that its approach would be firmly implanted after the three year co-operative programme.

In practice the model was less easily transferred to a different geographic, cultural and administrative environment, and progress was slowed by the need to modify techniques as new problems presented. Before these could be fully resolved World War I brought the IHB’s involvement in Fiji to a premature end. Original objectives were unmet, and further work hung in the balance for some years. Yet as later developments demonstrated, even the partial campaign met Rose’s criteria as a “pump-priming” exercise. Arguably, the interruption to the programme in Fiji even worked to the Foundation’s advantage: the colony had been persuaded of the reality of its hookworm problem, but then found that it could not deal with it from its own resources. Thus, although unsuccessful in relief, the campaign underpinned a major work of collaboration in later years.

**Rose and the Colonial Office**

Rose’s visit to London in 1913 established the framework of subsequent relationships between the IHB and the British Government that were to be crucial to a wide range of health and medical developments throughout the Empire. Despite Rockefeller Foundation assertions that it had no ties to the United States government, the American Ambassador, Walter H. Page, organised a dinner party that introduced Rose to the most influential Colonial officials and medical authorities. Among those attending were Lord Crewe, Secretary of State for India; Right Honourable Lewis Harcourt, Secretary of State for the Colonies; Dr Andrew Balfour of the Wellcome Research Laboratories; and Sir Malcolm Morris of the London School of Clinical Medicine. Here Rose presented Rockefeller health achievements and proposals, with seventy lantern slides illustrating the life cycle, impact, and treatment of hookworm disease adding to the evening’s entertainment. The result was an urgent invitation to the IHB to take up work in the colonies, with Harcourt assuring full support from his office and the co-operation of local authorities. The evening marked, he said “the

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4 IHC minutes, 27 June 1913, note that its Director, Wickliffe Rose, was authorised “to proceed with the organisation and work of the English Colonies Service.” RFA R.G. 12.1, Diaries, Box 53, Fldr. Rose 1913-15.
beginning of a new day in the administration of our colonial affairs and of a better civilization for all countries in the tropics.\textsuperscript{5}

Rose recorded “most satisfactory” conferences in London in the following days. The India Office, the Colonial Office, and individual colonial officials, among them Sir Thomas Robinson of the Australian Agency, were enthusiastic. The Colonial Office assured him of full access to officials and facilities in all colonies and agreed to establish a Colonial Advisory Committee (CAMSC) of medical and scientific experts and government officials to support their counterparts in the colonies.\textsuperscript{6} Discussions centred on the most fruitful areas (both geographical and medical) for health work. As in the domestic campaign, however, Rose had to convince everyone of the reality of hookworm disease as the most pressing health problem for colonial populations and development. He emphasised that the Rockefeller Foundation was only interested in funding work that promised “definite results”,\textsuperscript{7} to validate scientific health measures and act as a significant propaganda tool for the extension of public health services in the community. Countering suggestions that tuberculosis and malaria, “the scourge of the tropics”, required more immediate action, he pointed out that hookworm had already proved ideal for these purposes - diagnosis was uncomplicated, treatment was apparently safe and effective, and the improvement in health and vitality immediately apparent. Hookworm remained the IHB’s “disease of choice”.\textsuperscript{8}

\textbf{Pacific Connections}

Although the British West Indies was chosen to open the colonial hookworm campaign, the tropical territories of Queensland and Fiji were also considered compelling cases. Queensland’s Premier claimed that severe ankylostomiasis existed among the white settler communities there and extended an urgent invitation to Rose to visit and advise on hookworm work. Australia’s racially based immigration policy, the first legislation passed by the new Australian Federal parliament in 1901, was oriented “to keep[ing] its population as pure

\textsuperscript{5} W. Rose, “Diaries 1913-15” p. 4, RFA RG 12.1, Diaries, Box 53.
\textsuperscript{6} Ibid., p. 7.
\textsuperscript{7} Ibid, pp. 3-5.
\textsuperscript{8} By 1921 the IHB accepted that yellow fever and malaria could also provide good demonstrations in control. “Appendix to Statement of Policy”, May 1921, RFA RG. 3.1, Series 908, Box 12, Fldr. 124.
white as possible” by excluding Asians and coloureds. There was concern that suspected heavy hookworm infestation threatened the advance of white colonisation and potentially exposed tropical Australia to the pressure of Asian expansion. Furthermore, Premier Denham argued:

The fact that the population is white makes the problem of ankylostomiasis more important for the State than it would if the population was black. The white people suffer more severely from it.\(^9\)

Denham’s rationale for action raises some significant points relevant to tropical colonial medicine in general, and more specifically to the public health campaigns in the Pacific. First, it highlights the inherent racialism of the field, though with an interesting twist. As Worboys points out, this racialism was shot through with contradictions: “On the one hand it was assumed that the native was better acclimatized to the tropical environment and way of life”, which meant that “tropical” diseases therefore affected them less, “whilst on the other it was felt that there was some fundamental inherited biological difference”, responsible for their apparent low resistance to common “European” diseases and higher rates of morbidity and mortality amongst natives.\(^10\) Tropical populations were seen as reservoirs of infection, a constant threat to Europeans, who at the same time were perceived to be a biologically superior species. This perception failed to take account of the function of better nutrition, living conditions and sanitation in better European health statistics. It was unusual, then, for Europeans in the tropics to admit serious infection of a “native” condition such as hookworm, especially with its association with unhygienic practices.

If Australia’s immediate concern was to promote successful white colonisation, Fiji’s primary focus was the health of the indentured Indian labour force, vital to the country’s sugar plantations. In the Foundation’s experience, immigrants from the Indian sub-continent were heavily implicated in the global spread of hookworm,\(^11\) carrying the parasite into previously “clean” populations like the native Fijian communities, where infection could add anaemia to the debilitations of previously introduced diseases. Fiji also promised to be a useful control in a scientific study on the inter-relationship between malaria and hookworm in anaemia. Both diseases were rife amongst indentured Asian plantation labourers in the Federated Malay States and Java, but Fiji was free of

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\(^9\) D.F. Derham, in Rose, 12 March 1914, p. 6. RFA RG. 12.1, Diaries, Box 53.
\(^10\) M. Worboys, “The Emergence of Tropical Medicine”, p. 89.
malaria, so hopefully able to provide a clearer picture of the effect of uncomplicated hookworm infection.\textsuperscript{12} Despite strong interest in the Pacific, there were delays in implementing a treatment and control programme. The Colonial and Foreign Offices, despite their eagerness to tap into Rockefeller funds, were prone to detailed negotiation and deferred decisions on financial expenditure. Many tropical health officials doubted claims that hookworm was an important disease within their populations. The value of a hookworm campaign was considered particularly questionable in many parts of the Far East. Studies in the Philippines and experience in the Straits Settlements and tropical Australia suggested that, while hookworm was indeed present, there was no indication that it was "an important factor in the causation of disease or that it influenced the mortality directly or indirectly."\textsuperscript{13} Struggling to provide basic health services with minimal resources, individual Health Departments were reluctant to undertake the level of scientific survey required to determine definitively hookworm’s position as a disease-producing entity. They were understandably sceptical about committing precious funds to a campaign of unproven value, one, which was also readily perceived as American interference in medical administration. For its part the IHB liked to prepare its ground thoroughly; nor, from its firm belief that self-help was ultimately of greater and longer lasting value than proffered aid, would it commit to any programme until a government actually invited it to do so.

Determining the programme – Heiser and Fiji

Rose had recently recruited Dr Victor Heiser as the IHB’s Director for the East. As representative of the United States Public Health Service, Heiser had twenty years’ international experience, the last twelve organising health services in the American-occupied Philippine Islands. Heiser’s “oriental” sphere, which he

\hspace{1cm}\hspace{1cm}\hspace{1cm} Sisters of Christian Medical College in Vellore, India. Her work in trichuriasis is detailed in T.V. D’cruz, "Effect of Trichuris Trichiura Exposure on the Calcium Metabolism of the Small Intestine", Indian Journal of Medical Research, 35(1949), 81-94; and T.V. D’cruz, "Effect of Trichuris Trichiura Exposure on the Calcium Metabolism in the Small Intestine", Journal of Nutrition, 35(1949), 313-321.

\textsuperscript{12} S.T. Darling, "Fiji Islands", p. 1. RFA RG6 IHB/D Series 3, Box 162, "Fiji Hookworm Disease Reports 1917".

toured sixteen times over the next twenty years, included Australasia, the Pacific, South-east Asia, India, and the Middle East.\textsuperscript{14}

After a preliminary survey in 1914, he proposed an independent Commission, working without “preconceived ideas”, to clarify the disease’s status in a zone which included German and British New Guinea, Queensland, and the South Pacific. The most balanced view, Heiser suggested, would come from a team comprising “an American investigator... selected for his initiative and pushing abilities, and a worker from Great Britain, who should be selected for his conservatism and balance”, supplemented by an indigenous scientific worker in each country to facilitate communication and liaison with officials.\textsuperscript{15} Obviously pervasive stereotypes were well established for the working relationships envisaged in joint venture health work - the Americans would provide the leadership, with other players in backup and support roles. In practice, the situations that developed were far more complex.

Heiser’s suggestion was put into effect with the Darling Commission in 1917.\textsuperscript{16} In the meantime, the International Health Board forged ahead with its plans by undertaking its own preliminary investigations in the tropical and subtropical regions, including the Pacific and Australasia. In 1915, Heiser, with Colonial Office support, began a world tour, arriving in Fiji early in 1916. During the following months he travelled among the island dependencies, Australia, and New Zealand to assess health situations and medical services, and liaised with administrative and medical staff to establish the groundwork for future working relationships.

This IHB strategy was well planned and productive. In Fiji Heiser was well-received by the Chief Medical Officer, Dr G. W. A. Lynch, and the Acting Governor, Eyre Hutson, who readily met his request to study local conditions at first hand. In Suva, this included visits to the government laboratory, the Colonial Hospital, the Medical School, and the new gaol hospital, where a decreasing mortality rate impressed Heiser as “another excellent example of what can be accomplished by modern hygiene and sanitation.”\textsuperscript{17} He also inspected Makogai Leper Asylum and several sugar plantations. After consulting medical officers and available records, and making his own cursory assessment of the health of indentured plantation labourers, he estimated a conservative rate of at

\textsuperscript{14} Victor George Heiser, 1873-1972. Heiser published his memoirs as \textit{An American Doctor’s Odyssey: Adventures in 45 Countries}, (New York, 1936) and deposited his extensive personal papers in the American Philosophical Society Archives, Philadelphia (see note above)

\textsuperscript{15} Heiser, “Memo re Uncertainty Commission”, 17 June 1914, pp. 2-3, RF file, APS/VHP.

\textsuperscript{16} Heiser, “Memos 1917”, APS/VHP.

\textsuperscript{17} Heiser, “Notes on 1916 Trip”, p. 18, APS/VHP.
least 50 per cent hookworm infection among the 40,000 Indian residents, with a slow spread to the Fijian population.\textsuperscript{18}

Heiser was an exemplary ambassador for the International Health Board. He was always courteous and professed uncritical interest in local practices, though his private notes revealed some misgivings. When requested, he readily imparted his extensive experience in public health and his knowledge of the latest disease treatments and control. As a polished and entertaining guest, he was also adept at maximising the "business" opportunities which social situations afforded. "The Mexican story made a great hit," he recorded in his diary after a dinner at Government House, adding:

... The Governor said it was the first time he had relaxed in months; in fact, he said it was the first hearty laugh he had had since the war began. During the smoking hour he said he would agree to any proposition I might submit, if the government had funds to carry out their part.\textsuperscript{19}

Heiser, both publicly and in his private notes, commended the public health efforts of the Fijian administration and the plantation owners. After seeing local living conditions around Suva, with its hygienic fish market and water-carriage latrines for native residents - and the large number of apparently well-paid white officials - he recorded, "One constantly wonders how a country with so few resources can carry out so many admirable public functions."\textsuperscript{20} A local paper reported that he found sanitation provided in Fiji's plantations and villages "considerably advanced...in comparison with what he had seen in a good many other places...they were in a very good position to deal with [hookworm] disease." Heiser declared control, probably even eradication, achievable for the colony.\textsuperscript{21}

Such comments served to bolster existing local interest by validating community efforts. Members of the Legislative Council had already recommended a stronger approach to hookworm control, and Heiser's approval added weight to this. Having carefully crafted a situation which stimulated a request for aid, in accordance with IHB policy, Heiser advised Hutson that immediate hookworm control would probably save the colony from much later disease and expense, and promised to recommend acceptance if the Governor "would care to ask the Colonial Office to request the co-operation of the

\textsuperscript{18} Heiser to Director-General, IHC, 8 March 1916, "Notes on 1916 Trip", APS/VHP.
\textsuperscript{19} Heiser, "Notes on 1916 Trip", p. 38. APS/VHP.
\textsuperscript{20} ibid, p. 12.
\textsuperscript{21} Western Pacific Herald, Fiji, 15 March 1916, in 'Newspaper clippings 1911-20', APS/ VPH.
International Health Commission with the Government of Fiji, in the relief and control of ankylostomiasis.”\(^{22}\)

Also in accordance with established IHC policy and practice, Heiser clarified respective obligations. His organisation would supply a specialised medical officer, at least six microscopists, all equipment and medicine necessary in the hookworm campaign, and a lantern and slides for public education purposes; the Fijian Government’s responsibilities would include staff quarters, office space and supplies, transport for the field team, and hospital accommodation as required. The Administration was also expected to provide for the safe disposal of human waste throughout the country, as experience had already shown that however spectacular the results achieved by initial doses of anthelmintic, hookworm infection recurred unless preventive measures were taken against faecal ground pollution.

The Governor’s immediate response was appreciative and optimistic that the campaign would go ahead, conditional on a more detailed analysis of costs to government and the Secretary of State’s approval.\(^{23}\) Undeterred by the possible slow grinding of imperial wheels, Heiser sent a triumphant communiqué to Rockefeller headquarters, accompanied by a plan of action and details of supplies necessary for an anticipated immediate start. Conditions in Fiji, he reported, were

...most favorable for doing an excellent piece of work, the accomplishment of which will mean relief to the people of Fiji and serve as a model of what can be done to prevent soil pollution among an Oriental people.\(^{24}\)

Heiser’s reference to “orientals” indicated that the campaign’s primary interest was the Indian population, whose economic importance made this group’s health of immediate concern, even though overall Indian health statistics were actually better than Fijian. Heiser acknowledged the extreme difference in mortality rates and the continuing decline of the Fijian population in his report to the IHB, and part of the argument for hookworm control was to prevent it spreading to the Fijians. The Fiji situation did not fit the IHB argument that hookworm was a major underlying contributor to tropical ill-health, as the group most heavily infected, the Indians, was also the group with the lower morbidity rate. Nor did those Fijians with the parasite suffer as severely from it as

\(^{22}\) Heiser to Governor of Fiji, 8 March 1916. “Notes on 1916 Trip”, APS/VHP.

\(^{23}\) Husson to Heiser, 8 March 1916. “Notes on 1916 Trip”, APS/VHP.

\(^{24}\) Heiser to Rose, 8 March 1916. “Notes on 1916 Trip”, APS/VHP.
Indians, indicating that even with an apparently straightforward infection like parasitic disease, there were other factors that determined health status. Still, the focus at this stage was on the Indians, and would only later shift to the indigenous population, for economic and ideological reasons.

Curative and preventive medicine – the Rockefeller Foundation dilemma

Heiser's reiteration of the Fiji campaign's objectives - relief from disease through treatment, and the prevention of further infection through soil sanitation - reflected the IHB’s ongoing attempt to incorporate both curative and preventive aspects of hookworm work. Nearly everywhere, however, soil sanitation was a problem, and the tension between prevention and cure was never effectively resolved. Campaign strategies depended on dramatic cures to convince the target population of the power of modern medicine, so they would then readily accept medical advice on preventive measures against infection, especially the construction and use of privies. Although it happily funded treatment, the Foundation saw sanitation as an individual or community responsibility, a measure of commitment to the principle of self-help; but in practice poor rural workers could not afford the expenses of latrine construction, despite efforts to develop a cheap, efficient model.

Hookworm was the lure to draw communities on into a new science-based approach to other diseases, with successful treatment the "hook" into public health awareness and the adoption of preventive measures. But if treatment's visible results readily captured popular interest, it also set up expectations that the move from ill-health to health was easily achieved, and bore little relation to the personal expense, effort and imagination required in taking steps to protect against possible future illness. Soil sanitation programmes were difficult to instigate and maintain; yet without prevention, re-infection was inevitable.

For these reasons, even Rockefeller Foundation staff at the highest level were inclined to favour the immediate success of the curative approach over the long-term effort of prevention. In one of its earliest co-operative hookworm programmes, the short-lived 1914-15 campaign in Egypt, Rose resorted to enforcing an elaborate treatment system, after concluding that impoverished

25 Possibly because Fijians at this time were more likely to have Necator americanus rather than the more debilitating imported Ankylostoma.
villagers were incapable of sanitary practices. But treatment without sanitation proved wasteful, as the concurrent but better-established campaign in the West Indian colony of Porto (now Puerto) Rico demonstrated. The IHBC came to regret its pragmatic use of the “cure then prevent” sequence, when after spending SUS$347,000 between 1914 and 1920, mostly on hookworm treatment, over 90 per cent of the population of one million remained infected. Such results were hardly a persuasive argument for medical science and did little to advance the IHBC’s vision for its version of public health, though it was inclined to attribute the failure to others. In Porto Rico, the administration was blamed, with Heiser scathing about its elaborate plans for sewage disposal in the colony when its population had a meagre daily income of sixty to ninety cents. Nevertheless, when attempts to instigate affordable and appropriate soil sanitation were set aside in favour of an early focus on treatment, it was as much the result of IHC bias as of colonial incompetence; it was, after all, the Rockefeller Foundation which set down the conditions of the joint campaigns, and the terms on which they would continue funding.

The dilemma was inherent in the Foundation’s origins as an agency that put science at the crux of its goal to advance the “well-being of mankind”. In the medical arena, science and germ theory are, as Sylvia Tesh points out, “virtually synonymous”, so to accept that micro-organisms cause disease is inevitably to locate the problem of control in the laboratory rather than the community; health is then “a technical problem, not a social problem.” Scientific medicine had other ramifications: because it presented a moncausal explanation (and therefore – theoretically – a correspondingly simple solution), alternative, more complex causal factors were denied, or at least relegated to positions of minimal importance. Furthermore, the focus became diagnosis of causative organisms once pathological states arose, so that the emphasis was on treatment and cure, rather than prevention or health promotion. These developments generated a biomedical model of public health which moved away from earlier focus on

26 John Farley, *Bilharzia: A History of Imperial Tropical Medicine* Cambridge, 1991, p. 78. Farley also notes that the director of the Egypt’s Public Health Department acknowledged the difficulties associated with sanitary reform, but dissociated himself from the IHC’s emphasis on treatment.
27 Heiser to Elkington, 14 February 1920, RFA RG. 5, Series 1.2, Box 98, Flldr. 1350.
28 Heiser to Sawyer, 13 February 1920, RFA RG. 5, Series 1.2, Box 98, Flldr. 1333. Heiser recognised that extreme poverty also prevented individual latrine construction as a means to hookworm control in India, and chose treatment although estimating that drugs for the 45 million infected in South India would cost many million dollars. Heiser to Rose, 6 April 1921, RFA RG. 5, Series 1.2, Box 124, Flldr. 1655.
30 Ibid.
environmental hazards, so that even when there was a place for prevention of disease, the centrality of disease to the model meant that when a treatment was available, this was favoured over other methods of control.\textsuperscript{32}

**Fiji – modelling hookworm work**

After its early experiences in the tropical campaigns, the IHB took a stronger position on soil sanitation, which required regulation and inspection, as a precondition for undertaking a curative campaign.\textsuperscript{33} Part of Fiji’s attraction for Heiser was that the administration already emphasised latrine construction, and through its control over the supply of indentured labour was able to put pressure on plantation owners to comply with basic sanitary provisions on the labour lines.\textsuperscript{34} Where the District Medical Officer was especially energetic over latrine provision, as in Rewa, some decrease in the disease was apparent.\textsuperscript{35} Nevertheless, because it was uneconomic and inconvenient to provide latrines in the fields, planters and medical officers failed to tackle the main source of re-infection for plantation labourers. Similarly, even where authorities insisted on privies being provided, they found it impossible to enforce their use among the increasing number of rural free Indians who took up small agricultural holdings around the canefield districts at the end of their indenture period. Most severe hookworm disease occurred among this population, considered the main reservoir of infection threatening the indigenous Fijians.

The Fijian government expressed willingness to continue soil sanitation work as an important part of the joint campaign. Heiser was impressed, reporting to Rose:

In Fiji the opportunity for us to help them is much better than at any place with which I am acquainted. They deserve help. For over ten years they have been making a desperate struggle against hookworm and in some sections they have had considerable success. The job, however, is just a little too big for them, and the best of it is, they appreciate that.\textsuperscript{36}

\textsuperscript{32} See Farley – quoting Elizabeth Foe on the divisions in the Rockefeller Foundation between those like Rose who favoured treatment vs those for prevention; also Evan Willis, *Medical Dominance*, on scientific medicine, pp. 23-26.

\textsuperscript{33} Heiser, “Work against hookworm disease”, Memos 1917, APS/VHP.

\textsuperscript{34} Heiser to Rose, 8 March 1916, “Notes on 1916 Trip: Letters re Fiji”, p. 3, APS/VHP.

\textsuperscript{35} Heiser, p. 8. “Notes on 1916 Trip”, APS/VHP.

\textsuperscript{36} Heiser to W. Rose, 22 March 1916. “Notes on 1916 Trip”, APS/VHP.
If the administration’s response was gratifying, so too was that of Fiji’s European employers. In meetings with planters and leading businessmen, Heiser allayed any residual suspicions about Rockefeller intentions, explaining the treatment procedure developed by the IHB for plantations, and stressing the economic benefits that resulted from hookworm control. In contrast to employers of indentured labour Heiser encountered elsewhere in the East, Fijian planters not only co-operated but often later initiated health reforms. Deprived of a local labour force by the decline in the indigenous population and paternalistic government policy designed to keep Fijians from exploitative labour practices, they recognised their complete reliance on imported Indian workers. Given rising Indian nationalism, both the Planters Association and local business leader representatives on the Legislative Council realised their vulnerability, and were ready to invest in welfare to protect their enterprises. It was not just a healthy workforce that was at stake - it was the continuation of any workforce at all. Heiser noted that “it is quite clear that they see in us something they can interpose between themselves and the Indian party that is opposed to the indenture or contract system.”

Despite keen local support, Heiser’s notice of an imminent campaign proved premature. As regional director for the IHB, Heiser had considerable authority to make on-the-spot decisions about co-operative agreements and financial commitments. This flexibility was not available to colonial administrators, who were constrained by limited budgets and competing local demands, and had to refer proposals to the Colonial Office in London for final approval. It was mid-1916 before the Secretary of State accepted the IHB terms and entered into final negotiations for a joint campaign in Fiji, the first co-operative hookworm campaign in the Pacific.

Paul and the first hookworm programme

The IHB’s appointee, Dr George P. Paul, arrived in Fiji at the beginning of 1917 to be Director of the Bureau for the Control and Relief of Ankylostomiasis.

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37 Further indenture was prohibited in 1916, and existing contracts cancelled in 1920, intensifying employers concerns about labour supply.
38 Heiser, p. 74, “Notes on 1916 Trip”, APS/VHP.
39 Secretary of State to Colonial Secretary’s Office, 31 May 1916, M.P. No. 153/5559/16, and 12 July 1916, M.P. No. 192/6284/16, CSO files, “Hookworm Campaign”, NAF.
Within a month he had set up headquarters, drafted a budget, organised supplies from New York, and begun training four local youths as microscopists and clerks for the campaign. An integral part of IHB policy, this was designed to introduce new scientific skills to local communities as the basis for developing a self-sufficient public health service. Paul reported approvingly that the Fijians were "absolutely ‘raw’, but...proved very apt students."40

Community education on hookworm was another important IHB strategy. Paul's inaugural public meeting in Suva drew 250 Europeans, among them the Governor, the Colonial Secretary, and the Chief Medical Officer. A crowd of 500 attended a later meeting in Navua, three quarters of them Indians. Paul gave lectures illustrated with lantern slides, and distributed over 1300 information sheets in Fijian, English, Tamil, and Hindustani. However, these were of questionable value as the main target of the campaign, the Indian community, had poor levels of literacy.41

Fiji had promised an ideal environment for hookworm work, but physical conditions were still difficult. Navua, a low-lying, swampy sugarcane area on the wet southern coast of Viti Levu, was the first target of the campaign. Communication with Suva, twenty miles eastwards, was only possible by a small launch, and a lack of roads made travel within the district generally difficult, if not impossible after the frequent heavy rains. There were a few Fijian villages, and at Navua itself there was a sugar mill and plantation with barracks for indentured labourers; but most of the inhabitants were "free" Indians living in overcrowded settlements of "small, usually filthy, unsanitary hut[s] constructed of bamboo, sheet iron, or biscuit tins."42 This group's anticipated high hookworm infection rate caused most concern.

The IHB campaign was an intensive, painstaking process, beginning with a household census and sanitary survey. This essential preliminary work was a way of rendering the entire community visible and available for health action. The area was divided into seventeen districts, with the position and sanitary conditions of every household recorded at headquarters. All inhabitants were named and categorised by age, sex, and race. Apparently there was little

41 C. Hartley Grattan, The Southwest Pacific Since 1900: a Modern History, Ann Arbor, 1963, pp. 484-485. The first school for Indians did not open in Fiji until 1899; in 1921, only 38.5% of Indian males and 2.5% of females were literate, mostly in Hindustani. Ami Chandra, "Problems of Illiteracy among Indians of Fiji," in Proceedings of the Seventh Pacific Science Congress of the Pacific Science Association held at Auckland and Christchurch, New Zealand, 2 Feb. - 4 March 1949, vol. 7, Christchurch, 1953, pp. 564-565.
opposition to this unofficial census and assessment of household habits; Paul reported instead that "[t]he people as a whole took very kindly to our work...[they] soon realised the beneficent effects of treatment." Paul quickly learned, however, that ignorance of customary practices provoked resistance. Three Indian male nurses employed for the campaign walked off the job when they were expected to collect the tins containing faecal specimens from each household. The situation was resolved by hiring a lower caste worker able to perform this defiling task.

Diagnosis of the infected followed the same intensive pattern. The newly trained microscopists examined four smears from every specimen, counting helminth ova. The results from those examined showed 89.9 percent hookworm infection overall, with 94.2 percent among Indians. At 78.7 percent, Fijian infection was much heavier than anticipated, providing Paul with good evidence of the need for control of the parasite. Diagnosis also revealed other parasites, with roundworm (Ascaris lumbricoides) infestation particularly common and often heavy among the Indian population but considered of little consequence. Later when it was implicated in fatalities following hookworm treatment, which jeopardised the campaign, it received more attention and reinforced arguments for improving sanitary practices. The presence of multiple parasitic infections complicated the hookworm campaigns, and IHB staff tended to express frustration with Indian householders for their "insistence" on maintaining unsanitary living conditions - overcrowding, non-use of latrines, poor hygiene and diets - but ignored the political and economic factors which caused these.

Drugs and treatment

Paul used oil of chenopodium (American wormseed) to treat hookworm in Fiji, rather than thymol, the vermifuge used in earlier IHB campaigns. Chenopodium was cheaper and more effective, but still required precise dose measurement and careful administration of both drug and follow-up purgative to ensure successful treatment and to avoid disagreeable side effects such as dizziness and nausea. The process was unpleasant and consumed two days,

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43 ibid, p. 4.
44 ibid, p. 6. The infection rate was well over 30%.
45 Farley, (1991, pp. 73-74, 78) describes full treatment with thymol as highly risky, and taking a costly seven days.
during which food and activity were restricted. The infected were organised into groups of fifty, each under the care of a nurse who gave an initial purgative of magnesium sulphate, followed at intervals the next morning by two equal doses of chenopodium. A final purging was crucial to eliminate both worms and chenopodium before the body absorbed toxins from either. Treatment was repeated two weeks later, then specimens re-examined for proof of cure. Paul reported success in 70 percent of cases. Those still infected were given two further, more concentrated, doses, with recalcitrant cases hospitalised to enforce control over diet and treatment.

That no one refused treatment demonstrated a remarkable degree of voluntary compliance to an unpleasant and disruptive process. Nevertheless, Paul chafed at any “disobedience” to his instructions, sure that practically 100 percent cure was possible with one treatment “if the patients were under complete control, and the diet, the salts, and the amount of oil of chenopodium were properly adjusted.” With little leeway for error, the Director also maintained rigorous scrutiny over the work of the nurses and microscopists as “results depend on their reliability and efficiency as much as on dosage, method of treatment, and drug.”

As Paul’s situation demonstrated, one of the strengths of the IHB organisation was that staff faced with difficulties in the field could draw on a network of staff and medical researchers amongst whom ideas and trial results were constantly circulated. When Paul had questions on dosage, timing, and purging in the treatment procedure, Heiser replied immediately with information based on investigations carried out by other field and laboratory workers in their hookworm operations elsewhere in the world. The IHB practice of frequent correspondence between headquarters and field staff maintained a level of professional support and updated knowledge that was noticeably lacking in the more cumbersome bureaucracy of the Colonial Service.

Outcomes: The worm in the campaign

Despite the frustrations, Paul’s education programme and curative work were considered well planned, efficiently executed, and effective. Heiser and Rose were full of praise for “an excellent showing...that compares most favorably with

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46 All Paul to Rose, 1 January 1918, RFA RG. 5, Series 1.2, Box 66, Fldr. 952.
47 Heiser to Paul, 30 January 1918, RFA RG. 5, Series 1.2, Box 66, Fldr. 952.
the best that has been done anywhere in our experience. However, difficulty establishing preventive measures undermined the goal of hookworm eradication, as rapid re-infection in Navua dropped the initial 70 percent cure rate to 63 percent by the end of 1917. Sanitary conditions in the district appalled Paul, and his best attempts failed to remedy the situation. Of nearly 1,000 households, only 61 had serviceable though still unsatisfactory latrines; instead, bush, canefields and stream banks were polluted with excrement. The Legislative Council appointed a sanitary sub-inspector specifically to ensure Navua householders understood and complied with new sanitary regulations that made household latrines compulsory. Eight months after the start of the campaign, Paul reported heartening signs of the population’s apparent willingness to follow the recommendations and build privies. His optimism evaporated when it became apparent that the same co-operation did not extend to use; soil remained as grossly polluted and infected as before.

The campaign encountered the same difficulties when it moved to Rewa, another heavily populated and badly infected district where Heiser insisted that latrines be installed, and in use, before Paul began treatment, as only then would the benefit of hookworm control be obvious. Expecting lower infection rates where a high proportion of houses had privies, Paul again found that installation alone did not correlate to effective sanitation or automatically solve the problem of soil pollution; most latrines were inadequate or their use avoided. In fact, Rewa’s overall infection rate was even higher than in Navua, with 90.5 percent of the people examined positive for hookworm.

Faced with such mass infection, Paul experimented with alternative control measures, among them giving three rather than two doses of chenopodium before retesting patients, and suggesting compulsory treatment for all indentured Indians before they left service in the plantations to take up residence in the district. Proposed preventive measures included sanitary inspectors and a portable privy for use in the canefields. A request from the Fijian Educational Office for a lesson on hookworm which could be taught to all school pupils provided a promising opportunity to extend the campaign’s network, promoting awareness

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48 Heiser to Paul, 11 January 1918, RFA RG. 5, Series 1.2, Box 66, Fldr. 952.
49 Paul to IIB, 1 November 1917, RFA RG. 5, Series 3, Box 162, Fiji Hookworm Disease Reports, 1917; Lynch to Heiser, 4 January 1918, RFA RG. 5, Series 1.2, Box 66, Fldr. 951.
50 Heiser to Paul, 11 January 1918, RFA RG. 5, Series 1.2, Box 66, Fldr. 952.
51 Paul to Heiser, 11 March 1918, RFA RG. 5, Series 1.2, Box 66, Fldr. 952.
52 99% of the population were examined; the infection rates echoed Navua’s, with Indians 93.8%; Fijians, 85.3%; and Europeans, 21.9%. G. Paul, 21 February 1919, “Report on work for the relief and control of hookworm disease in Fiji from March 1, 1917 - May 20 1918”, No. 7427: RFA RG.5, Series 3, Box 162, “Fiji Hookworm Disease Reports 1918 and 1922.”
of hookworm transmission and the need for sanitary practices. A valuable adjunct to the IHB programme, it remained in the school health curriculum for many years, and prepared the wider population for later work in their districts.

Instead of sweeping Fiji as planned, this first IHB hookworm campaign left most of the country untouched. The discouraging re-infection rate and poor response to principles of sanitation forced Paul to re-evaluate plans. He confided to Heiser that he considered re-treating Rewa and Navua would be fruitless “until at least one year after each home in the area is provided with a suitable privy” and advised that it would be better to make “a thorough demonstration... in these two areas than to do less effective work over a greater area.”

Even before this modest goal was achieved, the campaign ground to a halt. When the United States’ entered World War I in 1918, Paul was among the thousands of American doctors who decided to join the armed forces, despite IHB offers of promotion and increased salary if he stayed in Fiji. Neither the IHB nor the understaffed Fijian Medical Department was able to provide a replacement. Paul acknowledged the possible waste of his work, after making “many personal sacrifices to run it smoothly under the many difficulties that have presented themselves”; but philosophically concluded that the interruption might be beneficial rather than harmful, allowing the Fijian administration to catch up on sanitary measures so that later treatment efforts would be more successful. Leaving the work ready to resume at any time, he closed the first co-operative Pacific hookworm campaign on 10 May 1918.

Evaluation

The Rockefeller Foundation chose hookworm as an ideal disease on which to demonstrate the power of scientific medicine, requiring only the simple application of established knowledge to resolve the problem, but the extension of work into colonies like Fiji exposed shortcomings in this enterprise. At the core of the biomedical paradigm was the proposition that once a disease-causing organism had been identified and an appropriate treatment discovered, the inevitable result would be eradication of the disease. This had seemed to be the

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53 Paul to Heiser, 11 March 1918, RFA RG.5, Series 1.2, Box 66, Fldr. 952.
54 Heiser to Lynch, 15 May 1918, RFA RG.5, Series 1.2, Box 66, Fldr. 951.
55 Paul to Heiser, 11 February 1918 and 25 April 1918, both RFA RG.5, Series 1.2, Box 66, Fldr. 952.
case with hookworm. When results in the field indicated otherwise, especially through rapid re-infection, the tendency was to hold “irrational” and “unscientific” behaviour of affected individuals responsible, rather than to question the essentially monocular and deterministic nature of the disease model itself. As Paul found, the behaviour of sufferers and local staff, as well as other local conditions, were variables that could easily confound an established biomedical regime of therapy and thwart a complete and permanent cure of hookworm. Laboratory-style control was impossible in the community, except perhaps where it could be coerced in institutional settings such as gaols and hospitals, and to a more limited extent on plantations. While legislative and educational measures exerted pressure on people to behave in ways that facilitated the application of scientific principles, the incomplete success of the hookworm project also forced the medical community to confront the inadequacies of positivist scientific knowledge and the need to respond to disease situations that were more complex than originally envisaged.

Hence research became an integral part of the hookworm campaigns as workers sought to capture the elusive factors that would improve the viability of biomedicine. This required constant refinements in technique and experiments with alternative drugs to optimise results while simplifying treatment programmes. Research sought to elucidate the parasite’s life cycle, the infection process, and human physiological reaction, in order to find more effective anthelmintics. Recognising that the situations in which the disease occurred were also complex matrices of social, environmental, and economic factors, efforts were also directed to developing treatment systems which would work in the widest possible range of situations, yet be refined to be as simple and specific as possible.  

Fiji only partially proved the “model” campaign that the IHB had anticipated. The Board had gone into the colony confident that the practical experience and knowledge of hookworm disease gained in the southern United States could be applied elsewhere in the tropical world; the Colonial Office had welcomed extra funds and expert staff from the Foundation as the solution to high morbidity; and Heiser had considered conditions in Fiji close to perfect for a convincing demonstration of scientific disease control. Certainly, those with power had been persuaded of the reality of hookworm disease, and the need to combat it. Paul found, however, that there would be no straightforward

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56 Hookworm continues to resist solutions both simplistic and sophisticated; a search under “human hookworm” on CD-ROM database Medline (6 January 2002) returned 1728 articles in medical and scientific journals dealing with obdurate and debilitating nematode infection for millions of people.
transferral of technique and knowledge, and no spectacular lasting results. The situation demanded more versatile and painstaking efforts than had been applied previously. "The control of ankylostomiasis," he wrote, "becomes a very vast problem especially when one is dealing with a primitive people." Hookworm disease was not a fixed entity, despite biomedicine's perceptions. It existed within diverse configurations of personal, cultural and environmental conditions that required careful monitoring and constant re-evaluation of therapeutic technique for cure to be effective. Hookworm could not be isolated from its community or environment for a clinical biomedical assault, and forced a re-evaluation of therapeutic techniques before a cure could be effective. New questions about the parasite, disease, and treatment arose in the context of Britain's tropical colonies, and found no immediate answers in Fiji.

Although they did not achieve control, let alone eradication, neither the IHB nor the Fijian administration appears to have considered the project a failure. "In all respects we regard the figures as highly satisfactory," Heiser wrote to Paul at the end of the year's work. Fiji's Chief Medical Officer regretted that the "good work must for the time being be at a standstill ... We...feel sure that after a year or two of such work some good lasting results must come." While the rapidity of re-infection was a serious and unforeseen setback that interrupted plans to extend the campaign into all districts, optimism prevailed that the combined forces of legislation and education would ultimately overcome the population's general inertia towards more sanitary practices. This, combined with re-treatment, would in time eradicate soil pollution and the cycle of repeated infection. The IHB continued to have faith that the application of scientific methods would resolve any problems encountered in the tropics. The core knowledge was established; ongoing research would clarify details and enable refinements in treatment methods and drug therapy.

Hookworm disease control was not an end in itself. It was the means to extend rational scientific process into the health and lives of a community. People's encounter with such powerful medicine would help promulgate a scientific world view that included certain views of progress and possibility. Fiji became a challenge rather than a defeat, and both the administration and Heiser anticipated that after a short interruption, the challenge would be met.

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57 Paul to Heiser, 11 March 1918, RFA RG.5, Series 1.2, Box 66, Fldr. 952.
58 Heiser to Paul, 10 April 1918, RFA RG.5, Series 1.2, Box 66, Fldr. 952.
Chapter 3
Footprints around the Pacific: the IHB in Australia and its dependencies

Though work in Fiji was stalled by America’s entry into World War I, the IHB was making progress elsewhere in the Pacific region. On his 1916 tour, Heiser also visited New Zealand and Australia to assess prospects for health programmes within these two countries and their dependencies. New Zealand itself, he concluded, did not warrant Rockefeller Foundation assistance¹ with its health services relatively well organised and efficient and no reports of hookworm. There was, however, the possibility of future work in its tropical territories. But, as might be expected from Rose’s encounters in London, Heiser’s visit to Australia concluded with an invitation for an immediate survey for hookworm, beginning an ongoing association that strongly influenced health services there. Hookworm work in Australia might appear peripheral to plans for the Pacific Island groups, but it was in fact pivotal to the breadth of subsequent developments in the region. Between 1916 and 1921, the IHB’s achievements in Australia guaranteed its prestige in the region and provided a valuable training ground for IHB staff - especially Dr Sylvester Lambert - in the tropical conditions of the Southwest Pacific. By promoting Australia’s nationalist policies, it also created circumstances that drew international attention to Pacific population problems.

The politics of Australian health services, medical education, and research were then vigorously contested, and these circumstances gave both the IHB and ambitious medical factions an ideal opportunity to advance their respective - and largely complementary - objectives.² As Denham had already indicated, hookworm in Queensland could function as a focus for wider fears about racial purity, national strength, and vulnerability to Asian neighbours. The disease fulfilled Gates’ early promise that it could underwrite a new public health

¹ The Rockefeller Foundation reconsidered involvement in New Zealand in 1925, when it sent Clark Wissler and Dr Edwin Embree to explore possibilities of assistance to Otago University’s Medical School. Sir Peter Buck later reported that they encountered “a long discourse on the superiority of British to American education so categoric that they refrained from raising the possibility of grants or endowments.” Sir Peter Buck/ Rangi Hiroa to Apirana Ngata, 20 October 1925, cited in J. Condiffe, Te Rangi Hiroa: The Life of Sir Peter Buck Christchurch, 1971, pp. 150-151.

consciousness, even though in the final assessment it proved to be a minor factor in morbidity statistics; by then, however, it had functioned well to achieve more covert objectives.

With the IHB's influence the hookworm campaign contributed directly to extending central government's control over health activities, including the formation of a Federal Department of Health fashioned according to IHB prescriptions. For J. H. L. Cumpston, its director and a staunch ally of Heiser, the Department provided greater traction for his pursuit of national security through health. This expanded from purely domestic fears of Oriental influx and Asian dominance into arguments that were significant for later Rockefeller Foundation involvement in health promotion in the wider Pacific region. Poor health and declining indigenous populations would leave the island groups without an efficient workforce to develop the land and resources, endangering European interests in the region as the subsequent vacuum exposed the Pacific to population pressure from Asia. Many shared Cumpston's view of the corollary:

The whole control of the Pacific turns on the control of the island groups. It is probably not too much to say that the peace and harmony of the world will in our time depend upon the balance of control in the Pacific.

His experiences with Heiser and hookworm work in Australia provided the means to generate international interest in Pacific population problems, and in turn drew the IHB into a commitment to future public health developments throughout the South Pacific, well beyond its original intentions, as Cumpston tried to co-opt the IHB into an ambitious Pacific Health Service. Hookworm campaigns in Australia also provided a training ground for IHB staff, most significantly Dr Sylvester Lambert.

\[3\] Ibid., p. 64; Milton J. Lewis (ed.), in J. H. L. Cumpston, Health and Disease in Australia: A History, Canberra, 1989, pp. 9-11. Although the Foundation's declared policy was to avoid any overt participation or influence in affairs of government, IHB neutrality was in fact selectively breached. On Heiser's visit to Australia in 1921, Cumpston arranged an interview for him with Prime Minister W. M. Hughes, whose opposition was allegedly preventing the establishment of a Health Ministry, his preference was for a lesser Division of Health focusing on tuberculosis. Heiser records verbally pummelling the hard-of-hearing Hughes, who in a virtual state of collapse" accepted his proposals for establishing a Ministry in exchange for the temporary loan of Rockefeller public health experts, and funds to train Australian replacements. Heiser, An American Doctor's Odyssey, pp. 353-354.

\[4\] John Howard Liddett Cumpston, (1880-1954) was Director of Quarantine 1913-1945 and first Director-General of Health (1921-1945). He was a prolific writer on medical and public health issues; a collection of his papers is held at the Australian National Library, Canberra. See also Margaret Spencer, John Howard Liddett Cumpston, 1880-1954, a Biography, Tenterfield, NSW, 1987.

\[5\] Cumpston to Heiser, 19 February 1923, RFA RG 5, Series 1.2, Box 167, Fldr. 2154.
First contact - Heiser and “inimical Australia”

On his 1916 visit, Heiser spent his brief three weeks in the country and neighbouring Papua covering vast distances to gather evidence of hookworm infection and establish contact with the many government ministers, officials, and medical men whose support was essential for the initiation of any cooperative programme. His first encounters belied any future profitable relationship. Although valued by the IHB, Colonial Office letters of introduction proved little guarantee of welcome from Federal and State governments. Australia, Heiser found, was “generally inclined to be inimical”, an attitude he originally attributed to strong anti-American, anti-business sentiments but later realised arose equally from struggles for autonomy and control between the different levels of government. The Federal Government was antagonistic to any hint of Colonial Office interference in its administration, and Heiser soon warned Rose, “In our dealing with Australia we must forget the existence of words like ‘Colonial Office’ and ‘British Colony’.” The states were similarly wary of Federal coercion in local affairs, and jealous of each other’s political and economic power. Heiser quickly laid aside his imperial connections, instead emphasising the Rockefeller Foundation’s politically neutral intentions and policy in order to alleviate fears of outside control.

Heiser also needed to be diplomatic in encounters with Australian health services. Federal jurisdiction was confined to quarantine, and the organisation of public health and medical care were State prerogatives, jealously guarded even where scarcely exercised. Heiser was familiar with meeting resistance to

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5 Hookworm was first identified in Australia in 1887, in temperate New South Wales, but most subsequent reports of infection came from Queensland. The disease was made notifiable in 1909, and the Australian Institute of Tropical Medicine at Townsville then began investigations in the Cairns area. A. M. Campstone, Health and Disease, p. 27; R. Patrick, A History of Health and Medicine in Queensland 1824-1960, St. Lucia, 1987, p. 250.
6 Heiser to Director-General, IHC, 1 May 1916, in “Notes on 1916 Trip”, APS/VHP, has details of his gruelling itinerary and influential contacts.
7 Heiser, An American Doctor’s Odyssey, p. 345.
8 Heiser to Rose (personal), 1 May 1916, in “Notes on 1916 Trip”, APS/VHP.
9 In Australia, a federal system of quarantine management was originally proposed in 1884, formalised in the 1901 Constitution Act, but only instituted when the Quarantine Service was finally established in 1909. With substantial opposition to central control, it required several subsequent amendments to resolve ensuing disputes over jurisdiction. Campstone, Health and Disease, pp. 420-1.
expanding Federal intervention, as the United States had gone through a similar process. His own orientation to "wholesale" prevention of disease, rather than clinical practice, had led him into the United States' leading Federal health agency, the Marine Hospital Service, and later to federal appointments as Chief Quarantine Officer and Commissioner of Health in the American occupation of the Philippine Islands.

Dr J.H.L. Cumpston, Australia's Director of Quarantine, became a great admirer of Heiser's strong leadership in public health work in the Philippines, where they first met in 1905. He was, nevertheless, amongst those initially suspicious of Heiser's suggestions for Rockefeller Foundation involvement in Australia. Cumpston, however, wanted a Federal Department of Health (built around his own Quarantine Service) and to modernise public health and research, so once he realised that Foundation activities could help establish strong central government co-ordination of health efforts he entered into a mutually productive alliance with the IHB and became a staunch proponent of their investment and assistance in co-operative health.

The IHB and White Australia

For the Australians, hookworm work provided a tool for reworking and resolving various concerns about the country's future direction and identity, and by its participation the IHB became complicit in one of its central elements, the "White Australia" policy. Its roots lay in the dispossession of the original inhabitants and later assumptions that remaining "primitive" Aboriginal populations would inevitably die out in the face of advanced European civilisation. By the early

12 Heiser covers his career before joining the Rockefeller Foundation in 1914, (after meeting Wickliffe Rose on his world tour that year) in the first fifteen chapters of An American Doctor's Odyssey.
13 Rose details IHB policy on public health and its place as an essential function of government, in "Memo on the Administration of the IHB", 1922, RFA RG 3.1, Series 908, Box 12, Fldr. 128.
14 Cumpston to Heiser, 20 November 1918, RFA RG 5, Series 1.2, Box 65, Fldr. 945.
twentieth century, additional forces fuelled a more potent white nationalism. A
civic nationalism which presupposed ethnic solidarity, a powerful Australian
Labor Party which saw cheap imported labour as a threat to working class
interests and future prosperity, imperial rivalries in the Pacific (especially the rise
of Japan), and white eugenicist concerns about racial purity and vitality, all
contributed to the declaration of "Australia for the [white] Australians".10
Formalised in the Immigration Restriction Act 1901, the Commonwealth's goal
was "continental uniformity": a completely European, preferably Anglo-Saxon-
Celtic, population, achieved through discriminatory immigration policies.17

Such a stance arose from an unavoidable insecurity as well as from ingrained
racism. The new Australian nation saw itself as vulnerable unless thriving
European settlement could secure the vast unoccupied arid north. To do so, it had
to prove that a white workforce would be viable in Australia's tropical regions.
The Commonwealth government established the Australian Institute of Tropical
Medicine at Townsville in 1909 to study both white acclimatisation and the
control of disease in the tropics.18 The subject was the key topic at the 1920
Australasian Medical Congress, and a subsequent study observed that Australia's
unique white tropical population was "in reality carrying out a huge and
unconscious experiment in acclimatization."19

The IHB and its campaign against hookworm therefore readily aligned itself
with the cause of 'White Australia', promoting organised, scientific public health
to remove threats to the white population and make the tropics safe for its
advance. When Heiser confirmed that hookworm was present in tropical

Queensland" in Fighting Words: Writing about Race, St Lucia, Queensland, 1999, pp. 34-47. S
Stone's Aborigines in White Australia: A Documentary History of the Attitudes affecting official
policy and the Australian Aborigine 1697-1973 (South Yarra, Victoria, 1974) is a collection of
contemporary writings which tracks white attitudes and responses. Expectations of extinction
survived well into the 20th century, fuelled by "scientific" anthropological accounts. Andrew
10 J. Hirst, The Sentimental Nation: The Making of the Australian Commonwealth, Melbourne,
2000, ch.1; Luke Tremain, British Imperialism and Australian Nationalism: Manipulation, conflict
and compromise in the late nineteenth century, Cambridge, 1994, pp. 159-162; Donald Denoon and
Philippa Mein-Smith, with Marivic Wyndham, A History of Australia, New Zealand and the
17 Gratton, The Southwest Pacific Since 1900, pp. 7-8; Denoon et al, A History of Australia, New
Zealand and the Pacific, pp. 210-211;
18 Cumpton, Health and Disease in Australia, pp. 10-12. For the wider debate on climate, race,
and medicine, see W. Anderson, "Disease, Race, and Empire" and "Immunities of Empire: Race,
Disease, and the New Tropical Medicine, 1900-1920", both in Bulletin of the History of Medicine,
1996: 70, pp. 62-67 and 94-118, respectively; also, specific to Queensland, see H. R. Woolcock,
"Our salubrious climate: attitudes to health in colonial Queensland", in Macleod and Lewis (eds.),
Disease, Medicine, and Empire, London, 1988, pp. 176-193.
19 "Current Comment. 'The White Man in the Tropics' " MJA, 1, 20 (8 May 1926) 524. The
journal continued to comment on the issue through the 1930s.
Australia and Papua, he recommended a full IHB survey; if this showed ankylostomiasis affecting mortality, morbidity or working efficiency, then a proper co-operative control campaign should follow. The possibilities for mutual benefit ensured that both the Australian Government and the IHB directors accepted his advice.20

Papua – planters, labour and hookworm

Until Queensland government officials could be convinced, the IHB began hookworm work in June 1917 with Dr J. H. Waite, IHB field director, undertaking a four month survey in Papua. The health of local labour was a priority in the Australian dependency as the Immigration Restriction Act prohibited the alternative of imported indentured labour. On Heiser’s 1916 visit, Lieutenant Governor J. H. P. Murray had shown interest in a survey, and promised to promote, and if necessary enforce, latrine use on the plantations in anticipation of a practical control programme.21

In Papua as elsewhere in the Pacific, Heiser had found that wartime mobilisation had depleted already minimal medical services. There was often only one Medical Officer available to oversee the four government hospitals and an estimated population of 200,000-300,000, of which around 8,000 worked on the plantations.22 Unsanitary plantation conditions were held responsible for the rapid spread of hookworm and other intestinal diseases; a cursory survey in the Port Moresby area by Medical Officer Dr W. M. Strong in 1915 indicated an infection rate of 72 percent among labourers, compared to 59 percent at the gaol and 50 percent amongst hospital admissions. There was the further fear that labourers established new centres of infection when they returned to their home villages after their three-year indentures. Planters’ collaboration was therefore considered essential in any programme to access this critical group; if they could be persuaded to provide this mobile labour force with the experience of sanitation and treatment, the plantations could act instead as foci to disseminate knowledge.

20 Heiser to G.F. Pearce, 29 April 1916, and Heiser to Director-General, IHC, 1 May 1916 and 2 May 1916, all in “Notes on 1916 Trip”, APS/VHP.
about hookworm and health measures and prepare the way for later work along these lines in the villages.23

As expected, Waite’s survey verified Strong’s findings of heavy hookworm infestation among Papuan labour.24 Waite proposed that the government provide staff and a suitable boat so that an IHB representative could establish hookworm control in one selected plantation region of the country. Both the Australian Department of Home and Territories (which had responsibility for Papua) and the Papua Government agreed, immediately appropriating £1000 from Papua’s £6000 health budget. The IHB offered the salary and travelling expenses of their Medical Officer, plus all scientific equipment, drugs and contingent items to administer 10,000 treatments.25 Waite planned the usual IHB intensive programme, with all infected labourers treated until cured. Planters promised to provide adequate field latrines, one for every seventy acres of cultivated land. Once established, work would be extended to other regions of Papua.26

Despite this agreement, staff shortages again delayed an immediate campaign, and Waite left to begin organising the survey now approved for Queensland, while Governor Murray deliberated over a proposal to train white Australian staff for Papua.27 Just when two full-time workers were authorised, the doctor appointed by the IHB for Papua pulled out.28 His withdrawal threw the plans for Papua into disarray, and cast doubts on the IHB’s intentions and effective organisational capacity.29 Heiser, fearing that the Commonwealth Government would revoke its support if no work began within the year,30 struggled to find a suitable replacement, a difficult task when the United States Army Medical Service and the Public Health Service together had absorbed around 53,000 American doctors to aid the war effort.31 In the event, the candidate finally selected, Dr Sylvester Lambert, was sent instead to help Waite.

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23 Heiser to Director-General, IHC, 2 May 1916, and Heiser, “Diary”, pp. 183-186, both in “Notes on 1916 Trip”, APS/VHP.
25 Heiser to Atlee Hunt, Home and Territories Department, 1 February 1918, RFA RG. 5, Series 1.2, Box 65, Fldr. 945.
26 Waite, “Memo and Instructions to the IHB Medical Officer undertaking hookworm control work in Papua”, 22 January 1918, RFA RG. 5, Series 2, Box 50, Fldr. 313.
27 Waite to Heiser, 11 March 1918, RFA RG. 5, Series 1.2, Box 65, Fldr. 949.
28 Waite to Heiser, 21 March 1918, and Heiser to Waite, 27 March 1918, both RFA RG. 5, Series 1.2, Box 65, Fldr. 949.
29 Heiser to Waite, 1 October 1918, RFA RG. 5, Series 1.2, Box 65, Fldr. 949A; Cumpston to Heiser, 18 November 1918, RFA RG. 5, Series 1.2, Box 65, Fldr. 945.
30 Heiser to J. Waite, 6 September 1918 and 1 October 1918, both RFA RG. 5, Series 1.2, Box 66, Fldr. 949A.
31 Heiser to Breinl, 29 August 1918, RFA RG. 5, Series 1.2, Box 65, Fldr. 947.
in Queensland, where the survey results indicated more fruitful opportunities for all concerned. Work in Papua was deferred until 1920; and in retrospect, what seemed to be a highly regrettable delay at the time proved to have advantages for the Rockefeller Foundation and its work in the Pacific region.

**Australian resistance to hookworm work**

Waite faced more than just staffing problems in his struggle to get the Australian campaign underway. Though dedicated and capable, he lacked Heiser’s impressive poise and was slower to gain the confidence of Australian officials. “Your co-operation in this country ought to be one of the best things that ever happened to us,” Cumpston wrote to Heiser when opposition and indifference caused Waite difficulties, “but it will only be secured if a man who is wise to diplomacy, and a good deal experienced in it takes the work in hand and sees it through.”

Furthermore, Waite misjudged public attitudes and response to hookworm. Early in the Queensland survey, he publicised worm counts from infected schoolchildren. This was a favoured HIB technique for raising awareness of the problem, but here it antagonised rather than educated the community. People refused specimens for examination, apprehensive of ridicule and social ostracism if found to be infected; one parent, an educated barrister, appealed to Waite not to make public his twelve year old daughter’s treatment for fear that her future marriage prospects would be affected. “Queenslanders seem to be almost as sensitive over ancylostomiasis as they are over venereal disease, wherever publicity brings the individual into the limelight,” Waite noted with some surprise. “We have had to exercise extreme care, even in the treatment of infected cases, to keep the personal factor away from public view.” Waite revised his approach, but still found resistance to the survey and treatment difficult to overcome.

Opposition from health professionals was another problem for Waite. Dr Anton Breinl, Director of the Australian Institute of Tropical Medicine in Townsville, also knew the “enthusiastic and whole-hearted ill-will” with which

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32 Cumpston to Heiser, 15 January 1918, RFA RG 5, Series 1.2, Box 65, Fldr. 947. Cumpston later revised his opinion of Waite’s abilities. Cumpston to Heiser, 26 August 1918, RFA RG 5, Series 1.2, Box 66, Fldr. 949A; Cumpston to Heiser, 20 November 1918, RFA RG 5, Series 1.2, Box 65, Fldr. 945.

33 Waite to Heiser, 16 November 1918, RFA RG 5, Series 1.2, Box 66, Fldr. 949A.
settlers and townsmen of the Australian north responded to suggestions for sanitary practices that would improve local health.\textsuperscript{34} Austrian-born Breinl faced constraints in his work as war magnified Australian xenophobia and he was classified as an alien.\textsuperscript{35} It was hardly surprising then that he responded defensively when the IHB-directed campaign seemed a further assault on his professional status and expertise. Breinl’s support was important to the project but Waite found him erratic and difficult to negotiate with. Ultimately, it took Heiser’s tactful intercession from New York to smooth relations between the two men. He urged Waite to develop a sympathetic and friendly approach in his dealings with the temperamental “laboratory genius”, and reassured Breinl about his important role in the campaign.\textsuperscript{36}

\textbf{Pragmatics – Cumpston, hookworm, and the expansion of Commonwealth health administration}

These early encounters over the hookworm issue reflected the divisions at all levels in Australian society over the control and direction of health services. The struggle was carried out not only between researcher and health practitioner, but also between the community and public health proponents, and between the Commonwealth and the states’ interests. By 1921, the collaboration between Cumpston and the IHB had helped swing the balance in the federal government’s favour. This enabled Cumpston to conceptualise quarantine beyond protecting the nation against infectious disease at the borders of the continent itself, to a perspective on national health and security that encompassed the wider Pacific as a \textit{cordon sanitaire}.

Cumpston’s favoured model was the United States Public Health Service; as he later informed Heiser, “[its] history has been my textbook.” Cumpston carefully followed its approach, avoiding any overt appropriation of state rights by a strategy was “peaceful penetration”, with States given financing and personnel to improve their sanitation. Using national crises as opportunities to

\textsuperscript{34} Elkington to Heiser, 13 July 1918, RFA RG. 5, Series 1.2-410, Box 65, Fldr. 945.
\textsuperscript{36} Heiser to Waite, 8 November 1918, RFA RG. 5, Series 1.2, Box 65, Fldr. 945. Also Heiser to Breinl, 29 August 1918, RFA RG. 5, Series 1.2, Box 65, Fldr. 947.
justify expansion, he unobtrusively extended the Australian Quarantine Service's involvement in public health. He set up a Federal laboratory in 1915, ostensibly to produce sera and vaccines so that Australia was independent of foreign imports in wartime. This rationale circumvented opposition to his real intention for the laboratory, which was to establish a basis of scientific research and bacteriology ("the handmaiden of public health") following the American example. His next step, in 1916, was to organise a committee to study the causes of morbidity and mortality throughout Australia, and possible preventive measures. He eventually persuaded this influential group to his view: that the Commonwealth Government should actively engage in public health work. The cumulative effect of Heiser's visit, the spectre of endemic hookworm infection, and the offer of IHB assistance provided another opportunity for Cumpston to press for Commonwealth involvement in the campaign against hookworm in Queensland and subsequently in other states. The IHB backed him in developments that had the potential to meet its own aspirations.

Hooking the heartland

Clearly, then, a hookworm control programme in Queensland went beyond mere concern for the health of the state's scattered communities. This was borne out by the results of Waite's survey, which began in April 1918. Of 21,844 people examined in the coastal belt - the apparent heartland of infection in Australia - only 21.1 percent were infected, and the rate dropped to a mere 9.2 percent once the whole state had been examined. Furthermore, most were cases of mild, asymptomatic parasitism, at least among the white population. Unsurprisingly, indifference if not outright opposition greeted Waite when he suggested a hookworm treatment project. Some local authority officials supported his idea of

37 All citations in this paragraph are from Cumpston to Heiser, 20 November 1918, RFA RG 5, Series 1.2, Box 65, Fldr. 945; cf. his official account, in Cumpston Health and Disease, pp. 423-424. The 1918 influenza epidemic and the risk of new health problems when Australian servicemen returned from World War I in 1919, provided further impetus for Cumpston's Federal expansion.
38 W. Sawyer, Report # 7599, "Work for Relief and Control of Hookworm Disease in Australia 1918-1920", RFA RG 5, Series 3, Box 161.
39 Cumpston, Health and Disease, pp. 240-243. Incidence and severity were higher among Aborigines; the ramifications of this are discussed later.
a centralised preventive approach, but most could not be persuaded that hookworm warranted further expenditure from their already constrained health budgets.

Cumpston, however, was determined to have a hookworm campaign begin in Queensland, convinced of its value to Australia’s future health developments. As Director of Quarantine he had just organised a successful nation-wide response to the influenza pandemic, after uncoordinated State efforts failed, so was in a strong position to claim the value of a wider Commonwealth role in health services. Having hookworm disease appear as another serious threat to the nation’s health and prosperity would conveniently reinforce his argument. Yet it was impolitic for Cumpston to declare his hand overtly, and Waite was reluctant to push the project against State opposition. Cumpston, carefully presenting the IHIB representative as a politically neutral but medically committed spokesperson, organised for Waite to be invited to Melbourne to discuss a possible co-operative campaign with Federal and Queensland State officials. Aware of the potential for conflict, Heiser warned Waite not to take sides, “but to induce the two to work together with us in our efforts to bring hookworm infection under control.”

As in other cases, Cumpston played on national insecurities, and exaggerated the danger posed by hookworm. After the survey, few health officials (including Cumpston himself) actually believed the disease to be a serious threat, but he nevertheless managed to expand the scope of the proposed hookworm campaign from a minor issue of control to the need for “absolute eradication”. Even Waite, although justifiably doubtful about the Board’s willingness to back such an expensive, unnecessary, and recognisably fruitless exercise for only 75,000 people, succumbed to Cumpston’s persuasion and declared eradication as the objective. Waite’s presentation at the Medical School in Melbourne drew leading Commonwealth and state representatives and prominent medical and business men. His analysis of the hookworm situation clearly demonstrated Cumpston’s influence. He emphasised that inaction would mean the ultimate defeat of the

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40 Waite to Heiser, 22 November 1918, RFA RG 5, Series 1.2, Box 66, Fldr. 949A. Among them was Dr J.S.C. Ellington, Queensland’s Director of Quarantine, who supported Cumpston and Heiser’s approach to public health, including establishing a Federal Health Department. Heiser to Ellington, 27 November 1918, RFA RG 5, Series 1.2, Box 65, Fldr. 945.
42 Heiser to Waite, 13 November 1918, RFA RG 5, Series 1.2, Box 66, Fldr. 949A.
43 Cumpston to Heiser, 20 November 1918, RFA RG 5, Series 1.2.410, Box 65, Fldr. 945.
"White Australia" policy, undermine the economic viability of Queensland's sugar industry, and let uncinaria spread unchecked from the north into other states. He recommended a five year campaign, concentrating initially in Queensland and Papua, with the Commonwealth, local government, and the IHB contributing to a minimal annual budget of £20,000. An expanded Commonwealth Quarantine Service would provide the obvious basis for Federal direction and co-ordination in a working relationship with the State Health Department and the Institute of Tropical Medicine, though an IHB representative would be field director until Australia trained a suitable replacement.

Queensland, still resisting financial commitment and Federal intervention, responded cautiously to the Cumpston-Waite proposal, as did Heiser from New York. He was not convinced that the extent of hookworm disease in Australia warranted the expenditure proposed, especially as it would mean curtailing more urgent and economic medical work the IHB planned in Asia. The Board would only consider the matter further if Waite could confirm the Australians' commitment to certain criteria for future development: a firm guarantee of Federal-State co-operation for the 5-year programme, and the establishment of a functional central health department that could take over completely from the IHB and continue to expand Australian public health services.

Cumpston had anticipated the IHB's doubts about cost and real benefit. To Heiser, he reiterated his commitment to the American model of public health and his belief that the hookworm campaign would bring progress along these lines to Australia, commenting pointedly, "This 'hormone' work is, as I understand, what the International Board is working for." The promise of a model demonstration of progress in Australia's public health organisation overcame the Board's hesitancy, and the lure of Rockefeller money, coupled with the assurance of a 1:1 subsidy from the Federal Government, eventually proved similarly irresistible to Queensland. The IHB's proposal followed its standard practice of financial contribution on a sliding scale: £8000 for 1919, decreasing by £1000

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44 Much emphasis was placed on the mental as well as physical degeneration which hookworm inflicted on white communities in tropical Australia. From his study assessing mental development of school children, Waite concluded that uncinaria was responsible for "considerable mental sluggishness" and in serious cases, mental retardation calculated at between two and five years below "normal". J. Waite, Report No. 7455, "Work for Relief and Control of Hookworm Disease in Queensland, 17 April 1918-31 December 1918, RFA RG. 5, Series 3, Box 161.
45 The cost of production of Queensland sugar was prohibitive without heavy government subsidies. Eric Williams points out, Australia willingly paid a high price order to remain a white man's country, but not if the physical health of the Australian worker was jeopardised. Capitalism and Slavery, New York, 1961, p. 22.
46 Waite to Heiser, 22 November 1918, RFA RG. 5, Series 1.2, Box 66, Fldr. 949A.
47 Heiser to Waite, 19 November 1918, RFA RG. 5, Series 1.2, Box 66, Fldr. 949A.
48 Cumpston to Heiser, 20 November 1918, RFA RG. 5, Series 1.2, Box 65, Fldr. 945.
annually until its complete withdrawal from the programme after 1923. Australian participation, shared equally between Commonwealth and State funding, would increase correspondingly from £12,000 to £16,000 over the campaign's five year period. By then, theoretically, a permanent, well-equipped, Federal Department of Health would be in place to oversee future work.\textsuperscript{49} IHB support for a hookworm campaign in Queensland therefore strengthened the political agency of Australian national health interests, which would, in turn, play a part in determining the future direction and scope of the Board's Pacific work.

\textbf{‘A little stopover’ - Lambert in Australia}

The hookworm campaign in Australia helped establish the Rockefeller Foundation's stake in the South Pacific in other ways. During the crucial negotiations for the campaign, Dr Sylvester Maxwell Lambert arrived to help Waite in Australia. Although unrecognised at the time, this heralded a significant development for the Rockefeller Foundation's Pacific role. The Australian project provided Lambert with training in both the technical and public relations skills required in an IHB public health campaign, in an environment expansive enough to accommodate the doctor's boundless but unrefined energy.

Lambert was only reluctantly appointed to the IHB staff by Heiser, who at the time faced a dearth of civilian doctors in his attempts to satisfy repeated requests from Fiji for a field director to re-open the work there. Lambert had been rejected for Army service because of poor eyesight, and hardly met the IHB's criteria. While Heiser continued to hope for a more suitable candidate, Lambert undertook preparatory hookworm training in Mississippi.\textsuperscript{50} The Papua commitment had priority, but Heiser decided that before Lambert could be entrusted with such responsibility he needed a probationary period in Australia. Despite Heiser's misgivings, Lambert eventually proved his worth, redeemed the IHB's plans in Papua (and New Guinea when that German territory came under Australian jurisdiction at the end of the war), and revived the Fiji hookworm campaign, energetically extending the IHB's (and his own) involvement in health activities throughout the South Pacific.

Initially, however, Lambert's arrival in Australia in mid-October 1918 seemed to fulfil all Heiser's worst fears about his suitability as a Rockefeller

\textsuperscript{49} "Hookworm Report, 1918-1924", RFA RG. 5, Series 3, Box 161.
\textsuperscript{50} Lambert, 1946, p. 3; RFA, Biographical file, Lambert, S.M., Fldr. 1
emissary. It also serves to illustrate some key issues in public health at the time. Ironically - or perhaps appropriately - Lambert featured as both actor and casualty in the drama of pandemic influenza that raged worldwide during 1918-19, with its enormous death toll raising new questions about cause, prevention, and response to infectious disease. When Lambert, his wife, and baby daughter sailed from San Francisco, influenza was already aboard, and the family was among those who fell ill. On the stopover in Wellington, the passengers were subjected to supposedly preventive inhalations of zinc sulphur steam. After three days, however, the boat left for Australia with sick crew. Lambert stood in as ship's doctor, doing the rounds daily, but was furious when the captain refused to isolate the infected. In Sydney the passengers encountered Cumpston's stringent regulations - a seven day quarantine and compulsory steam inhalation treatments ashore - for all arrivals from New Zealand, where the epidemic was severe. The trips in an open boat in cold wet conditions triggered relapses for the Lambert family, and both his severely ill wife and daughter were later hospitalised. When released from quarantine after fifteen days, Lambert was scathing about the treatment the passengers had received. "What I think about Government officials in Australia isn't fit to write... This has been a most miserable trip," he complained bitterly in his first letter to Heiser.51

Heiser was not the only one to hear his views; Lambert, unschooled in the IHB's delicate approach to political situations, publicly supported the passengers’ complaints about their treatment, creating a furor in the press. Cumpston's measures were questioned in the Federal Parliament, and Waite feared repercussions for the just-negotiated hookworm campaign. He persuaded Lambert to refute the criticisms "as well as he was able",52 then bundled him off to Queensland, out of the way of further damage. Lambert did not then realise the serious consequences of the incident, which adversely affected his relations with Cumpston for many years and contributed to the Australian’s cool response to Lambert’s later initiatives for co-operative action in the Pacific.

Nor did the episode improve his standing with Heiser, who thereafter took every opportunity to curb his subordinate’s frankness and educate him in the IHB’s approach of leading unobtrusively, but decisively, from the rear.53 While Lambert never consistently managed the required degree of subtlety, his direct

51 Lambert to Heiser, 29 November 1918, RFA RG. 5, Series 1.2, Box 65, Fldr. 948.
52 Waite to Heiser, 10 December 1918, RFA RG. 5, Series 1.2, Box 98, Fldr. 1352.
53 James Gillespie (1991, p. 68) points to the expectation that Foundation staff "work within a rigid framework imposed from the centre"; as Lambert’s subsequent work shows, resistance and subversion was possible.
manner and boisterous enthusiasm proved to be a combination that had wide appeal in the Australian north and later in the Pacific. Faced with Lambert’s prolific achievements in the field, Heiser came grudgingly to acknowledge that his unconventional approach could work, and authoritarian control eased into a more supportive and appreciative working relationship.

Safely in Queensland, Waite and Lambert worked in collaboration with the Queensland Health Department until the remaining details of the larger joint scheme were finalised. Unfortunately, Waite’s dedication to health promotion did not ensure his own; within a fortnight he fell so seriously ill that he was forced to tender his resignation. His breakdown neatly encapsulated many of the concerns around which tropical medicine was constructed. The protracted stress of working in an unfamiliar and difficult environment; vulnerability to exotic diseases such as the sprue and malarial fever with which he was finally diagnosed; and high maternal mortality rates (Waite was acutely depressed at his wife’s recent death after the birth of twins), were all common themes in a speciality which aimed in part to alleviate anxiety over the ability of white races to live and prosper in tropical regions. As the IHB found, the problem went beyond Waite’s individual suffering to costly disruptions in administration and productivity. Faced with closing work in Australia, or the expense of employing an inexperienced local physician, Rose chose the risky alternative Waite suggested, and appointed Lambert temporary director of IHB operations.  

Now committed to making Australia a model of economic, scientific health services, the IHB searched for a doctor who combined a thorough training in the laboratory with wide experience in public health administration and practice. Lambert met neither of these criteria. It took several months before a replacement was found: Dr William A. Sawyer, who as previous head of the Public Health Service in California was “a man unusually well qualified to meet the high standards necessary for success in Australia.”

The emphasis on laboratory expertise reflected the drive to establish modern public health on a firm foundation of bacteriology and pathology; yet experiences in Queensland highlighted the fact that the ultimate success of a public health campaign relied on other skills besides scientific understanding of disease causation and treatment. Both health and science are configured, function, and develop within a matrix of political, social, and economic factors that influence

54 Rose to Waite, 23 December 1918 and 27 December 1918, RFA RG 5, Series 1.2, Box 66, Fldr. 949A.
55 Heiser to Lambert, 26 February 1919, RFA RG 5, Series 1.2, Box 81, Fldr. 1150; Heiser to Atlee Hunt, 13 May 1919, RFA RG 5, Series 1.2, Box 81, Fldr. 1147.
the application of this knowledge to disease prevention and control.56 The new scientific public health advanced by Cumpston and the IHB was intensely ideological, perceived as central to the national state’s role in advancing national efficiency, development and power in a competitive world through building a large, healthy, and productive population; in Australia this was especially critical given its ‘White Australia’ policy. Health therefore required a strong reciprocal commitment from government; for Cumpston, this was “the statesman’s first duty.”57 Yet if a centralised bureaucracy of experts in scientific medicine was to direct “the public health”, it could only do so by reworking existing political and social relations, including the respective responsibilities of Federal and state governments, the position of medical professionals, and, especially in Queensland, a community in which rugged anti-authoritarianism was antipathetic to administrative coercion or control. To establish the rhetoric of scientific public health as a legitimate discourse, the Hookworm Campaign needed to be effectively persuasive at all levels, especially - as survey results showed - there was no intrinsic “truth” to its claim to be a fully rational and scientific assessment of the disease situation and health priorities.

Lambert may not have been the “statesman of science” that Cumpston and Heiser believed appropriate to the campaign, but more importantly, he was able to take its work into the community in “a way that defused public resistance and made the previously incredible, credible. Initially he reported Queensland to be “the toughest people and country I have ever seen”, but soon (unlike Waite) found work in the field easy, with people responding eagerly to the “proper approach and ... publicity.” Brisbane bureaucrats were admittedly difficult, requiring “a smooth man to do the work here ... a politician as much as anything else”,58 and Lambert’s own approach forthright rather than polished; but contrary to Heiser’s apprehensions that this might cause problems, it proved highly successful in establishing working relations. Within a short time Lambert complained to Heiser, “Things have gone so smoothly with me here that it grows monotonous. ...The politicians are the same type as at home, very willing to help if you know them and show them.”59

The Queensland Government funded the survey and treatment work until the major programme began; when its grant proved insufficient, Lambert used the “special connection” he had developed with the Home and Under-Secretaries and

57 Lewis (ed.), in Cumpston, Health and Disease, p. 4.
58 Lambert to Heiser, 6 May 1919, RFA RG. 5, Series 1.2, Box 81, Fltr. 1151.
59 Lambert to Heiser, 19 May 1919, RFA RG. 5, Series 1.2, Box 81, Fltr. 1151.
the Minister of Agriculture to secure bridging finance. Even Breinl, who considered that Waite and the IHB had hijacked his Institute’s role in tropical health and cast a slur on his own professional ability, was won over by Lambert’s prodigious energy and sociability. He volunteered helpful advice for forthcoming work in Papua, and recommended Lambert as an Associate of the Institute of Tropical Medicine.

Lambert also proved an able team leader. He trained his field staff well in IHB methods then willingly devolved responsibility so that the survey and treatment could be carried out in several areas at once. His approach inspired a core of willing, co-operative field workers (some of whom later provided continuity of expertise by accompanying Lambert to the Pacific) and ensured that the campaign proceeded with speed and efficiency despite the difficulties associated with working in scattered rural communities. It was also intrinsic to later plans for the Pacific.

Like Cumpston, Lambert was concerned to keep public interest in hookworm alive until the full campaign began. He was an ardent publicist, maintaining a high profile for the survey through the newspapers - in the first three months of 1919, the Cairns papers alone gave the hookworm work 340 column inches of publicity. He arranged “media events”, organising a local journalist to interview Cairns health authorities and the Superintendent of Schools for “an unbiased outlook” on their enthusiastic reports of improved public health and mental alertness in schoolchildren as a result of the hookworm work, and sending photos to local papers of his friends the Minister of Justice and the President of the Arbitration Court, standing in front of a model privy which he had developed. The latter, Judge MacCawley, asked Lambert to write on sanitation and hookworm disease for inclusion in his arbitration decision on sugar plantation employment conditions. As well as holding open public meetings on hookworm, Lambert targeted local schools to propagandise the work. “Here in Ingham I have given twelve school lectures to about 525 children especially laying stress on the necessity of their efforts at home,” he wrote to Heiser. “The boys find that after a campaign of that kind their work is easy. We will not have over four percent refusals here.”

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60 Lambert to Heiser, 26 May 1919, RFA RG. 5, Series 1.2, Box 81, Fldr. 1151.
61 Lambert to Heiser, 1 July 1919, RFA RG. 5, Series 1.2, Box 81, Fldr. 1151.
62 Media coverage of the 1919 influenza outbreak, and the struggle between the States and Commonwealth over control of quarantine measures against the epidemic also effectively furthered public awareness of health programmes. Lambert to Heiser, 18 April 1919, RFA RG. 5, Series 1.2, Box 81, Fldr. 1150.
63 Lambert to Heiser, 28 February 1919, RFA RG. 5, Series 1.2, Box 81, Fldr. 1150.
64 Lambert to Heiser, 26 May 1919, RFA RG. 5, Series 1.2, Box 81, Fldr. 1151.
These methods successfully raised the profile of the hookworm campaign, the efficacy of treatment, and the importance of sanitation. However, as Heiser set out to teach Lambert, publicity was a delicate matter for the IHB. As director until Sawyer arrived, Lambert could educate and advise, even propagandise, but IHB policy was to credit all health action and improvements to government agencies, rather than the philanthropy or its employees. Heiser cautioned:

It is well to remember that the most effective kind of publicity in public health work is that which educates public opinion and reports accomplishments, rather than results which it is expected to achieve...keep out of the newspapers unless you actually have something new and effective to say, and then say it through the local health authorities.

Nor was Lambert to advocate his own improved design for an economical privy, even to rouse Queenslanders' enthusiasm for sanitation:

As you probably understand we never take it upon ourselves to approve any particular type of excrement disposal. We advocate the method of the Board of Health in the area in which we are working.

Cumpston, strategically ready to acknowledge Rockefeller involvement when it would give extra credibility to his own activities, also received a tactful reminder from Heiser in New York:

Please keep in mind that we have no desire whatever to have our name mentioned. We are truly in this work for humanitarian reasons and if we can stand in the background and help to uphold the hands of those like yourself who are actually doing the work, we will feel like we are accomplishing our mission.

This approach maintained the illusion of national autonomy and self-direction, strengthening popular acceptance of state direction of health promotions which were successful while relieving the IHB from responsibility for those efforts less effective. The Rockefeller Foundation set rules on publicity and publication to avoid it becoming responsible for information that might lack "proper scientific foundation." In part this unwillingness to jeopardise the IHB's reputation stemmed from a recognition that although gaining ground, the position of scientific public health was still precarious, its future not yet fully assured. Presenting the IHB's position on public health as state policy rather than a function of private charitable enterprise helped exclude competing discourses in

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65 Fosdick (Rockefeller Foundation, p. 322) claimed modesty about its activities as a first principle of the Foundation.
66 Heiser to Lambert, 14 April 1919, RFA RG. 5, Series 1.2, Box 81, Fldr. 1150.
67 Heiser to Lambert, 15 May 1919, RFA RG. 5, Series 1.2, Box 81, Fldr. 1151.
68 Heiser to Cumpston, 11 October 1919, RFA RG. 5, Series 1.2, Box 81, Fldr. 1147.
69 Heiser to Sawyer, 13 February 1920, RFA RG. 5, Series 1.2, Box 98, Fldr. 1353.
medicine which could still undermine the campaign to redirect social health practices along scientific lines.

Manipulating hookworm disease

The campaign's success in establishing the "reality" of hookworm, and its subsequent failure to live up to its public promises, also required careful management. Cumpston's early insistence on exaggerating both the danger of hookworm disease and the need for eradication, in order to gain support, had unintended consequences, as did Lambert's earnest publicity. Sawyer arrived in Australia to find Queenslanders upset that press coverage of "the hookworm problem" was adversely affecting immigration to the state. His counter-propaganda was a fine balance of threat and reassurance, and drew Queenslanders as heroic crusaders for white civilisation: hookworm if uncontrolled was indeed a "hidden danger" to white settlers; otherwise it was nothing but a minor common tropical condition which rational, organised public health methods could easily control, especially where - as in Queensland - "full co-operation is received from an intelligent white population." Furthermore, focusing on hookworm should increase settlement as the campaign to "stamp out" hookworm would also prevent other diseases and

...demonstrate to the World that through sanitation wide reaches of the tropics can be made and kept safe for colonization by white men.

... By sharing in the provision of an organized force to operate against Hookworm, Queensland is carrying out her purpose to make her tropical lands fully fitted for settlement by a prosperous and progressive white race.\(^{70}\)

Sawyer's response deliberately constructed Queensland's agency in extending human control over a potentially hostile environment. Hookworm, like the tropics themselves, presented a challenge, but would be no match for the white man's new approach to medicine. The IHB-assisted campaign would "rapidly and systematically" eradicate danger and disease. To reinforce locals' sense of empowerment, Sawyer had them manage all public relations for the campaign, but predicted that underlying IHB's expertise and direction would be

\(^{70}\) Sawyer to T.J. Ryan, 8 September 1919, RFA RG. 5, Series 1.2, Box 81, Fldr. 1152.
recognised.\textsuperscript{71} His diplomacy was successful, and Queensland authorities continued to support hookworm work.

Despite his promises, Sawyer soon had to carefully re-frame the campaign's widely publicised goal, as IHB experiences elsewhere now indicated that eradication was probably impossible. The Director and Heiser confidentially agreed that it was more applicable in the Australian context to advocate the less specific idea of "control". With the campaign's goals downgraded, Sawyer observed that other infectious diseases were more serious threats to Queenslanders' health, despite the claim that improving sanitation to prevent hookworm infection would also reduce their incidence. Hookworm nevertheless remained the focus of joint health efforts.\textsuperscript{72}

\begin{flushleft}
An integrated hookworm campaign
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The official joint Hookworm Campaign began in October 1919, after Sawyer arrived to arrange final details. As IHB-appointed Director, he had executive control. A Central Committee in Melbourne, representing the Commonwealth, controlled finance and policy. From headquarters in Brisbane, an Executive Committee with State, Commonwealth, and IHB representatives organised the work in Queensland, a model followed when work began in other states. Eventually several field units, with a medical officer overseeing inspectors, microscopists and a clerk, extended the work throughout Queensland.\textsuperscript{73}

Lambert had followed the standard IHB intensive method in the survey to date, with census-taking, physical and stool examinations of all those persuaded to participate, and treatment of the infected, along with a sanitation survey and education in disease prevention and hygiene. Results from 22,000 people in the coastal belt from Cooktown to Townsville showed an average 21.1 percent infection rate, with a range from 18.2 percent for white people, to 80.9 percent among the 992 Aboriginals examined.\textsuperscript{74}

These ethnically divergent results generated inversely proportional action. Australia's white population remained the focus of the campaign, although its

\textsuperscript{71} Heiser to Sawyer, 11 November 1919, RFA RG. 5, Series 1.2, Box 82, Fldr. 1153.
\textsuperscript{72} Sawyer to Heiser, 30 December 1919, RFA RG. 5, Series 1.2, Box 82, Fldr. 1153.
\textsuperscript{73} Sawyer, Hookworm Report No. 7540, "The Relief and Control of Hookworm Disease in Queensland, Australia, from April 17, 1918 to December 31, 1919", RFA RG. 5, Series 3, Box 161.
\textsuperscript{74} Cumpston, \textit{Health and Disease}, pp. 240-242.
infection rates countered the IHB’s generic model of hookworm as a widespread public health menace. Variations in incidence and effect provoked Lambert and fellow fieldworkers to new questions about transmission and prevention, and as the survey programme expanded, methods became more discriminating. Cumpston’s expedient exaggeration of the problem had distorted hookworm epidemiology by using the number of people infected rather than the more accurate indication of average worm count. Now, economics, efficiency, and credibility demanded that control strategies take into account Breinl’s earlier differentiation between patients with hookworm disease (with symptoms of lowered health) and infected carriers, who had developed tolerance to the parasite, with little effect on health. Even mild infection proved to be present and endemic only in certain areas of Queensland, and was almost negligible throughout the country as a whole. Consequently surveys were reduced to representative groups from a cross-section of the population, establishing baseline infection rates ("the hookworm index"), which determined permanent control procedures after 1922; these ranged from no action, where rates were minimal, to annual intensive control for areas with 20-100 percent infection.\textsuperscript{75}

As Breinl had argued, hookworm disease itself was relatively rare and not usually serious, despite the gruesome depictions in one of Waite’s survey reports.\textsuperscript{76} A combination of factors such as high rainfall, sandy soils, and the rural farming situation, where sanitation was poorer and going barefoot common, contributed to higher infection rates. Miners, whose working conditions combined warmth, moisture, and no sanitation, were also highly susceptible. Hookworm was often endemic among the institutionalised in benevolent and insane asylums. The other group among which both hookworm infection and disease were serious was the Aboriginal population of the coastal areas,\textsuperscript{77} whose treatment was to highlight most clearly that the motive underlying the campaign was political rather than health-oriented.

\textsuperscript{75} Ibid, p. 240; W.C. Sweet, 1 October 1922, "The Control of Hookworm Disease in Queensland", p. 6, RFA RG. 5, Series 2, Box 39, Fltr. 231.

\textsuperscript{76} Gillespie, "Rockefeller Foundation, Hookworm and National Health Policy", p. 79.

\textsuperscript{77} Cumpston, \textit{Health and Disease}, pp. 240-245.
Lambert, the Hookworm Campaign, and Aboriginal Health

The construction of hookworm as a threat to white settlement in Queensland and its identification as a tropical disease inevitably brought strong racial elements into the hookworm campaign. Working among Aboriginal communities in the north provided Lambert with his first encounters with an indigenous population whose extinction seemed inevitable to most observers, and like many contemporary commentators, his reflects both fascination and abhorrence.

Even identifying the origins of the disease had racial implications. First diagnosis of hookworm in Australia around the turn of the century seemed to indicate that the parasite was recently introduced from Asia rather than endemic. Breinl suggested that Europeans were responsible for introducing the infection to the aboriginal population. While this proposition had aspects abhorrent to white notions of its own superior health and cleanliness, Lambert took the "charitable view" that it was made in preference to claiming uncinariasis as an indigenous disease, "as that might set up such a scare as to depopulate the coast [sic] of Queensland." However, when his own initial surveys showed 90 percent - 100 percent infection among Aborigines, Lambert concluded that they, not whites, were the origin of hookworm disease in Australia, and questioned if this might be "one of the principal factors in their degeneracy as a physical and mental type of man".

Lambert was excited by an invitation to examine residents at Monamona Seventh Day Adventist Mission near Cairns, describing it to Heiser as "a small, big opportunity, for I should be able to make good publicity of it... Anything about Abos always attracts attention." As State funding was minimal, and missions largely self-supporting, Lambert hoped to find "the Abos live or have lived so far in almost their natural state" so might therefore provide conclusive evidence for a pre-existing disease situation. In fact, the mission lifestyle was

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78 Ibid, p. 239. Cumpton notes that previous governor, Sir William MacGregor, a doctor by profession, attributed Asiatics with introducing hookworm into the State. Repatriated indentured Kanaka labourers then took the parasite into the Pacific.
79 Lambert to Heiser, 7 February 1919 and 22 February 1919, both RFA RG. 5, Series 12, Box 81, Fldr. 1150. Anthropologist Mary Douglas argues that what is "of the other" or alien is more menacing than the known. Purity and Danger: An Analysis of the Concepts of Pollution and Taboo, London, 1966.
very different from previous subsistence hunter-gatherer ways; most now lived in small shacks and ate non-traditional foods. Still, Lambert admired the missionaries’ pragmatic civilising programme, with its daily work parties “to induct [the Aborigines] into the arts of agriculture and to educt what labor was possible from the black.” There were no sanitary provisions for the Aborigines; latrines were erected only after Lambert’s lectures on hookworm prevention. He described the mission Aborigines as well fed and apparently contented, in better condition than those seen in the bush. Yet anaemia was noticeable among the children and women and geophagy, a symptom of hookworm, universal. Comparative statistics from 170 Aboriginal residents and 13 white staff showed infection rates of 94 percent and zero percent respectively.

Although later mission surveys, such as at Cape Bedford, north of Cairns, gave much lower positive rates, Lambert publicised Aboriginal infection rates as “uniformly 100 percent”, adding:

These figures bring home the fact of the necessity of treating all aboriginals, consistently, to a cure. This is a responsibility to the blacks that must be assumed by their more intelligent white neighbours...unless this is done, they will act as carriers and be a constant threat to the white population, because of their nomadic life and filthy habits.\(^{81}\)

This assessment ignored the relative safety of a freely nomadic life, when sites could be abandoned before levels of soil pollution became high. It also contradicts his experience at Monamona, where the tribes demonstrated great interest in his talk on hookworm, and came voluntarily for examination and treatment, showing “a lively interest in participating in their own cure – really models for more enlightened communities.”\(^{82}\)

Despite Lambert’s acknowledging that their understanding and “docility” facilitated treatment, the hookworm campaign took a coercive approach to Aborigines. Lambert reported that the “proper State authorities” were cooperating in a plan to treat all Aborigines every six months until cured, which was relatively easy among mission Aborigines, but bush people were harder to “run down” for consistent examination and treatment. In the north the police administered compulsory hookworm medicine to Aborigines at mandatory check-ins and annual Blanket Days, using blankets or cash as overt inducements. This plan, agreed to by the Chief Protector of Aboriginals, John William Bleakley, had ethical shortcomings – the aspect of compulsion and force, the use of untrained

\(^{81}\) Lambert, “Monamona Mission: Description of a little-known Settlement”, 1919, RFA RG. 5 Series 2, Box 39, Fldr. 234. Sawyer also reported that Aborigines on Hammond Island (near Thursday Island) were completely free from hookworm disease “owing probably to their habit of living on the beach.” Sawyer to Heiser, 5 May 1921, RFA RG. 5, Series 1.2, Box 119, Fldr. 1593.

\(^{82}\) Ibid.
lay people to administer potentially damaging drugs, and the failure to verify infection before treatment, or cure afterwards. Lambert considered it the only way, as effective treatment of this group was essential if hookworm was to be routed in Australia. 83 The IHB later commended Lambert (who paid gratuities to participant policemen) on his “co-operative project.” 84

The reality that hookworm seriously affected Aboriginal health was overshadowed by the perception that it posed a major threat to white settlement. Thus the main resources of the campaign went into assessing and remedi ing the far more minor infection among the white population. Suggestions for handling the disease among Aboriginals, such as enforced ongoing treatment, were based on perceptions such as Lambert’s which saw indigenous people as a reservoir of infection endangering the health of the white community; action was limited to preventing spread of the disease between the two groups. Most surveys of infection rates among Aboriginals were made in settlements that owed their existence to changes in traditional lifestyle wrought by European settlement, rather than among less easily contacted nomadic people. 85 There was little consideration of attending to factors such as poor nutrition, housing, and sanitation which often resulted in the settlements, leaving people vulnerable to infection. Lambert, for example, suggested that treatment at heavily infected Yarrabah Mission had been ineffective due to a diet almost entirely of rice. Experimenting with various combinations of dosage, purgatives, and timing was nevertheless the solution here, rather than any real attempt at preventive health programmes, such as improving diet. 86 Later, however, Sawyer reported the Chief Protector’s support for privy installation at Barambah settlement. Here, white residents had sewage disposal but were still exposed to contaminated soil because the Aborigines were provided with no facilities whatever. 87

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83 Lambert to Heiser, 21 March 1919, RFA RG 5, Series 1.2, Box 81, Fldr. 1150.
84 Heiser to Lambert, 2 June 1919, and Lambert to Heiser, 8 December 1919, both RFA RG 5, Series 1.2, Box 81, Fldr. 1151.
85 Gillespie, “Rockefeller Foundation, Hookworm and National Health Policy”, pp. 84-86; Cumpton, Health and Disease, p. 241, reported that 295 of the 303 people found with hookworm in the Broome area were Aborigines whose infection was traced to the Beagle Bay Mission Station where most coastal Aborigines spent time and “conditions were favourable to the spread of infection.” G.M. Foster and B.G. Anderson compare vulnerability to disease in nomadic and settled populations, in Medical Anthropology, 1978, pp. 15-18.
86 Lambert to Heiser, 10 March 1919, RFA RG 5, Series 1.2, Box 81, Fldr. 1150.
87 Sawyer to Heiser, 22 June 1920, RFA RG 5, Series 1.2, Box 98, Fldr. 1354.
Lessons of the Australian campaign

Lambert’s representation of Aboriginal health problems foreshadowed his future role as the IHB’s sole representative and intermediary between other colonised indigenous populations in the Pacific. As a result of the Australian campaign hookworm disease remained a problem amongst the indigenous people long after its insignificance to the health of white Australians had been acknowledged and major control efforts therefore abandoned. The IHB professed humanitarian ideals in its public health projects, but here failed to address serious, endemic infection among a marginalised group, solely on the basis of their racial origins. Furthermore, the organisation was willing to comply with dominant political and ideological agenda where this facilitated the achievement of its own goals: the extension of an improved, more unified health administration, based on western scientific medical paradigms, which in Australia was achieved to at least the partial satisfaction of Cumpston and the IHB.

It also demonstrates weaknesses in the foundations on which this public health system was to be built. As well as concentrating resources in areas of lesser need, the exaggeration of western scientific medicine’s ability to eradicate the “simple” disease of hookworm focused on administering treatment as the “magical” component of control, while tending to ignore the wider synergistic factors contributing to community health and wellbeing, even as far as these were understood. Drugs were provided free, while the IHB steadfastly insisted that individuals take responsibility for providing their own latrines, despite soil pollution being known to be the crucial link in hookworm infection, and cost of materials and maintenance often an impossible burden for most vulnerable sectors of the population. When biomedicine proved to be incapable of curing hookworm as touted, the solution was seen in determining more effective drug treatments.

This direction, evident in the Australian campaign and a significant aspect as the IHB moved into the tropical Pacific, reflected the ongoing, universal contestation for authority in western medicine. However strongly the IHB urged the training of true public health personnel and a team approach, their emphasis on “scientising” public health to establish its validity placed laboratory-style

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research at the forefront, elevated clinical intervention, and left the practical application of preventive, non-medical methods (the hygienic environmental approach) as a lesser, lower status health strategy. Both Cumpston and Heiser saw the laboratory as at the cutting edge of medicine, though such was the plasticity of medical science at this time that Heiser at least was unsure of its best function and direction.89

The wider campaign brought up questions about individual susceptibility, tolerance, or immunity to the effects of hookworm and also cast doubt on assumptions about the effectiveness of treatment. In some communities, equilibrium of infestation existed; here, treating but failing to cure or prevent re-infection of those with minor, harmless infection not only unproductively exposed individuals to potentially damaging toxins, but frequently caused a resurgence in infection until population/parasite homeostasis was re-established.90 Despite enthusiastic reports of improvements during the early years, and the "probable" 64 percent reduction overall in hookworm infection at the campaign’s end in 1924, re-surveys indicated that these had been over-optimistic; in some areas infection rates quickly returned to the same level as in the initial surveys, or even higher.91

These results did not fit with the IHB’s argument that scientific medicine could easily control hookworm. They did force the organisation to look again at preventive measures of soil sanitation as a means of improving outcomes.92 The link between faecal pollution and disease was obvious but its exact nature remained undetermined. Cumpston’s later reported that in depth study of the relationship between hookworm incidence and sanitation found a general correlation between soil pollution and hookworm infection, at least in wet areas. Attempts to establish a mathematical formula that would validate this relationship along scientific lines were unsuccessful, and after assuming responsibility for hookworm work in 1924, the Australians found it necessary to make a closer epidemiological analysis.93

From the beginning, Lambert assumed that good latrines were as important to the campaign as good publicity, and used various persuasive techniques to get

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89 Heiser to Cumpston, 11 October 1919, RFA RG. 5, Series 1.2, Box 81,Fldr. 1147.
90 Gillespie, “Rockefeller Foundation, Hookworm and National Health Policy”, p. 75.
92 Heiser to Sawyer, 13 February 1919, RF RG. 5, Series 1.2, Box 98, Fldr. 1353; W.C. Sweet, 1 October 1922, "The Control of Hookworm Disease in Queensland", pp. 7-11, RFA RG. 5, Series 2, Box 39, Fldr. 231.
93 Cumpston, 1989, pp. 242-244.
the populace behind installation and use.\textsuperscript{94} He also designed a model privy, the "Type A", which combined durability with minimal cost, advanced features designed to overcome public resistance. Paradoxically, despite its emphasis on the importance of pest-proof, spill-proof latrines, the IHB appeared more concerned that Lambert might be pre-empting the decision-making of local authorities, than pleased to have its objectives promoted, though Sawyer reassured Heiser that the model complied with State Health Department regulations.\textsuperscript{95} Although promoted by education and coerced through legislation, careless use and maintenance of privies dogged the campaign in Australia as it did elsewhere. Non-compliance not only operated at an individual level; it was reinforced by local authorities’ failure to make adequate provisions for safe sewage disposal, and by the competitive State and Commonwealth governments' inertia in promoting sanitation measures.\textsuperscript{96}

Latrine installation had the potential to pressure people to participate in public health in a way that the treatment programme could not, bringing their private behaviour further within the orbit of state jurisdiction. Obstruction was a strategy of resistance to this new intersection of individual and society, where the state extended control, demanding further individual effort, expense, and accountability, to provide for community well being. This intent was central to the Rockefeller Foundation’s choice of hookworm disease to instigate public health administration on a wider scale. For most people, however, the connection between sanitation and health remained a contested concept. Inherent in biomedicine was the perspective that health and illness were functions of the individual rather than the social human body. Such a view accommodated the strengthening relationship between “expert” medical professional and patient, but devalued the team work required by the preventive, sanitary, public health movement which was the IHB ideal at this time.\textsuperscript{97} As F. F. Longley, the sanitary engineer provided by the IHB to advise the Commonwealth Department of Health and State authorities, pointed out:

> It is common to look upon public health work as work for doctors only. The functions of a doctor seem to the lay mind to be practically synonymous with the promotion of health... There is a distinct difference between the viewpoints of the average doctor and the sanitarian. The doctor attempts to cure disease where it exists; the sanitarian attempts to

\textsuperscript{94} Sawyer to Heiser, 8 December 1919 and 24 December 1919, both RFA, RG. 5, Series 1.2, Box 82, Fldr. 1133.
\textsuperscript{95} Sawyer to Heiser, 10 February 1920, RFA, RG. 5, Series 1.2, Box 98, Fldr. 1353.
\textsuperscript{96} Gillespie, 1991, p. 82.
\textsuperscript{97} W.A. Sawyer, “Team Work in Sanitation”, 1922, RFA RG. 5, Series 2, Box 39, Fldr. 231.
prevent it coming into existence. The doctor thinks of the afflicted
individual, the sanitarian thinks of the community as a whole.98

Lambert's progress in popularising the hookworm programme in
Queensland's north can perhaps be attributed to his ability in combining both
facets of intervention. His successful supervision of medical relief during the
1919 influenza epidemic gave him status and public support that made his
message on sanitation more readily accepted. While preaching hygiene and the
importance of clean water supplies to prevent tropical diseases, he also
researched the etiology and remedies to cure his own disabling sprue, maintaining
effective control through a treatment based on recent research but outside current
understandings of the disease. While some of his experimentation and
conclusions initially set him at odds with his superiors, who judged his in-the-
field empiricism perhaps too enthusiastic to be "scientific";99 Lambert
incorporated the key principles of scientific medicine which were at the core of
the IHb's early public health project, in an active interweaving of hygienic
prevention and active treatment of disease conditions. In doing so he also
projected the values and structures of science developed in a European context,
with its hierarchical classificatory system and Darwinian evolutionary
concepts.100 These foundations informed the racial interpretations of disease
around which tropical medicine developed, Lambert exhibited in his treatment of
Aboriginals, and which he took, albeit in modified form, into the island
populations of the Pacific.

98 F F. Longley, "Public Health Engineering in Australia", 1923, RFA RG. 5, Series 2, Box 39,
Fldr. 235.
99 Lambert, "A Personal Experience with Sprue", RFA RG. 5, Series 2, Box 39, Fldr. 234; Heiser
to Sawyer, 1 February 1920, RFA RG. 5 Series 1.2, Box 98 Fldr. 1353.
Chapter 4
Papua and New Guinea

Through successfully negotiating the hookworm project, both Cumpston and the IHB secured a place for themselves in future Australian health services. Cumpston was in a strong position to extend Commonwealth jurisdiction, and the IHB was satisfied that its interests were well grafted onto further developments in public health. It was an achievement of some magnitude: as Heiser later observed:

... the goal which we set for ourselves in Australia was reached sooner than we expected. ...a few years ago the Rockefeller Foundation was associated in the minds of Australians with corporations which they abhor, and now we have the sympathetic support of all classes, including a critical labour government, it is further justification of the soundness of the policy upon which our work rests.1

The campaign was more than a vindication of the IHB’s use of hookworm as a tool to gain support for more systematic public health. It had been an experience in adapting IHB methods to new situations, environments and communities. There was the unusual primary focus on a white population,2 and the rubric “tropical” belied the diverse climatic and physical conditions that needed to be taken into account in pursuing the campaign in Australia’s north. Lambert particularly had proved himself able to take whatever circumstances he encountered in his stride.

By early 1920, with continued confidence in the basic approach and rationale of hookworm control programmes, Sawyer turned his attention to organising the work promised earlier for Papua. Waite’s hasty 1917 survey implicated plantations as the reservoir of infection, so it was optimistically assumed that a regular intensive treatment programme that concentrated on signed-on labour would be sufficient to clear hookworm from the Territory. The case proved otherwise, and it became obvious that the health needs of the wider community had to be addressed. In Australia, resources were poured into an intensive campaign against negligible infection in the white population, but despite the concern to secure a cordon sanitaire and buffer zone to Australia’s

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1 Heiser to Rose, 12 February 1921, RFA RG. 5, Series 1.2, Box 123, Fldr. 1654.
2 The Sanitary Commission had dealt with white people in the southern United States, and the Foundation built its propaganda film Unhooking the Hookworm around rural ‘poor white’ characters, but hookworm was more widely regarded as a disease of coloured tropical people.
north, finance was not forthcoming to establish similarly comprehensive work among Papua’s indigenous communities.

Heading the hookworm team in Papua, Lambert found that terrain, climate, endemic disease, indigenous beliefs, the multiplicity of languages and tribal groups, all posed unforeseen problems. Though he was often humorously self-deprecating about his own mistakes and foibles, his responses to situations in Papua and on the subsequent campaign in neighbouring New Guinea consolidated his reputation as a willing and intrepid field director. His obvious dedication to his work drew respect and confirmed a future for him in the International Health Board’s service. After Papua New Guinea he was increasingly confident of his ability to run a thorough campaign and became more assertive in his dealings with Heiser. Their relationship settled in to one of mutual regard and as a result Lambert was accorded a degree of leeway and independence which in the island environment allowed him to push at the accepted boundaries of IHB practice in pursuit of his own innovative vision of a Pacific future. Consequently he extended Rockefeller participation well beyond its original intentions.

Just as the Papua campaign consolidated Lambert’s position within the IHB, it also established his approach to introducing and expanding public health intervention in Pacific communities.* Here, indigenous people, while subject, were to remain the majority: indeed, an exploited majority, but one not usurped by white settlement as had been the Aboriginal experience. If he had accepted the demise of the minority Aborigines as inevitable, the assumption that such a fate awaited the large, economically important indigenous populations he now worked among was inadmissible. Lambert began to question the adequacy of the existing IHB hookworm enterprise to deliver on its promises and to realise the complex alternative medical paradigms on which the Pacific’s indigenous people based their understandings of health and illness. From Papua onwards he cast more widely for innovative medical and health measures that would confirm that western scientific medicine was up to the task of delivering improved health.

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3 Lambert to Heiser, 22 February 1922, RFA RG. 5, Series 1.2, Box 141, Flkr. 1861.
The political economy of colonial medicine

The situation in Papua can be profitably assessed within the theoretical framework of the political economy of health. The expansion of medical services in the colonies developed from the recognition that ill health, much of it generated by the process of imperial acquisition and subsequent imposition of capitalist modes of production, severely curbed the economic development and profitability of colonial empires. Medical intervention was therefore first directed primarily to the labour force itself to ensure commercial productivity, and later to guaranteeing the workforce’s reproductive capacity. However, as individual detailed studies have shown, explaining medical expansion solely as “some inexorable process of capitalist development” belies the complexity of this development in many colonial societies, including Papua and New Guinea.

Strategic, trade, and labour interests first motivated Australia’s involvement in Papua, in the later part of the nineteenth century. The rapid expansion of the German firm Deutsche Handel und plantagen Gesellschaft (DHPG) in New Guinea after 1880 threatened Australian commercial aspirations there, prompting calls for British intervention. When the colonies eventually agreed to contribute to administration costs, Britain reluctantly proclaimed a Protectorate over the south-eastern part of the island in November 1884, and German annexation of the north-east quickly followed. Australians had high hopes of capitalising on indigenous resources and labour, but the first Administrator of British New Guinea from 1888-1898 had a different agenda. Dr (later Sir) William MacGregor saw in Papua a last opportunity to demonstrate that an indigenous population could be brought to civilisation without being destroyed, and his foremost policy was to establish protection of Papuan interests. With his background in tropical colonial medicine, MacGregor integrated public health into his administration. Influenced by Robert Ross’s work on the anopheles mosquito vector in malaria, he favoured preventive environmental hygiene.

4 Lesley Doyal, The Political Economy of Health, London, 1979, provides a comprehensive exposition, applied to the development of health services in both industrial and colonial economies. See also Lenore Manderson, Sickness and the State: Health and Illness in Colonial Malaya, 1870-1940, Cambridge, 1996, pp. 5-11; Arnold (ed.), Imperial Medicine, pp. 2, 14-16.
5 Arnold, Imperial Medicine, pp. 16-21; Denoon, Public Health, Chapters 4 and 5.
7 Ibid., p. 12; E. P. Wolfers, Race Relations and Colonial Rule in Papua New Guinea, NSW, 1975, pp. 16-19.
techniques such as swamp drainage, sewage disposal, and ensuring clean water. As usual, inadequate finances, different Colonial Office priorities and pressure from white settlers set limits on administration, so MacGregor actively encouraged mission involvement in Papua, and largely devolved health and education to the various denominations. His Native Regulations continued to guide Australian administration until the Second World War.

MacGregor’s orientation to indigenous welfare continued when the Protectorate was transferred to Australia by the Papua Act of 1905. Sir Hubert Murray, Lieutenant-Governor from 1908 to 1940, showed an intense, if paternalistic, concern for Papuan well-being that at times opposed planter interests, which pressed for immediate development of local resources. While the main thrust of health efforts was about improving labour productivity, “to keep the tribes alive for another day’s work”, as Lambert expressed it, this was modified by wider philosophical, social, and administrative concerns. Increasingly, regulations guided, and controlled, Papuan participation in health and sanitary measures. In remote areas, white entry was officially restricted, but Murray introduced police patrols to pacify the tribes and gradually extend government authority, and these functioned also as diffusion-points for propaganda on cultivation, sanitation, and hygiene to improve village health. Apart from these basic efforts, the logistics of Papuan administration limited medical activities to accessible coastal pockets, but even here, where plantations provided relatively easy access to large groups of Papuans, few labourers had the benefit of medical attendance, even when dying. Nevertheless, the plantations were a site for preventive public health work, and the Administration pursued latrine building and set comprehensive guidelines for labourers’ rations, based on emerging nutritional knowledge, to counteract beriberi and scurvy symptoms. When the early surveys portrayed hookworm infection as rife in the plantations and spreading to the villages, eliminating infection at the source became a priority.

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9 Wolfers, Race Relations, p. 22; Denoon, “Tropical Medicine”, pp. 19-24
10 Lambert, Doctor in Paradise, p. 29.
12 Wolfers, Race Relations, p. 32.
13 Mair, Australia in New Guinea, p. 31.
Renegotiating the Papua campaign

On his approach to the Papua administration in early 1920, Sawyer found its interest still alive despite the two year delay. Governor Murray assured him that promised funds were available, and that plantations had continued with the latrine construction initiated by Waite’s earlier visit. The administration would provide the necessary transport, and planters promised accommodation for field workers. Although some important questions of policy remained unresolved, Sawyer and Lambert discussed arrangements for a systematic campaign, including creating an advisory committee in Papua which would co-operate in planning the work, which Lambert and his unit of field staff would undertake between April and November.  

Lambert was enthusiastic, but Heiser, still uncertain of his appropriateness as IHB representative away from the moderating influences of Sawyer and the safety net of a wider team, held reservations about renewing his contract. “We are eagerly awaiting your opinion of him and of his work,” Heiser wrote to Sawyer:

... In estimating him for future service please keep in mind that we have some doubt as to whether he possesses the full preliminary educational requirements which our men should have and also whether he has that balance of judgement which is so very necessary in dealing with foreign countries...it would be well not to commit us to his permanent employment.  

Sawyer, agreeing that Lambert did not fit the mould of “gentleman doctor”, nevertheless reported favourably on his work, optimism, and knowledge. Lambert was re-appointed but despite his own requests and Sawyer’s recommendation, Heiser consistently refused to increase his salary. This affirmation of his achievements and value to the IHB finally came in 1921, after his success in Papua and New Guinea, when Rose and the IHB Board rewarded Lambert for “exceptional service.” His response at the time indicated that the effort expected of IHB staff drew on a network of commitment that extended beyond the individual in the field:

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15 Sawyer to Heiser, 9 February 1920 and 14 April 1920, RFA RG. 5, Series 1.2, Box 98, Fldr. 1353.
16 Heiser to Sawyer, 11 September 1919, RFA RG. 5, Series 1.2, Box 81, Fldr. 1152.
17 Sawyer to Heiser, 3 November 1919, RFA RG. 5, Series 1.2, Box 82, Fldr. 1153; Sawyer to Heiser, 16 February 1920, RFA RG. 5, Series 1.2, Box 98, Fldr. 1353.
... the fact that I have been able to live and work with fair efficiency under conditions, at times, difficult, has been largely due to [my wife's] care of me and her encouragement ... the Board has loyal servants in the Lambert family.

Sawyer's was more certain of Lambert's capabilities than he was of support from Papua's medical establishment. When Waite visited in 1917, Dr Walter Mersh Strong, the Chief Medical Officer of Papua, argued that venereal diseases posed a much greater threat to the population than hookworm. Gonorrhoea was widespread in regions explored early on, apparently introduced by "the white man's coloured followers"; though almost universal yaws endemicity gave general immunity to syphilis. Strong was unconvinced by Waite's arguments that concentrating on sanitary measures and treatment to control hookworm would be the most effective way to strengthen the public health system so it could handle complex venereal disease control. Fortunately, when Sawyer met with Strong (the latter returning fresh from a year's leave in England), he now agreed willingly to the proposals for intensive hookworm work. Nevertheless Sawyer decided on a cautious approach in any IHB moves to advance a public health programme in Papua, advising Heiser:

The best policy seems to be to push ahead with plans for the control of hookworm on the plantations, in the mines, and elsewhere in Papua, and to watch our opportunity to use our influence to advance plans for an adequate health service.

With agreement reached, the Lambert family and four hookworm staff left for Papua in May 1920. Their departure was appropriately eventful. Quarantine against influenza in Queensland delayed their leaving; storms, fever, and seasickness marked the passage, which culminated in their ship running aground. Once in Papua, however, Lambert soon had the campaign underway. With himself as Secretary, Lambert set up a local Executive Advisory Committee, comprising the Government Secretary, the Chief Medical Officer, and both the President and the Vice President of the Papuan Planters Association. The campaign had three aspects: a complete survey of the country to determine the dynamics and pattern of infection; treatment of current infection; and establishing future control. All plantation labour would be examined and treated, beginning with accessible plantations around Port Moresby and the coast, and representative villages investigated in each district. In this way it was hoped to sweep over the

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18 Lambert to Rose, 11 June 1921, RFA RG. 5, Series 1.2, Box 119, Flldr. 1591. Lambert frequently acknowledged Eloisa. She later trained with him for malarial work, when his failing eyesight made microscope work impossible.
20 Heiser to Sawyer, 24 June 1920, RFA RG. 5, Series 1.2, Box 98, Flldr. 1354.
21 Sawyer to Heiser, 15 May 1920, RFA RG. 5, Series 1.2, Box 98, Flldr. 1354.
whole territory, more than 233,000 square kilometres, in seven months. As usual, the standard intensive approach would be followed, and latrine construction encouraged.

Within a month of Lambert’s arrival, the hookworm work was in full swing, with two extra microscopists sent from Australia at his request. Soon Sawyer was able to convey Lambert’s “glowing accounts of progress” to New York. Lambert made a rough survey of each district ahead of his field units, each inspector-microscopist then working independently with a Papuan staff. The terrain, with 3000 miles of coast, the lowland border frequently cut by rivers and swamps, and rising sharply to rugged high ground, made the logistics of travel and communication difficult. The men were frequently isolated from headquarters and without either supervision or assistance for months at a time. Under the circumstances, Lambert could only trust that his subordinates adhered to the campaign’s objectives and methods. These men, after all, were not the professional tropical physicians that the IHB would ideally have chosen if available, but lay people trained to diagnose and treat common native diseases, especially hookworm, and keep detailed records of population and ill-health. Most were Australians, though Lambert trained up any likely European when necessity arose. These men provided a core of skilled fieldworkers for other health work.

Education for Papuans was rudimentary, so there were no native medical assistants on the campaign, at least until after 1922 when a simple travelling medical service was established. However, the campaign employed Port Moresby speakers of the local Motu, with some skill in English, as interpreters and personal assistants. Standing out in distinctive blue and yellow uniforms designed by Lambert, these “boys” conveyed new concepts and perceptions of the physical body and its relationship to the environment from the Europeans to the indigenous people, persuading them to undergo examination and treatment, and on occasion to construct approved latrines. With the diversity of languages encountered throughout the territory the work was often mediated by further translations: English to Motu to Police Motu (the variant adopted by other tribespeople through some contact with the Port Moresby authorities) and finally into the local language. Fortuitously for the campaign, final comprehension in this game of “Chinese whispers” was improved by the widespread indigenous

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23 Sawyer to Heiser, 22 June 1920, RFA RG. 5, Series 1.2, Box 98, Fldr. 1354.
belief that attributed various physical disorders to the presence of snakes in the body. Hookworm simply fitted into this model, and despite eagerness to establish a rational basis for disease the hookworm staff were happy to exploit the association and the local perception of their ability to remove the “little snakes” as magical.25

Working conditions were primitive, and staff exposed to the same pathogenic organisms as the locals were often equally impotent against them, despite their advocacy of prevention and treatment. Chris Kendrick (one of Lambert’s most trusted and able staff who later moved to Fiji with him) worked four and a half intensive months in the north-eastern area before returning to Port Moresby. Despite following Lambert’s stringent rules on a prophylactic quinine schedule, he suffered recurrent malarial attacks, as did Lambert himself, and other field-workers became hookworm casualties.

In Papua, planters’ co-operation impressed Lambert, who saw their assistance as filling the gaps in an understaffed medical service, reducing the costs of the campaign, and ensuring continuing treatment and latrine construction. To him, planters were “the forward-looking ones, who wanted native labour restored to health, to revitalize races for whom, at that time, there seemed no future but extinction.”26 However his admiration for their enterprise and reliance on their support nearly led him to another diplomatic faux pas. Although he was initially careful to cultivate relations with officials, he found fault with government sanitation efforts and aligned himself with the planters by describing Murray’s policies on Papuan development as “pinch-penny”. Murray, fearful that public criticism might further inflame planter hostility to his administration, took his concerns to the Commonwealth Government. Worried that Lambert might repeat his early error of judgement in Australia, Cumpston and Sawyer urged restraint and compliance with Government publicity objectives.27

27 Sawyer to Heiser, 13 August 1920, RFA RG. 5, Series 1.2, Box 98, Fldr. 1354.
Lambert and the IHB

Although this was a potentially damaging incident, Heiser’s subsequent response indicated a change in his relationship with Lambert. There was a reminder of IHB expectations:

as you so well know ... our policy is not in any way to comment upon the acts of Government. We should always remember that we are guests in a foreign country, and it little becomes us to criticize.\textsuperscript{28}

However, this rebuke was tempered by an expression of appreciation for Lambert’s zealous efforts “bringing rudimentary sanitation into the lives of primitive peoples.” Heiser and the IHB were coming to recognise that the doctor’s driving enthusiasm and often unconventional approach made a unique contribution to the organisation. An appreciative rather than critical response was the best way to ensure his loyalty and direct his boisterous energy along the appropriate lines. Lambert’s precarious future with the Foundation gradually evolved so that he became not only a valued employee, but from his experiences in Papua New Guinea, gained the status of “a character” in the IHB. His colourful stories of adventures among the “primitive cannibals” and the romantic isles of the South Seas were eagerly devoured at Headquarters, and his managerial fumblings and occasional diplomatic lapses were treated with new, somewhat amused, tolerance.

“Seed-beds” – a re-evaluation

The campaign survey overturned previous assumptions about hookworm infection in Papua. The average infection rate was 50.7 percent, but this bare figure disguised huge variations in actual infection, highlighting the complexity of environmental, social and cultural factors which determined the presence and severity of biological infection. Villages built over the water were free not only from marauding enemy tribes but also the parasite; those in dry areas and alongside tidal beaches showed infection rates at less than 14 percent. Plantations were certainly most heavily affected, but inland villages far from the

\textsuperscript{28} Heiser to Lambert, 18 September 1920, RFA RG. 5, Series 1.2, Box 98, Fldr. 1352.
reach of plantations and traders often had infection rates up to 90 percent.\textsuperscript{29} High rainfall and wanton soil pollution was the crucial combination.

The results had several implications. Lambert used them as vindication of the European civilising mission. Rather than villains responsible for downgrading indigenous health, white settlers and their plantation system were themselves victims of an endemic disease that Papuans “might have brought from Africa, ages ago; a disease so wasting that the mills, rivers, the plantations were calling upon half-invalids to furnish the brawn for Europe’s driving ambition.”\textsuperscript{30} Planters were virtuous, transforming “boys...lousy with diseases they’ve caught in their blighted villages.”\textsuperscript{31} Lambert compared these new recruits on one plantation with old hands on another:

these were different from the scrawny cannibals I had seen on the hemp plantation. They were fatter, better muscled, and their brown skins were beginning to show silk ... the planters had taken care of them. Back home, where they pursued the jolly business of going to war and dining on the enemy, they hadn’t eaten very regularly. On the farms the white man had fed them, and done his best to teach them sanitary ways; an uphill job amongst primitives who were naïve as cattle in their bodily functions... all over the territory I could tell, almost at the sweep of the eye, the men who had been on the plantations. They were the upstanding, healthy specimens.\textsuperscript{32}

Nevertheless, the villages were Papua planters' only source of labour, and evidence of hookworm there meant that medical efforts had to be more widely extended. Planters appreciated the improved productivity of their workers after treatment, but were unlikely to willingly carry the burden if they considered the responsibility lay elsewhere.

Lambert’s support for planters’ efforts extended to some dubious ‘health measures’. Accepting one planter’s explanation that his labourers were “only animals” and correspondingly prone to homosexuality when deprived of their wives, he approved the plantation’s provision of prostitutes, paid in trade tobacco, rice and tinned food, as a fine “sanitary” alternative. That this contributed to the spread of introduced venereal disease (several women had recently been sent away with gonorrhoea) did not seem to detract from Lambert’s assessment of the Queenslanders’ actions as admirable, kindly, and “scientific”.\textsuperscript{33}

\textsuperscript{29} Sawyer, “Work for the Relief and Control of Hookworm Disease in Australia, 1918-1920”, pp. 28-29, RFA RG. 5, Series 3, Box 161, Hookworm Report No. 7599.
\textsuperscript{31} Lambert, Doctor in Paradise, pp. 22.
\textsuperscript{32} Ibid., p. 33
\textsuperscript{33} Ibid., pp. 22-23.
Missions and Health

As well as the planters, Lambert established links with the Christian missions whose health services were the backbone of medical and health delivery in Papua. Their involvement was an essential element in the success of the campaign. As in all South Pacific groups, the Papuan Administration’s medical service was inadequate for the territory and population. By 1921, when officially back to full strength after demobilisation, it could still only boast an under-resourced Chief Medical Officer (who doubled as Government anthropologist),

34 four doctors (one “efficiently modern; the other three…elderly hacks”), two nurses and two dispensers.

35 All were European. For those Papuans distant from the four medical centres, or plantation employment, missions were therefore the only contact with any sort European medical care.

The London Missionary Society established itself in the Fly River area in 1872, and later MacGregor actively encouraged other denominations into Papua to help in the civilising process, providing basic welfare and education which the administration recognised as essential for extending European control, but was itself unable to fund.

36 He allocated missions individual areas which they could convert and civilise. The missionaries themselves suffered severely from local diseases; by 1911 all fifty Methodists who arrived to begin mission work since 1891 had either died from fever or been forced to leave in broken health. W.E. Bromilow of the Methodist Mission agreed to the Administration’s public health measures such as swamp drainage to control malaria, but rejected suggestions that to protect their own health the missionaries segregate themselves from Papuans and their diseases. It was the missionaries’ duty “to heal the body while saving the soul”, although their medical knowledge was often minimal and their skills rudimentary, limited to dressing wounds, administering simple remedies, and tending the ill when epidemic disease struck. Nevertheless, mission clinics


were often well attended. Concern for the specific needs of women and children
led missions in some areas to employ qualified nursing sisters, as at the Dobu
Methodist Mission from 1891,37 and later hospitals and physicians were also
supported. After MacGregor’s time, the missions continued to provide local
health services, largely outside the notice of the administration, and with little
assistance from it. With the hookworm campaign came some recognition,
especially when hookworm proved to be more than a plantation problem.
Established mission networks were well placed to take over administering
wholesale treatment so that, as Lambert realised, “Thousands of natives can
easily be reached and treated each year..., the numbers depending on the
Mission’s interest in the work.”38 To keep their support, a mission representative
was appointed alongside the predominantly labour interests on the Hookworm
Committee, and drugs were provided free. Whatever Lambert’s feelings about
exploiting medicine in the interests of church rather than capital, mission health
services provided essential care in Papua until they were finally integrated with
the government system fifty years later.39

A special plan

The initial campaign was completed after seven months, nearly 18,000
examinations, and approximately 16,000 treatments. Widespread endemic
infection and lowered haemoglobin levels indicated that hookworm was
“undoubtedly making inroads on the vitality of the native races.”40 The extent of
infection destroyed any expectation of eradicating the parasite; as Lambert
concluded, the cost and effort of intensive work needed to control hookworm
even in the areas “under the influence of civilisation” would be impossible for the
 Territory long into the future. Civilisation and sanitation were the ultimate
solutions, and until these were achieved an economic alternative was necessary to
ensure labour for the plantations on which the country’s prosperity relied.41

37 Ibid., pp. 547-548, p. 555.
39 Donald Denoon, Public Health in Papua New Guinea: Medical Possibility and Social
40Lambert, “Papua Hookworm Report,” p. 108. Those with hookworm showed a haemoglobin
average of 55.7% of the normal, compared to the uninfected at 63.5% - already low, probably due
to malaria.
Even inexpensive control work was beyond Papua’s means, however, so Sawyer negotiated a further joint programme between the IHB and the Papua and Australian governments. This arrangement removed one obstacle to further work by providing continued access to cheaper drugs; chenopodium cost £44.16.0 per gallon if bought through the established Colonial Office procedures, whereas the American price was only £8.13.0 to £12.16.0 per gallon. The Advisory Hookworm Committee continued, and the Chief Medical Officer of Papua took over as Director of the Papua campaign, which had an annual budget of £450. The IHB agreed to contribute on a sliding scale, beginning at 35 percent and dropping gradually to 20 percent after four years, with the balance divided equally between the Territory and the Australian Commonwealth until the Papuan Government took over full responsibility. Using “qualified” volunteers from among the European community of planters, missionaries and district administrations, with drugs issued free of charge, Sawyer calculated the annual cost of treatment for an estimated 19,000 people at £285.0.0, or £1.10.0 per 100. All employers of indigenous labour, including missions, were required by law to give systematic six-monthly treatments.42

Lambert considered that the campaign’s greatest value had been to impress both European and Papuan with the need for careful sanitation to prevent infection, but because of the difficulties perceived in implementing this outside plantations and mission stations, treatment remained the focus of further work; in 1921, a total of 21,289 treatments were issued.43 Whatever the real health benefits, the work had important side effects. With hookworm treatment time and labour intensive, and European personnel in short supply, Papuans were employed to assist with treatment. The campaign also drew attention to the health needs of villagers. Lambert had tentatively suggested that the work was an opportunity for Government to “gradually assume new medical relations to the natives.”44 This was impossible, with few European doctors and limited finances, but CMO Strong supported his suggestions of a scheme to train native assistants to treat common medical conditions like ulcers, yaws, hookworm, and malaria, and to undertake preventive work. A Travelling Medical Officer would provide back-up and supervision.45 Though Papua failed to develop this proposal to any real benefit, the idea later proved of significant value elsewhere in the Pacific.

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42 “A Plan for the Continuance of the Hookworm Campaign in Papua,” RFA RG. 5, Series 2, Box 50, Fldr. 313.
43 “Papua Medical Report, 1921-22,” p. 119.
Saying it in Pidgin – Lambert in New Guinea

With Papua committed to hookworm work, Sawyer went on to Rabaul, the capital of New Guinea. Australia had taken over the original German colony at the outbreak of the war in 1914 and installed a military government; in 1921 the League of Nations placed the territory under Australian mandate. Cumpston, looking for an opportunity to establish a government medical service there, encouraged the IHB’s interest, but uncertainty over the final form of government postponed developments. Now that the authorities had decided to set up a separate administration, rather than amalgamate with the Papua Government, they were keen to establish hookworm control in the new colony. Sawyer was happy to assign this responsibility to Lambert, his only field director with “tropical experience with colored natives.” In discussions with the Administration, Sawyer made provisional arrangements for an investigation and control programme, along the lines of the Papua work, to begin in March 1921.46

After a brief spell in Australia, Lambert, with his family and field staff, took passage to Rabaul, along with the new civilian government of Administrator Brigadier-General E.A. Wisdom. Lambert found that the medical staff, including the Chief Medical Officer, Colonel Honman, had no experience with tropical diseases or working conditions, and set out to educate them. His warning on the vicious cycle of alcohol use and malaria that so often undermined European health in the tropical colonies apparently had little impact: Honman, who “wasn’t afraid of liquor or anything else”, afterwards regularly treated his “New Guinea fever” (malaria) with strong morning doses of gin and vermouth. His worrisome disregard for good tropical health practices had more than potentially personal consequences. On one occasion when plague had broken out in Brisbane, he waived quarantine for a ship carrying his new Ford sedan which he did not want to risk damaging by unloading out in the stream. However, Honman supported Lambert and the hookworm work, as well as co-opting his services to run the Rabaul hospital.47

During thirty years of colonisation, the Germans had built an infrastructure in their New Guinea territories quite different from that which the British and Australians established in Papua. With commerce the dominant interest,

46 Sawyer to Heiser, 30 December 1920, RFA RG. 5, Series 1.2, Box 98, Flkr. 1355.
administration was limited to protecting and developing plantation and investment enterprises. Elsewhere, there was little intervention in New Guineans’ lives, although *huiuai* (local leaders recognised by the administration) and *tutu*l (interpreters and later, medical assistants) were intermediaries relaying administrative policies, including basic health and sanitation measures, to the villagers.\(^{48}\) Quarantine was the main tool to limit the effect of introduced disease on a vulnerable population.\(^{49}\)

The new Australian administration placed indigenous protection, welfare and development as higher priorities.\(^{50}\) Revenue from New Guinea’s well-developed, profitable plantation economy already sustained a Medical Service much larger than Papua’s, and with Cumpston’s interest in expanding the jurisdiction of his new Department of Health, there was soon a Commonwealth Laboratory established in Rabaul to provide additional services. However, medical policy in the transition from Australian military to civilian administration was not clearly determined and the coincidental timing and high profile of the IHB presence in Rabaul influenced the direction of future health services towards medical treatment rather than the primary, preventive public health care system suggested as an alternative.\(^{51}\)

In New Guinea, Lambert was impressed by the German initiatives that the Australians retained, and which influenced his perception of medical possibility in the South Pacific. Simple first aid training for New Guinean *tutu*l began in 1903 and was continued by the Australians, who paid these medical and sanitary assistants £1 a year to deliver basic medical aid in their villages.\(^ {52}\) From his own observations Lambert came to conclusions that differed from prevalent views equating technological primitivism with lack of intelligence:

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...\text{the higher-type Melanesian ... was far from a fool ... What except race prejudice stood in the way of their being educated in medicine and equipped to practise among their own people, whose language and customs no white physician would ever understand?} \]

He proposed training selected New Guineans to administer hookworm treatment under lay supervision. The results persuadeed Lambert that medical training of

\(^{48}\) Denoon, 1989, p. 28.
\(^{49}\) Ibid., pp. 26-27.
\(^{50}\) Wolfers, p. 68, pp. 90-91.
\(^{51}\) Denoon (1989, pp. 45-50), discusses the alternative proposals of Walter Lucas, executive of the Expropriation Board which handled redistribution of German plantations to Australians. He suggested planters contribute, via the Board, to an extended service with a rural, preventive focus which would reverse depopulation and ensure future labour requirements were met. However, clinical care and tropical diseases were prioritised by the administration.
\(^{52}\) S. Frankel and G. Lewis, “Patterns of Continuity and Change” in *A Continuing Trial of Treatment*, p. 7.
\(^{53}\) Lambert, 1946, p. 80.
indigenous people was worthwhile, a conviction that became central to his later proposals for Pacific health services. Meanwhile, Lambert undertook training of his own, learning tok pisin (pidgin English), the trade language of much of Melanesia, so that he could communicate hookworm propaganda undistorted by mediating interpreters. His lecture, its anglicised version a comic description of hookworm infection and Rockefeller participation, almost did as much to establish Lambert’s reputation among the scientific elite of the Foundation as did his work.54

Experiments and Ethics

Rabaul also gave Lambert the opportunity to experiment in other directions to improve campaign outcomes. Strategies to break the cycle of hookworm infection were proving less successful than the IHB had anticipated when it promised tropical colonial governments easy control of the parasite. Sanitary measures were difficult to implement, for reasons already discussed, and the focus on establishing reasonably efficient health organisations to instigate control quickly reached the limits of skeletal colonial medical services. In addition, researchers found that hookworm larvae remained alive in the soil far longer than previously thought. Research in California and China suggested viability for as long as sixteen months, a major setback as it suggested that endemic areas might never be infection-free.55 During Rose’s directorship of the IHB, its policy was to put existing knowledge into practice; research was considered outside its core function.56 As hookworm work was internationalised, however, existing knowledge quickly proved inadequate, and although the IHB mainly turned to experts in established scientific laboratories, giving support to established institutions and to establishing new public health laboratories that would expand into research, it also encouraged its field staff to adopt an empirical approach.

The inadequacy of preventive measures meant that field officers generally strove to compensate through improved treatment methods. Chenopodium soon replaced thymol as a safer and more effective vermifuge for hookworm, even though explicit knowledge of its action was negligible. This drug also had

54 Ibid., pp. 94-98; Heiser, An American Doctor’s Odyssey, pp. 365-366.
55 Heiser to R.T. Leiper, 26 June 20, RFA RG. 5, Series 1.2, Box 98, Fldr. 1346.
problems, with disturbing side effects and potential toxicity, possibly caused by
deterioration of its active compound, ascaridol. Nor was there a pharmacological
standard for its optimal strength. It was also time-consuming to administer,
requiring fasting and purging. These steps were essential but unpopular with
patients, and employers whose support was so important also chafed at
interrupted working time and the associated loss of profits. In Australia,
Lambert relied on tiresome vigilance to improve patient compliance. In Papua,
the objective had been to sweep through the population, demonstrating the basic
technique and taking a chance on results. In New Guinea, however, Lambert’s
supervision of Rabaul Hospital provided ideal conditions to experiment with
alternative treatments, with the ready support of Colonel Honman.

His experiments took place at the Native Hospital, rather than in the
European wards, whose patients would have been most unlikely (or expected) to
submit to being locked behind barbed wire for three days under police guard, and
then subjected to enforced dosing with various combinations of drugs and purges
at various doses and intervals. Altogether Lambert made seven series of tests
(including one examining the vermicidal effect of indigenous plants - betel nut,
limes and papaya) to study which expelled the maximum number of worms, and
which optimally balanced results and convenience for a mass treatment
programme.

In another clinical trial, six patients transferred from the gaol to be nursed
through an influenza epidemic were doubly deprived of choice. Convicted to
hang for cannibalism, their imminent deaths made them “perfect subjects” for a
later experiment with unpredictable outcomes: as Lambert said, “it didn’t matter
if the poor devils died in bed or at a rope’s end.” On these men Lambert tested
intravenous and intramuscular injections of chenopodium (ordinarily
administered orally), to determine whether the drug acted by surface contact with
the parasite in the bowel, or through absorption from the host’s bloodstream. The
injections proved less efficient against hookworm than oral dosing, indicating
that chenopodium acted through contact; but the intravenous method removed
another lesser parasite, whipworm (trichocephalus trichura), which had
previously resisted any anthelmintic.

Lambert’s New Guinea experiments anticipated the IHB’s subsequent
change to a more investigative approach as the Foundation expanded its

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57 Heiser to Lambert, 3 May 1919, RFA RG. 5, Series 1.2, Box 81, Fldr. 1151. Sawyer to Heiser, 7
June 1919 and 27 June 1919, RFA RG. 5, Series 1.2, Box 81, Fldr. 1152.
58 Heiser to Rose, 9 April 1921, RFA RG. 5, Series 1.2, Box 124, Fldr. 1655.
59 Lambert “Comparative Tests of Methods of Treatment,” RFA RG. 5, Series 2, Box 50, Fldr. 313.
60 Lambert, Doctor in Paradise, pp. 103-104.
leadership role in international public health work. They also highlight the ease with which ethical issues of experimentation on human subjects could be set aside, in the absence of strict regulation over research. Sawyer suggested the first series of experiments, but Lambert could not claim to have followed any basic ethical guidelines in the process:

I received a letter from Sawyer...asking me to try the Chenopodium and Thymol carefully on animals and then on the native. There being few animals here I first tried it on the Dodo of which there are a large number in the vicinity. As it had no ill effect on the Dodo, with the P.M.O.‘s [Principal Medical Officer] advice and with the consent of the Administrator [sic], I tried it on a native.

Obviously aware that he had acted outside his brief, Lambert went further in disclaiming responsibility:

This latter work I would not have done only that when I mentioned it to the P.M.O. he insisted that I do it. So as you might say it was against my will and desire. Please cover me on this till I get it written up, for my report.

Lambert was satisfied that results contributed to understanding of helminth aetiology and treatment and Directors Wickliffe Rose and Dr. F. F. Russell supported his plans to give the research into chenopodium injections wider exposure through American medical journals. Only when an eminent parasitologist condemned the experiment, as trials on dogs demonstrated the highly destructive effect of intravenous chenopodium on brain and lung tissue, Russell decided, rather regretfully, that publication was unwise “because of the ethical issues involved, namely, the use of intravenous treatment of human beings with an untried drug without preliminary experimental data.” Lambert was nevertheless praised for his initiative, and credited with performing a valuable service which ideally deserved prompt recognition. His perceived success encouraged him to undertake more audacious drug trials later, again without IHB permission, and again transgressing basic medical ethics. Ironically, by the time the IHB officially adopted research as a key function and requirement for funding

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61 Memorandum concerning future developments in the International Health Division of the Rockefeller Foundation, 1928, and F. F. Russell, “The Program for Future Work of the International Health Division”, 1929, both RFA RG. 3.1, Series 908, Box 11, Fldr. 124
63 Lambert to Heiser, 5 October 1921, RFA RG. 5, Series 1.2, Box 119, Fldr. 1591.
64 Ibid.
65 Ibid.
66 Discussed in correspondence from Lambert to Rose, 17 March 1922, RFA RG. 5, Series 1.2, Box 141, Fldr. 1861, and from C.C. Williamson, the IHB’s Director of Information Services, to Lambert, 27 June 1922, RFA RG. 5, Series 1.2, Box 141, Fldr. 1862.
approval, Lambert was immersed in organisational responsibilities and had some difficulty re-orienting himself to the IHB’s changed emphasis.

Necessity and practical ingenuity also had a role in improved techniques. When Lambert’s assistant, Chris Kendrick, ran out of standard equipment he improvised with a tool made of galvanised wire. His modified Kofoid-Barber salt-flotation procedure proved a better examination method, and the new version replaced the standard campaign examination technique of plain smear and centrifuge, as it halved the time taken and was more accurate.

“Killim altogether had feller senake”

The New Guinea campaign found a hookworm infection in 79.4 percent of the 28,271 people examined over seven months: a higher rate than Papua’s 59.2 percent. With better resources than Papua, the Administration was keen to continue with wholesale control of hookworm disease, rather than an inexpensive follow-up plan. After submissions from New Guinea, Cumpston also encouraged continued IHB co-operation. Sawyer’s final recommendation was for a joint programme funded from the existing Australian Hookworm Campaign (to which the IHB was still contributing), and the Commonwealth. The New Guinea administration undertook to administer 180,000 doses in 1922-1923, via tax-collecting patrols, but the New Guinea Hookworm Committee soon reported disappointing results, with under 81,000 treatments in 1922-23, and less than 50,000 the following year. Any progress in real control of uncinariasis through a mass treatment programme relied on rapid and complete coverage of the whole population twice yearly, and despite its larger medical staff, such a proposal remained as unrealistic for New Guinea as it was for Papua, even in areas under government control.

Despite not meeting its goals, Dr Raphael Cilento, Director of Health for New Guinea, continued to emphasise the programme as “the only way to get results under present conditions in the Territory.” Although there was some effort to improve sanitation, with public latrines for natives in the towns and outstations, these were recognised as relatively ineffective even in Rabaul, the administrative centre. Preventive sanitary measures were still considered

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68 Memo, 18 September 1921, AFS/VGP.
69 Sawyer to Heiser, 29 August 1922, RFA RG. 5, Series 1.2, Box 140, Fldr. 1855.
impractical for the New Guineans, until Europeans could educate them to the
benefits. 70 In fact, indigenous sanitary conventions were as diverse as any
expression of cultural practice in the Territory. Pit latrines found in New Britain
were equal in sophistication and efficacy to the latest IHB design, to the
amazement of the Europeans. The equation of sanitation with civilisation was so
strong in the western public health-oriented mind that the immediate assumption
was that these "savage, cannibalistic" people could only have been taught the
construction and use of cesspits by a white visitor. The pits and their origin
aroused great interest, even to the IHB’s New York office. When eventually
accepted as indigenous, long-established practice, the New Britain latrine was
rationalised as being "probably for aesthetic reasons rather than owing to
recognition of the relation of sanitation to health." 71

Notwithstanding the questionable worth of hookworm treatment, it remained
the model for health services provided by the administrations of both Papua and
New Guinea. The IHB and the governments intended that hookworm campaigns
would develop into a wider health system based on scientific principles, but the
curative emphasis established a dynamic that, as in other countries, focused
resources and attention on a narrow range of somewhat treatable diseases such as
yaws (which did of course relieve individual sufferers), rather than on
ameliorating conditions contributing to ill-health. 72 Quarantine (despite Honman)
kept major new epidemic diseases out of the Territory, yet already-introduced
diseases like venereal and respiratory infections and tuberculosis, along with
dysentry, malaria and leprosy, continued their spread into remote areas as a
result of increased contact and labour migration. 73 A spate of regulations,
enforced by patrol officers, followed the establishment of each administration,
setting down requirements for basic village health measures such as inoculation
and the reporting, examination, isolation, or treatment of the sick.

However, with government services focused on areas of European
settlement, little care could be provided, except the simple remedies of
indigenous paramedicals, or the Christian missions. 74 Under the circumstances,
experience of western medical practices was sporadic, simplistic, and, apart from

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70 "Minutes of the Ninth Meeting of the Hookworm Committee, Rabaul, May 8th, 1924", RFA RG.
5, Series 2, Box 50, Flgr. 313.
71 Sawyer to F. Reid, 8 June 1922, RFA RG. 5, Series 1.2, Box 140, Flgr. 1854. Lambert (1946,
pp. 91-92) acceded, with some surprise, the possibility that Islanders might traditionally practise
"reasonably self-preserving "habits.
72 Denoon, Public Health in Papua New Guinea, pp. 49-50.
74 J. D. Waiko, A Short History of Papua New Guinea, Melbourne, 1993, pp. 104-105.
the miracle of arsenical yaws injections, generally unimpressive, however it may have seemed otherwise to its backers. Specifics of timing and situation influenced indigenous reaction to introduced health and medical measures, with varying degrees of accommodation, rejection, and assimilation.75 Overall, the joint efforts of the IHB and the colonial administrations fell far short of creating the adequate health service which Sawyer and others had envisaged would become standard in tropical colonies through the impetus of the hookworm campaigns.

Lambert left Rabaul at the end of 1921, leaving further development of services to the government and bringing direct IHB involvement in the Australian dependencies to an end. His cumulative experience in Australia, Papua and New Guinea established a reputation that put him in demand elsewhere in the Pacific, and the IHB was ready to tempt new territory with its medical promise.

75 For examples, see S. Frankel and G. Lewis (eds.), A Continuing Trial: Medical Pluralism in Papua New Guinea.
Chapter 5
Labour and depopulation: the Solomon Islands

Under Lambert’s enthusiastic direction, the hookworm campaigns in the Australian territories had progressed rapidly, and their apparent success in improving labour productivity impelled the IHB’s health work further into the Pacific. En route to Australia early in 1921, Heiser stopped over briefly in Suva and discussed arrangements for work to reopen in Fiji. At the same time, Lambert’s arrival in New Guinea brought mounting interest from the neighbouring British Solomon Islands Protectorate, and negotiations began for a hookworm survey there. The IHB was agreeable, as Lambert could reach the group easily and cheaply from New Guinea, and his visit would boost the profile of the proposed new campaign in Fiji.¹

The Solomons provided Lambert with his first experience of the archipelagic Pacific. Here, he found the problems that he had already encountered in Papua and New Guinea came into even sharper relief. The maritime world amplified distance and isolation, complicating access and consequently the delivery of health programmes. Island populations, discrete and more measurable units within the bounds of island and atoll, appeared more conspicuously vulnerable to the ravages of contact and consequent population decline. The Polynesian outliers heightened his experience of ethnic and cultural diversity, stirring Lambert to anthropological musings on the inherent value of “primitive” social systems and confirming his interest in their conservation. Lambert finished his brief six week survey with decided views on Pacific depopulation, but with a deepening sense of gloom that knowledge and resources – even the IHB’s – were currently inadequate to reverse the process. He was also more acutely aware of the need for a comprehensive sustainable system of basic health care.

As elsewhere, the Solomons’ health situation and responses to it reflected the effects of contact, colonial politics, and economic practices. Even when European contact was minimal, in the era before government pacification, it had some far-reaching effects on population. Firearms and steel axes introduced as trade items increased fatalities from inter-clan raids and head-hunting, and new infectious diseases such as influenza and dysentery, carried to the islands on

¹ Heiser to Rose, 3 February 1921, RFA RG. 5, Series 1.2, Box 123, Fldr. 1654; IHB memo, 29 March 1921, VGP/APS.
trading and mission vessels, caused high mortality. Later, changes in settlement patterns, social relations, and cultural practices, and the imposition of new regulations, also created conditions which increased vulnerability to disease. Noticeable depopulation in many areas led to the belief that Solomon Islanders, like most other indigenous Pacific groups, would inevitably die out. Nevertheless, the administration’s early response had been further exploitation and land alienation, rather than the protection implied by the institution of legal government in the dependency.

Britain assumed a reluctant jurisdiction over its own subjects (largely traders) in the group in the 1870s. By 1893 this control had been extended to full Protectorate status, in order to safeguard colonial interests in Solomon Islands’ labour, which in the later decades of the nineteenth century constituted the bulk of the Melanesian labour force crucial to developing the Australian and Fijian sugar industries. However, the Australian Federal government ended the import of indentured labour under the Pacific Island Labourers Act 1901, and by 1906 had repatriated most Melanesians from Queensland. Recruiting Solomon Islanders for Fiji ended four years later. In 1908 Burns Philp formed the Solomon Islands Development Company Ltd (SIDC) and, along with its newly established competitor, Levers Pacific-Plantation Ltd (LPPL), and other small planters, hoped to take advantage of the return of experienced labour and rising copra prices to expand plantation investment and production in the Solomons.

Charles M. Woodford, the first Resident Commissioner, promoted plantation development as the only viable source of revenue for the dependency, which the Colonial Office expected to be self-supporting. Between 1896 and 1915, Woodford’s pacification programme in the western islands largely achieved the stability necessary to encourage interest in investment. Massive alienation of prime land followed, further disrupting communities and cultural patterns and

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2 Even apparently healthy visitors carried infection, as Bishop C. Wilson describes in *In the Wake of the Southern Cross*, London, 1932. After leaving both a teacher and influenza at one island, the mission ship was unwelcome on its next visit.


contributing to the spread of disease and population decline. The Colonial Office stopped direct land purchases by whites from islanders in 1912, but by 1913 European settlers and plantation companies had rights to more than 450,000 acres (180,000 hectares). 8

Woodford had made land available, and Levers and Burns Philp were ready with capital, but unexpectedly, labour shortages slowed development. A planters' petition to import Asian indentured labour 9 met with a Colonial Office prohibition, forcing them to recruit from within the group. However Islanders proved reluctant to accept the wages offered, which were lower than those they had received in Queensland, and with access to their own land there was little incentive for cash work. 10 Indentured island labour almost doubled between 1909 and 1911-12, to 4,500, but never rose much above 6,500 even though an annual £1 head tax introduced in 1921 was designed to press more Islanders into work on the plantations. 11

Labour constituted the biggest single expense, an estimated seventy-two percent, of the cost of establishing a plantation. 12 Much of this was actually attributable to the higher salaried European managers and overseers, whose vulnerability to malaria also cost companies dearly through medical and repatriation expenses. Islanders’ wages were low, only £12 per annum over a three-year indenture, and on Levers’ plantations at least, company trade stores with their 100 percent profit margins recouped 50 percent of this. 13 Nevertheless, planters focused on maximising labourers’ productivity, often using blatantly abusive practices, though pragmatism engendered contradictions. For example,

9 J.H. Campbell et al. to BSIF RC, 24 January 1911, in J. Meek, Solomon, trip report 1911, Joseph Meek Papers, LRA, into the 1920s, Levers continued to press for Asian recruitment; see F. D’Arcy Cooper to Amery, 19 July 1926, in J. Meek, Correspondence, Joseph Meek Papers, LRA.
10 Scarr, Fragment, pp. 294-297; Buckley and Klugman, Burns Philp, p. 165; Bennett, Wealth of the Solomon, pp. 151-152.
11 Buckley and Klugman, Burns Philp, p. 277; Bennett, Wealth of the Solomon, p. 162. I. Frasier describes the head tax as one of the most coercive measures used to move Solomon Islanders from village subsistence to the plantation economy, especially on those islands like Malaita which had few resources to trade for cash. I. Frasier, “Mansina Rule and Solomon Islands Labour History” in Clive Moore, Jacqueline Leckie, and Doug Munro, (eds.), Labour in the South Pacific, Townsville, 1990, pp. 193-195. The head tax had ramifications for health and health programmes.
12 Buckley and Klugman, Burns Philp, p. 177.
Levers' plantations demonstrated some of the worst treatment of labour\textsuperscript{14} but the company also built the first hospital in the group, and was first to employ a qualified doctor. His services were occasionally supplied to the administration, which instigated none of its own until 1910,\textsuperscript{15} with negligible development thereafter. Government remained reliant on planters and increasingly energetic mission medical activities for health work, although under the impetus of post-war humanitarian movements and the need to ensure both labour efficiency and its ongoing supply, the administration developed its regulatory role and improved surveillance over plantation working conditions. As a 1922 report on labour conditions noted, this reduced sick rates on plantations, where medical attention was better than in the villages, but even officials considered it unreasonable for government to impose stringent requirements on employers for medical facilities until it provided some services itself to the general population.\textsuperscript{16}

**Lambert and Levers**

It was these unusually active commercial interests rather than government that pursued IHB involvement in the Protectorate, and provided most of the funding. Contact between Lambert and Levers developed from a chance meeting in Papua. George Fulton, general manager of Levers' plantations in the Solomon Islands, was interested to hear of the improved health and productivity reported for Papuan plantation workers as a result of the IHB's hookworm campaign. In turn, Fulton's mention of two virtually untouched islands in the Solomons group caught Lambert's imagination. Rennell and Bellona lay only 240 kilometres south-east of the Solomon administrative centre at Tulagi, but with difficult access and few apparent resources had been almost completely ignored by Europeans. Neither missionary nor recruiter had succeeded in penetrating much beyond the landing beach, and the murder of three Samoan mission teachers

\textsuperscript{14} J. Bennett, "'We did not come here to be beaten': Resistance and the Plantation System in the Solomon Islands to World War II", in Brij Lal, Doug Munro, and E. D. Beechart (eds.), Plantation Workers: Resistance and Accommodation, Honolulu, 1993, p. 138.

\textsuperscript{15} J. Meek, 19 May 1908, p. 2; Meek Report, 'Solomon Islands Trip, January-February 1911,' pp. 22, 23, both in Joseph Meek Papers, LRA.

\textsuperscript{16} Allardvee, "Report on BSIP labour conditions", 17 April 1922, WPHC 1094/1922. In 1906, before beginning medical services, Levers' sick rate was 5.5%; by 1925, when hookworm and malarial treatment were standard for all labourers, it reached a low 1.6%, despite an outbreak of meningitis that year. G. Fulton, 'Solomons Report 1925,' pp. 2-3, Joseph Meek Papers, LRA.
optimistically left there by the South Sea Evangelical Mission in 1910 proved a further deterrent to contact. The existence of a practically virgin Pacific population so close at hand wildly excited Lambert, who saw it as a chance for a definitive case study of autochthonous disease, and hopefully support for his emerging belief that contact and the introduction of new germ agents was the primary cause for depopulation in the region.\(^{17}\) Fulton’s casual suggestion of a possible visit to mysterious Rennell with its “archaic” population was an extra incentive for Lambert to develop his connections with Levers’ Solomon Island interests, and was thus a factor in eventual proposals for a hookworm survey there in 1921.

Burns Philp, the Pacific shipping and trading company, shared Levers’ concern at dwindling labour reserves. The two companies, the largest employers of native labour in the Solomons, extended the initial invitation to the IHB, promising assistance to a field unit.\(^{18}\) The IHB was keen but as usual would act only on a government request for assistance, which came only after Fulton’s mediation and assurances of minimal Administration expenditure allayed its anxieties about cost.\(^{19}\) So closely had Lambert become identified with the hookworm campaigns that the Solomons’ Acting Resident Commissioner wired an invitation directly to him in Rabaul, rather than to Sawyer as Director of the IHB’s work in the Western Pacific region. Quickly reasserting his authority, Sawyer accepted the invitation on the IHB’s behalf and appropriated the SUS795.50 already approved by the Board’s Executive Committee.\(^{20}\) After completing his work in New Guinea Lambert sent his family and household effects back to Brisbane, and left for Faisi, Shortland Island, in October 1921.

Limited to only six weeks and one field unit, the survey could be no more than cursory. With six main islands and a myriad of smaller islands and atolls, the islands themselves cover 28,530 square kilometres, spread over a sea area of

\(^{17}\) There had in fact been chances for infectious disease to enter the population. Before leaving the teachers on Rennell, Dr Northcote Deck visited the island on four occasions, and had taken six Rennellese youths for some time at the mission school at One Pusi, Malaita. As with the men Fulton recruited in 1919 for labour on Levers’ plantations, separation from their home island proved so distressing that all were soon returned. Florence Young, *Pearls of the Pacific*, London, n.d., pp. 208-212; Lambert, *Doctor in Paradise*, pp. 68-69.


\(^{19}\) Lambert to Heiser, 3 February 1921, RFA RG. 5, Series 1.2, Box 119, Fldr. 1591; Rose to Heiser, 28 March 1921, RFA RG. 5, Series 1.2, Box 124, Fldr. 1655; Sawyer to Heiser, 5 May 1921, RFA RG. 5, Series 1.2, Box 119, Fldr. 1593.

\(^{20}\) Sawyer to Rose, 12 July 1921 and 19 July 1921; Rose to Sawyer, 15 July 1921; all RFA RG. 5, Series 1.2, Box 119, Fldr. 1594;
777,000 square kilometres.\textsuperscript{21} The group is subject to wind patterns that create dangerous conditions on lee shores and in exposed waters, making coastal and inter-island sea travel (the only option in Lambert's time) an often risky and unreliable undertaking. Mainly volcanic in origin, the larger islands are ruggedly mountainous with limited coastal plains, high temperatures and rainfall, and dense tropical vegetation,\textsuperscript{22} all of which hampered access to dispersed communities. In 1921 the Protectorate's indigenous population was an estimated 100,000.\textsuperscript{23} Like Papua New Guinea, it was linguistically diverse, with more than eighty languages reflecting the mixing and isolation of non-Austronesian and Austronesian-speaking peoples. Altogether these features imposed limits on what the hookworm unit could expect to achieve.

The survey party faced other constraints when the government vessel \textit{Belama}, its promised transport, was wrecked. Levers, whose contribution of £1072 funded the major share of the survey, provided an alternative with its steamer \textit{Koonakarra}, but its tight schedule around island plantations and trade stations limited Lambert's contact with Solomon Island communities. Usually he had only a few evening hours in which to present his hookworm lecture and then collect faecal specimens from those willing to contribute; altogether 4138 did so. However, time pressures meant specimens had to be kept in formalin for later analysis in Australia, a technique which indicated low infection rates that contradicted more accurate sample worm counts made by Lambert and other medical staff.\textsuperscript{24}

Lambert's survey was obviously superficial and inadequate, but as it drew fresh attention to the inadequacy of current services, some action followed. Until the IHB hookworm survey, the disease barely rated in the medical administration's statistics on morbidity. Figures were only available for indentured labour or those islanders admitted to hospital, but indicated respiratory infections and dysentery as the main causes of mortality in the indigenous population. In 1921-22 these contributed 57 and 9 deaths respectively, or 47 percent of a total of 140 deaths amongst indentured labourers. The year's

\textsuperscript{22} J. Bennett, \textit{Wealth of the Solomons}, pp. 1-5.
\textsuperscript{23} "BSIP Annual Medical Report 1921", FCO, WP/HC1416/22. This estimate was guesswork, as there had been no official census undertaken, and no birth or death records kept for village populations. Foreign residents in 1921 comprised 450 Europeans and 120 Chinese and others. The first census in 1931 returned a population figure of 93,000: Bennett, \textit{Wealth of the Solomons}, p. 434 n86.
\textsuperscript{24} Lambert to Heiser, 10 December 1921 #2, RFA RG. 5, Series 1.2, Box 119, Fldr. 1591; Lambert to Heiser, 12 January 1922 and 22 April 1922, both RFA RG. 5, Series 1.2, Box 141, Fldr. 1861.
influenza epidemic in the islands had a mortality rate estimated at 25 percent in some districts, though accurate figures were impossible as village births and deaths were not routinely reported. Endemic yaws, and introduced tuberculosis and gonorrhoea, were other diseases widespread throughout the group.25

In contrast to identifiable morbidity from these diseases, there was no clinical evidence of hookworm disease in Solomon Islanders. Nevertheless Nathaniel Chrichlow, Acting Senior Medical Officer, was enthusiastic about the survey and its potential to stimulate further medical work. He had long been convinced that there was widespread general parasitic infection but with limited resources had been unable to investigate. Now, he assured the IHB of his full support, sought information on survey methodology from Heiser,26 and undertook more intensive research, including worm counts and analysis of haemoglobin indices. Lambert privately credited Chrichlow’s work with salvaging the survey, and suggested an IHB fellowship at Johns Hopkins to develop his preventive approach.27 The Medical Officer’s conclusions - that the infection rate averaged over all the islands was approximately 85 percent but the individual worm burden was so low as to rarely cause clinical symptoms or harm28 - differed from Lambert’s more severe prognosis that “an 85 percent hookworm infection cannot be overlooked; it would be fatal.”29 Where Chrichlow diagnosed a degree of immunity and minimal lowering of vitality, Lambert perceived clear clinical evidence of the disease and its probable implication “in the high death rate from the epidemics of dysentery and pneumonia that sweep these islands.” Nevertheless, Chrichlow and Lambert made similar recommendations: based on the need to maximise the supply and efficiency of native labour, extensive and ongoing treatment programmes should be instigated. The MO stressed better latrine installation and sanitation enforcement; Lambert, presumably with an eye to the IHB’s ultimate goal of State-provided care, advocated the employment of a

25 "BSIP Annual Medical Report, 1921", WPHC 1416/1922. For Europeans and Non-natives, malaria and its dreaded complication, blackwater fever, was the most fatal disease, contributing to a mortality rate higher than that for indentured labourers, with 25 deaths per 1000 compared to 20 per 1000 (ibid). Lambert was damning about European residents’ “backward” approach to malaria prophylaxis, claiming that a small expense and effort would enable white people to live in the group unaffected by the disease. “BSIP Ankylostomiasis Report, 1921”, p. 47, RFA RG. 5, Series 2, Box 50, Fldr. 311
26 Chrichlow to Heiser, 30 October 1922, RFA RG. 5, Series 1.2, Box 123, Fldr. 1640.
27 Lambert to Heiser, 13 May 1922, RFA RG. 5, Series 1.2, Box 141, Fldr. 1862.
government hookworm inspector. Acknowledging the important role of the missions in village health work, he also suggested that each denomination employ a medical officer.

In his Medical Report for 1921, Crichlow warned of serious population decline unless there was more attention generally to health, and suggested that the government allocate some of its newly instituted head tax to indigenous welfare. However, it was Levers that again took the lead, adding a trained field inspector from Lambert’s team to their medical corps. His duties included control of epidemic dysentery and influenza on their plantations along with overseeing hookworm work. Fulton also took steps to protect the future capacity of the company’s labour force, agreeing to extend hookworm and simple health care to villagers on Santa Cruz, which was heavily infected. Lambert pinned his “semi-philanthropic” suggestion on Levers’ “great hopes that by the furtherance of hookworm work they may build up the people of this group so that it will be a valuable recruiting ground” to supplement the already heavily recruited island of Malaita. Lambert facilitated these initiatives by negotiating with the IHB to supply chenopodium to the Solomon Islands at cost price.30

Though hopeful that treatment would improve the population’s health and efficiency, the administration acted more slowly on the recommendations. The Resident Commissioner acknowledged that inadequate Government medical services were a leading factor in depopulation,31 and trenchantly observed that Solomon Islanders received little except “the blessings of settled Government” in return for the £7,500 they contributed through the new head tax.32 Nevertheless, action was kept within tight fiscal parameters, partly because island finances were so uncertain: in 1921-22 revenue of £56,432 exceeded expenditure by £11,000, but economic depression swung estimates for 1923-24 into deficit.33 The Administration delayed the promised appointment of an inspector to propagandise among other plantations and missions until the Lever’s move proved its success. Crichlow, however, continued with some follow up inspections34 and pursued training of medical dressers at Tulagi Hospital, along

30 Lambert to Heiser, 12 January 1922 and 28 January 1922, and F. Read to Lambert, 10 March 1922, all RFA RG. 5 Series 1.2, Box 141, Fldr, 1861.
32 RC to HC, 22 May 1922, FCO, WPHC 1690/1922.
34 Sawyer to Heiser, 19 June 1922, RFA RG. 5, Series 3, Box 161, Hookworm Reports 1918-1924.
the lines that Lambert had encouraged in Papua and New Guinea. After 1923 District Officers diversified their monitoring of basic village sanitation to provide simple medical treatments in their areas. Whether in response to Lambert’s suggestion, true humanitarianism, or for the more pragmatic evangelical reason that medical care brought more villagers into the ambit of conversion, the Methodist Mission under J.F. Goldie also began employing trained nurses the same year, and went on to open a well-equipped hospital in New Georgia in 1927. Other missions were slower to develop advanced medical services, although most included hookworm and later yaws treatment as part of their routine work.

The practicalities of the survey venture and its sponsorship by commercial employer interests determined Lambert’s general interpretation of the Solomons’ health situation. He acknowledged that his survey was superficial, but his Solomon Islands experience reinforced his growing belief that population decline followed trade, which introduced diseases to which islanders had no immunity. The corollary was that the more frequently islands were visited through trade and other forms of European activity, the larger their disease burden and vulnerability. Lambert’s responses were complex and paradoxical. He bemoaned the impact of European contact on communities and lifestyles which he frequently characterised as utopic demonstrations of true civilisation, in contrast to his own, yet he also liked to accentuate islanders’ “unenlightened savagery” through dramatic tales of head-hunting and other activities. He understood the process of increasing contact as generally irreversible and damaging, but was convinced that indenture (whose armed recruitment of island “savages” he described as a “hunt”), was a viable and enlightened activity that protected Islanders and remedied their ill-health. Possibly Levers’ initiatives justified his faith, but these were an exception. In general the plantation system constituted, for fresh recruits, one of the most drastic experiences of exposure,

35 Resident Commissioner to High Commissioner, 22 May 1922, WPHC 1690/1922.
38 Lambert, Doctor in Paradise, pp. 110-115. Rennell and Bellona were the exceptions, and Lambert campaigned into the 1930s to have these islands kept as a sort of “anthropological reserve” to preserve their people and cultures in pristine, pre-European form that would provide “experts” with invaluable information on health, culture and civilisation: ibid, pp. 304-328. The exclusion of European commercial interests was also effective elsewhere, for example see R.W. Cilento’s account of population increase on Unia Island: Causes of the Depopulation of the Western Islands of New Guinea Canberra, 1928, p. 10; and the Solomons government used prohibitions on recruiting in some areas in a considered attempt to halt continued population decline: J. Bennett, Wealth of the Solomons, p. 177.
subjecting workers to new pathogens, in often unhealthily crowded living conditions and on nutritionally deficient diets. The extreme death rates of first recruitment in the 1880s had abated by the twentieth century as exposure and immunity increased, but plantation mortality rates remained at 2-3 percent per annum until the late 1920s when increasingly stringent government health regulations took effect.

If it was impracticable for island populations to revert to earlier isolation, Lambert saw the alternative - health surveillance and education by a paternalistic agency - as vital if numerical decline was to be halted. If the government was unwilling, or unable, to take on this role and extend directly its provision of health services, it did at least begin to recognise its responsibility in ensuring welfare. Its scrutiny of planters was a means by which this responsibility could be delegated, and indigenous health status monitored and improved with little extra expenditure to the administration.

Despite its brevity, Lambert’s visit provided a catalyst for activities that led to some improvement in Solomon Islanders’ health. This was most apparent in the health of plantation labour, which had improved relative to that of the general population by the late 1920s. By investing in health programmes and making some efforts to improve sanitation, as Levers did, plantation companies began to slow the process of population decline to which they had so directly contributed. In doing so, they acted undeniably to protect their own interests in labour and capital rather than from humanitarian concern. As a demonstration of “rational” public health action, they modelled precisely the scientific approach for which the IHB and other public health agencies argued, perhaps for reasons best articulated by Dr René Sands, the influential Secretary-General of the Red Cross, when he described his organisation’s international activities as:

... based on hygiene and not on human brotherhood, because science is unassailable and is accepted by all serious-minded people, while reform advocated for sentimental or political reasons leads to controversy and inevitable antagonism.

The Protectorate government, however, was neither sentimental nor scientific. Despite being the first of the High Commission territories to utilise IHB

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41 Ibid, p. 177.
expertise, it continued with a minimalist approach to medical and health services. It was left to commercial and mission interests to develop medical work. The Methodist Mission appointed its first qualified doctor, Edward G. Sayers, in 1927 for the hospital at Reviana; in 1928 it established a second medical unit on Choiseul, and soon after built Helena Goldie Hospital on more accessible Vella Lavella.43 Other missions, among them the Anglicans, the South Sea Evangelical Mission, the Seventh Day Adventists, and the various Roman Catholic orders, also engaged in medical work to some degree or another,44 although as Metcalfe later pointed out, rivalry among them worked against co-ordinated efforts that might have produced substantial results.45 In 1929 Crichlow found an increase rather than a reduction in disease conditions in the Solomon Islands.46

The Solomons survey, Lambert's last project under the auspices of the Australian Hookworm Campaign, signalled the end of his apprenticeship and a maturing of his perspective. Following on from his experiences in Papua and New Guinea, the Solomon Islands' survey extended his appreciation of the region's diverse communities while confirming his hypothesis that the decline of indigenous populations had a single root cause: lack of immunity to introduced diseases. This assessment gave Lambert more focus. He discarded any residual ideas about the inevitable demise of Pacific Island races; immunity could be acquired, and his task, through the IH B, was to find ways to accelerate the process while minimising its damage. Lambert still believed that hookworm treatment, although it needed to be made more effective, could improve general health and resistance, but the effort was wasted without some more comprehensive package of medical and public health interventions. After almost four years in the field, his evaluation of current health efforts in the colonised Pacific was not particularly favourable. Colonial governments were moderating their exploitative attitudes towards indigenous populations, but still held back from the full co-operative team approach to public health activities that might

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45 Metcalfe, "The Problem of the Tropical South Pacific," PMB 67, 266.

46 N. Crichlow, "The Prevalent Diseases of the British Solomon Islands", *Transactions of the Royal Society of Tropical Medicine and Hygiene*, 1929:23(2), pp. 179-184. Dengue had been introduced from Australia in 1923, poliomyelitis from New Zealand in 1925, and cases resembling, though not positively identified as, diphtheria and typhoid also reported.
ameliorate the systemic inadequacies of existing medical services. Pacific health problems needed new perspectives and longer-term solutions than current programmes offered, yet the dilemma was to provide these in the face of chronic under-resourcing, and in ways that better integrated health care into the community. Lambert concluded that reliance on costly European medical staff was a major drawback, especially as he considered many Medical Officers underqualified for tropical conditions and divorced from any real understanding of local populations, if not completely professionally and personally incompetent. On the other hand, two years' working with Islanders built in Lambert a growing appreciation of untapped potential. Seeing Melanesians with basic training giving useful assistance in New Guinea's medical service provided a model to build on. When Lambert left Melanesia he a good grasp of the problems, and some ideas for possible solutions. He was provided with the opportunity to develop and apply these insights, when in an unexpected move the IHB decided to post him next to Fiji to re-open the hookworm campaign there early in 1922.
Chapter 6
Establishing the IHB in the South Pacific

Compared to the Solomon Islands’ administration’s negligible involvement in health, issues of population decline and health generated a more active response elsewhere in the Pacific. Facing limits on labour supply, most British Pacific territories recognised the economic consequences of disease and poor health and, with influential public health proponents like the Rockefeller Foundation arguing that current medical knowledge could be applied with effect, governments reassessed the costs of treatment and prevention against loss of productivity and income. In Fiji, the abolition of Indian indentured labour made population vitality a particularly critical issue. The previous IHB hookworm work had promised a solution, and although its early end left its true potential unproven, the administration, supported by industry and business interests, was prepared to allocate resources to a fresh campaign, anticipating definite advantage from further co-operative work with the Foundation. This was to be no fledgling project, as in the other Melanesian territories, but a full three-year programme providing complete coverage of the population, both Fijian and Indian.

However, the programme developed in unforeseen directions, as Lambert, unexpectedly appointed Director, seized the opportunity to promote the ideas derived from his previous campaign experiences. As the administrative and economic centre of British territories in the Pacific, Fiji provided Lambert with several critical advantages. It had an authoritative Governor with direct access to the Colonial Office and, in his dual capacity as Western Pacific High Commissioner, in a position to influence several subsidiary administrations. The Western Pacific High Commission itself provided an existing structure through which Lambert could develop his conception of a co-operative, centralised, regional medical service. Fiji’s public service was well established, substantial enough to include officials receptive to Lambert’s proposals, and importantly, in a position to make effective decisions. Furthermore, Fiji had two institutions, a “medical school” for Fijians and a leper asylum, which though undeveloped, demonstrated to Lambert that his embryonic ideas were feasible.

Lambert needed all possible advantages. The hookworm campaign was his first priority and its anticipated success essential to establish his credibility, but this was threatened when chenopodium continued to prove a clumsy treatment
tool. Lambert’s experiments with an alternative occupied the first part of the campaign; apparent achievement assured him almost celebrity status, and ironically promised sustainable treatment programmes, which obviated the need for further IHB involvement. However, subsequent problems with the drug’s safety undermined the hookworm programme, and in the context of growing international concerns about the health and sustainability of island populations, Fiji and the IHB negotiated another comprehensive co-operative arrangement which ensconced Lambert in the Pacific Islands and finally secured for him the position and authority necessary to pursue other proposals which addressed the structural inadequacies of Pacific medical services.

Building co-operation – the IHB and colonial concerns

Lambert’s work in the Pacific developed in the context of a strengthening relationship between the Rockefeller Foundation and the British Empire. By 1921, Secretary of State Viscount Milner acknowledged seven years of IHB assistance with colonial hookworm campaigns and its new ventures into yellow fever and sleeping sickness in the African territories. He then proposed a conference in London to assess tropical medicine and sanitation work and possible areas for future Colonial Office-Rockefeller Foundation co-operation. With the Colonial Office expanding its tropical medical research work in the colonies, an open conference with IHB experts and specialists from the London and Liverpool Schools of Tropical Medicine would strengthen its scientific basis and identify “the most urgent of the unsolved problems bearing on health and disease prevention ... as well as others of less immediate importance but of scientific interest.”

Rose’s trip to London in June 1921 in response to this Colonial Office initiative proved mutually satisfying, and established general agreement on matters of principle. Together, the IHB and the Colonial Office created a formidable strategic bloc representing a specific approach to health and medical matters. British interest in building a School of Public Health and Hygiene in London especially pleased the IHB, which saw the training of experts in

1 H. J. Read, CO, to General Director IIB, 4 August 1920, RFA RG 5, Series 1 2, Box 98, Fldr. 1345; G. Grindle, CO, to Rose, 29 January 1921, RFA RG 5, Series 1 2, Box 119, Fldr. 1583.
preventive medicine as the key to successful public health efforts in both tropical and temperate areas, and was willing to assist such a development. When the Colonial Office requested sanitation information, the IHB went a step further, putting all Britain’s tropical administrations on its mailing list, which effectively extended its propaganda network. Yet the IHB’s power to influence came not only from its extensive financial resources, but also because the clarity of its goals and policies gave it the appearance of a neutral party, above self-interest. Subsequent cordial correspondence on epidemic outbreaks and control programmes in various British dependencies reflected the careful construction of a partnership in which the IHB used praise of British efforts to take the sting out of the Crown’s reliance on foreign investment in order to fulfil its basic responsibilities, and the Colonial Office’s lofty acquiescence in IHB activities served to remind the Board that it, too, benefited from the arrangement.

The renewed campaign in Fiji also owed much to Heiser’s efforts at the regional level. After the IHB’s early departure in 1918, he maintained correspondence with Fiji’s CMO, keeping him informed of new medical developments and assuring him that efforts were continuing to find a replacement for Paul. However, the Rockefeller Foundation’s immediate priority was the rehabilitation of health and medical services in a Europe devastated by war, and until American forces demobilised the IHB had trouble finding suitable medical staff for its hookworm work.

The Fijian administration had been similarly handicapped, barely able to maintain even routine services due to the number of medical officers who had enlisted. This had been especially felt during the influenza epidemic in 1918, when Fiji had to rely on medical relief teams from New Zealand and Australia. Subsequently, the Colony’s new Governor, Sir Cecil Rodwell (1918-1925), wrote to the Secretary of State outlining the colony’s desperate situation. Of five

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2 Read to Rose, 29 July 1921, and Rose to Read, 10 August 1921 and 8 August 1921, all RFA RG. 5, Series 1.2, Box 119, Fldr. 1583. In the latter Rose makes clear the IHB’s willingness to fund training in public health, drawing parallels between the London discussions and its involvement with Harvard, the Czechoslovakian government, and New Brunswick public health education programmes.

3 Grindle to Secretary of the Rockefeller Institute for Medical Research, 30 November 1921; C. C. Williamson, Director of IHB Information Services, to Under-Secretary of State, 13 December 1921, both RFA RG. 5, Series 1.2, Box 119, Fldr. 1583.

4 Leading articles in the MJH praising the Rockefeller Foundation’s contribution to health demonstrate how successfully it had achieved status as a model to emulate.

5 See various correspondence between Rose and the Colonial Office in RFA RG. 5, Series 1.2, Box 119, Fldr. 1583.

6 Heiser to Lynch, 17 April 1919, RFA RG. 5, Series 1.2, Box 82, Fldr. 1156.

7 Rodwell to CO, 25 January 1919, PRO CO 83/145.
current medical vacancies, there was the possibility of filling only two. Staff were suffering from years without leave and heavy workloads. Colonial Office responses, reflecting the crisis in medical services after four years of war, were dismissive: Fiji should not complain when everyone was suffering shortages; the Fiji service was comparatively "sound and efficient and contains a particularly good type" and might even stand further cuts to staff and salaries. Difficulties in maintaining departmental staff numbers would dog medical efforts in following years, and determine the direction of future services.

Through 1919, Heiser was kept up to date with Fiji’s continued sanitation efforts against hookworm, with Medical Officers and Sanitary Inspectors working in Navua and Rewa. The colony was now short ten of its prescribed 23 medical officers, and a proper campaign depended on the IHB sending staff. Though still unable to promise immediate help, Heiser emphasised the IHB’s new policy on pre-sanitation (latrine installations and use for six months before actual hookworm treatment commenced in an area) and implied that a definite commitment to soil sanitation would be required of Fiji. Rodwell promised that these conditions would be met once hookworm control resumed.

Late the following year, Heiser began an extensive tour of his oriental sphere to check the progress of campaigns already underway and discuss future possibilities, including new arrangements for resuming the IHB involvement in Fiji. An assurance of diplomatic support and telegraphed notice to Rodwell from the Secretary of State concerning Heiser’s arrival left no doubt as to the importance the Colonial Office attached to the IHB Director’s visit to Fiji, though it lasted only a brief few hours. He found that all involved with the earlier programme had left, but their replacements were eager for further co-operative work, with the CMO particularly committed to IHB hookworm control. Heiser negotiated a tentative agreement which he described as "very satisfactory and an advance upon what we have done before."

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8 Rodwell to Milner, 1 April 1919, and Confidential Memos, Correspondence - Fiji 1916, PRO CO 83/146.
9 Montague to Heiser, 13 August 1919, RFA RG. 5, Series 1.2, Box 82, Fldr. 1156.
10 Heiser to Montague, 10 October 1919, RFA RG. 5, Series 1.2, Box 82, Fldr. 1156.
11 Heiser to Rodwell, 3 November 1920, and Montague to Heiser, 6 January 1920, RFA RG. 5, Series 1.2, Box 98, Fldr. 1357.
12 NAF. CSO 8157/20, 18 November 1920.
13 Heiser to Rose, 3 January 1921 and 5 January 1921, RFA RG. 5, Series 1.2, Box 123, Fldr. 1654.
Reopening the Fiji Campaign

When the Colonial Office confirmed the Fiji arrangements in mid-1921 Heiser faced the problem of finding a director to head the campaign. His appeal for an experienced man from the Australian programme was fruitless; Sawyer, already struggling to keep staff, explained that Australian doctors were able to earn higher incomes in private practice than those which both the Commonwealth Health Service or the Hookworm Campaign offered. He suggested $800 per annum plus allowances as a suitable remuneration for the Fiji position, adding that the Fiji work could be overseen more usefully from Australia than from faraway New York. Almost as an afterthought, he suggested appointing Lambert, whose planned finish in the Solomons late in the year would fit well with Fiji.

Lambert’s future in the Pacific remained uncertain at that point, despite his success in Melanesia and obvious dedication. He had hopes of being posted to Mexico, his wife’s home country, but offered to defer his three years of accumulated leave if the IHB wanted to send him elsewhere. Meanwhile, he had proposals for expediting a full survey of the Pacific region, suggesting to Rose that the Board economise by having staff returning from Australia to America on leave stop over in the various Pacific groups (Lambert recommended the Society Islands, as well as British colonies) to undertake quick hookworm surveys, with worm counts, lectures, and localised treatment. Most of the Pacific region could be covered in a year, using only one IHB doctor and assistant; Lambert had in mind himself and Bill Tully, both planning leave in the United States in 1922, after finishing work in Melanesia. Rose recognised the proposal’s potential to fill gaps in the epidemiology of Pacific hookworm infection, but his immediate approach to French authorities in Paris was rejected. This refusal was indicative of future relationships between the IHB and French Pacific administrations, for of

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14 Memo, 3 June 1921, APS/VHP.
15 Sawyer to Heiser, 11 August 1921, RFA RG. 5, Series 1.2, Box 119, Fldr. 1594; Sawyer to Heiser, 11 August 1921, and Lambert to Heiser, both RFA RG. 5, Series 1.2, Box 119, Fldr. 1591.
16 Lambert to Rose, 11 July 1921, RFA RG. 5, Series 1.2, Box 119, Fldr. 1591.
17 Rose to Williams, 13 August 1921 and Williams to Rose, 31 August 1921, RFA RG. 5, Series 1.2, Box 123, Fldr. 1651. The French also discouraged a later bid from Lambert to survey in their Oceanic territory. Burns to Gray, 27 April 1925, NA IT 1 110/5/2 pt.1.
all their territories, only the New Hebrides Condominium would later be opened to IHB activities, and that reluctantly.

Sawyer was highly respected, and his support for Lambert’s appointment significant. Heiser was unconvinced. He continued, unsuccessfully, to press for an alternative, until the urgency of beginning work in Fiji settled the matter. Finally, Lambert was approved for the position for which the IHB had first engaged him four years earlier, but he was still without Heiser’s unequivocal support. Impatient for an immediate start to the Fiji campaign, Heiser sharply criticised Lambert for taking too long to finish his current project. His censure elicited a frustrated outburst from Lambert. “I don’t think I can be accused of trying to loaf this last three years,” he protested; and more pointedly:

While I am on the subject, how long is my initiatory [sic] period as a probationer to last? Haven’t I worked hard enough and respectfully enough to be a full fledged member of the Board’s Staff? What will I call myself in Fiji?

With his status unclear, Lambert left Sydney for Suva in January 1922. He was both full of plans for how Fiji could be used as a base for work in the wider Pacific, and angry at Heiser’s disregard for his past efforts and present circumstances. Heiser’s continued criticism, this time for Lambert’s report presentation, generated an even sharper response. “You are not clear as to the situation ... If I thought you were sure of your grounds I would say that it was very unfair,” wrote a clearly beleaguered Lambert, suggesting that he take long overdue leave while Sweet, Sawyer’s Assistant Director, “come to Fiji to gain part of his training ... He would find a smoothly running show and could get more experience here than in Australia.” Heiser’s reply refusing the transfer took several months to arrive, and by this time Lambert, immersed in his mission to save the “valuable races” of the South Seas, was proving himself up to the task. Slowness in communication, with messages often crossing mid-Pacific, had the potential for misunderstanding, confusion, and frustrating delays in progress; but as in this instance, it also allowed time for situations to defuse and individual initiatives to be taken before the authoritative decision handed down.

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18 Heiser to Rose, 8 October 1921, RFA RG. 5, Series 1.2, Box 124, Fldr. 1657.
19 Lambert to Heiser, 12 December 1921, RFA RG. 5, Series 1.2, Box 119, Fldr. 1591.
20 Lambert to Heiser, 22 February 1922, RFA RG. 5, Series 1.2, Box 141, Fldr. 1861.
Carving a niche

Despite this uncertainty, once in Suva Lambert moved quickly to re-establish the Bureau of Ankylostomiasis as a joint operation of the IHB and the Colony of Fiji, under the charge of the Department of Medicine and its Chief Medical Officer. To validate his position as Director, Lambert was made a District Medical Officer and Medical Officer of Health for the colony. He refused the offer of headquarters in a new building at the far end of town, instead sharing an office in the Town Hall with the Medical Officer of Health, Dr Carment, so that the IHB project remained closely identified with the Administration's health work, and Lambert could maintain a highly visible presence in Suva. He explained to Heiser, "I want to stick closer than a brother to them and to so incorporate this work with theirs that at the end...it will carry on automatically and function as an accepted branch of Government work."21 He submitted his first report to the administration within a fortnight of his arrival. The IHB Executive Committee approved his draft budget of $2000 for a year's hookworm work in the colony. In accordance with Heiser's negotiated agreement, this met full expenses for the first year of the campaign, dropping to 66 percent then 33 percent over the following two years, with the Fijian Government assuming full responsibility thereafter.22

This early impetus was soon followed by a more realistic grasp of the situation. Lambert chose to reopen the campaign in Rewa, where Paul had begun control work prior to his departure in 1918. This district was conveniently close to Suva; it was also an important cane-growing area with a large, hookworm-infected Fiji-Indian population. The Colonial Sugar Refining Company offered its hospital alongside the mill at Nausori as a base for the campaign, as well as every other assistance Lambert requested. But conditions in Rewa had even Lambert stymied. The Fiji Government's promised pre-campaign sanitation work turned out to be a farce. The sanitary inspector appointed had no

21 Lambert to Heiser, 29 January 1922, and Heiser to Lambert, 25 April 1922, RFA RG. 5, Series 1.2, Box 141, File 1861, Lambert, "Fiji - Hookworm Disease Report for Quarter ending March 31, 1922," RFA RG. 5, Series 3, Box 162, CMO to Colonial Secretary, 3 February 1922, NAF CSO 114/22.
22 Encl. in Heiser to Rose, 3 January 1921, RFA RG. 5, Series 1.2, Box 123, File 1654.
knowledge or experience, and despite a directive to clean up the Indian areas (the Fijian villages were ignored) Lambert could find no evidence of improvements. Dense settlement, low-lying waterlogged ground and sandy soil facilitated cross contamination from household pit privies to nearby wells providing family water supplies. As well as hookworm and dysentery, the District Medical Officer estimated that endemic typhoid infected ten percent of the population, with surges during epidemics.\(^{23}\)

Lambert recognised that providing a clean water supply was the essential health measure, but such work was outside the brief of the co-operative agreement, and even less likely given a downturn in the economy. The colony had overspent its budget by £200,000 during 1921, with a slump in sugar and copra prices causing the closure of several companies and a 50 percent cut in already low wages for Colonial Sugar Refining Company labourers, to 1/6 a day. Heiser’s visit to negotiate the new campaign had fortuitously coincided with a passing buoyant moment, and Lambert reported that he now faced quite different circumstances:

> This year it is difficult to get a penny out of them. If you had come a year later you would have been able to receive no help from them at all... the Government and public are very kind to me, but it will be very difficult to get anything done beyond what is vitally necessary to our work.\(^ {24}\)

New possibilities – experiments with Carbon Tetrachloride

These circumstances were discouraging, but even worse was increasing dissatisfaction with chenopodium and the population’s obvious resistance to treatment. Lambert was acutely aware that chenopodium failed to demonstrate persuasively that modern western medical practice could be worthwhile, a demonstration essential to get a sceptical public and newly cost-conscious administration onboard and ensure public participation. He knew that quick and radical action was necessary to salvage the campaign and his reputation. In *A Doctor in Paradise*\(^ {25}\) Lambert presented an heroic account of how these problems were solved: the weary and dispirited doctor brooding on the hopeless task ahead,

\(^{23}\) Lambert to Heiser, 22 February 1922, RFA RG. 5, Series 1.2, Box 141, Fldr. 1861.
\(^{24}\) Ibid.
\(^{25}\) Lambert, *Doctor in Paradise*, pp. 140-147.
when, in one of those serendipitous 'eureka' moments which stud the annals of science and validate its credibility as creative process, his eye alights on a veterinarian's article about experiments on hookworm in dogs with a new vermifuge, carbon tetrachloride (CTC).\textsuperscript{26} The doctor finds a handy bottle of this common cleaning fluid, and on the basis of the veterinarian's experiment of self-medication without ill-effect, undertakes his own empirical trials on "four hookwormy East Indians", patients in the hospital's native ward. The drug proves wildly successful, the patients are restored to vitality, and doctor and his medicine are welcomed everywhere as a miracle.

However, the correspondence between Lambert and the IHB gives a very different account of the progress and aftermath of the drug trials which he credited with reviving the Fiji campaign. It indicates that he and the IHB were interested in carbon tetrachloride even before he left for Suva, and that Lambert's intentions to try the drug were clear. In January 1922, he reported a meeting with Colonial Sugar Refining Company personnel in Sydney, where he inquired into CTC's availability,\textsuperscript{27} and soon after, within just a few days of opening the campaign in Fiji, notified New York of his tests with the drug. His "careful letter" to the Foundation was in fact a brief telegram: "Hall treatment 12 Indians 98 percent effective. Send by quickest route 10 gallons."\textsuperscript{28} Coincidentally, on the same day the IHB also received a telegram from an IHB field officer working in Brazil, who reported extraordinary results from his own carbon tetrachloride trials; in fact, the IHB had already carried out experiments on prisoners in Ceylon.\textsuperscript{29} An IHB memo noting that Lambert's supply had been sent from New York indicates IHB consent to his activities, rather than instant, horrified rejection of any experiments on humans as described in \textit{A Doctor in Paradise}.\textsuperscript{30}

A few weeks later, Lambert sent a full account of his subsequent experimental tests to Heiser. These had been done with various dosages and age groups, initially Indian, and finally by treating a group of over 300 Fijians "without noteworthy occurrence." Follow up tests with the usual chenopodium dose showed that the new drug removed 96 -99 percent of hookworm, though had less

\textsuperscript{26} Maurice C. Hall, Senior Zoologist of the United States Bureau of Animal Husbandry, published his experimental results in \textit{The Journal of the American Medical Association}, November 19, 1921.

\textsuperscript{27} Lambert to Heiser, 28 January 1922, RFA RG. 5, Series I.2, Box 141, Fldr. 1861.

\textsuperscript{28} Lambert to IHB, 6 February 1922, RFA RG. 5, Series I.2, Box 141, Fldr. 1861.


\textsuperscript{30} Memo to Dean, 16 February 1922, RFA RG. 5, Series I.2, Box 141, Fldr. 1861; Lambert, \textit{Doctor in Paradise}, p. 145.
effect on ascaris. Assuring Heiser the work had been done carefully, and that carbon tetrachloride’s tastelessness and comparative lack of side effects was winning favour with the public, Lambert declared his intention to make the drug routine in the field campaign, as it had already become for all patients at Suva Hospital. 31

In mid-March, however, came first warning signs about the drug’s potential dangers, and a more prudent IHB stance:

In view of the conservative policy of the Board in not adopting on a large scale a new method of treatment until careful experiment has been made in more than one field of work, it seemed better to send a somewhat smaller quantity of Carbon Tetrachloride and wait until we had fuller reports of its use. 32

After further warnings on its possible toxicity, the IHB next decided to postpone any shipment of CTC, but conveniently Lambert had the Fiji CMO’s approval for its trial and use. Impatient to continue treatments, he had Sawyer send a supply of the drug from Australia. Between 21-31 March, he treated 4000 people. Four days later he cabled Heiser: “Already completed 5000 treatments. A complete success.” The IHB’s return telegram expressed pleasure at the success of treatment, but reiterated that until the toxicity risk was fully assessed, field use was inadvisable and it would send no CTC to Fiji. 33

With Montague backing continued use of the drug, Lambert pushed ahead, bringing the total number of people treated to 10,000 by 20 April, when he informed the IHB that few symptoms had occurred. Even without CTC’s greater efficacy, he argued, it was the drug of choice for a mass campaign as it was practically asymptomatic compared to chenopodium’s serious side effects, which during Paul’s time apparently created such a negative impression in the community that reopening the campaign met with opposition from the start; Lambert claimed that people blamed chenopodium for cases of permanent deafness and the 1918 influenza epidemic. The Indians, still the main source of labour and the object of the treatment programme, but now free and newly empowered by the campaign to end indenture, strongly resisted any pressure to

31 Lambert to Heiser, 23 February 1922, RFA RG. 5, Series 2, Box 40, Fldr. 242. News of CTC’s use was public by April, when The Medical Journal of Australia reported on the drug, noting the IHB’s “cautious experiments in mass” and the Fijian trials. “Carbon Tetrachloride in Hookworm Disease,” AJA 1922:1(15), April 15, 415.
32 Read to Lambert, 13 March 1922; Smillie to IHB, 16 March 1922; Read to Lambert, 17 March 1922, all in RFA RG. 5, Series 1.2, Box 141, Fldr. 1861.
33 Lambert to Heiser, 31 March 1922; Lambert to IHB, 4 April 1922; IHB to Lambert, 11 April 1922; F. Read to Lambert, 14 April 1922, all RFA RG. 5, Series 1.2, Box 141, Fldr. 1861. Maurice Hall described potential dangers of CTC in “Carbon tetrachloride as an anthelmintic,” AJTM 1922:2(5) September, 373-380.
take chenopodium. Citing Montague’s willingness to assume full responsibility for mass dosing with carbon tetrachloride, Lambert concluded “I think until I receive orders from you to discontinue tetrachloride I will carry on with it.”

Several factors enabled Lambert to disregard IHB guidelines. First, Heiser was again on tour in Asia, and communications were slowed by being re-routed through New York. He was therefore initially unaware of the problems reported from trials in other areas such as Ceylon, Brazil, and Dutch Guinea, so instead of his usual forceful curb on Lambert’s propensity to experimentation, he was enthusiastic about replacing chenopodium with the new drug. “It is beginning to look as though carbon tetrachloride treatment ... is the goal we have been trying to reach,” he enthused, citing successful experiments on three condemned prisoners in Manila.

Second, Lambert’s position in Fiji allowed him a degree of flexibility. His salary was paid by the Foundation, yet being under the jurisdiction of the Fijian Medical Department, he could claim their “higher authority” when it worked to his advantage. The IHB was equally happy to cede their normal employer control over Lambert’s activities, allowing the colonial government to take the risk and responsibility. The organisation neatly side-stepped any controversy regarding experimentation, while maintaining its leadership in public health.

Both the IHB and the government were fervent about improving hookworm treatment. Lambert’s arguments for the greater economy of carbon tetrachloride were persuasive, especially to an administration with limited resources. He presented hookworm infection as a major obstacle to economic development in the Tropics, which was considered vital to avert a crisis in subsistence for temperate populations. Lambert blamed the early drugs - “powerful poisons” requiring close, labour intensive, and educated supervision - for the slowness and expense of previous treatment campaigns. The need to determine who required treatment, by collecting and analysing individual faecal specimens, also made campaigns time-consuming and expensive, and the method was error prone. Furthermore, toxicity meant that pregnant women and the frail had to be excluded from treatment, contributing to a permanent group of carriers. The disagreeable

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34 Lambert to Heiser, 22 April 1922, RFA RG. 5, Series 1.2, Box 141, Fldr. 1861.
35 Heiser to Lambert, 25 April 1922, RFA RG. 5, Series 1.2, Box 141, Fldr. 1861; and ditto, 29 April 1922, RFA RG. 5, Series 1.2, Box 140, Fldr. 1854. Condemned prisoners were useful subjects for research - alive they were necessarily compliant sources of data from experimental drug treatment, and execution provided convenient autopsy material to determine the physiology of the drug’s action. Unfortunately for experimental science, death sentences were comparatively rare, while pardons could lose valuable anticipated post-mortem information. First articles on carbon tetrachloride trials are outlined in Medical Annual, Bristol, 1923, p. 47.
taste and side effects of most drugs also meant that extensive propaganda campaigns were necessary, and their relatively ineffective anthelmintic action increased the probability of rapid re-infection in the community, necessitating repeat treatment, frequently refused.36

Multiple demands on the organisation’s funds meant the IHB was also sensitive to the economics of hookworm control. Repeated, labour intensive campaigns were expensive, restricting IHB participation to only a few of the countries that were eager to avail themselves of the opportunity. Increasingly, there were concerns that the hookworm campaigns might fail altogether as a demonstration of the efficacy of a scientific approach to public health, undermining the whole foundation on which the organisation’s philanthropic endeavours were built and threatening its aspirations to control the direction of modern medicine. Lambert presented carbon tetrachloride as the solution to these problems. Cheap, effective, palatable, safe: these features gave it the potential to eradicate rather than merely control hookworm, ensuring economic development and justifying western medicine.37 It was, he proclaimed, an “epochal” new treatment for hookworm disease.38

In the event, the IHB’s attitude was one of cautious enthusiasm. Lambert was to proceed carefully and not exceed a maximum dose of 3cc until the drug’s effect on liver and kidneys had been more fully researched.39 Nevertheless, when Lambert succeeded in his ambition to be the first to publish an account of carbon tetrachloride work, with an article in the prestigious Journal of the American Medical Association,40 George Vincent, President of the Rockefeller Foundation, congratulated him for his scientific enterprise.41

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36 Lambert, “Ankylostomiasis (Mass Treatment by Carbontetrachloride)”, 19 July 1922, RFA RG. 5, Series 3, Box 162, “Hookworm Disease and Reports 1918 and 1922”.
37 Lambert, ibid, reported a 91% reduction in individual hookworm infection and soil pollution levels after one dose of CCl4; about 80 people could be treated with 1 lb. of the drug, which cost 4s. 3d.; 6000 people could be treated each month by one field unit of 9 men. Also Lambert to Heiser, 13 July 1922, RFA RG. 5, Series 1.2, Box 141, Flrdr. 1862.
38 Lambert, “Ankylostomiasis (Observations on twenty thousand treatments with Carbontetrachloride)”, 1 June 1922, RFA RG. 5, Series 3, Box 162, “Fiji Hookworm Disease, 1918 and 1922”.
39 Read to Lambert, 21 June 1922, RFA RG. 5, Series 1.2, Box 141, Flrdr. 1862. Carbon tetrachloride is closely related to chloroform, which can cause liver necrosis in overdose: Russell to Sawyer, 24 August 1922, RFA RG. 5, Series 1.2, Box 140, Flrdr. 1855. Lambert used doses up to 4 cc in his early trials: Lambert to Heiser, 23 February 1922, RFA RG. 5, Series 2, Box 40, Flrdr. 242; much later, the Australian Hookworm Campaign, trialled doses ranging from 3 cc to 10 cc at Goodna Mental Asylum, reporting “surprisingly few” symptoms, except vomiting and drowsiness: Sawyer to Russell, 11 November 1922, RFA RG. 5, Series 1.2, Box 141, Flrdr. 1856.
41 G. Vincent to Lambert, 27 December 1922; also C. Williamson to Lambert, 23 October 1922, both in RFA RG. 5, Series 1.2, Box 141, Flrdr. 1862.
There were 40,000 uncomplicated treatments in Fiji before serious problems developed, with the post-treatment deaths of two Indian boys, but by then there was no serious suggestion that the IHB would stop using carbon tetrachloride. Lambert was aware from laboratory trials and his own clinical observations that certain factors – among them alcohol and fat consumption - increased toxicity, presumably by increasing absorption of the drug in the body. Purging with magnesium salts within hours of dosing was important to stop this physiological process. Lambert attributed the reactions of some Europeans to this synergistic activity, but it was hardly a factor in the first deaths. These and subsequent cases were regarded as unfortunate but aroused great interest in the scientific community, providing a valuable opportunity to examine the victims' viscera and see first-hand the liver lesions of toxic dosage.

As the first deaths occurred after Lambert began using a new batch of the drug, they were finally attributed to its contamination with minute quantities of toxic carbon bisulphate, prompting the IHB to emphasise using the purest product available. Alcohol was considered a factor in two later cases. The deaths were cautionary but because contributing circumstances could be controlled, need not deter the drug's continued use. The IHB suggested, however, that Lambert write a brief update on developments, so that his article in JAMA would not mislead people into believing CTC was harmless.

The drug remained Lambert's favoured hookworm treatment, though later other problems came to light. Some people heavily infected with ascarides, another intestinal parasite especially prevalent among Indians in Fiji, responded adversely to CTC, with the worms releasing potentially lethal toxins when aggravated by the drug. As oil of chenopodium was a more effective ascarides vermicide, Lambert developed the practice of administering both drugs together in these cases. Like Lambert, the IHB also maintained high hopes for CTC. "If carbon tetrachloride can be made safe, it looks as though we shall have the greatest weapon yet available against hookworm," Heiser concluded in 1923.

42 Russell to Lambert, 5 October 1922, RFA RG. 5, Series 1.2, Box 141, Flrd. 1862.
43 Lambert to Heiser, 2 September 1922, RFA RG. 5, Series 1.2, Box 141, Flrd. 1862: Lambert to Montague, 1 December 1922, RFA RG. 5, Series 1.2, Box 141, Flrd. 1860; Russell to Sawyer, 16 December 1922, RFA RG. 5, Series 1.2, Box 141, Flrd. 1856.
45 Heiser to Lambert, 8 May 1923, RFA RG. 5, Series 1.2, Box 141, Flrd. 1862.
Mass treatment and propaganda

Carbon tetrachloride was not the only radical element of Lambert’s plan to stimulate the hookworm campaign. He also abandoned the established time-consuming surveys, which determined infected individuals before treatment, in favour of mass treatment of the whole community without preliminary examination. Lambert’s arguments for greater economy (the cost of each treatment was only fourpence halfpenny), administrative efficiency, better compliance and improved outcomes, were accepted by the IHB and backed by research findings elsewhere.46

Propaganda was the third vital aspect of Lambert’s approach. He perceived education as the key to making permanent changes in the public’s acceptance of health programmes, and in Fiji he extended his repertoire from lectures, demonstrations, and press publicity. The potential of more advanced technology fascinated him, especially a mobile hand-cranked film projector he had encountered in Papua. This was ideal for field showings of the IHB’s new educational movie *Unhooking the Hookworm*, which Lambert enthused over as "one of the most marvellous illustrations of the Moving Picture art that I have ever seen." The government was similarly impressed, purchasing the film immediately it arrived. Lambert reported this "the most valuable single aid to a campaign that there is" after it played to full houses during its two week run in the Suva theatre.47

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46 Lambert, “Ankylostomiasis (Observations on twenty thousand treatments with Carbon tetrachloride),” 1 June 1922, RFA RG. 5, Series 3, Box 162, “Fiji Hookworm Disease, 1918 and 1922,” pp.2-3; Lambert to Heiser, 25 May 1922, and F. Read to Lambert, 21 June 1922, both RFA RG. 5, Series 1.2, Box 141, Fldr. 1862; Sir L. Rogers, “Ankylostomiasis in Medical Annual, 1924: Bristol, p.29.

47 Lambert to Heiser, 11 January 1922 and 4 February 1922, and R. C. Dean to Lambert, 8 February 1922 and 25 March 1922, RFA RG. 5, Series 1.2, Box 141, Fldr. 1861; Lambert to IHB, 28 June 1922, RFA RG. 5, Series 1.2, Box 141, Fldr. 1862; Lambert, “3rd Quarterly Report, 1922”, RFA RG. 5, Series 3, Box 162, “Fiji Hookworm Disease, 1918 and 1922.” Other authorities were equally persuaded to the propaganda power of moving pictures with their “universal language” and “possibilities of conscious and unconscious influence”, the development of an Empire film industry was a serious topic at the 1926 Imperial Conference. Summary of Proceedings of the Imperial Conference, *AJHR* 1927, A-6, Appendix II, pp. 63-64. Later the Colonial Development Public Health Committee specifically recommended investing £60,000 to develop an Imperial Loan Library of films for instruction and propaganda in the colonies on medical and hygiene matters. D. Shiel’s to Secretary of State, 24 June 1930, WPHC 3137/1930. Lambert’s emphasis on educating as well as treating people was also increasingly recognised in the western world as vital to “the great future of public health”. J. Whetley, “Propaganda Work for the Education of People in Health”, *Journal of the Royal Sanitary Institute*, 1923:43 (7), pp. 251-253.
With sanitation and hygiene already part of the curriculum in Government and Assisted schools, Lambert took advantage of an established framework and his initial good relations with the Acting Superintendent of Schools, David Winn Hoodless, to promote both the Hookworm Campaign and the IHB’s participation in further public health education. In the opening three months of the campaign he lectured to 1016 children at six schools in Suva; a further 9290 people were recorded at 136 public meetings, and with newspaper coverage and thousands of pamphlets distributed, Lambert was able to report to his superiors, “I believe that every one nearly in Fiji, black or white, knows that we are here, what we are here for, and are anxious for us to reach their districts.”

The economics of treatment versus prevention

In the first months, despite interest in implementing his three-pronged programme, Lambert’s initial optimism changed to despondency about the long-term prospects for health work in Fiji, largely due to recession lowering government revenues. By May, expenditure on public service salaries had been reduced by £19,000; three European Sanitary Inspectors had been cut from the payroll, including those in the crucial provinces of Rewa and Navua. Lambert took over sanitation work himself, assisted by an Indian sub-assistant surgeon who cost the government less than his European equivalent. Soon, however, praise from a visiting American scientist who had seen IHB operations elsewhere, renewed Lambert’s enthusiasm. As he relayed to Heiser:

He said...that I did not realize what big new work we were doing here and neither did the Board and that I should get the credit for it...he considered the work marked a new phase in tropical development.

People were eager for treatment now, with Fijians reportedly calling carbon tetrachloride “the medicine for making people fat.” Lambert concluded, “I am beginning to believe that it might be possible to eradicate hookworm disease in

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48 D. W. Hoodless to Lambert, 16 August 1923, RFA R.G5 Series 1.2 Box 167 Flclr. 2158.
49 Lambert, "Fiji Quarterly Report, 1/4-30 June 1922", RFA RG. 5, Series 3, Box 162, "Fiji Hookworm Disease Reports 1918 and 1922."
50 Lambert to Heiser, 18 May 1922, RFA RG. 5, Series 1.2, Box 141, Flcir. 1862.
51 Lambert to Heiser, 13 July 1922, RFA RG. 5, Series 1.2, Box 141, Flcir. 1862.
an economic sense by this alone."52 A fortnight and 9000 treatments later he was even more emphatic:

... carbon tetrachloride makes one feel that he is getting somewhere and not merely sweeping fog off the back veranda roof ... This new treatment is going to revolutionize the hookworm game all over the world. ... nothing will stop this ... treatment. It gives marvellous results. The cooperation one receives is astounding. We can go over districts so rapidly that there is now a hope of eradicating hookworm disease because we can reduce the percent of infective females and thus the soil pollution. Any large estate that takes the interest can eliminate in a short time all infection by doses given to labor at properly graduated intervals, in spite of soil pollution.53 (my italics)

Lambert recognised that the introduction of a more effective vermicide had the potential to shift the focus of public health efforts in Fiji, and overcome one of the campaign's major problems. Previous drug therapy against hookworm was only effective when complemented by preventive sanitation, but this was always difficult because of the expense of installing water supplies, drainage systems and latrines. Implementing these schemes often required huge effort in persuading communities to change their cultural practices, for benefits not immediately apparent to them. In Western countries these problems had been largely overcome in the long development of public health services, and an infrastructure that promoted sanitation and hygiene meant that these were largely accepted as factors in the improved health status of their populations. After Erlich began the development of specific chemotherapeutic therapies for disease with discovery of arsphenamine for syphilis in 1906,54 public health workers envisaged preventive and curative elements operating in close association rather than competition; treatment would supplement individual and community efforts to safeguard national health. This was the principle guiding health efforts in Britain up to World War I, when the turmoil of war changed the balance in this developing partnership. The ideal of domestic health promotion was subsumed as national wealth and resources were diverted elsewhere. Changing state funding policy favoured the rise of private practitioners of medicine, who focused on individual treatment, rather than preventive public health services. The medical requirements of war also boosted research and development of therapeutic

52 Ibid.
53 Lambert to Rose, 28 July 1922, RFA RG. 5, Series 1 2, Box 141, Fl dr. 1862.
options to disease and injury, and these overwhelmed less spectacular public health activities.\textsuperscript{55}

Carbon tetrachloride apparently lessened the need for sanitary measures. The IHB had always considered government commitment to sanitation crucial for permanent public health success\textsuperscript{56} but as Lambert now pointed out, the drug sent treatment racing ahead of these more time-consuming efforts, and threw out the planned pre-sanitation timetable.\textsuperscript{57} However, sanitation work was not relinquished altogether. Lambert happily reported to Heiser that the Fijian Government had finally begun drainage work on the low-lying Nausori plains, where up to 3,000 Indians lived “under the worst conditions of all.” Engineers were also going ahead with a long-planned filtered water system for the Rewa district. These systems would alleviate faecal contamination from cess-pits to wells and therefore encourage the Indians to use their privies, which they had sensibly avoided doing in the past.\textsuperscript{58}

Compromise and co-operation

Yet Fiji abandoned its earlier commitment to the IHB on cleaning up other areas. By late 1922, the government’s acute financial problems jeopardised the future of the co-operative campaign itself. Fiji’s post-war economic situation reflected that of other British colonies.\textsuperscript{59} The Colonial Office refused to countenance colonial borrowing, and with a second round of retrenchments pending, the Medical Department considered alternatives to cut the cost of hookworm work. Lambert, due for leave, suggested that Kendrick, his assistant from the Australian campaigns, replace him as director, thus saving the government’s share of Lambert’s salary. IHB guidelines and annual checks on progress, Montague’s unshakeable commitment, and a government guarantee of ongoing work, would secure hookworm work. Lambert considered the arrangement an early

\textsuperscript{55} These developments were discussed by W. J. Howarth, President of the Society of Medical Officers of Health (England) in his Presidential address at the Congress of the Royal Sanitary Institute, Bournemouth, 1922: “General Practitioners and the Public Health Service”, The Medical Officer, 1922, Vol. 28, p. 65.
\textsuperscript{56} F. Read to Lambert, 21 June 1922, RFA RG. 5, Series 1.2, Box 141, Fldr. 1862.
\textsuperscript{57} Lambert to Heiser, 18 May 1922, RFA RG. 5, Series 1.2, Box 141, Fldr. 1862.
\textsuperscript{58} Lambert to Heiser, 28 June 1922, RFA RG. 5, Series 1.2, Box 141, Fldr. 1862.
\textsuperscript{59} Howarth, “General Practitioners”, Lambert to Heiser, 3 September 1922, RFA RG. 5, Series 1.2, Box 141, Fldr. 1862.
achievement of the IHB’s goals and urged it to accept the plan as “the best solution of all”, arguing:

It immediately begins hookworm work and sanitation not alone as Government Department but with an actual officer of the Government at its head... I don’t believe that they can stop it if they want to. 60

Lambert’s desperately-felt need for leave was possibly a factor in his enthusiasm for prematurely relinquishing direct IHB involvement in the hookworm work, especially as the Board could not find a relief replacement. After four years service in the tropics without a break, he was physically and mentally at a low ebb; he had “lost [his] ginger completely.” Nevertheless, he arranged with Montague to begin work in Lautoka province, on the island’s dry side, where none had been undertaken before. Interest in hookworm work had also increased elsewhere in the Pacific, with Western Samoa especially keen for Lambert to initiate a campaign there. Despite his desire to return home, Lambert saw such work as a chance to advance the IHB’s aims. His comments to Heiser reveal how central to progress he considered his own and the Board’s activities, compared to the efforts of colonial administrations: “I never saw such a place to hurrah a man on if he will do anything as the South Pacific. ... one is a shining light if one does even a little work because one has so little competition.” 61

Possibly Lambert was justified in this perception. Despite heavy cuts elsewhere in the Medical Department, the government decided against any curtailment of the hookworm budget, and requested a Board substitute during Lambert’s absence. With none available, the IHB, concerned that Lambert might over-extend both his health and their commitment by staying on, authorised him to make whatever arrangements he judged suitable, ignore Samoa’s request, and return to the States. Leaving Montague to handle IHB finances, and Kendrick in charge of fieldwork, the Lambert family left Fiji early in November 1922. 62

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60 Lambert to Heiser, ibid
61 Lambert to Heiser, 21 September 1922, RFA RG. 5, Series 1.2, Box 141, Fldr. 1862. In response to queries about carbon tetrachloride and mass treatment from other Crown colonies, the High Commissioner for the Western Pacific had earlier asked Lambert to write a report for general distribution. In line with RF policy, Lambert had presented the work as much as possible as that of the Fiji administration, and kept out any mention of the Rockefeller Foundation. Under the circumstances, this had the effect of Lambert being personally identified with the work: Lambert to Heiser, 28 June 1922, RFA RG. 5, Series 1.2, Box 141, Fldr. 1862.
62 Heiser to Lambert, 20 October 1922; Lambert to IHB, 30 October 1922; Heiser to Lambert, 31 October 1922; Lambert to Heiser, 1 November 1922, RFA RG. 5, Series 1.2, Box 141, Fldr. 1862.
**Entrenching Hookworm Work, 1923**

Rather than downgrading the campaign, Lambert's departure on leave confirmed the place of hookworm work in Fiji, and the IHB's commitment. Away from the tropics, Lambert quickly regained his vitality and enthusiasm. In New York, he now argued strongly for the Board's continued involvement in the colony, soon writing to Montague of his probable return:

> I am doing my best to rehabilitate my shattered constitution ... The farther I get from Fiji and the longer I am away from it, the more I appreciate what a fine place it is ... I look forward with feelings of great pleasure to the prospect of spending another period in so delightful an atmosphere, both climatic and professional.63

Problems with carbon tetrachloride decided Lambert's future. Another death in Fiji renewed the drug dilemma, and the campaign there temporarily returned to chenopodium, less spectacularly fatal despite its other drawbacks. Under the circumstances, Lambert reasoned, the IHB should return to the islands "at least till the proper and best method is decided on for the mass treatment of Fiji." The administration had refused to downgrade the work despite its financial problems, and Lambert considered the IHB similarly "honour bound" to continue its association:

> I feel very strongly that we should be leaving them in the lurch to desert them at this time. It should not take too long to straighten things out and get the place on a running basis which will be permanent ... we should not be made liable to a charge of neglect on our part.64

Although Fiji was only a very small part of the IHB's international public health efforts, both the carbon tetrachloride trials and consequent deaths there put it in the spotlight in scientific and colonial circles. Though work continued, Montague counted on Lambert's return "with well considered plans for further treatment after discussion with the mandarins in New York" for it to regain its full impetus.65

Lambert's interest in continuing in Fiji stemmed from more than his desire to maintain the IHB's, or his own, professional credibility by satisfactorily completing the hookworm project there. The financial and administrative

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63 Lambert to Montague, 5 December 1922, RFA RG. 5, Series 1.2, Box 141,Fldr. 1860.
64 Lambert to Heiser, 24 February 1923, RFA RG. 5, Series 1.2, Box 167,Fldr. 2137.
65 Montague to Lambert, 15 January 1923, ibid.
problems that dogged the campaign during 1922 had left Lambert little time to pursue his ideas for more ambitious health schemes, but there had been enough interest in Fiji to convince him that co-ordinated health services could be established, and even extended to other South Pacific administrations. First, however, Fiji - the richest of the British Pacific dependencies - needed to develop an adequate health infrastructure so that it could serve as a regional centre. At the time, the IHB did little to encourage Lambert’s ideas of more extensive involvement, perceiving higher returns in public health progress from activities elsewhere.

Support for a centralised, rationalised approach to Pacific health problems was also developing in other quarters. Cumpston in Australia, as well as business, medical, and political interests throughout the Pacific and the Pacific rim were among those considering the future of the Pacific and its populations. While the motives and suggestions on what should be done were varied, they brought pressure to bear on the IHB to take a leadership role in Pacific health developments, and were therefore influential in Lambert’s return as an active IHB presence in the Pacific.

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Lambert - developing aspirations for Pacific health

After his brief survey of the scattered communities of the Solomon Islands confirmed Lambert’s interest in the role of medical services in the future of Pacific peoples, he promoted development at every opportunity. To Heiser he enthusiastically outlined an “easy and economic” hookworm survey programme radiating out from Fiji, encompassing the Gilbert, Ellice, Phoenix and Tokelau Islands, as well as Tonga, the New Hebrides, New Caledonia, Samoa and the Cook Islands. A second centre established in Tahiti could cover the French possessions in eastern Polynesia. Lambert established valuable connections by actively involving mission organisations in the hookworm campaigns in Melanesia. Before leaving for Fiji he secured contacts with the Methodist Mission and met with the Anglican Australian Board of Missions. Impressed by Lambert’s Papua work, this group proposed an IHB survey in the New Hebrides,

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66 Lambert to Heiser, RFA RG. 5, Series 1.2, Box 119, Fldr. 1591.
if the Presbyterian Church, with which it shared the mission field in the northern islands, agreed to co-operate.67

From his first arrival in Fiji, Lambert took every opportunity to widen interest in hookworm surveys. As administrative centre for the Western Pacific High Commission, Suva was an ideal place to meet government officials from throughout the region. Islay McOwan, Fiji’s Acting Colonial Secretary but previously British Agent in Tonga, stressed the value of a survey there, and Commander Burroughs, recent Deputy Commissioner in the Ellice Islands, encouraged Lambert’s plans for an early survey of that group. Governor Rodwell was also eager to extend surveys beyond Fiji. Lambert suggested that he use the rare opportunity of a six week cruise planned for the High Commissioner’s yacht, to the Gilbert and Ellice Islands Colony, and forwarded a tentative survey budget of £50.68 He marshalled hopeful arguments to Heiser: the surveys could be done cheaply and efficiently, they need not detract from the Fiji campaign, and “the results in the stimulation of sanitation and preventive medicine should be very large in proportion to the expenditure.”69

Lambert was to be disappointed. Access to transport, structurally crucial in determining the extension of medical practice through the Pacific, frequently controlled the scope of Lambert’s efforts, and in this instance the Pioneer’s changed itinerary made the trip impracticable. Anyway, Montague felt that Lambert’s absence was not in the best interests of the work in Fiji, and Heiser also refused to authorise the survey.70

The IHB did not share Lambert’s growing valuation of Pacific populations, having determined that its work should be confined to countries with large populations so that expenditure produced benefit for maximum numbers.71 Without denying the need for work in the Pacific, Heiser pointed out that scattered, inaccessible, island groups with sparse populations and infrequent transport hardly fitted those criteria, costing “out of all proportion to the amount

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67 Lambert to Heiser, 28 January 1922, 29 January 1922 and 28 March 1922, RFA RG. 5, Series 1.2, Box 141, Fldr. 1861.
68 Lambert to Heiser, 29 January 1922 and 17 March 1922, RFA RG. 5, Series 1.2, Box 141, Fldr. 1861. Lambert was particularly interested in the Gilbert and Ellice Islands after reports of hookworm cross-infection between pigs and humans there.
69 Lambert to Heiser, 28 April 1922, RFA RG. 5, Series 1.2, Box 141, Fldr. 1861.
70 Correspondence and memos, “Proposed Hookworm Survey GEIC,” WPHC 567/1922.
71 IHB to Heiser, 20 March 1922 and Heiser to Rose, 22 March 1922, RFA RG. 5, Series 1.2, Box 145, Fldr. 1921.
of good which we could accomplish elsewhere." Although Lambert needed to focus full energy on the Fiji campaign for its success.

Lambert disagreed, strongly. Arguing passionately that the Board should go beyond cost/benefit criteria, his reply framed the more personal perspective he had been developing. Throughout the Pacific, "fine" and "valuable" races were dying out, "robbed of their possessions by the whites and massacred by introduced diseases". Now these could be easily treated and prevented as governments and missions were willing to provide a little more effort and education. In an argument aimed at the Rockefeller Foundation's philanthropic heart and its goal for medical science, Lambert stressed that the Islanders themselves were responsive to efforts on their behalf: "It is more than just treatment for hookworm disease with them. It is the grasping of new ideas by minds which are eager for it." 

Australian interests and the "Pacific Problem"

While the IHB could deflect Lambert's arguments on the intrinsic value of Pacific populations and the relevance of their fate to the Western world, it took more notice when authoritative voices elsewhere expressed similar views. Cumston, Heiser's ally in Australia, brought the issue into new focus with his rationale for the preservation of "native races". Cumston tied action on Pacific health problems and indigenous depopulation to the future of white control and economic exploitation of the Pacific. Historically, the region was Australia's "first frontier", and its resources regarded as an economic adjunct to the colonies. In 1918, the Australian Inter-State Commission proposed rationalising economic, trade, and administrative functions in the Pacific, and recommended establishing some form of federated control, centred on Australia. Subsequent discussion on centralised administration of the island dependencies showed general agreement in principle, but proponents in the region favoured establishing Fiji rather than Sydney as the administrative and transport centre.

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72 Heiser to Lambert, 22 March 1922, RFA RG. 5, Series 1.2, Box 141, Fldr. 1861.
73 Lambert to Heiser, 13 June 1922, RFA RG. 5, Series 1.2, Box 141, Fldr. 1862.
Such proposals paralleled the increasing articulation of concern over Pacific health problems, expressed pre-war at the 1914 meeting of the British Association for the Advancement of Science in Australasia.\textsuperscript{76} With former German New Guinea and Nauru allocated to Australian trusteeship after the war, the Commonwealth’s interest in tropical medicine expanded beyond concern for its own white tropical populations, with arguments for apolitical medical action to counter the perceived “extermination of many picturesque native races” fuelled by mixed motives of humanitarianism and self-interest.\textsuperscript{77} The 1918 Conference on International Relations, in California, and the First Pan-Pacific Science Conference in Honolulu in 1920 reflected and furthered interest.\textsuperscript{78} The “white man’s” moral responsibility to alleviate the “material harm” his presence caused to Pacific populations was argued with increasing conviction in the \textit{Medical Journal of Australia} during 1922. Critical of the medical service Australia provided in Papua and New Guinea, the \textit{Journal} outlined proposals for a well-organised Pacific medical service operating from a convenient location with the support of all involved governments. As with earlier recommendations, Sydney or Brisbane was touted as the logical headquarters because established shipping networks for rapid transit of supplies were vital. Private endowment of such a project was considered ideal but improbable, with the next best option control by Australia’s Federal Government and contributions from the Pacific administrations and the British Imperial Government. The idea of a co-operative venture in Pacific health was rapidly reified as “The Pacific Medical Service”.\textsuperscript{79}

These developments matched Cumpston’s increasing preoccupation with what he thought “may be described somewhat flamboyantly as the question of the future of the Pacific.”\textsuperscript{80} However humanitarian matters were largely absent from Cumpston’s concerns, which focused on future development of the Pacific Islands as this affected white interests. Indigenous population decline and demoralisation would weaken existing control over the Pacific, create

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\textsuperscript{76} M. Spencer, “The Pacific Medical Service”, paper presented to the Australian Society of the History of Medicine, July 1997.


\textsuperscript{78} Margaret Spencer, “The Pacific Medical Service”.

\textsuperscript{79} ibid, pp. 156-157; Armit?, “A Pacific Medical Service”, \textit{MJA}, 1922:1(19), 527-528.

\textsuperscript{80} Cumpston to Heiser, 22 December 1922, RFA RG. 5, Series 1.2, Box 141, Fldr. 1858. Sawyer also wrote to Heiser outlining discussions with Cumpston and others regarding the Pacific, and detailing current health initiatives activities by relevant governments (England, France, Australia, and New Zealand) in the South Pacific. Sawyer presented Cumpston’s scheme as a five year project of thorough epidemiological investigation, identifying causes and remedies of depopulation, with a
international conflict over repopulation and therefore threaten Australian and international security. Cumpston recognised that both social conditions and disease contributed to the Pacific health situation, but he dismissed the former as extraneous to the public health enterprise. Disease conditions were most relevant, were controllable, and current neglect required immediate remedial action in the interests of world peace. His proposed solution was ambitious: a co-ordinated international medical effort involving the region's imperial powers (Britain, the United States, France and Japan); regional administrative bases with properly equipped and staffed research laboratories; subsidiary local bases; and well-staffed floating laboratories. Sydney was the most logical control centre. Cumpston's lavish outside estimate for the project was an annual expenditure of £300,000.81

Even half this figure was excessive for Heiser and the IHB, whose current budget in Australia and the Pacific ran to a mere few thousand pounds. Cumpston was equally extravagant in his impression of the Foundation's potential contribution to the Pacific project:

Magnificent as is the work you are now doing, I cannot conceive anything which could have the same importance to the human destiny of the world for the next 100 years as an earnest and really efficient application to this present problem.82

The health of scattered and irrelevant Pacific populations was assuming an importance the IHB usually reserved for the teeming millions of China. Despite their ongoing animosity, Lambert and Cumpston were partners in this shifting perspective.

Heiser's reply discouraged any hopes of IHB assistance and indicated a shift in the Board's policy since its earlier rejection of Lambert's proposals for work in the Pacific. Now Heiser agreed that preserving Pacific populations was vital for the region's colonial powers, and perhaps the United States. The IHB, he assured Cumpston, had been considering the issue and possible strategic action over the past year. But Cumpston's plan had a critical flaw, in that it needed unanimous agreement from the powers involved; for this reason Heiser maintained that health initiatives could only come from the Island administrations themselves. If this assertion merely reiterated IHB policy, with the added advantage of not committing the IHB to any large expenditure, it was also a more realistic

81 Cumpston to Heiser, 19 February 1923, RFA RG. 5, Series 1.2, Box 167, Fldr. 2154.
82 Ibid.
assessment of the disparate nature of colonial aspirations and the extent to which national self-interest and territoriality featured in control of the Pacific.

The fantastic scale of Cumpston's scheme - sixteen laboratories, six laboratory ships, associated schooners and supply ships and extensive staffs - perhaps worked in Lambert's favour. Although dismissed earlier, his plans for extending Pacific public health activities were now seen as moderate and achievable, and formed the basis of the alternative Heiser now presented to Cumpston: the IHB would be prepared to accept invitations from other Island governments to initiate hookworm control work, which it would then use as an opportunity to collect data on other disease conditions, and encourage public interest. This would stimulate the development of fuller health plans that could be locally organised, and only then was higher level international co-operation feasible.  

Cumpston was dissatisfied with the IHB's stance, pointing out that despite "particularly favourable conditions" for operations in New Guinea and Fiji, a similar IHB approach there had not substantially improved efforts to deal with serious disease conditions such as tuberculosis, yaws, dysentery, malaria and filariasis. Like Lambert, he knew the frustrations of inadequate staffing; a single hookworm unit moving progressively through the islands would likewise do too little, too slowly.  

Cumpston negotiated elsewhere for support. As the key topic at the Pan Pacific Science Congress in Melbourne in August 1923, the Pacific health problem received wide publicity. There was liaison with the Colonial Office through Dr C. J. Martin of the Lister Institute, and the Australian Minister of Health also considered the matter urgent, agreeing to deal with it "as an Empire matter of first importance" at the Imperial Conference in London later that year. Cumpston accepted that France and Japan, the other Pacific imperial powers, might be uninterested, but asked Heiser to promote the idea of concerted Anglo-American discussions on the issue with the United States government. Finally, as another avenue to the IHB, he invited Lambert to the Congress to present a paper on Pacific health problems and discuss international co-operation and ways of improving Pacific health administration in general. Although neither Lambert's visit nor the IHB's lobbying eventuated, Cumpston later triumphantly informed Heiser of the resolution passed at the end of the Congress: "That the scientific

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83 Heiser to Cumpston, 13 April 1923, RFA RG. 5, Series 1.2, Box 167, Fldr. 2157.
84 Cumpston to Heiser, 17 May 1923, RFA RG. 5, Series 1.2, Box 167, Fldr. 2157.
85 Ibid, Sawyer to Heiser, 31 May 1923, RFA RG. 5, Series 1.2, Box 166, Fldr. 2147.
problem which stands first in order of urgency is the preservation of the health
and lives of the native races by the application of the principles of preventive
medicine and ethnology.  Despite Heiser’s pessimism about international
interest, both the American delegate and the French Consul-General promised
support.  

Ultimately, Cumpston’s scheme came to nothing. While its exorbitant cost,
grandiose design, and great power unwillingness to co-operate were factors, so
too was the IHB’s reluctance to take on the leadership role which Cumpston
advocated, urging regional control instead. Visiting the United States at the
IHB’s invitation in 1924, Cumpston finally accepted that the Board would not
commit to his current plans for a South Seas medical service. Eventually
Australia’s interest in a Pacific-wide Medical Service declined; its future efforts
focused on its own tropical territories. By this time the IHB had established the
extent of its interest in the region, largely along the lines Heiser proposed in
1923, and with Lambert as their representative. Within the limitations of the
IHB’s approach Lambert remained committed to developing a unified medical
service.

Lambert, the IHB, and the South Pacific

Although the IHB regarded Cumpston’s proposals as exceeding the operations it
envisioned for the Pacific, it nevertheless reconsidered the issues that he raised
about the possible extinction of island populations. The scenario of retarded
development and conflict, coming on top of Lambert’s passionate plea for the
preservation of “valuable races” and the need to resolve hookworm treatment

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17 Heiser to Cumpston, 21 August 1923, RFA RG. 5, Series 1.2, Box 167, Flldr. 2157; Heiser to
Cumpston, 26 December 1923, RFA RG. 5, Series 1.2, Box 167, Flldr. 2154. Cumpston to Heiser,
25 January 1924, RFA RG. 5, Series 1.2, Box 197, Flldr. 2512.
18 In a letter to Russell on 29 March 1924, Heiser anticipated Cumpston’s visit being “mutually
beneficial”: his only hesitation was that Cumpston might infer the IHB’s support for “his plan for
saving the natives of the south sea [sic]. He may be able to convince us but he has not done it yet.”
RFA RG. 5, Series 1.2, Box 202, Flldr. 2588. Cumpston’s arguments are outlined in Heiser’s memo
of his meeting with Heiser, F.F. Russell and George Vincent, 19 August 1924, RFA RG. 5, Series
1.2, Box 197, Flldr. 2512. Heiser later noted Cumpston’s understanding that the IHB was “not
prepared to take action to save Polynesians from possible extinction” with the only reason given
being lack of funds. 3 November 1924, Memos 1924, APS/VHP; and F. F. Russell, Memo, 13
November 1924, RFA RG. 5, Series 1.2, Box 197, Flldr. 2512.
problems in Fiji, persuaded the IHB to continue expanding its work in the South Seas. The Board followed up some of Lambert’s suggestions even though Heiser’s responses were invariably unenthusiastic. Possibly he restrained Lambert’s activities during 1922 from residual doubts about his suitability as a permanent IHB representative. Although Lambert proved his ability in public health procedures and public relations, the position as campaign director required administrative competence in accounting and book-keeping, skills that he struggled to acquire. Furthermore, while the IHB worked its staff hard, it was reluctant for Lambert to over-extend his commitments given his poor health. Having withdrawn from Fiji once, it was hardly politic to divert IHB resources elsewhere until this programme was properly established.

With an IHB presence in the Pacific now assured, Lambert returned refreshed to Suva in May 1923. He was to complete the Fiji programme as soon as possible, secure firm guarantees of ongoing government sanitation work, and train local personnel. Then, as a trial, his services would be made available to island governments wishing to initiate hookworm campaigns. Heiser’s instructions were clear:

... avail yourself of every opportunity to stimulate this type of work, with the understanding that the International Health Board is to incur no expense beyond your salary and travelling expenses.  

Lambert was to combine this with gathering health information that might be useful to developing an international colonial Pacific health service. Finally, he was to keep careful pre- and post-treatment records, so that the efficacy of mass treatment campaigns could be assessed.

Once back in Fiji, Lambert moved quickly along these lines. Work in Ba, on the dry side of Viti Levu, provided an interesting counterpoint to conditions encountered in Rewa. Hookworm infection was much lighter, in fact so negligible among children that those under five were not treated. Fifty-seven percent of Indians and 46 percent of Fijians examined showed positive infection. The work introduced new methods to reduce carbon tetrachloride’s iatrogenic effects. As a result of recent IHB-approved research, Lambert now administered the drug in a solution of the purgative magnesium sulphate. This increased safety, economy, efficiency, and speed, with three staff able to treat up to 920

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89 Heiser to Lambert, 21 April 1923, RFA Biographical File, Lambert/1; Heiser, Memo for Annual Report 1923 - The East and Central America, Memos 1924, APS/VHF.
people per day. Later in the year, after assessing all deaths from treatment, Lambert added the vermicide ascaridol to the solution given to Indians, reducing the chance of lethal aggravation in those heavily infected with ascaris.

Lambert reported that mass CTC treatments had a “cumulative popularity”, with news of earlier successes making work easier in each new district. Acceptance was especially important in the Indo-Fijian sugar cane areas, where the Colonial Sugar Refining Company gave the campaign wholehearted and practical support both to improve productivity and as a panacea for political dissatisfaction. George Dixon, the company’s travelling inspector, reported “a marvellous change in the whole social atmosphere...he sees no way of accounting for it save our work”; and estate superintendents remarked on improved labour relations, with Indians more cheerful and willing to work. Dixon had also noted a similar remarkable change in Rewa Indo-Fijians, who now looked “better nourished and brighter and happier in their bearing.” In a reflection which gave credence to the principle motivating the Rockefeller philanthropy, he commented “though this [improvement] may to some extent be explained by improved economic and political conditions, I am inclined to attribute it largely to a general improvement in health following on last year’s campaign against the hookworm.”

Though impressionistic, such conclusions repositioned scientific medicine as the principal contributor to improved health, increased economic productivity, development, and social stability, and hence lessened any need to review social and economic relations. In the same way that curative treatment came to usurp more complex preventive methods in achieving the public health, biomedicine came to the forefront as a means to achieve social and economic objectives which were beneficial to the interests of government and capital. Relief from individual suffering was secondary to these concerns. As Levers did in the Solomon Islands, the Colonial Sugar Refining Company continued to support IHB initiatives. Lambert recognised the Company as “the dominant force in Fiji.”

92 Lambert, ibid; Lambert to Heiser, 28 May 1923 and 29 May 1923, RFA RG. 5, Series 1.2, Box 167, Fldr. 2157.
93 Dixon to Lambert, 29 June 1923, RFA RG. 5, Series 1.2, Box 167, Fldr. 2158.
94 Lambert to Heiser, 10 July 1923, RFA RG. 5, Series 1.2, Box 167, Fldr. 2158. R. Gerard Ward notes that the Company “has, with reason, been referred to as ‘the other government.’” Cited in Land Use and Population in Fiji: A Geographical Study, London, 1965, p. 37. The CSR’s own
with its financial, practical and political input influencing the direction of
government programmes, and had cultivated contacts with company’s
management in Sydney before he came to Fiji.\textsuperscript{95}

By August Lambert had completed the predominantly Indian sugar districts
of Viti Levu, except for Nadroga and Sigatoka, which he postponed, sensible to a
death from choline treatment there during his absence.\textsuperscript{96} Moving to Vanua
Levu, where most Indians were clustered around the CSR’s Labasa mills and
estates, he anticipated even easier progress once the campaign began working
amongst the predominantly Fijian areas. By October, all but about 1700 Indians
(still the primary target of the campaign) had been treated.\textsuperscript{97} Meanwhile,
sanitation work was proceeding in districts where carbon tetrachloride treatment
had already knocked back hookworm infection rates and cut soil pollution.\textsuperscript{98} By
the end of 1923, there were over 5125 “Oriental” type pit latrines installed for
Indians, and their use was reportedly increasing. After previous resistance, this
part of the campaign was now routine and the government agreed to employ extra
Indian sanitary inspectors. Lambert included these in a new budget for 1924,
when the government would take over the majority cost. Approved expenditure
of £1217 included salaries for an Ankylostomiasis Officer (£367), 2 NMPs
(£120), 3 Indian Sanitary Inspectors (£180), an Indian topaz, or assistant (£50),
plus drugs (£200), and travel expenses (£100), with the balance for contingencies.\textsuperscript{99}

This budget demonstrated Lambert’s ability to direct the terms of
arrangements between the IHB and government. It threw the IHB into some
confusion as it implied that he had negotiated the end of the joint programme a
year earlier than originally arranged. The Board reconfirmed its commitment in
Fiji, offering to carry the full cost of Lambert’s salary while the government
covered other campaign expenses. This also gave the IHB more flexibility to
transfer Lambert as necessary. Effectively, Lambert was a step ahead of the IHB
office. He had taken to heart Heiser’s directive to complete his work in Fiji, and

\textsuperscript{95} Lambert valued its unique role in colonial development and “important contribution to “a happy
social balance” in Fiji. A.G. Lowndes (ed.), South Pacific Enterprise. The Colonial Sugar Refining
Company Limited, Sydney, 1956, p.68.
\textsuperscript{96} Lambert traded their promise of support for his knowledge of Papua and the logistics of planning
a survey of the best cane areas there. Lambert to Heiser, RFA RG. 5, Series 1.2, Box 141, Fl.1861.
\textsuperscript{97} Lambert to Heiser, 28 May 1923, RFA RG. 5, Series 1.2, Box 167, Fl.2157; Lambert to
Heiser, 11 July 1923, RFA RG. 5, Series 1.2, Box 167, Fl.2158.
\textsuperscript{98} Lambert to Heiser, 5 October 1923, RFA RG. 5, Series 1.2, Box 167, Fl.2158.
\textsuperscript{99} Lambert to Heiser, 28 May 1923, RFA RG. 5, Series 1.2, Box 167, Fl.2157.
was determined to expand elsewhere. Independently, he had negotiated with Montague that the IHB would pay a third of the budget, but Lambert would step down as Director and control would pass to Bill Kendrick, now employed as Ankylostomiasis Officer by the administration, rather than the IHB. Citing total commitment from the government, the CSR, and the public, Lambert claimed, "The work here...is established. If anyone can find a single individual white black brown or brindle [sic] that doesn't know about it and agree with the general idea, it would be a matter of great surprise."\textsuperscript{100}

Follow-up work was assured (approximately 30-40,000 treatments planned for 1924) and permanent sanitation programmes established, all within the framework of government medical services, and reinforced by corporate sponsorship. The IHB nevertheless remained a key influence, having defined structure and practice, and establishing the system of financial, narrative and statistical reports which continued to determine the public health programme's development.\textsuperscript{101}

By the end of 1923, the Rockefeller Foundation had a position in the Pacific beyond that envisaged when Heiser first negotiated the IHB's return to Fiji to complete its hookworm programme. Anticipated then was a discrete, local, three-year campaign that would eliminate hookworm from the Fijian body and bring the colony's medical organisation to better health with an injection of properly scientific public health method; the patient could then be left to cure itself. However, with Lambert's appointment as director, the switch from chenopodium to carbon tetrachloride, and the increasing propaganda about the strategic importance of the Pacific and its indigenous populations, these goals mutated. Problems with new drug technology bound the IHB to further work, and then its therapeutic success expanded demand for services. Lambert's expectations spanned the Pacific; hookworm and Fiji were critical steps to more comprehensive medical organisation, rather than ends in themselves. In the context of new concerns about colonial progress and imperial security, his proposals for regional health development suggested some possible solutions.

\textsuperscript{100} Lambert to Heiser, 22 January 1924, RFA RG. 5, Series 1.2, Box 197, Fladr. 2515.
\textsuperscript{101} Lambert to Kirk, 22 January 1924, and CMO to DMOs, "Ankylostomiasis Campaign", 4 January 1924, both RFA RG. 5, Series 1.2, Box 197, Fladr. 2515.
The IHB came to accept his ideas as viable, and by integrating his recommendations into its planning, committed to an indefinite future in the Pacific.
Chapter 7
Planning a South Seas Service

With Fiji organised to continue its own hookworm work, Lambert was now in a position to pursue health work elsewhere in the Pacific. The Fiji campaign's progress assured him of strong interest from other administrations, and he assiduously developed contacts in the region. By August 1923, in line with the IHB's brief that he progressively gather information and stimulate health work, he had a tentative two year schedule for surveys in all the main South Pacific island groups.¹ But wider circumstances, both imperial and local, supported Lambert's own impulse towards more comprehensive development. In Fiji key individuals shared his sense of possibility and encouraged Lambert with their ideas and willingness to effect change,² while his experiences with Fijian Native Medical Practitioners, graduates of the Colony's small Medical School, convinced Lambert that an educated indigenous medical workforce would overcome many of the structural, geographical, and cultural obstacles to improving Pacific health. Accordingly, he prepared a proposal for a Pacific Medical Service. The IHB resisted this and subsequent similar attempts to extend its commitment, insisting that developments occur within the resources of Pacific administrations. However, the latter generally considered proposals for cooperation unrealisable at the time, except for one project already partially underway - a central leprosarium that built on Fiji's existing leper station at Makogai. This had immediate appeal as an economic inter-group initiative that could counter both the disease, and the growing public concerns about it, by isolating and treating its victims in one place, and its success provided a model which Lambert used to promote his other plans.

¹ Lambert to Heiser, 10 August 1923 and 18 August 1923, RFA RG. 5, Series 1.2, Box 167, Fldr. 2158. Lambert optimistically included even those which had not yet made requests, notably the French territories.
² Notably High Commissioner Rodwell, CMO Montague, and Colonial Secretary T. E. Fell.
Contextualising health development

As Cumpston’s political and strategic concerns demonstrate, the flurry of health activity in the South Pacific through the 1920s was not driven solely by the IHB’s participation, even where it could be directly attributed to Lambert’s presence. Beyond the borders of the region itself, the Colonial Office was taking a new interest in the health of its tropical dependencies. This effort, in part driven by the pragmatic need to stimulate Britain’s flagging post-war economy by exploiting colonial resources and potential markets, was directed largely towards rejuvenating the large populations in Africa and Asia, but once established, the general thrust of colonial policy applied even in the remote reaches of the Pacific. Although this did not necessarily result in any imperial investment in health infrastructure for the small island communities, it did mean that their well-being was subject to the same bureaucratic surveillance and promptings that applied in more important colonies, as administrations now found themselves called to account for inadequate health services. Likewise, the League of Nation’s oversight of mandated territories elevated a humanitarian approach to trusteeship and the responsibility to improve indigenous health. Other factors also favoured new approaches. Biomedical knowledge was advancing, and as belief in its potential efficacy spread, previously obdurate perceptions of race extinction shifted, helped by the rising science of anthropology and ethnographic studies that argued for the value of other cultures and their preservation.

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3 Barrie Macdonald, *Cinderella of Empire*, p. 112

These new attitudes were obviously to Lambert’s advantage. News of the IHB representative’s presence in the Pacific had spread quickly through official channels and, helped by Lambert’s active propagandising, through the informal networks that effectively disseminated information across the Pacific. Governments, now expected to extend welfare services from within their own limited revenues, explored the potential of American subsidies and expertise. Officials were generally receptive to IHB participation, as an opportunity to implement ideas long-considered but previously unaffordable. Some, however, responded with varying degrees of resistance, based on suspicions about “foreign intrusion” (especially American), a defensive autonomy, the perception of different priorities, or simple apathy. Lambert had ample opportunity to practise tact and patience as he picked his way through the hierarchical structures of command in the various colonial administrations to negotiate agreement and implement the health surveys and programmes. Even so, a vigorous personality such as his inevitably aroused an antipathetic response from some people, and on occasion personal animosity and dissension determined developments. Nor was Lambert’s task made easier by having to deal with diverse array of administrative arrangements, among them Tonga’s constitutional monarchy, the bizarre joint colonial control in the New Hebrides, Condominium, and for New Zealand’s two colonial territories, separate control by two different government departments in Wellington.

In the Western Pacific High Commission territories, the support of the High Commissioner was crucial; the relationship that IHB Directors had established with the Colonial Office ensured that this was generally forthcoming. Nevertheless, structural features of the Colonial Service bureaucracy often frustrated Lambert’s expectations of progress. Months could pass in the process of referring proposals to distant staff in the Colonial Office, who in turn deferred to the Colonial Advisory Medical and Sanitary Committee. The regular turnover in officials, both local and in London, could further stall developments, with new appointees delaying decisions while they familiarised themselves with the circumstances, or brought different perspectives of policy and practice to the field. Lambert desperately urged the IHB to take advantage of Rodwell’s enthusiastic support in 1923, for example, fearing – justifiably – that developments would lose momentum when his term ended.5 New Zealand administered territories presented a different situation, as the proximity of

5 Lambert to Heiser, 12 October 1923, RFA RG. 1.1, Series 419L, Box 1, Fldr. 5.
Wellington enabled more direct links, and the long service of key Island Territories and External Affairs Department decision-makers allowed Lambert to sustain more stable relationships. As a recent colonial agent, New Zealand also had a less entrenched hierarchical administrative structure and was more receptive to outside expertise. The correspondence between Lambert and Wellington officials portrays an amicability and openness lacking in his more formal communications with High Commission administrations.

As well as administrative differences and personnel politics, geographic distance and accessibility were further determinants of health status and needs. The Gilbert and Ellice Islands, the Solomons, and the New Hebrides may have been Western Pacific High Commission territories, but there was no direct transport link between the Commission’s headquarters at Suva and these groups. Except for special arrangements, such as the 1924 trip Lambert made to the Gilbert Islands in the High Commissioner’s yacht, visits were circumscribed by co-ordinating shipping schedules first to Australia and from there into the Western Pacific. Once in the group, Lambert and the medical units were reliant on government boats (if such existed), trading vessels, or local plantation and mission craft. Weather and mechanical failure added to the vagaries of these travel arrangements, forcing Lambert to bypass some areas altogether and then extrapolate his survey findings, as in the Cook Islands and Tonga. Unless he got stranded, as happened for a month in Malekula in the New Hebrides, many of the surveys were in reality no more than cursory assessments, rather than the rigorous scientific studies they were claimed to be. Accessibility also determined the later implementation of medical services, with staff and facilities centralised while the outer, remote communities remained under-resourced. While this was generally reflected in static or even worsening disease status on the periphery, this was not consistently the case; in some areas, even where serious medical efforts were instigated, population decline and revival proceeded simultaneously in adjacent islands, confounding attempts to clarify cause and effect.

5 Only the more accessible Southern Cooks were visited; the particular problems of the more isolated atolls 300 miles to the north were not assessed, but assumed. Likewise, only Tongatapu, the main island in the Tongan group, was surveyed.
A South Seas service

In his pursuit of Pacific health developments, Lambert found some keen allies in Fiji. Foremost was Dr Aubrey Montague, whose 1922 appointment as Chief Medical Officer Lambert considered “a boon to me and to Fiji”. He eulogised Montague, who provided important continuity of support through changing Administrations, as

... the best of the Anglo-Saxon breed, one of the most helpful influences that ever touched my life... He was one of the three ablest men I have known in the Pacific, and he didn't take third place. ... I put a high value on the intimacy we formed.  

Though very different in personality, the two men had complementary qualities and skills - the American forthright, energetic, vocal and pragmatic in pursuit of his goals, and the English colonial public servant retiring, practical, unswervingly principled, and as Lambert described him, thrifty to the point of problematic parsimony. Montague, who already had ideas for improving Fijian health, appreciated that Rockefeller assistance would be short-lived, and for any permanent gains Pacific administrations had to become self-sufficient in medical resources and staff. Of primary importance was the “special education of the brightest youths in medical science and art; and the education in the art of nursing of the most intelligent girls,” without which there would be no permanent gain.  

He was receptive to Lambert’s arguments for a broader, coherent approach to Pacific medical problems, and the two men adopted a team approach in pursuit of their plans, with Lambert’s role to secure the Rockefeller Foundation’s financial support and propagate among other administrations as he surveyed the Pacific, while Montague would convince the Fiji Government. They decided on three key aspects: co-ordinated collection and centralised treatment of lepers; enlarging the Fiji Medical School into a pan-Pacific institution with a formalised, upgraded curriculum; and centralising the Western Pacific’s medical work into a unified Medical Scheme under a Director based in Suva. Both men considered that the success of any future health projects, even hookworm and yaws work,

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7 Lambert, Doctor in Paradise, p. 123. In 1919 Rodwell had opposed suggestions of Montague’s appointment as CMO, eliciting a petition in protest from Suva residents: PRO CO 83/145.
8 Montague to Lambert, 20 August 1923, RFA RG.1.1 Series 419L, Box 1, Fldr. 5.
depended ultimately on the Medical School plan, so that an indigenous staff with professional standards and status would be permanently integrated into the community. Training of Native Medical Practitioners from all over the Pacific remained a key principle in all Lambert's subsequent plans. This was congruent with IHB policy that local personnel should be trained to the fullest extent possible to carry on public health work after the IHB withdrew, but his interpretation was not quite what Rockefeller educationalists had in mind, and the subsequent struggle for a Central Medical School and Pacific Medical Practitioner system encompassed many of the issues involved in establishing scientific medical practice among indigenous colonial populations, as well as the difficulties of rationalising services among diverse administrations in an extensive archipelagic region.

Based on the ideas he and Montague shared, Lambert presented his first plans for "a satisfactory beginning of a South Sea service for the High Commission group" in August 1923. Less grandiose than Cumpston's recent proposal, which Lambert denounced as poorly conceived and too expensive, his own plan had an estimated budget of £20,000 per year and his focus was particularly on practical public health work rather than research. Each High Commission group would have its own units separately treating yaws and hookworm, educating the people in sanitation and "the laws of simple living", and identifying those with leprosy. Lambert centred his scheme firmly in the Pacific: Fiji was the "logical geographic and economic centre of the South Pacific" and as such should be the site of headquarters for the service, rather than Australia. Facilities already there, such as the leper station at Makogai and the Native Medical School in Suva, could be expanded to provide for all Island groups. Having already experienced the frustrations of inadequate, erratic shipping schedules, Lambert considered a reliable vessel essential to Pacific medical development, to transport personnel and supplies throughout the scattered islands, and to allow a Travelling Medical Officer to inspect health programmes regularly.

There was a mixed response to Lambert's first articulation of a wider health service for the South Pacific. Governor Rodwell was in general agreement with the need for action, but considered Lambert's scheme still too ambitious and

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9 Montague to Lambert, 11 October 1923, RFA RG.1.1 Series 419L, Box 1, Fldr. 5; Lambert, Doctor in Paradise, p. 124.

10 Lambert to Heiser, 27 and 28 August 1923; Lambert, "Tentative plan for High Commission group," 28 August 1923, all RFA RG. 5, Series 1.2, Box 167, Fldr. 2158.
currently unaffordable. He discarded the inter-group vessel as an expensive complication, and favoured developing a central leprosarium separately from the overall scheme. His priorities were hookworm and yaws units in the Western Pacific High Commission - especially in those “festerings sores of the South Pacific”, the New Hebrides and the Solomons - and as a necessary corollary, extending the Medical School to supply Native Medical Practitioners.\(^{11}\) Forwarding these plans to the Colonial Office for approval to include them in the budget for 1924, Rodwell included Lambert’s assurance of likely IHB funding - hopefully half the costs of mobile treatment units for each of the five Western Pacific dependencies plus a Director and central office in Fiji.\(^{12}\) He emphasised that the benefits of this initial co-operative treatment programme extended beyond the mere relief of hookworm and yaws, as the proposals were “only intended as the foundation of a wider scheme, based upon a central Training Institution at Suva having its own inter-group transport by which medical stores and Native doctors could be distributed and regular visits of inspection made.”\(^{13}\)

To Lambert, Montague and Rodwell in the Pacific, the scheme was well planned, its considerable benefits obvious. However, their superiors were unconvinced. After comment from the Colonial Advisory Medical and Sanitary Committee, the Secretary of State declined authorisation, cautioning that more detailed analysis of costs and arrangements was necessary to determine the scheme’s feasibility.\(^{14}\) When Lambert sent the proposals to Heiser, his suggestion of IHB assistance, rather than the scheme itself, drew a firm response:

> As you will recall...we stated that before we are ready to consider any health scheme for the South Pacific we desired to obtain more information and to have reasonably accurate surveys based on information that could best be obtained by our lending your services to the various Island Governments for the purpose of assisting them in starting campaigns for the control of hookworm disease... I doubt very much whether it is a good idea for you to hold out hope that we will participate further.\(^{15}\)

Having integrated Rodwell’s ideas, Lambert, however, had already submitted a refined proposal in which he enlarged his analysis of action required

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11 Rodwell, 25 September 1923, WPHC 2339/1923.
12 Rodwell, Memo, 25 September 1923, WPHC 2339/1923.
13 Rodwell to Secretary of State for the Colonies, 9 October 1923, WPHC 2339/1923.
14 Secretary of State to Rodwell, 4 February 1924, WPHC 2339/1923.
15 Heiser to Lambert, 5 October 1923, RFA R.G5, Series 1.2, Box 167, Fldr. 2158. Heiser reiterated the IHB’s expectation that it would have no financial participation other than Lambert’s salary and travel, “Memos 1924,” APS/VHP.
to reverse population decline. Success, he asserted, depended on fully implementing two clearly defined but interdependent programmes. Building on Cumpston’s dire predictions about labour and colonial sovereignty, he presented a drastic picture of the Pacific situation: underpopulation existed because of the fatal impact of introduced disease and the destruction of culture which together demoralised and devitalised Island societies and had economic and strategic ramifications for the West. Practically nothing was being done, even about preventable or controllable diseases. European doctors were often both difficult to obtain and unsuitable, given transport problems and primitive living conditions in isolated islands. Besides, an “elaborate medical administration” was too costly, and unsustainable when populations were relatively small. The solution to these problems lay in ‘training Native Medical Practitioners for all Groups in an improved, centralised school in Suva, where conditions were ideal, then returning them to district service in the islands.\(^\text{16}\)

However, the immediate, short-term solution was mobile medical units against hookworm and yaws, diseases currently “decimating” population in the Western Pacific territories.\(^\text{17}\) Lambert and Rodwell had considered all possible permutations for this scheme, regarding transport, use of staff, integrating the identification and collection of lepers, later expansion to deal with other serious health issues like tuberculosis and malaria, involvement of local committees and their relationship to the central Directorate based in Fiji, and the possible later inclusion of Samoa, the Australian territories, and other colonial administrations—“all the necessary links to the chain.” The plan had the advantages of flexibility and economy, requiring only one qualified European medical officer to travel among the groups and oversee the work, which would be directed by lay Europeans and carried out by NMPs.

Lambert argued his case from every perspective:

There is growing to be a universal feeling that the natives of the South Pacific should not be sacrificed to the greed of the white man as the aboriginals of so many countries have been. Also that it is bad economics in every way. Sir Cecil Rodwell has talked to me about these peoples and feels as I do from intimate contact that they are worthwhile and that much can be done for them at relatively little expense. ... Here is a plan that fairly begs to be done, a chance such as the Board looks for ... work can be started that will have untold and endless good effects.  ...  

\(^{16}\) Lambert to Heiser, 12 October 1923, RFA RG 1.1, Series 419L, Box 1, Fldr. 5.  
\(^{17}\) Interestingly, neither came specifically into the category of introduced disease, but as usual the rationale for the first was the opportunity to educate in preventive measures, while treatment for yaws (suspected to constitute a significant factor in infant mortality rates and female infertility) unfailingly demonstrated the obvious therapeutic power of western medicine.
such work might help prevent a Pacific war. In any case it will be a wonderful way to show brilliantly what the effects may be of sanitation and preventive medicine on the increase and upbuilding of peoples. Here the effects can be measured and examined and proved as they can be in no other place and their proper values seen. This is an opportunity that may be long in appearing again. ... the great need is not for research but for the demonstration of the usefulness of the knowledge that research has already given us.\textsuperscript{18}

To Lambert, the scheme was the opportunity for a sea change in colonial relations, a chance for the Rockefeller Foundation to demonstrate a most important principle: that administrations had

... obligations to the native races, accustoming them to the idea that native interests are paramount with commercial interests. Beyond that are vistas of new educational methods and opportunities for their betterment. This sounds missionary and visionary, but the possibilities are there, indeed actualities, with the natives ready and eager to grasp them when the chance is given; and the metamorphosis of the Pacific races is waiting on their proper education which fundamentally must be education in the way to live at their physical and mental best. And that is our job right now to inaugurate.\textsuperscript{19}

Assuring Heiser that he had not committed the IHB “by ...word or implication”, Lambert urged action before Rodwell’s term expired in 1924, as “[i]t is a great advantage to deal with such an understanding person rather than with a new man who would have to learn these matters in the course of time. We could settle them so much more easily [now].\textsuperscript{20}

To those in Fiji, mobile medical units and NMP education appeared reasonable and convincing steps to permanently resolving the Pacific’s health problems and establishing an effective health infrastructure, but Lambert’s ardent appeal had no more effect in galvanising the IHB Directors than had Rodwell with the Colonial Office. There was little interest in further commitment to co-operative treatment programmes in the region at that time, and the indigenous medical school programme as suggested by Lambert met with vehement opposition from those within the Foundation’s ranks seeking to secure credibility for scientific medicine as an elite profession. However persuasive his argument that the current time and circumstances promised progress, the IHB turned down his proposals as premature, with more substantive research and information necessary before any further consideration.

Without the weight of IHB support the plans lost momentum. Constrained by IHB policy and colonial practice to working within local situations and

\textsuperscript{18} Lambert to Heiser, 12 October 1923, RFA RG.1.1 Series 419L, Box 1, Fldr. 5.
\textsuperscript{19} Ibid.
\textsuperscript{20} Ibid.
interests, Lambert had no choice but to work within the operational agreement framed before his return to Fiji. During 1924 and 1925, therefore, he was largely preoccupied (at least in practical terms) with health surveys and the activities these generated in individual island groups. Never regarded as ends in themselves, these surveys now assumed further significance as instrumental opportunities to move towards a clearly envisaged, integrated goal. Lambert kept the idea of a Pacific Health Service alive, continuing relentless, tactical lobbying to convince both Pacific administrations and agencies and the IHB that centralising certain medical services, creating mobile specialist units against prevalent diseases, and most importantly, moving from a European-based medical service to one which relied on indigenous medical practitioners, would be the most economical and constructive way to address the problems of Pacific ill-health and depopulation. While this conviction was shared to various degrees by other key figures, Lambert’s continued presence in the region through the 1920s and 30s and his positioning as both committed insider and neutral outsider allowed him unique opportunities to pursue this goal.

Makogai.

Through Rodwell’s decision to keep the leperarium project separate from the larger medical scheme, Lambert had an immediate opening to promote centralisation as a desirable regional initiative, one which he could thereafter hold up as a model for what co-operative projects might achieve. It was an ideal first step, one that European administrators and settlers were willing to support given the particular place that leprosy had long held in Christianity and therefore in the Western psyche.\(^{21}\)

No current epidemiological or linguistic analysis provides unequivocal evidence of *Mycobacterium leprae*, the causative organism of true leprosy,\(^{22}\) in the Pacific prior to European presence, despite frequent early European reports of the disease among island populations and indications of its long-standing

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\(^{22}\) The bacillus was first identified by Dr G. A. Hansen in 1874, hence the disease’s modern name, Hansen’s Disease, adopted to relieve the past stigma of ‘living death’ associated with leprosy.
presence in Fiji and some Solomon Island communities. Increasing contact and labour movement encouraged its spread, and by the late nineteenth century leprosy was well-established and causing serious concern throughout the region. A survey in Fiji in 1891 located over 400 cases, mainly Fijians, though estimated twice that number, or about one percent of the population. With no clear idea of aetiology, no cure, and little palliative treatment available, segregation was increasingly the chosen method of control. Fiji established an isolation station near Suva Hospital for non-Fijians and in 1899 introduced a Leper Ordinance to restrict the public activities of sufferers who remained in the community, but as the European population and plantations expanded, public pressure grew for more complete exclusion.

This, of course, was only possible if there was somewhere for lepers to live well away from the community. In 1909, after deciding to establish a single asylum for the whole Colony, the government paid £10,000 for Makogai, an island of 2,075 acres (8.4 square kilometres) 29 kilometres north east of Levuka. The island had several advantages: a good anchorage, established coconut plantations (a thriving coconut oil soap industry developed later to supplement funds), open grassland, several bays backed by fertile flats, and was suitably removed from view and contact. Following common practice elsewhere, and despite opposition from Fiji's dominant Wesleyan Mission, Roman Catholic Sisters were chosen as nursing staff, for both their dedication and cheapness – £40 per annum for a European sister, and £20 for a Fijian. By comparison, the Medical Superintendent was well compensated for isolation, potential risk and inevitable ostracism, with especially generous terms of service and pension and a


24 Heiser promoted segregation on his 1916 trip to Fiji, for control, economy, and humanitarian reasons. "Notes on 1916 Trip - Fiji," p. 13, APS/V1HP. See also George Sternberg (Infection and Immunity, with Special Reference to the Prevention of Infectious Diseases, London, 1903, pp. 181-190), for contemporary theories of transmission. Sternberg commented on the disproportionate fear of leprosy considering the difficulty contracting it, and compared to the real, far greater mortal danger of tuberculosis.

beginning salary of £600, twenty-five percent higher than a Medical Officer then received.\textsuperscript{27} There were also two NMPs and an ancillary staff of labourers and warders.

With its clearly defined clean and unclean areas, its hospital, separate ethnic villages for able-bodied men and dormitories for women, its vegetable plots and herds for meat and milk, the station finally opened in November 1911 with forty patients. The number grew as transport allowed, for a public alarmed at leprosy in its midst also feared contagion from any vessel that conveyed patients to Makogai. The problem remained even after instituting a system of thorough disinfection, and devising a specially built "cage" to carry patients on deck.\textsuperscript{28}

This new institution provided consistent nursing care for acute cases previously abandoned and uncared for. It also imposed inescapable discipline, as discharge required the Governor’s approval, given only after the disease had been inactive for two years according to clinical and bacteriological evidence. Cure was then an impossible goal, though the most frequently used treatment, oral and injected doses of chaulmoogra oil and its derivatives, slowed the disease’s progress and relieved symptoms in some cases. An ordered, hygienic life, physical activity, and good nourishment were also integral to Makogai’s therapeutic programme.\textsuperscript{29} Heiser visited in 1916, reported it "the best leper colony I have ever seen" and thereafter advised on new therapeutic techniques.\textsuperscript{30} However, he turned down the medical superintendent’s later suggestion that the Rockefeller Foundation direct its resources to a co-ordinated world campaign against leprosy, the disease’s hopeless intransigence did not lend itself to a useful demonstration of scientific medicine.\textsuperscript{31}

By 1920, Makogai had become a model for leprosy care in the Pacific, in contrast to other administrations’ halting efforts. In Western Samoa, the first cases, all immigrants, were identified in 1892, and their isolation was one of the

\textsuperscript{27} Sister Mary Stella, \textit{Makogai}, pp. 35, 39-40.
\textsuperscript{28} Ibid., 1978, pp. 61-63. In 1922, Rotuma complained about its £300 contribution to Makogai, when its own lepers had to stay on Rotuma because no transport was available. Montague to Colonial Secretary, 2 August 1922, and reply, 18 August 1922, WPHC 2178/1922.
\textsuperscript{29} This was frequently stressed in Medical Superintendent's Reports, for example, E.A. Neff in "Fiji Annual Medical and Health Report, 1928", pp. 62, 63, WPHC 835/1920. For other pharmaceuticals tried, including local dilo oil, see Dr C.J. Austin, ‘Report on Central Lepers Hospital, Makogai’ in "Fiji Annual Medical and Health Report, 1931," p. 38, WPHC 3783/1932.
\textsuperscript{31} Hall to Heiser, 28 August 1919, and Heiser to Hall, 10 December 1919, both RFA RG. 5, Series 1.2, Box 82, Flrdr. 1156.
first health regulations passed. After 1910, Samoan infection increased; by 1920, half of the 28 recorded cases were Samoan. Expansion and escape became problems at the original leper station on Upolu, so inmates were moved offshore to Nu’utele Island in 1918. When this proved expensive yet too isolated to allow adequate medical care, the New Zealand Government asked Fiji to accept Samoan lepers at Makogai. Recognising the humanitarian and economic advantages of co-operation, Fiji agreed, and arrangements were finalised early in 1921. Samoa would pay for the new accommodation required, transport to Makogai, and annual maintenance and treatment costs of £70 for half-castes, £60 for Chinese, and £40 for Islanders. In the eighteen months it took the Administration to find a boat and crew willing to transfer lepers from Samoa, numbers had doubled.

Samoa’s move proved a catalyst to solving the leprosy problem for other small administrations. It also complemented and coincided with Lambert’s planning for a Pacific health service. Throughout the region, partly because medical surveillance improved, leprosy sufferers were identified in increasing numbers, but transport to isolation stations was difficult and most suffered under inhumane conditions. Fiji’s Colonial Secretary suggested that Makogai had the potential to expand into the leprosy centre for the British colonies of the Western Pacific, conferring “immense public benefit” at no extra cost to Fiji if costs were proportionally shared. If all contributed, there could also be a boat specifically for carrying lepers, removing the transport problem. Rodwell agreed, as did the Colonial Office, and negotiations began with the Western Pacific High Commission and the New Zealand Government.

When Lambert returned from leave in 1923 with approval to extend hookworm surveys and investigate possibilities for development of a Pacific

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32 F.M. Keesing, Modern Samoa: its Government and Changing Life, London, 1934, p. 378. According to F. H. Davies, (cited in “Western Samoa Medical Report 1924”, AJHR A.4A, p. 8), of the first identified one was Hawaiian and two apparently Chinese, in 1892, with one Samoan and two half-castes reported later that year, of Tate, responding to Faipule claims that Chinese indentured labour was spreading leprosy to Samoans, gave 1896 as the date for first cases, with no Samoan cases until 1907, and no Chinese until 1915. Tate to External Affairs Secretary, 17 April 1920, NA IT 1 8/8 pt.1.
34 For conditions in the Gilbert and Ellice Islands Colony, see McClure to High Commissioner, 11 September 1922, WPHIC 2689/1922; in Cook Islands, Lambert, 1946, p. 277. Heiser (Diary, 30 June 1928, APS/VHP) reported that Cook Island lepers had suffered such neglect that some had to have their clothes cut off them on arrival at Makogai.
35 I. McOwan, Appendix No. 1, “Makogai Leper Asylum”, AJHR 1928, A.-3A, pp. 6-7; Fell to Jellicoe, 7 May 1924, Jellicoe to Governor of Fiji, 17 June 1924, both NA IT 1 8/8 pt. 1
health service, he found this local initiative underway, and smoothly incorporated it into his larger plans, using it to underline the need for a dedicated medical vessel and for mobile health units working under NMPs. However, by choosing to keep 'the leper question' separate, Rodwell ensured that development of Makogai proceeded even when proposals for the larger Pacific scheme proved too ambitious for immediate acceptance. Nevertheless, Lambert came to be identified as the driving force behind the central leprosarium, by championing Makogai wherever he went on survey during 1924 and 1925 and persuading other groups to participate, and himself claimed credit for its growth.

Recognising Makogai’s expertise, New Zealand transferred its own lepers from Quail Island in Lyttelton Harbour in 1925, and 32 from the Cook Islands the following year. Tongans arrived in 1927, followed by Solomon Islanders. Against Lambert's advice, the Gilbert Islands maintained its own leper station, though unsatisfactorily, until 1935. By 1928 Makogai accommodated 409 patients, and new arrangements were made to ensure that those participating contributed equitably to both capital and running costs. Legal partnership was recognised through company registration as Makogai Limited, which also enabled the institution to bypass restrictions on colonial borrowing, so that it could raise special loans for necessary improvements. Fiji retained ultimate control, but other participants guaranteed their commitment for at least twenty years.

Makogai, with an eye to enhancing British prestige as well as serving patient interests, developed as an exemplar of contemporary leprosy treatment. Just as importantly, it epitomised co-operation. Because this enforced community with its diverse population (patients from fifteen ethnic groups and staff from a dozen

38 Correspondence, 17 June 1924, 13 February 1925, 11 March 1925, 10 August 1925, all NA IT 1 8/8 pt. 1.
39 Gilbert and Ellice Islands Colony, “Medical and Sanitary Report for 1926-27”, p. 4. The Colony had 22 lepers at the time; treatment over the years was variable.
40 For details of considerations and decisions regarding future directions, see "Makogai Lepers Asylum: Papers dealing with the arrangements for centralizing at Makogai Lepers Asylum (Fiji) lepers from New Zealand and Pacific territories", AIIH 1928 A-3A, pp. 1-12. For information on admissions, treatment, and developments, see Medical Superintendent’s Reports in “Fiji Annual Medical and Health Report.”
41 Sir Maui Pomare to New Zealand Prime Minister, 10 September 1926, IT 1 8/8 pt. 1;
others\(^{42}\) had obvious potential for conflict, the asylum was deliberately organised to minimise friction while enabling the different Islander groups to maintain their cultural identity. Reports stressed predominantly harmonious relations, and this internal success reinforced Makogai as a model for co-operative centralised Pacific health services, one which Lambert used to advance the possibilities of further unified efforts. However, although officials readily grasped the benefits of economy of scale and had little trouble reaching mutually satisfactory terms in order to remove dread leprosy from their communities, agreement on his other proposals with their more preventive orientation, radical goals, and less obvious immediate gains, were to prove more difficult to negotiate.

\(^{42}\) Sister Mary Stella, *Makogai*, pp. 171, 94.
Chapter 8
Surveys

Although reined in by the IHB, Lambert used the hookworm and health surveys he undertook in the Pacific from 1923 to 1925 as opportunities for ceaseless promotion of his ideas for unified medical efforts. Extensive travel around the Pacific increased his appreciation of individual islands' circumstances and responses, so that he could refine his own plans and approach to meet an increasingly receptive audience. It also reaffirmed his belief that Pacific health problems could be largely resolved through unique locally oriented solutions.

Although disease and population decline had been a shared experience for South Pacific populations in the aftermath of European contact, there was no homogeneous pattern of epidemiological or demographic encounter and response. Similarly, Lambert encountered both diversity and commonality in the health and medical circumstances of different island as his activities accelerated through the 1920s groups; and although his survey programme was structured around a uniform motif – the presence of hookworm disease and assumptions about its centrality to the current precarious state of Pacific populations – it had various outcomes. Hookworm infection rates varied, and other diseases were recognised as of greater consequence. Notably, however, even when these early high profile investigations revealed minimal infection and though further Rockefeller Foundation co-operation was not automatic, every group undertook hookworm treatment, as well as expanding its medical work in other ways. This brings into question the understandings and expectations which motivated responses to Lambert’s recommendations, the consequences for health services, and in turn their impact on health; and finally, the extent to which these factors advanced Lambert’s plans for a centralised medical service.

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The Gilbert and Ellice Islands

The programme of surveys began with the long-awaited trip to the Gilbert and Ellice Islands in February 1924. Recurrent delays\(^2\) epitomised the difficulties that poor transport and communication posed in any plans to extend health services in the region, or establish Fiji as the effective centre of a Pacific health organisation; though a Western Pacific High Commission territory, the colony had only six-monthly shipping links with Australia, infrequently with Samoa, and none with its parent administration.\(^3\) In the dependency itself, inadequate financial resources exacerbated transport difficulties, and both limited government and its services.

The colony was as much an “accident” as a “Cinderella” of Empire.\(^4\) Begun as the Gilbert Islands Protectorate in 1892, it eventually became a conglomeration of disparate island groups placed under a single administration for reasons of economy and anticipated convenience. The Gilbert Islands, the southernmost chain of Micronesia, comprised sixteen tiny coralline atolls strung across the equator, separated by 480 kilometres of ocean from the northernmost of the Ellice Islands group. These nine Polynesian islands straggled south-east, contributing to an island chain more than 1600 kilometres long, but with a total land area of only 300 square kilometres.\(^5\) Ocean Island, 400 kilometres west of the Gilberts, was added in 1900, and the Union Group (now Tokelau), which stretched along the equator 1000 kilometres east of the Ellice Islands, in 1909. Full annexation of the Protectorate followed in 1916.

There were few resources to provide revenue; even Ocean Island’s profitable phosphate industry contributed meagrely to local funds. Consequently, government services were minimal, and little was done to address the colony’s needs or the problems in its remote, far-flung reaches. The British Phosphate Commission employed the first medical officer in the Protectorate in 1904, for its

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\(^2\) Lambert to Heiser, 28 May 1923, RFA RG. 5, Series I.2, Box 167 Fldr. 2157; Lambert to Heiser, 11 July 1923, 10 August 1923, 18 August 1923 and 5 October 1923, all RFA RG. 5, Series I.2, Box 167, Fldr. 2158.


\(^4\) B. Macdonald, Cinderellas of Empire: Towards a History of Kiribati and Tuvalu, Canberra, 1982.

\(^5\) Macdonald, Cinderellas of Empire, p. v; Lambert, “Health Survey of the Gilbert and Ellice Islands”, pp. 3-4, WPHC 1291/1924.
staff on Ocean Island, while missions provided the basics of medical care for villagers. Later the administration organised a Medical Department and central hospital at its headquarters at Tarawa, with a Senior Medical Officer and a Matron, but was frequently without the second Medical Officer allowed for it. From necessity, the Colony had already moved to reliance on Fiji-trained Native Medical Practitioners, who were stationed at Tarawa, Funafuti in the Ellice Islands, and at the Union Islands hospital at Atafu. Supplementing the service were native medical dressers trained at Tarawa Hospital. These provided elementary medical care and simple surgery at small “native hospitals” — usually no more than a dressing station and dispensary — on many of the other islands.

When a new SMO, Dr Hubert Kitson, arrived in 1921, there had been no supervising Medical Officer for the colony for three years, during which time the Medical Department had, unusually, been under the charge of a senior Fijian NMP, Sowani Vuamau. Sowani was transferred to the Gilbert Islands soon after he graduated from the Fiji Medical School in 1900, and at one time served sixteen years there without leave, when no relief was available. His medical skill was legendary to both islanders and whites, who considered him as adept as any European doctor, and almost rewarded him accordingly. In 1922 his salary was £200 plus a £50 field allowance, and his ration scale 4s. 7d. per day rather than the usual 1s. 5d. allowed government servants. Western Pacific High Commission Secretary Roger Greene observed that Sowani was “such an ‘idol’ in official and other circles that the necessary regard for Regulations has been lost sight of in the prevailing admiration for the NMP” — a problematic precedent in later moves to place NMP salaries on a uniform footing. As a comparison, when experienced NMP Malakai Veisamasama was appointed to lead the medical

6 Macdonald, Cinderellas of Empire, pp. 112-114; Grumble, A Pattern of Islands, pp. 66-67.
7 Lambert, “Health Survey of the Gilbert and Ellice Islands, with special reference to hookworm infection”, p. 6, WPHC 1291/1924. At the time of his visit there were 42 dressers and 28 island hospitals.
8 SMO F.H. Kitson to Resident Commissioner, GEIC, 21 September 1921, Grumble to Rodwell, 16 May 1922, Rodwell to Secretary of State, 19 July 1922, all WPHC 1665/1922, “Medical Administration in Ellice and Union Islands”; R. Greene, WPHC Secretary, to High Commissioner, confidential memo, 11 September 1922, WPHC 2688/1922; Buxton, correspondence and notes on Ellice visit, September 1924, WPHC 144/1925. Grumble, A Pattern of Islands, p. 187. Margaret Guthrie, Mist Unc: Dr D.W. Hoodless and the development of medical education in the South Pacific, Suva, 1979, p. 17, and insert, “History and Graduates”.
9 Green, 6 October 1922, and RC to High Commissioner, 11 September 1922, both WPHC 2696/1922. Lambert to Heiser, 12 October 1923, RFA RG. 1.1 Series 419L, Box 1, Fltr. 5.
campaign in the Ellice Island in 1929, he was paid only £10 per month (half of which the Government held over) and an annual ration allowance of only £27.10

In the absence of medical services, District Officers were also called to medical duties. During stints at Beru and Abemama, DO Arthur Grimble prescribed and administered drug treatment, performed minor surgery, and by following an obstetric textbook, even undertook a gruelling foetal manipulation during an obstructed labour. He used the book again when his wife fell ill and went into premature labour, delivering a 1.4 kilo baby daughter, who survived.11 Grimble’s wife Olivia, bolstered by cod liver oil and a copy of Plunket founder Truby King’s *Feeding and Care of Baby*, also acted as an unofficial maternal and child welfare worker, co-opting the women’s prison as a health centre.12 Despite the apparent enthusiasm which these local women showed, a proposal to train half-caste girls in obstetrics at Tarawa Hospital was abandoned in 1922,13 and in following years no further action was taken to involve island women in health care, on the grounds that they had not achieved a sufficient level of education to properly understand modern child rearing practice. In the late 1930s, Eric Bevington, DO in the Southern Gilberts, described the Group’s very limited medical services and the absolute reliance on too few NMPs.14

In 1921, the Administration was called to account for its deficient medical service after the London Missionary Society complained to the Colonial Office.15 Responsibility also lay with the latter, for insisting on a fiscal policy which encouraged colonial administrations to pare spending on basic welfare activities.16 In fact, medical spending was an increasing part of the Colony’s budget, rising to about 18 percent in 1919-1920,17 and in 1922-23 the Medical Department’s allocation of nearly £10,000 was higher than for any other department,18 although £3000 included to enlarge Tarawa Hospital remained

10 Lambert to Pilling, 17 January 1929, WPHC 263/1929. Even so, this was higher than the £75-£100 currently allowed in the Estimates for a second NMP, and the SMO suggested an even lower starting salary of £60 per year. SMO D. Murray Young to RC, 20 April 1929, WPHC 452/1930.


13 Kitson to Resident Commissioner, 27 February 1922, WPHC 2630/1922.


16 In *The things we do for England*, pp. 39-47, Bevington describes the lengths to which Colonial Office fiscal policy drove staff in their attempts to carry out routine work.

17 GEIC Abstract Account 1919-20, WPHC 1798/1922.

18 Annual Abstract Account of GEIC 1922-23, WPHC 2935/1924. Law enforcement came a close second to health; education was well down the list.
unspent as this development plan was soon shelved in favour of decentralisation. Debate over hospital services continued through the next decade as part of the wider discussion on how to optimise medical services.19

The disease situation – tuberculosis and yaws

Kitson proved an active SMO, undertaking medical tours to islands largely ignored in the past and identifying yaws and tuberculosis – the “scourge of the islands” – as the colony’s most common serious endemic diseases. Without laboratory facilities, reliant on clinical diagnosis, he recorded that nearly all children aged between eight and ten exhibited tubercular adenitis (enlarged neck glands), which were understood to be a precursor to the full blown tuberculosis. Such high incidence of the disease in a population with access to plentiful sunshine and fresh air, with adequate food and uncrowded housing, baffled medical authorities, accustomed to using these as treatments in the sanatoria of the west. With no cure and little hope of prevention, Medical Officers in the colony relied heavily on mass surgical excision of infected tonsils and adenoids in an attempt to prevent generalised tuberculosis developing.

Yaws was especially severe in the northern group, apparently introduced by indentured Gilbertese labourers returning from Fiji, Samoa, and Tahiti in the previous sixty years.20 Kitson initiated an intensive campaign, with NMPs and dressers treating cases immediately on diagnosis. In the Ellice Islands filariasis was prevalent. This mosquito-borne infection caused fever, debilitation, and eventually elephantiasis, the gross swelling of limbs caused by blockages in the lymphatic system. Attempts were made to prohibit islanders from inter-group travel to prevent its spread into the Gilberts.21 Curtailing contact was also seen as

20 Lambert, “Health Survey,” p. 8, WPHC 1291/1924. Yaws was introduced in 1867, and mistakenly identified as syphilis by whites, although the latter was not known in the Group. Lambert, Minute, 4 October, 1930, WPHC 2799/1930.
21 Kitson and Lambert both suggested restrictions on movement, but the Colonial Office decreed this unauthorized under Section 15, Part 1, of the Schedule to the Native Laws Ordinance, 1917. Gore to Hutson, 6 April 1925, WPHC 1092/1925.
essential in the case of leprosy. However, plans to segregate and treat leprosy patients from throughout the group at a hospital established at Naa, North Tarawa, were largely hampered by the usual difficulties in finding transport for them, and also by islanders’ reluctance to isolate those suffering. As it was, the hospital warranted no confidence, with only an orderly in charge, and no regular medical attendance or appropriate treatment.22

Kitson’s reports emphasised two critical factors relevant to health improvements. One was structural: unless the government got its own vessel, contact with many islands in the Colony would remain irregular and infrequent, resulting in shortages of basic medical supplies and little ongoing oversight of medical work. Getting lepers to Naa and the seriously ill to Tarawa for more advanced medical care was also difficult, and once there, the sick and their attendant families might be stranded for long periods without a return boat to their island. This cost and inconvenience featured in discussions about appropriate treatment and the most suitable medical system for the colony, advancing the argument for decentralisation and therefore the further use of indigenous medical staff.23

Most of Kitson’s criticism, however, was directed at the people themselves, and he constantly attributed the high incidence of ill health to their behaviour and cultural practices which frustrated his every effort to educate them in desirable preventative measures.24 Kitson’s response is perhaps explicable, when circumstances demanded action but little was possible. Even where current medical knowledge was adequate, the financial constraints of current colonial policy inhibited its use. As a medical man faced with the frustrating limits of his ability to reduce disease, it was often easier to blame the victim for succumbing.

22 Confidential memo, McClure to High Commissioner, 11 September 1922. Although Sowami had trained in the latest chalcomougar treatments at Makogai while on leave, he was apparently thwarted in implementing improvements at Naa by Kitson, who according to Roger Greene, the WPHC Colonial Secretary (5 October 1922), was “rather jealous of the high estimation in which Sowami was held by Europeans and natives alike...it is quite possible that for [this] reason Sowami’s latest gained knowledge was not availed of by Dr. Kitson.” WPHC 2689/1922.
23 Memo, 11 September 1922, and McClure to High Commissioner, 11 September 1922 (confidential), both WPHC 2688/1922.
Lambert’s survey

Lambert’s survey had the capacity to alter, extend, or reinforce these perceptions of health, and to influence subsequent development by recommending local activities that slotted the Colony into his planned Pacific framework. Lambert left Fiji early in 1924 for a two month, 10 400 kilometre (6500 mile) round trip to survey the Gilbert and Ellice Islands and Rotuma, Fiji’s northern outpost. The voyage was organised primarily as an inspection tour for the Colony’s Acting Resident Commissioner, Arthur Grimble, rather than for Lambert’s specific purposes, and this limited the extent of his survey. Again he was forced to preface his report with assurances that though “naturally hurried [the work] represents, I believe, a fairly accurate picture of health conditions”, and assurances that there was little to gain from a longer survey.25 The forced pace left Lambert substantially reliant on the administration for general health information, but as Kitson had recently died, leaving the colony again without a Medical Officer, even such basic data as birth and death statistics were unavailable. Grimble, an enthusiastic amateur ethnographer described as “the authority on Gilbertese anthropology,” contributed substantially to the report.26

Nevertheless, he presented the survey as an advance on work undertaken there previously, such as Dr Frank O’Connor’s 1920 research on hookworm and filariasis, which communication and transport problems limited to a few of the Ellice Islands.27 Where time permitted, Lambert lectured on hookworm, then distributed specimen tins, examined the population individually for clinical signs of syphilis, yaws, filariasis, tuberculosis, skin diseases, and estimated haemoglobin levels. Elsewhere, Grimble explained the process to village magistrates and dressers, who were then responsible for informing the community, and collecting and forwarding specimen containers to the next island stopover for examination. With Lambert was his favourite NMP, Malakai

26 Ibid. Arthur Grimble arrived at Ocean island as a Colonial Office cadet in 1914, and served there as District Officer and later Resident Commissioner until 1933. A Pattern of Islands (London, 1952) and Return to the Islands are romanticised accounts of his experiences.
27 His apparent discovery of *Ankylostoma duodenale* in pigs there suggested an increased risk of cross-infection to humans, which prompted Lambert’s strong interest in the GEIC survey. Buxton, a researcher from the London School of Tropical Medicine, undertook further research on filariasis. Grimble to High Commissioner, 2 June 1922, WPHC 1676/1922.
Veisamasama, and another Fijian assistant, whose familiarity with his working methods and expectations expedited the survey.  

The results pointed to some major differences in disease patterns between the Gilbert and Ellice groups (the Union Group was not included in the survey). While both shared the burden of heavy yaws and tuberculosis infection, with some leprosy, sporadic dysentery and influenza, the Ellice Islanders also suffered from filariasis and generalised hookworm infection, neither of which was a serious problem in the Gilberts. In the four Ellice Islands surveyed, Lambert found hookworm infection rates from 41 percent to 76 percent, giving an average of 52 percent infection for the group. The highest result was for Funafuti, the port of entry and therefore the island most likely to reflect exposure to introduced diseases. By contrast, infection rates on eight Gilbert islands ranged from only 2 percent, at Tarawa, to 20 percent; the average was 9 percent of the population infected. Although no reliable worm counts were possible because of short stopovers at each island, severity of infection was estimated from haemoglobin indexes, which averaged 86 percent in the Gilberts and a lower 76 percent in the Ellices. This indicated a higher degree of anaemia in the latter, and while Lambert attributed some of this to higher levels of yaws, tuberculosis and filariasis in the group, he classified the Ellice Islands as suffering from hookworm disease and the Gilberts from light hookworm infection. Hookworm, he concluded, was not a problem in the Gilberts, but in the Ellice Islands heavy infection and subsequent anaemia were probably aggravating the effects of endemic tuberculosis and yaws.

In explaining the markedly different hookworm situations in the two groups, Lambert discounted environmental factors, finding no relationship between rainfall and infection rates. Nor did labour indenture and migration appear to have any correlation to hookworm's variable presence. Instead, different cultural practices seemed to provide the answer. Grimble explained that with sorcery.

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28 Lambert to Heiser, 24 April 1924, RFA RG. 5, Series 1.2, Box 197, Flrd. 2515. Lambert commented, "These men paid their way many times...our results would otherwise have been negligible.

29 O'Connor's earlier examinations had found 85.5% infection at Funafuti, out of the 96.5% of the population tested. Lambert, "Health Survey," p. 9, WPHC 1291/1924.

30 The anomalous low rate at Tarawa, like Funafuti a point of entry, raises interesting points about the way in which results can be determined or distorted by the research process. On this island the examinations "had to be made" (Lambert does not specify whether from time restrictions - unlikely given that this was the Resident Commissioner's base - or for another reason) from a village close to the government station, and therefore subject to a high degree of sanitary regulation; more distant villages may have demonstrated higher infection rates and changed the final results.

31 Lambert, "Health Survey," pp. 10-12, WPHC 1291/1924.
inherent in their religious beliefs. Gilbertese feared harm or death if an enemy obtained their bodily wastes (such as hair, nail parings and excrement) for use in “magico-religious ritual”. Villagers therefore defecated into the sea, with faeces safely disposed of by the tide. The later European introduction of latrines built out over the sea was within the customary framework and readily accepted, and the Gilbertese were less exposed to soil pollution diseases like hookworm. In contrast, Ellice Islanders unconstrained by fear of sorcery promiscuously polluted the soil around their villages, consequently suffering high rates of hookworm infection.

In 1920 O'Connor described Ellice Island villages as “indescribably filthy”, a view upheld by Kitson in his 1922-23 Medical Report. By Lambert’s visit in 1924, however, the administration’s preoccupation with soil sanitation was taking effect. Villages had been relocated to positions where the tides flowed freely, communal work on latrine construction and repair was compulsory and their use enforced by regulation, with hefty fines of 5s. to £1, or imprisonment from one week to one month for defecating or urinating elsewhere in the village so that soil pollution was now rare. Regulation, policing and fines also further ensured that both Gilbertese and Ellice Island villages were kept clean and tidy, with the women supervised in daily rubbish collections around the villages and foreshore, and properties inspected on Saturdays. These measures also helped to prevent filaria-carrying Stegomyia psuedoscutellaris mosquitoes breeding close to the villages, although there were claims that mosquito populations increased after other administrative introductions, such as rainwater tanks and, especially, keeping pigs in yards away from the village rather than letting them forage freely.

Lambert decided against O’Connor’s claim that pigs could infect humans, as the Islanders suffered from Necator americanus and pig hookworms were of the Ankylostoma variety. He also noted heavy infection (but negligible health

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[32] Grimble, records that prior to the Protectorate’s establishment, the Gilbertese rarely lived in waterside villages. A Pattern of Islands, p. 138.
[34] Ibid. Pigs were corralled after O’Connor implicated them in the transmission of hookworm to humans. The debate over pigs and “filth diseases” also surfaced elsewhere in the Pacific and extensive administrative efforts to confine them had unforeseen and generally detrimental consequences to public health. Lambert, “Medical Conditions in the South Pacific”, The Medical Journal of Australia, 22 September, 1928 (reprint, Sydney, 1929), pp. 27-28. From the Solomons village of Teop, Rev. J.R. Metcalfe noted that pigs scavenging freely ate all the rubbish and cleared water from puddles, keeping the village free of mosquitoes. However the DO considered it the dirtiest village in the district and had the pigs corralled, after which mosquitoes appeared. J.R. Metcalfe, “Our Time at Teop” pp. 97, 102, in “Articles on the Solomon Islands” FMB 67, Manuscript Series (microfilm).
impact) with the common intestinal parasite *Trichuris trichiura* on islands with high rainfall; and that the Colony's indigenous population showed no current or historic signs of syphilis, presumably because of the immunising effect of universal yaws infection.

**Proposals for health improvements**

After commenting on the thousands of operations carried out in recent years against tubercular adenitis, and the "disastrous effects" of widespread yaws among the islanders, Lambert still concluded that the islanders lived "under good physical conditions", and suffered from "fewer natural or imported diseases than any race of the Pacific." Health and ill health were after all relative to high background levels of morbidity and mortality; nevertheless, the colony's disease levels were cause for government concern. Lambert's report reiterated his key themes: disease was a primary factor in "racial decay" in the Pacific following European contact, and now ethical, economic and political considerations obligated colonial governments to reverse this process through appropriate medical services. He recommended employing at least ten NMPs to provide medical care supervised by a European Travelling Medical Officer, on the grounds that physical conditions and cost made European Medical Officers unsuited to tropical service except as administrators, while well-trained NMPs would demonstrate "the value of western medicine and the value of western civilisation."

He believed that control of hookworm and yaws was crucial to lowering tuberculosis mortality, improving general health and resistance until indigenous populations developed a greater immunity to this devastating disease. Filarisis, the Ellice Islands' other major cause of morbidity, required further research into mosquito control or curative drugs. Finally, as past history and his own

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35 Europeans also then accepted physical illness as a natural consequence of life rather than an aberration. In *A Pattern of Islands*, Grimble (p. 234) observed that his contemporaries had no "post-war preoccupation" with physical illness as the "pseudo-medical journalism that was to succeed in creating so many recondite diseases for nervous minds to dwell upon had not yet afflicted us. In our comfortable ignorance, we ... still expected castor-oil, bread poultices, iodine, and aspirin to cure most ailments. They usually did, too." Despite referring to medical events in his books, Grimble never gives a hint of extensive endemic disease - no crippling yaws or tubercular suppurations mar his smiling, vigorous, healthy atoll dwellers.
experience showed, Lambert concluded that little could be achieved until communication in the colony improved.

Lambert’s assessment that lack of immunity to introduced disease was the crux of health problems and required clearly medical and practical solutions was well received by the Western Pacific High Commission. Grimble, however, blamed a different European introduction for “the tragedy of vanishing populations”; it was western-style clothing, encouraged by Christian missionaries and often worn filthy and wet, which “constituted one of the major calamities of Oceania.” “No health campaign in the Gilbert and Ellice Islands,” he argued, “can hope to achieve enduring results if it leaves unattacked this problem of clothes.” High Commission officials dismissed as impractical his proposals for legislative, fiscal and educational measures against islanders’ peculiar and distorted dress habits, but favoured his suggestions to reduce mosquitoes by installing pumps and covers for village wells and clearing bush; and curb the spread of tuberculosis with regulations against the islanders’ habit of “promiscuous expectoration”.

Soon further medical research in the Ellice Islands reinforced Lambert’s findings. The London School of Tropical Medicine funded Dr Patrick Buxton for a study of filariasis, although his interest extended to other diseases. Considering the high incidence of yaws especially costly in terms of money, health and efficiency, Buxton recommended increasing treatment to eradicate the disease completely. Tuberculosis he thought less serious than generally suggested, at least on the islands he visited. There was still no Medical Officer to replace Kitson, which placed the colony in a unique situation of having a wholly indigenous medical corps. Sowani was senior medical person, but as he travelled frequently in the group (and also covered the three Tokelau Islands when possible), dressers provided routine medical care on the different islands. These men, Buxton noted, were “on the whole an efficient lot, some of them remarkably

36 All references are to Lambert, “Health Survey,” WPHC 1291/1924.
37 Correspondence in WPHC 1291/1924. The argument that islanders should abandon wearing European clothes was frequently advanced - Lambert himself implicated this as a major factor in lowered resistance to tuberculosis, declaring “If I had my way I would strip every Pacific Islander down to a scanty covering and keep the bodies of all of them exposed to the healing rays of the sun till they acquired some resistance to tuberculosis.” S.M. Lambert, “Medical Conditions in the South Pacific”, op cit, p. 26. In Papua and New Guinea Native Regulations prohibited the wearing of European clothing above the waist, supposedly because people were careless about washing, with disease spread by wearing wet and dirty clothing. L. P. Mair, Australia in New Guinea, 1970, pp. 67-68. Similar regulations were considered for the GEIC.
so.” He commented less favourably on the London Missionary Society whose activities he thought poor return for the extensive contributions received from the island communities, when co-operation between mission staff and Government would greatly improve hygiene education, health and well-being.39

Action and inaction

That the Gilbert and Ellice group was within a short period the subject of three medical research initiatives – O’Connor’s, Lambert’s and Buxton’s – indicates a new perception of opportunities for understanding and response regarding indigenous health and disease. The combined effect of the surveys was to bring the colony more strongly into the orbit of concern over colonial health, although awareness of the need to improve services was no guarantee of immediate action. Rather, rival claims to expert knowledge complicated the slow process of colonial decision-making. Although suitably qualified and willing Medical Officers were unavailable, Lambert’s advice to develop island-based native medical practitioners was rebuffed, and the Gilbert and Ellice Islands Medical Service stagnated. After 1925 the medical establishment comprised only a newly appointed Senior Medical Officer based at Tarawa Hospital in the northern group, and NMP Sowani at Funafuti in the south. Transport remained an obstacle to development, with the SMO unable to reach the Ellice Islands, but stationing a Medical Officer there considered pointless when he had no way to travel throughout the group regularly. With this situation, and Sowani as an irrefutable example of the efficient but cheaper service that NMPs could provide, support shifted away from procuring a second Medical Officer to investing in training island youths at Lambert’s proposed Central Medical School.40 However Ellice Islanders’ medical situation deteriorated further when Sowani was transferred to Tarawa, Funafuti was downgraded to a native hospital, and care left solely to dressers.

Far away in London, removed from any real understanding of the limitations imposed by geography, the Colonial Advisory Medical and Sanitary Committee (CAMSC) responded to Lambert’s report and Grimble’s correspondence with its

39 Buxton, correspondence and notes on Ellice visit, September 1924, WPHC 144/1925.
40 Pilling to High Commissioner, 5 June 1925, WPHC 1057/1925.
own recommendations, which included intensive sanitation and mosquito eradication campaigns in the group. The Colonial Office refused High Commission requests for assistance to buy a vessel to improve medical services, a dismissal that later rebounded when a League of Nations-sponsored medical mission in the Pacific could not reach the Group to follow up CAMSC’s serious concerns about tubercular adenitis there. As the administration grappled with the logistics of poor resources, transport problems and a declining medical staff, it eventually recognised the validity of Lambert’s arguments. Having earlier dismissed as excessive his recommendation for ten NMPs, by 1927 the Resident Commissioner decided that efficient medical organisation demanded a minimum of 24, one for each native hospital in the colony.

The pragmatics of medical attention

Even after Lambert concluded that hookworm was a problem in the Ellice Islands, the disease appeared infrequently in government correspondence, largely because SMO Murray-Young and Sowani, stationed in the Gilberts, had little contact with the parasite. Instead, the conditions prevailing in the accessible Northern Gilberts – tuberculosis, yaws, and filariasis – remained the primary concerns at local, regional and imperial levels of administration. Uneven and partial responses meant that important health and medical needs remained inadequately addressed in the colony.

Young devoted himself particularly to intensive surveys and treatment of tubercular infections. In 1927 he recorded 3,437 operations to remove chronically enlarged tonsils, adenoids and cervical glands among the juvenile populations of Abaiang, Marakei, Butaritari and Makin. It is difficult to envisage the process by which this mass surgery on children took place, requiring general anaesthesia, in rudimentary island hospitals and with limited post-operative nursing care available. Even today tonsillectomy and adenoidectomy

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41 Despatches between the Secretary of State and Hutson, 2 August 1928 and 26 September 1928, WPHC 714/1928.
42 GEIC RC to High Commissioner, 27 May 1927, WPHC 1160/1930.
43 “GEIC Medical and Sanitary Report for 1926-27”, WPHC 714/1928. This number presumably accounts for multiple operations in individual children, as only 1976 children were examined on these four islands, with an average of 90.7% showing diseased tonsils, adenoids, or lymphatic glands, or a combination thereof as a clinical indication of early tuberculosis.
can be uncomfortable and distressing procedures, and 80 percent of the children had both operations. However, Young reported very satisfactory results in improved general health and resistance, and an enthusiastic response to the treatment from anxious parents who increasingly appreciated that “Western medical methods are to be relied on.” Major glandular surgery had less favourable outcomes, with Young noting that “no cases were seen exhibiting the large scars of previous operative treatment for extensive chains of tuberculous glands...and the inference is that these cases had not been cured, but had declined and died.”

Nevertheless Young continued operating with enthusiasm, like Kitson implicating the “lackadaisical habits and fatalistic tendencies inherent in the Gilbertese race” in the outcome, and attributing blame to parents for neglect during convalescent care.

Fiji’s CMO, Lambert, and CAMSC also continued to support mass surgery even though statistics showed it produced “no appreciable reduction” in tuberculosis. The process was finally reviewed in the 1930s, found wanting in medical merit, and quietly discarded. At this time the role of vitamins in nutrition and health was becoming the fashionable “new science” and it was to potential inadequacies in the indigenous diet that health professionals now looked for explanations of continuing high rates of tubercular infection. Yaws was also implicated, either as a contributory factor by lowering general resistance, or as the direct cause of adenitis.

From the late 1920s, the Medical Department paid yaws more attention, with Young and Sowani giving a total of 12,666 arsenical injections across all age groups in the Gilbert Islands in one year. Here again medical work was defined and limited by transport difficulties, with the department forced to rely on commercial trading boats and their idiosyncratic schedules when touring the islands. As often only one-day stopovers were possible, many Islanders did not get the course of two injections necessary to effectively clear the skin ulcers and

45 Ibid.
48 Macpherson to RC, 12 February 1933, 1660/1933; Young, “Medical Report, 1933”, p. 2, WPHC 2704/1934; Lambert, 31 August 1934, WPHC 1681/1934.
painful lesions symptomatic of later stage yaws, so that the disease remained incompletely controlled despite the investment of drugs and effort.\textsuperscript{49} Although village hygiene was now considered generally satisfactory, efforts also went into pest control, and Young promoted clearing vegetation to prevent mosquitoes and flies breeding within a half-mile radius of houses.\textsuperscript{50} On small atolls this could mean a significant reduction in available food-bearing breadfruit and coconut trees and deprive inhabitants of shelter from the elements.

What impact did this seemingly intense activity have on health standards? Lambert had concluded from his survey that people in the Ellice Islands, by contrast more fertile and less drought prone, suffered more severely from a wider range of disease conditions than the Gilbertese, whose "brighter eyes", "clearer skin" and better physiques he attributed to a more precarious physical environment which had bred a constitutionally superior population.\textsuperscript{51} Yet this difference in health status was ignored in the organisation of medical services, which were concentrated around the main hospital at the Administration's headquarters on Tarawa in the Gilbert Islands. Although this was a period of intensifying concern over health, through the mid-1920s this situation remained unchanged because the government failed to implement recommended changes or redirect resources where most needed.

Population statistics nevertheless present an interesting comment on the role of colonial medical intervention in the fifteen years after annexation. From 1914 to 1929, every island in the Ellice group increased in population, with an average net gain of .66 percent. By comparison, overall population loss was the fate of the Gilbert Islands, despite greater medical attention; a population gain in the four Northern Gilbert islands was offset by decreasing populations in the southern atolls, producing an overall decline of .47 percent.\textsuperscript{52}

\textsuperscript{49} Young, "Medical Report, 1926-27," p. 3, WPHC 714/1928.
\textsuperscript{50} ibid.
\textsuperscript{51} Lambert, "Health Survey," WPHC 1291/1924.
\textsuperscript{52} "Statement of Gains and Losses in Native Populations over the 15-year period 1914 -1929", WPHC 1160/1930.
Hookworm and Yaws treatment campaigns

The inequitable distribution and inadequacy of medical resources in the group was partially addressed through the IHB assisted yaws and hookworm scheme for the Western Pacific High Commission territories, which Lambert finalised in August 1927, three and a half years after his survey. Rockefeller contributions to the four-year treatment programme were on a sliding scale, decreasing from £870 in the first year.

The inclusion of yaws in the introductory IHB campaign in the Western Pacific signalled a departure from the usual Rockefeller Foundation approach. Elsewhere, hookworm work remained the opening wedge for expanding public health. Theoretically, yaws work was outside the Rockefeller Foundation’s brief, as treatments were curative only, and did not lead to the more preventative sanitary practices which were considered the essential consequence of hookworm work. Hookworm infection was a condition which few Pacific Islanders were even aware they had, so remained a somewhat nebulous entity despite Lambert’s graphic descriptions and use of appropriated local symbolism. This was especially so where infection was slight and its health effects marginal, not easily apparent to the sufferer, for whom the discomfort of treatment and purge might bring negligible, scarcely noticeable improvement in health.

In contrast, yaws was universal, its symptoms highly visible, and its existence so integrated into Islanders’ sensibility of the physical body, that it was widely considered a requisite experience of normal childhood. Treatment with arsenical drugs cleared the painful skin lesions so quickly that this apparently miraculous cure proved a huge propaganda boost for western medicine. It was one treatment that aroused little fear; among Ellice Islanders it was eagerly accepted, and believed to be a general tonic and remedy for rheumatism. Yaws treatment had the potential to overturn indigenous understandings of ill health and disease in a way that hookworm treatment could not. Often western medicine was accepted as suitable only for “European diseases”, but the magic efficacy of the “needle” in a condition defined as “indigenous” blurred this

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53 Lambert, “Medical Conditions in the South Pacific”, op cit, pp. 16-17.
54 Macpherson to Lambert, 2 October 1931, WPHC 1184/1932.
categorisation, opening possibilities for greater acceptance of European treatment. Advanced yaws was painful and disabling; with its affinity to syphilis, the disease was also implicated in lowering women’s reproductive capacity and contributing to infant sickness and mortality. With these reasons and the possibility of treatment, yaws programmes provided a better demonstration than hookworm.

**Tonga – “the little kingdom”**

The Gilbert and Ellice Islands epitomised the problems that Lambert’s plans for the Pacific aimed to resolve, and yet his recommendations had little immediate effect there. Circumstances in Tonga, on the other hand, suggested a territory where he could build on the interest he had already generated and gain influential local support for his wider proposals for co-ordinating Pacific health services.

Heiser found no evidence of hookworm when he visited Tonga in 1916, but Lambert’s arrival in Fiji in 1922 coincided with reports of the parasite’s discovery in the kingdom. Tonga offered obvious opportunities for IHB work, and according to Islay McOwan, former British Agent and Consul, the economic and social conditions there would be favourable to such participation. Lambert expected an early request to survey the group but as could happen so easily in the Pacific, miscommunication and misunderstanding caused delays until 1924, when Lambert himself asked the High Commissioner to organise an invitation that accorded with IHB procedure. Tonga’s Privy Council immediately secured approval for expenditure of £100 for the survey.

Lambert arrived in Tonga in late May 1924. Here he found a health situation determined by the common Pacific experiences of isolation and contact, and by the particular influences of missions, the social and economic circumstances of the country’s period of sustained independence, and the

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55 Medical work elsewhere in the colonial world demonstrated a similar enthusiasm for yaws injections; for example, K. David Patterson, *Health in Colonial Ghana: Disease, Medicine and Socio-Economic Change, 1900-1955*, Waltham, Mass., 1981, p. 27.

56 Lambert and other Medical Officers agreed with the 1896 inquiry into Fijian population decline in this regard. Lambert, "Health Survey," p. 8, WPHC 1291/1924.


58 Lambert to Greene, 10 December 1923, and subsequent correspondence, WPHC 2965/1923. Greene to Lambert, 28 January 1924, RFA RG. 5, Series 1.2, Box 197, Fldr. 2515.
subsequent imposition of British interests after 1900. This combination of environmental, political and cultural factors carried through into a unique relationship with Lambert and the IHB.

Historical Factors in Tonga’s Health Situation

Along with Christianity and western civilisation, the early missions introduced a variety of unwelcome new diseases to Tonga, contributing to population decline. Tongans believed that inexplicable sickness was the action of supernatural forces offended by the behaviour of the living, and their therapeutics proved ineffective in the face of introduced infectious diseases. However the missionaries’ basic pharmacopoeia and nursing care were relatively successful, demonstrating apparent spiritual power and providing persuasive opportunities for conversion to Christianity. Medical work therefore became an important, jealously guarded function of the missions, and even in 1916, the Church violently opposed the government’s attempts to pass new public health laws, fearing that this would undermine its status as healer.

Medical and sanitary legislation was in place in the kingdom after the 1870s as part of the reforms that its monarch, Tupou I, introduced to develop the country, stabilise its internal politics and maintain independence during the Great Power carve-up of the Pacific. These first regulations on housing standards and household privies were largely ineffective. Events after Tupou’s death led to British intervention in Tonga. Although brought into the orbit of the Western Pacific High Commission, Tonga avoided full annexation but by 1908 the British consul had decisive involvement in financial matters and administration. With political and financial order restored, an extensive programme of public works

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60 Campbell, Island Kingdom, 1992, pp. 43-44.
62 Heiser, Memo No. 7120, “Public Health Activities and Medical Relief in the Tonga Islands”, 9 May 1916, pp. 2-3, RFA RG 5, Series 2, Box 42, Flrd. 251. Heiser reported that “the missionaries...prescribe and administer medicine without any restriction.”
63 Campbell, Island Kingdom, p. 104. Quarantine measures did not stop measles being introduced in 1893. The disease killed 1000 of the 19,000 population, severely disrupting administration and food production. Rutherford, Friendly Islands, p. 176.
64 The events leading to and following the British assumption of control in Tonga are described in Rutherford, Friendly Islands, pp. 180-187; and Campbell, Island Kingdom, pp. 109-116.
began which included building hospitals at Nuku'alofa and Vava'u and constructing large concrete water tanks in the villages. Without streams, the group relied on rainfall and shallow wells, so ensuring an adequate supply of clean water remained a central public health issue.

By 1909 the population showed a steady increase; at 21,958, it was 1.5 percent higher than the previous year's figures. While there was no further serious epidemic disease, dysentery, influenza, and yaws were common, and tuberculosis increasing. High birth rates were matched by high mortality, especially for infants. Further public health activities were undertaken after 1913, with an education programme against tuberculosis and the opening of rural dispensaries attended by Tongan dressers trained by the European CMO at Nuku'alofa Hospital. At the time of Vincent Heiser's visit, six dressers were employed, having finished three years of practical training in the hospital with twice weekly lectures on the rudiments of anatomy, physiology, materia medica, diagnosis and therapeutics. Like other Pacific territories, Tonga had a shortage of doctors, so sometimes these dressers were placed in positions beyond the capabilities of their training, as Heiser observed with some despair during his visit in 1916. Nor was he more impressed with the European MO at Vava'u - "a pickled alcohol specimen" - and noted that the CMO, Dr H. M. Cowan "has had a most difficult time obtaining suitable men." Irrespective of quality, medical treatment was free to all Tongans, while half-castes and Europeans paid.

Heiser's main interest was to determine the extent of hookworm infection, but clinical examinations revealed no evidence of the parasite, a situation he attributed to minimal immigration (especially Asian) and no large plantations or concentrations of labour. The Medical Officers, who had laboratory facilities for detecting its presence, had never recorded a case. Of other health conditions, Heiser noted no malaria, despite prolific numbers of mosquitoes, and elephantiasis and yaws were apparently much less than in Fiji or Samoa; there was some dysentery, and extensive morbidity but not mortality from a disease closely resembling typhoid, and attributed to drinking water from polluted sources. He considered a low rate of intestinal-borne diseases possibly due to the

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65 Campbell, Island Kingdom, p. 117.
66 Ibid., p. 121.
68 Heiser, "Notes on 1916 Trip", p. 63, APS/VIP.
69 Ibid., p. 60, pp. 66-67.
70 Ibid., pp. 61, 64, 69; Heiser, Memo No. 7120, pp. 3-4.
extensive use of pit latrines. Apart from quarantine regulations, there were no public health regulations in force; nor were there reliable death records. From his visit, Heiser reported to New York:

The data available would not seem to justify even a preliminary microscopic survey for hookworm infection ... A scholarship to a native of Tonga promises more for the sanitary uplift of these islands than anything else that we might do. 71

The Hookworm Survey, 1924

Given Heiser's observations, it is difficult to explain the reports of widespread hookworm infection in Tonga just six years later, or the results of Lambert's subsequent survey. Little had changed in the health services, in the facilities available for diagnosis, or in the immigrant situation. Every household had a latrine "by law and in fact"; though these were often in disrepair soil sanitation was limited, and even where open to flies and pigs, neither pest spread hookworm. The country was relatively prosperous, people lived lives "automatically removed from poverty" 72 with abundant nourishing food to build increased resistance to the parasite.

Although there was no record of any actual hookworm case in 1916, Heiser had noted rumours of cases among a few immigrants from Papua and New Guinea. Possibly Tonga was then at such an early stage of infection that Heiser, relying on clinical signs, and attuned though he was to the least signs of parasite's presence, missed sub-clinical indicators. It is possible also that following the ravages of the 1918 influenza epidemic, which killed 8 percent of Tongans, the population was debilitated and more vulnerable to a rapid spread of hookworm infection from this very limited source. No-one seemed to query the cause of the sudden turnaround in Tonga's hookworm status; to the contrary, Lambert welcomed the opportunity to bring the group into the IHB fold, departing for the group with his family, Malakai, a quart of chenopodium oil, 5000 specimen tins, the stereoptican and slides, and a deckchair. 73

Without either time or transport to take him further north, Lambert spent the whole time on Tongatapu, the main island in the group, where he concentrated on examining residents of the capital, Nuku'alofa, and villages "representative of the

71 Ibid., p. 7.
73 Lambert to Heiser, 8 October 1924, RFA RG. 5, Series 1.2, Box 197, Fldr. 2516.
Tongan population" in the surrounding countryside. The work had the support of Queen Salote and her husband, the Premier Uiliami Tungi Mailefisi. Salote faced many political challenges during these early years of her reign, but Lambert considered her support influential and critical. Along with the rest of the royal family, the Privy Council, Parliament, and leaders in the church, education and medical fields, Salote was the first to view Lambert's propaganda trump card, *Unhooking the Hookworm*. With accompanying lectures on the parasite and infection, the film was then taken to the villages to prime the Tongan public, resulting in "highly satisfactory" co-operation and participation in the survey.\(^{74}\)

Less satisfactory was the involvement of the CMO, who autocratically assumed control of the project, but whose inexperience slowed the work so much that specimens from only 1420 people (1413 Tongans and 7 Europeans) were examined.\(^{75}\) Of these 654, or 46 percent, were found infected. While the incidence of infection varied little, even between Nuku'alofa and the districts, the degree of infection, judged by the number of eggs per slide, was heavier away from the town; in some rural areas, he found cases of severe infection. Adults generally had a higher rate of infection than children; males were more infected than females.\(^{76}\) The results from Tongatapu were extrapolated to the northern islands, where higher rainfall made a "higher infection rate and greater pathological effects" likely.\(^{77}\)

Lambert was unable to determine the degree of infection with any accuracy, as in Tonga he did not have access to the "meticulous assistance" necessary for the requisite worm counts. As in the Gilbert and Ellice Island survey, Lambert had neither the time nor facilities to get full haemoglobin tests from those found infected. This meant that no clear correlation was possible between degree of infection and anaemia. Instead Lambert estimated haemoglobin levels for 385 people attending a dispensary, and determined an average of 75.4 percent, an index he considered too low given the varied and abundant Tongan diet. Lacking critical evidence, Lambert nevertheless assumed that this indicated anaemia-producing diseases, most probably hookworm.\(^{78}\)

The infection survey section took only 6 out of the 27 pages that made up Lambert's Hookworm Report. The rest consisted of a general background survey

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74 Ibid.
75 Lambert to Heiser, 25 June 1924, RFA RG. 5, Series 1.2, Box 197, Fldr. 2515.
78 Ibid., p. 25.
of Tonga, covering its history, geography, population, government, education, and economic infrastructure; and an outline of public health activities, medical services, and other disease conditions. Together these provided an epidemiological context for public health concerns. Lambert found the exclusion of the Chief Medical Officer from the Privy Council an anomaly, stating firmly:

Health is admittedly one of the chiefest [sic] functions of government, and in the Tropics it is the paramount consideration. Tropical government cannot flourish without the intimate advice of its health authority.\(^79\)

Although every Tongan was entitled to free medical care and treatment, including dental, Government spending on medical services was low - at £6,700 per year, only 9.1 percent of an annual revenue of £73,000. The Medical Department listed 20 notifiable transmissible diseases, of which 1906 cases were reported in 1923, of these, yaws (897), typhoid (345), and dysentery (108) represented 1350 cases that Lambert claimed were preventable. Yaws was treatable, and proper water supplies, soil sanitation and public health education would control the other diseases. Reinforcing the need for these measures, Lambert noted that pneumonia and tuberculosis (responsible for 518 of transmissible cases) “invade with fatal effect principally those whose bodies are weakened by yaws, typhoid, dysentery and hookworm disease. These all weaken the body by impoverishing the blood.”\(^80\) Furthermore, tuberculosis, typhoid, dysentery, and yaws caused 89 of the 178 deaths attended by a medical practitioner (309 were unattended). These were all diseases Lambert attributed to poor sanitary practices, with hookworm-induced anaemia a contributing factor.\(^81\)

Lambert’s argument for hookworm’s involvement in Tonga’s health status was in fact hypothetical and unproven. Hookworm did not feature on the list of transmissible diseases, presumably because from previous evidence it did not exist in Tonga as a contributor to ill health, at least until some time after Heiser’s 1916 visit; whereas the morbidity and mortality caused by other diseases was established. People were not dying from hookworm disease, as they were from typhoid and tuberculosis, and neither Lambert nor anyone else correlated the incidence of hookworm in those afflicted with the other major diseases, nor noted

\(^{79}\) Lambert, “Hookworm Survey of Tonga.”
\(^{80}\) Ibid., p. 14. After dysentery, gonorrhoea was the next most frequently reported, with 30 cases; the remainder comprised 2 each of syphilis, tetanus, leprosy, and puerperal fever; ibid., p. 13. Given the shortage of experienced medical staff, the figures for disease undoubtedly underestimate true rates of occurrence.
\(^{81}\) Ibid., p. 19.
any increase in these since hookworm became established in Tonga, despite his argument that it was "producing important effects on the health of the people" and that its control would have beneficial consequences on other diseases. His conclusions merely purported to be the outcome of clearly scientific practice.

Apart from actual treatment for the parasite, there was nothing in Lambert’s recommendations that was specifically about hookworm. Again, hookworm was used as a hook on which to hang a raft of public health proposals, especially reorganising the water supply, which despite the public works undertaken during Tupou II’s reign remained a major source of infection, with shallow, easily contaminated wells. Installing pest-proof latrines and controlling pigs were both recognised measures against the real killers – typhoid and dysentery – and ones which could have been acted on regardless of hookworm. Yet, again, the magic of the hookworm-Rockefeller Foundation combination worked its charm. Even before the survey was completed, the Privy Council was considering plans for Lambert to inaugurate a hookworm campaign, which Bill Tully, his experienced assistant from the Queensland hookworm trail, would then manage.\(^2\)

Tonga’s prompt, active response was in marked contrast to the Gilbert and Ellice Islands’ process. The difference lay in constitutional independence, autoethnous leadership and control over revenue which all allowed greater opportunity for action. Lined up against these advantages, however, was the counterweight of Tonga’s Protectorate status, the interests of European members in the Privy Council, and personal rivalries. Any IHB campaign depended on the good relations established with local administration and medical staff, and while Lambert had the instrumental support of the British Agent and Consul, Islay McOwan, the situation was complicated by the CMO, Dr Dawson, a “small dour Scotchman [sic] ... a scraper over trivial matters” with little organisational ability though professionally competent. Dawson and Lambert disagreed on most issues, among them the correct survey methods, whether pigs spread human hookworm, and the most suitable latrine design. The CMO, antagonistic and obstructionist, exemplified resistance to IHB involvement in Pacific health projects.\(^3\) Lambert managed to avoid open conflict with him, but feared that

\(^2\) Lambert to Heiser, 25 June 1924, RFA RG. 5 Series 1.2, Box 197 Flldr. 2515

\(^3\) Heiser sympathised, having met Dawson (‘Colonel’ at the time) in Western Samoa in 1916, when the doctor was attached to the New Zealand military occupation force there. Heiser recorded that “Governor Logan can do very little with him”, and could himself only get an appointment with the doctor “after much diplomatic sparring” - though he also noted Dawson’s huge workload. Heiser, “Notes on 1916 Trip - Samoan Islands,” APS/VHP. Heiser to Lambert, 19 August 1924, and 14 October 1924, RFA RG. 5 Series 1.2, Box 197, Flldr. 2516.
Dawson’s continual feuds with individual Privy Councillors might also stymie any medical proposals.  

The CMO’s stance remained a major determinant in the progress of Tongan public health, although Lambert also found European members of the Privy Council uncooperative, and confided to Heiser that two of the four were “rather inferior in their...financial morals... and are more apt to pass things from which they can gain something.” Addressing this self-interest, Lambert again presented a campaign’s potential in commercial terms:

... aside from humanitarian considerations, [it will bring] a manifold return of the investment each year in increasing health and happiness to your people, and in their economic efficiency.

Self-interest eventually succeeded in thwarting a central element of Lambert’s public health programme, the reorganisation of the country’s water supply.

Despite these problems, Lambert’s careful and patient approach in Tonga was rewarded in July when the Privy Council voted to fund a hookworm campaign. It appropriated £945 per annum for two years, with further extension if necessary, and pledged to develop the campaign infrastructure into a permanent sanitary department that would oversee new latrine installations. However, it turned down Lambert’s elaborate plans to overhaul the water supply, with new catchment areas, wells, village baths and washing places, which would increase expenditure on sanitation to £20,000. Pending the results of the hookworm campaign, the Council also deferred yaws control work suggested in Lambert’s tentative plan for IHB-funded work in Western Pacific High Commission territories. It was, however, enthusiastic about Lambert’s other proposal for the Rockefeller Foundation, the Pacific Medical School, seeing this as the solution to one of the greatest problems facing small Pacific governments, “viz., the proper education and training of native students in Western medical and surgical science.”

While Tonga’s willingness to finance the hookworm and education campaign from its own funds demonstrated just the sort of self-responsibility for health which the IHB aimed for, this early autonomy potentially undermined the

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84 Lambert to Heiser, 25 June 1924, RFA RG. 5 Series 1.2, Box 197, Fldr. 2515.
85 Ibid.
86 Lambert, Memo, WPHC 1807/1924.
87 Lambert to Heiser, 9 November 1924, RFA RG. 5 Series 1.2, Box 197, Fldr. 2517.
88 Lambert to Sawyer, 8 January 1926, RFA RG. 5 Series 1.2, Box 262, Fldr. 3322.
89 Lambert to Heiser, 17 July 1924, RFA RG. 5 Series 1.2, Box 197, Fldr. 2515.
90 McOwan to Acting High Commissioner, 18 July 1924, WPHC 1807/1924.
wider health and sanitation scheme Lambert and the WPHC planned for the region. Officials favoured a uniform approach, and conceded that Lambert was “prime mover [of the scheme] so may be expected to know how to conduct it.”91 Lambert, aware of the difficulties of co-ordinating the different administrations, no doubt also had in mind his superiors’ directives – first develop a grass roots commitment to health development, and then the Rockefeller Foundation might consider more ambitious plans. His success in Tonga guaranteed just such a favourable response from New York.92

The Hookworm and Latrine Campaigns, 1925

With arrangements for a campaign secured, Lambert left Tonga for a health survey of Western Samoa followed by six weeks in Fiji to check the progress of work there. By October he was back in the kingdom, ready to finalise work details with the newly appointed Privy Council Sanitation Committee which comprised the Premier (the only Tongan member), the Minister of Works, the CMO, and the Judge of the Land Court. This addressed the issues Lambert’s report raised, beginning with the recommendation that every household erect a fly- and waterproof latrine, at their own expense.93 As Lambert knew from past experience in relatively affluent Australia, the “privy question” was always a “delicate and difficult one to handle as it involves spending money by the individual.” In Tonga it was made more difficult by Dawson’s automatic objection to every design Lambert proposed, a situation resolved only by diplomatic sleight of hand.94 Cost was only one constraint; so too were high sub-soil water, the need for components robust yet light enough to be moved by simple transport, and the lack of local timber. The final design, a pit privy, combined imported seats and concrete forms; by placing a bulk order for a thousand of these, the committee kept the cost to 25/-, as well as ensuring a uniform standard. Not to rely solely on the inherent attractiveness of this new model, the committee advised legislation making installation compulsory.95

91 Pilling (Secretary to WPHC) to High Commissioner, 31 July 1924, WPHC 1807/1924.
92 Heiser to Lambert, 4 September 1924, RFA RG. 5 Series 1.2, Box 197, Fldr. 2516.
93 “Recommendations of the Committee appointed by the Privy Council to deal with Sanitation,” 11 November 1924 and 12 November 1924, RFA RG. 5 Series 2, Box 42, Fldr. 25.
94 Lambert, Doctor in Paradise, p. 199.
95 Lambert to Heiser, 9 November 1924, RFA RG. 5 Series 1.2, Box 197, Fldr. 2516.
The Ministry of Works surveyed all water storage on Tongatapu. Many people still relied on shallow muddy wells, easily polluted by animals and often fouled by bucketing water out, while concrete water tanks were in disrepair, uncovered, with inadequate catchments. These were replaced or repaired, with new concrete curbing, pumps, and covers for wells to keep out mud and pigs. Amongst other measures discussed were the enclosure of pigs and, once a Board of Health and Sanitary Boards were established, appointing Health Inspectors to check the estates and houses. The Hookworm Campaign was discussed after these issues, and to Lambert’s relief CMO Dawson decided that mass treatment was appropriate. Accordingly, the Committee decided that every person over the age of one year should be compelled to turn out for village hookworm inspections and treatment, or fined.

The campaign began immediately on Tongatapu, with the ceremonial treatment of the whole Royal Family. Despite this public relations tactic, the community’s initial refusal rate was high. Lambert attributed this to treatment involving new ideas, and beginning the campaign in the “most sophisticated areas”, which he associated with greater individuality. Education became an important part of the work; six stereopticon lectures in Nuku’alofa drew 2500 people and every household received a hookworm pamphlet. Lambert, having advised introducing compulsory hygiene courses in all schools, modified “Elementary Hygiene for Fijians” for Tongan conditions, then had the Premier translate this “to get the correct Tongan language images.” Five thousand copies were distributed.

With these measures, Lambert soon reported to New York that

... work proceeds beyond expectations. Tully has more than come up to the mark and is going through Tongatabu like a housefire. He will cut down my estimate of the time necessary to cover the kingdom by a year at least if his gait continues.

This left Lambert free to concentrate on rewriting the health laws, explore the possibility of employing a woman doctor to organise maternal and child welfare work in the villages, and oversee the beginning of the latrine project. He assured

96 Tongans considered church roots, the largest water catchment for village water supplies, tapu, only the example of Queen Salote later in the 1920s made this source more available.
97 "Recommendations," RFA RG. 5 Series 2, Box 42, Fldr. 25.
99 Lambert, Narrative Report, 31 December 1924, RFA RG. 5 Series 3 Box 162.
100 Lambert to Heiser, 6 March 1924, RFA RG. 5 Series 1.2, Box 197, Fldr. 2515. It seems this letter is wrongly dated - in March 1924 Lambert was in GEIC, but in Tonga March 1925.
101 Ibid.
Heiser that work would continue after his departure in April 1925, as the
government was importing 5000 expensive privy seats which "they will have
some job in shifting...from their shoulders without putting them in as privies."\textsuperscript{102}

Lambert was frank about his tactics:

the plan I usually try to follow in the field [is] of loading Government up
with expense so that they have to make an effort to shift the load. That
always makes them take an interest in sanitation. If one can make the
load big enough the interest is maintained and by and by they get the
habit. I always tell them frankly at the beginning what my plan is and
they seem to like it.\textsuperscript{103}

Lambert, however, misjudged the government's interest - or at least did not
take into account the factors determining its translation into action. After he left
Tonga, the passage of necessary new health legislation went on hold pending the
arrival of a new Chief Justice in October, and the public health programme
falterd. Dismayed, McOwan informed Lambert that the water and latrine
reforms were lagging behind. McOwan wanted Lambert, "the man with the
authority and prestige of the Board" back in Tonga to ensure that both his
initiatives - the hookworm treatment programme and an effective well-organised
public health scheme - were successfully completed.\textsuperscript{104}

After the Tongan Government authorised "maximum expenditure" for the
sanitation and water schemes early in 1926, Lambert, with IHB approval,
rearranged his work schedule in the Cook Islands and deferred planned leave so
that he could spend several months in Tonga getting the programmes
underway.\textsuperscript{105} However, subsequent events showed that Rockefeller prestige and
authority, and that of the British Agent, counted for little against the political and
personal animosities in Nuku'alofa. The British Consul had invited Lambert after
discussions with Tungi, but had not passed the request through the Privy Council
for official authorisation. Engaged in a "private war" with McOwan, Dawson
objected, claiming that the newly constituted local Public Health Board had the
work well in hand and did not need Lambert - already on route from the Cook
Islands - to inspect or advise. Confronted with this factional dispute when he

\textsuperscript{102} Lambert to Heiser, 8 April 1925, RFA RG. 5 Series 1.2, Box 229, Fldr. 2909.
\textsuperscript{103} Lambert to C. C. Williamson, 4 May 1925, RFA RG. 5 Series 1.2, Box 229, Fldr. 2909.
\textsuperscript{104} McOwan to Lambert, 2 October 1925, RFA RG. 5 Series 1.2, Box 262, Fldr. 3322.
\textsuperscript{105} Lambert to IHB, 8 January 1926; Sawyer to Lambert, 27 January 1926 and 28 January 1926, all
in RFA RG. 5 Series 1.2, Box 262, Fldr. 3322.
arrived in Tonga, Lambert agreed not to involve himself with the work, to avoid any further delays to progress.\textsuperscript{106}

Frustrated by this setback but limiting himself to scathing private criticism of Dawson, Lambert nevertheless remained fairly optimistic that the Health Board would now make permanent improvements.\textsuperscript{107} After all, Tully had done well with the hookworm programme; by early 1926, his unit had treated 81.1 percent, or 19,054 people out of a total population of 23,485, at a cost of 8.8 cents (US) per treatment. Although there was no ascarides to complicate the parasite picture as in Fiji, so no adverse effects from carbontetrachloride, babies, the aged, infirm, and pregnant had been excluded from treatment. Only the remote outlying islands remained to be treated. Along with the hookworm work, Tully had collected data on water supplies, and made examinations for filariasis that showed an infection rate of 20 percent on Lifuka, increasing to 40 percent at Nuku’alofa.\textsuperscript{108}

As planned, the campaign had evolved into a public health department and, once the necessary legislation was enacted, Tully was appointed Public Health Officer and began overseeing latrine installations. The government, using prison labour, had been producing the concrete slabs and risers at the rate of twelve a day,\textsuperscript{109} with 1600 scheduled installations by June. Tully visited every home, indicated a suitable position for the privy purchased by the household, then returned to check it had been correctly installed. There had been 64 convictions for non co-operation, though these were attributed to the “litigious and independent nature” of the Tongan, rather than his failure to perceive the benefits of sanitation.\textsuperscript{110} Obviously this was a scenario which had been anticipated, for in a unique move the Minister of Police was appointed to the Principal Board of Health along with the CMO and the Minister of Works. As usual in the Pacific, the leading missions were also included, perhaps more to bring them onside as these new health measures undermined their earlier medical hegemony and

\textsuperscript{106} Correspondence in Pilling to Lambert, 4 February 1926, WPHC 355/1926; Lambert to Sawyer, 5 March 1926; McOwan to Lambert, 6 March 1926; Tungi to Lambert, 6 March 1926, all in RFA RG. 5 Series 1.2, Box 262, Fldr. 3322.

\textsuperscript{107} Lambert to Sawyer, 5 March 1926, RFA RG. 5 Series 1.2, Box 262, Fldr. 3322.

\textsuperscript{108} “Narrative and Statistical Report, Tonga, for 10 November 24-28 February 1926”, RFA RG. 5 Series 3, Box 162.

\textsuperscript{109} Lambert, “Public Health Survey in the South Pacific during 1925”, RFA RG. 5, Series 2, Box 40, Fldr. 242.

\textsuperscript{110} “Hookworm, South Pacific Islands (Tonga): Annual Report, 1926”, RFA RG. 5 Series 3, Box 162.
lessened their practical involvement. Other key groups, "the people" and the traders, were not represented.

Like Lambert, Tully was frustrated at the petty rivalries that permeated the administration, but did his diplomatic best to stay uninvolved. He was in an invidious position: experienced after five intensive years in hookworm, malaria and filaria surveys, often in charge, yet a layman nevertheless in a field that was rapidly professionalising and hierarchical. Dawson's claims to superior public health knowledge, often mistaken and disproved in practice, were particularly galling. Tully avoided contact with his medical associate as much as possible, relying instead on the Premier and McOwan to support the public health work.\footnote{Tully to Sawyer, 4 April 1926, RFA RG. 5 Series 1.2, Box 262, Flldr. 3324.}

This lack of cohesiveness continued to impinge on Tonga's public health efforts. After three years Tully's unit had treated the main groups for hookworm and had nearly completed the latrine programme, but he had minimal success in advancing the matter of water supply. This had been central in Lambert's 1924 outline for the "complete sanitation of Tonga", yet the Government, resisting the financial commitment repeatedly sidelined the scheme. Lambert complained that despite Tonga's budget surplus of at least £130,000, white government officials and residents were avaricious and miserly, and

... seem to develop a strange psychology there. Though they receive the Tongan's money as salary, they seem to get a spiteful attitude toward him and act almost as obstructionists to his progress, in this case wanting him to pay not from taxes for any improvements. [sic]\footnote{Lambert to Heiser, 20 April 1926, RFA RG. 5, Series 1.2, Box 300, Flldr. 3803.}

McOwan had left to become Native Commissioner in Fiji, but he still had interest and some political influence in Tonga's affairs. Lambert used this to advantage when, frustrated at the continued thwarting of his water scheme, he warned that he would withdraw Tully for work elsewhere, eliciting a pledge of renewed support from McOwan. As Tully was in fact employed by the Tongan government, not by Lambert or the IHB, and the IHB, having made no financial contribution to Tongan health projects, had no real leverage on that government's decisions, these tactics indicate a remarkable complexity in the relationship of the Americans, both the individual and the organisation, with colonial health and political administrations. Lambert did not stop with the Native Commissioner, but went to the High Commissioner:
I ... said I wasn’t interested in a few new tanks or a little new guttering, and in nothing except an entire new water supply and that it should be given to the Tongans from their own Government funds, for which those funds were saved, and that the British were responsible for getting rid of the typhoid of these natives under their jurisdiction, since it could be simply and easily done and the money was there and the plan outlined.\footnote{113}

Both officials approved his suggestions for a complete new water system and agreed to present Lambert’s plan to the Tongan Government through the current British Agent and Consul. Even this high level intervention was only partially effective, for after his next visit to Tonga Lambert reported that the country was to spend £1000 p.a. on improving water supplies, rather than undertaking the complete project. According to Lambert, Dawson was solely responsible for this piecemeal approach:

If there was any other CMO there but Dawson I could get anything I wanted including a complete water scheme. My relations with the Government including both European and Tongan legislators are as nearly ideal as such a thing can be. The Queen and Tugi are most friendly, friendly in a way in which they would dislike to refuse me anything, but this stubborn conceited little man blocks me completely.\footnote{114}

Lambert suggested that if the Rockefeller Foundation provided funds to employ a supervisor for the work, he could bypass troublesome resistance to his water project. However, the Foundation considered the programme too small and isolated to support, especially when Tonga itself could pay.\footnote{115} When Queen Salote gave new water tanks to residents on remote Niuafo’ou Island, Lambert hoped for further government action, but he was to be disappointed. He continued to fret over Tonga’s failure to complement the hookworm and latrine initiatives with clean water supplies, and blamed the “liar” and “obstructionist” Dawson.\footnote{116}

Lambert’s recommendations for a wholesale overhaul of the supply were not adopted despite a rise in the reported incidence of typhoid and dysentery well into the 1930s, and a recognition that providing unpolluted water could prevent these diseases.\footnote{117}

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\footnote{113} Ibid.
\footnote{114} Lambert to Heiser, 4 August 1927, RFA RG. 5, Series 1.2, Box 300, Fldr. 3804. Campbell (\textit{Island Kingdom}, p. 141) states that the idea that “the population should increase and enjoy good health” was a basic tenet of Salote’s approach. Lambert frequently refers to the support and encouragement the Queen gave to medical work in Tonga, and to his public health and education projects. \textit{Doctor in Paradise}, pp. 191-192, 198, 201, 202, 211-212.
\footnote{115} RFA R.G. 2, Series 419H, Box 9, Fldr. 75.
\footnote{116} By December 1927, 5900 latrines had gone in: RFA RG. 5, Series 3, Box 162, Fiji 1923-27.
\footnote{117} “Annual Report on the Social and Economic Progress of the People of the Tongan Islands Protectorate, 1936,” London, 1937, pp. 8, 10. Typhoid figures given were 1932 -165; 1933 - 147; 1934 - 142; 1935 - 112; 1936 - 206. Reported dysentery stood at 12 cases in 1932, remained
Discussion

As a direct consequence of Lambert’s IHB-funded health survey, Tonga undertook hookworm, latrine and education campaigns, reorganised its care of leprosy patients, and became actively involved in attempts to establish the Central Medical School. During the 1920s, the group pursued other public health initiatives. It adopted the policy guidelines of the 1926 International Pacific Health Conference, passed new quarantine regulations to protect against foreign diseases, and maintained yaws treatments, and appointed a Government dentist – though not Lambert’s proposed woman doctor to advance maternal and infant care in the villages. Apart from paying Lambert’s salary during his time there, the Rockefeller Foundation made no financial contribution to Tonga’s public health developments; the country financed its programmes entirely from its own resources.

In its singular self-sufficiency Tonga demonstrates the multiple layering of relationship and interaction by which public health services were established in the colonial South Pacific. Lambert was influential, remarkably so as his relationship with the Royal family and his assumed right to direct Tully’s employment demonstrated; but he could not effect the hegemonic authority so frequently ascribed to the IHB’s philanthropic enterprise. Instead his work was often overthrown by Dawson, who largely decided priorities and programmes without regard for Lambert or the monarchy. Nor did Lambert himself pursue a programme consistent with IHB practice; although his standard recommendation for hookworm work was readily taken up by the Tongan Government, Lambert’s correspondence indicates that from the beginning he held other disease conditions to be more important, and fought for preventive measures such as the new water supply whose expense normally placed them outside the IHB’s consideration.

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between 46-59 from 1933-35, rose to 66 in 1936. Possibly these later high figures are due to more accurate diagnosis and improved recording, by 1936 Tonga’s medical staff had been boosted by seven NMPs.

118 Despite this, the IHB’s Comptroller recommended that Lambert get the Tongan government to send quarterly accounts detailing expenditure to New York, as this obligation would guarantee Tonga’s continued funding commitment. Lambert made the arrangements, suggesting that the IHB could ensure good surveillance of government health activities through the Premier, Tungi, as this “will have a tendency to maintain interest in the work here.” Kirk to Lambert, 2 December 1924, RFA R8, and Lambert to Heiser, 2 March 1925, RFA S2.

What his surveys and recommendations highlighted was the diversity of disease pictures presented among the different islands. Hookworm's prevalence - and more relevant, its seriousness - varied widely; nowhere could it be considered the leading cause of mortality or even morbidity, as tuberculosis, yaws, and malaria were recognised to be. What is surprising is not that Lambert made routine, if occasionally half-hearted, recommendation for immediate hookworm treatment programmes, but that the groups then instigated such measures.
Chapter 9
Surveys and Health Work (II)

After his surveys of the Gilbert and Ellice Islands Colony and Tonga, Lambert had introduced all the solely British administrations of the Western Pacific High Commission to hookworm work and exposed them to the IHB model for public health and his own plans for revitalising Island populations. Together these territories remained at the heart of his plans to unify medical services in the Pacific territories, but he also aspired to have other colonial jurisdictions share the benefits and increase the capacity of a rationalised operation. New Zealand responded enthusiastically to IHB expertise, but despite Lambert’s best endeavours he could not convince the French that his services might contribute to their colonial interests. The only French territory he managed to survey was the New Hebrides, and then only because the joint Condominium Government provided access.

Western Samoa

With his Tonga survey complete in July 1924, Lambert and his entourage sailed immediately for Western Samoa, where he undertook a similar exercise during the following six weeks. While this was his first encounter with a New Zealand-administered territory in the South Pacific, it followed from relations earlier established by Heiser during his 1916 tour and resumed once the IHB established hookworm operations in Australia. Western Samoa like Tonga remained independent from any financial arrangement with the IHB (at least until 1932), and even more unusually, it initiated its own hookworm campaign prior to, rather than as a result of, Lambert’s survey. Neither of these factors meant that Lambert and the IHB were negligible forces in public health work in Western Samoa; on the contrary, the American developed strong links with the colonial administration, both in Apia and in Wellington. He established himself as an influential advisor and representative of Samoa’s best interests through the 1930s, and Samoa actively backed Lambert’s plans for co-operative schemes such as the
Central Medical School, Makogai Leper Colony and a Unified Pacific Medical Service.

Heiser spent three days in Samoa in April 1916, during New Zealand’s wartime occupation. At this time the government’s sole medical services were in Apia, with two Medical Officers (one of them the notorious Dawson) and a Matron at the hospital. The needs of the expeditionary force were the Administration’s priority. There was an outpatients department, where eye problems were most common, and a leper colony for fifteen patients. Overworked, Dawson combined the duties of surgeon, eye specialist, sanitary officer and hospital administrator. Apart from quarantine inspection, there was no work in public health, and there were no medical services at all for the 15,000 residents of Western Samoa’s second island, Savai’i.1

Heiser reported appalling sanitary conditions around Apia, with “disorderliness and filth everywhere” and flies “most troublesome”, but a surprisingly good standard of public health.2 There were few latrines in use in the Samoan community, though some available for indentured labour on plantations to protect against typhoid and dysentery. Dawson claimed that hookworm disease was “very common” but records were contradictory; the disease was reputedly imported from American Samoa or by Chinese labour recruited under the German administration. According to Keising, the Germans had begun a Samoa-wide campaign against hookworm before New Zealand took control.3 However, Heiser concluded that infection was negligible.4

Nevertheless he and the military administrator, Colonel Robert Logan, discussed the potential for co-operative IHB work in the group. Logan doubted that the administration would invest in a hookworm and sanitation campaign, given the uncertainty of New Zealand’s future involvement with Samoa and the greater concern about obtaining enough well qualified doctors.5 After his visit Heiser recommended that once Samoa’s status was resolved post-war, the Commission could undertake a preliminary microscopic survey from Fiji before deciding whether anti-hookworm measures were required.6

2 Heiser, “Notes on 1916 Trip - Samoa”, p. 46, APS/VHP.
4 Heiser, “Report No. 7124”.
5 Heiser passed Logan’s request on to Rose at IHC headquarters but advised that the organisation should not be directly involved with any medical appointments. Heiser to Rose, 17 March 1916: “Notes on 1916 Trip”, APS/VHP.
6 Heiser, 18 May 1916, “Report No. 7124”.
By the time the war ended, however, the International Health Board had left the Pacific. New Zealand’s position changed when epidemic influenza ravaged Western Samoa after November 1918, killing 8,500 people (22 percent of the population) directly and many more in its aftermath. A subsequent New Zealand Royal Commission of Inquiry upheld Samoan allegations of Logan’s negligence of their best interests, for both failing to quarantine the ship that carried the disease into the islands and then refusing American Samoa’s offer of medical aid.  

Along with the allocation of Western Samoa to New Zealand under a League of Nation’s mandate in 1920, the epidemic and its aftermath was a catalyst that changed New Zealand’s attitude towards the population’s welfare. Protecting Samoan health became an integral part of New Zealand’s policy in the group.

Health initiatives under the Mandate

New health services beginning in 1919 included first efforts to improve public health through women’s committees in the villages. In 1921 the new Acting Administrator, Colonel Robert Ward Tate, informed the Fono a Faipule (the advisory Council of Chiefs) of plans to improve water supply, increase MO numbers, enlarge Apia Hospital, and establish medical stations in many districts,

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8 A Department of External Affairs was established to control the new dependency from Wellington, with a civil administration operating in Samoa with executive power vested in the Administrator and limited community legislative representation. For discussion of the Mandate system, see Felix Keesing, Modern Samoa, pp. 95-109; G. H. Blakeslee, “The Mandates of the Pacific”, Foreign Affairs, 1, 1 (1922-3) 98-115; Sir J. Allen, A Mandate for Samoa, Royal Colonial Institute, 2 November 1920.

9 The Royal Commission of Enquiry advised New Zealand officials to develop “a lively sense of the grave responsibilities that rests upon them” regarding the health of its dependent populations. Commission Report, A. 4 , AJHR 1919.

10 The work began with Doctor Mabel Christie. Penelope Schoeffel examined the development and impact of the women’s committees in her PhD thesis “Daughters of Sina: a study of gender, status and power in Western Samoa” (ANU, 1979).
beginning with the first for Savai‘i, at Tuasivi. A Division of Public Hygiene was added to the existing Division of Clinical Medicine and Hospitals in the newly formed Department of Health, and a Board of Health was constituted. Ordinary Medical Department expenditure for the year amounted to £15,840, or 11.6 percent of the government’s budget, with an extra £6000 borrowed to finance hospital extensions. As a comparison, the Education Department’s budget was £3,176. The following year combined clinical, public health and extraordinary medical expenditure increased to £33,052. A scheme for training Samoan medical assistants began, with four promising cadets at Apia Hospital, with arrangements made to extend nursing training with recruits drawn largely from the London Missionary Society’s Papauta Girls High School. The Administrator used the Fono as a conduit for encouraging Samoan medical participation, urging it to select suitable boys for training as medical assistants, ensure villagers followed village improvement plans, and advertise the availability and necessity for treatment. He also promoted a dedicated medical tax so that all Samoans could receive free treatment, securing matai agreement in 1922.

The International Health Board connection was re-established in 1920 when the Colonial Office notified that Heiser was planning a further visit to Samoa and New Zealand to investigate public health activities and assess whether cooperative programmes might be useful in the future. In 1921 Dr. Russell T. Ritchie, Western Samoa’s Medical Officer of Health, travelled to Australia to study IHB methods in the hookworm campaign there, and attend a course in tropical medicine at the Townsville Institute. Soon after Tate informed the IHB that a preliminary survey in Samoa showed that “the great majority of the population harboured hookworms.” As in Tonga, this was a radical turnaround from Heiser’s 1916 assessment. The infection rate seemed low, so Tate decided that education, rather than treatment, was the priority. Anticipating an indifferent response from Samoans about proper sanitation, he chose to purchase stereopticans, lantern slides, charts and appropriate literature from the IHB, and

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11 Tate to Minister of External Affairs, 1 February 1921: IT 1 88/3 pt.1.
12 Western Samoa, First and Second Annual Reports: AJHR 1922, A-4.
14 Correspondence and Reports, Fono a Faipule: IT 1 88/3 pt.1.
16 Tate to Rose, 13 August 1921, RFA RG 5, Series 12, Box 110, Fl dr. 1507a; also AJHR 1922, A-3A, p. 31.
pursue a "vigorous system of propaganda",\textsuperscript{17} rather than a co-operative hookworm campaign.

At the end of 1922, S. Lee, New Zealand’s Minister of External Affairs, informed Sawyer in Australia that work had yet to begin, but he hoped that there would soon be definite progress through education and the “new Fijian treatment” (CTC).\textsuperscript{18} An over-extended Medical Service had caused delays; it was still difficult to secure suitable staff for the enlarged Department, which faced criticism of its employment conditions and salaries. Tate, worried about waning support for medical efforts, wanted to reorganise the Department under a public health-oriented administrator, whose training allowed “a breadth of view” lacking in a purely clinical Medical Officer.\textsuperscript{19} The Samoan administration’s long-term problems with medical staffing and cost made it receptive to the solutions soon offered by Lambert’s proposals for training Samoan Native Medical Practitioners at a Central Medical School in Suva, and the debates foreshadowed the arguments that would arise during later negotiations for a Unified Medical Service for the Pacific.\textsuperscript{20}

When Brigadier General George Spafford Richardson was appointed to replace Tate in 1923, he fixed medical services even more firmly as an object of the administration’s interest. Richardson was inexperienced but confident that he could direct development in the Samoans’ best interests. He set out to bring western medical treatment within easy reach of all Samoans, reorganising the Health Department with clinical and public health duties integrated under Ritchie’s direction. He expanded District services, with a second outstation, extra dispensaries and trained Samoan nurses supplementing the medical work done at mission centres and on occasional malagas. Richardson implemented the medical tax at £1 for each adult male, and free medical care for all Samoans followed. Mobile medical units began extensive hookworm and yaws control programmes which treated 18,000 with carbon tetrachloride and gave nearly 33,000 injections of Novarsenobillon during the year. This health promotion was

\textsuperscript{17} Tate to Rose, 13 August 1921, RFA RG. 5, Series 1.2, Box 110, Fldr. 1507.

\textsuperscript{18} Lee to Sawyer, 21 November 1922, RFA RG. 5, Series 1.2, Box 167, Fldr. 2158. Earlier treatment with thymol was slow and costly, as its dangerous toxicity required hospitalisation of hookworm patients; at the same time these excluded more seriously ill people from hospital attendance.

\textsuperscript{19} "Western Samoa Medical Report, 1923" A.I.H.R 1923, A-4, p. 6.

\textsuperscript{20} Tate to Gray, 30 November 1922, I/T 1 8/12:2.

For example, one official argued that to appoint MOs from the British Colonial Medical Service to New Zealand territories would be problematic and unpatriotic. Frengley to Secretary of External Affairs, 30 April 1923: I/T 1 8/12:2.
marred by a severe epidemic of Shiga dysentery which in 1924 caused roughly 400 deaths above the previous year, many of them young children; however discouraging, Richardson saw this as “an opportunity to make an object lesson for the Natives in the matter of sanitation ... the first and foremost problem in Samoa.”

Again, the outcome of the treatment programmes indicated that there were alternatives to hookworm as exemplary cases to justify public health intervention, and that left to their own devices, governments might choose different routes from that chosen by the IHB as ideal to expand health services. Running both hookworm and yaws treatment programmes concurrently became too great a drain on the Department’s resources, and when impure carbon tetrachloride caused problems and the necessary sanitary ideals proved difficult to establish, hookworm work was abandoned. Yaws eradication became the focus of the administration’s strategy to turn the population away from their traditional *fā'a samaoa* approach to healing and develop their confidence in European medicine.

As elsewhere, the injections were popular. In Samoa, where more regular access to villages was possible, the mobile treatment units gave a course of three injections for advanced yaws, with apparently spectacular success. Samoan enthusiasm for the treatment extended to accepting the stringent regulations aimed at control of the disease. However, the people did not easily relinquish their own construction of its aetiology, avoiding treatment for young children with primary yaws because they perceived that this would “drive the disease in” and thereby cause greater ill-health in the future. With yaws considered a major but preventable contributor to high infant mortality figures such a response reinforced European ideas of Samoan conservatism and ignorance.

Lambert’s Health Survey

Ritchie invited Lambert to visit Samoa for a month on the campaign trail in 1922, but an official request for his services came only after Richardson’s

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22 H. L. James, “Pathology of Samoan”, *Journal of the Polynesian Society*, 22 (1913) 83.
24 Lambert to Heiser, 21 September 1922, RFA RG. 5, Series 1.2, Box 133, Flhr. 1767.
arrival. The Administration then asked Lambert, as a “disinterested observer”, to report on Samoa’s health. Arrangements for his few weeks in Samoa immediately circumscribed his survey’s objectivity. On his arrival in July 1924 Lambert left almost immediately on a malaga, one of the annual official tours Richardson undertook. The large party for this journey around the island of Savai’i included leading administrative officials, medical staff, native police and carriers, as well as thirty members of the Fetu o Samoa (Star of Samoa), a Boy Scout-type movement whose uniforms and drummers added to the pomp and ceremony.  

The malaga’s purpose was to impress, to inspect village and health conditions, and to inform villagers of Government policies and activities. Richardson promoted disease prevention, proper water supplies, sanitation, and the purpose of the health campaigns, stressing that “there must be babies in the villages if [Samoans] wanted to increase and assume their former power and grandeur as a race.” In his report Lambert declared the malaga “unique … and remarkable for its simplicity and the results in obtaining the confidence of the native and his interest and co-operation in measures for his own benefit.”

The malaga’s time limits and its strong ceremonial format restricted Lambert to cursory health inspections of village populations. His subsequent report, subtitled “with special reference to hookworm infection”, had little detail about the disease; rather, it recognised that in Samoa, as in the Gilbert and Ellice Islands, yaws had a more central role in developing public health:

Yaws is probably the greatest cause, direct and indirect, of death among the Pacific Races in the first two years of life. The treatment of this condition … is probably the finest demonstration to them of the value of Western Medicine.

With medical programmes already underway and plans to extend maternal and child welfare in the villages, Lambert had no new suggestions to make; rather, his role was to give focus and definition to the administration’s plans. With an eye to the ground swell of local resistance to the costs of Samoa’s Medical Department and the concerns of the European planters over labour shortages, his summary emphasised the economic benefits accruing from western health care:

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25 “In Samoa: what is being done”, Wellington Post, n.d. IT 1 8/12/2. Persuasion was used as well as discipline - lollies were presented as “the lure used to insure [sic] a full attendance of all children.” - Lambert, “Health Survey of Western Samoa”, p. 5, NA IT 1 8/21/1
26 Ibid. For other accounts of the malaga see also Lambert, Doctor in Paradise, pp. 213-215; Field, 1991, p. 65.
27 Lambert, “Health Survey”, 1924, p. 12, NA IT 1 8/21/1.
28 Lambert to Heiser, 9 November 1924, RFA RG 5 Series 1.2, Box 197, Fldr. 2517.
Every Colony in the Pacific faces the problem of a decreasing native population in the face of a need for an increasing labour supply to develop these islands for their products which have grown to be necessities ... of the temperate climates. ... The true answer to this problem ... is the care of the health of these people. ... The result of such an effort will be the large increase of the population and the final pressure of that population on the means of subsistence will furnish labour for the development of the islands in an increasing amount ... [health] measures are ... reflected in increasing populations of healthy, happy Samoans ... they will mean dividends on the investment for the country, which after all must be the criterion of the success of a humanitarian effort, if it is to be enduring.29

The Mau and Health

Lambert’s report received wide coverage, with New Zealand newspapers stressing its approbation of the Administration’s efforts and the “confidence and affection” their success elicited from the Samoans.30 The Department of External Affairs, describing it as “undoubtedly ... a great tribute to the Samoan Administration”, disseminated the report widely, including copies to the League of Nations and the Colonial Office. Richardson underlined Lambert’s experience and “the fact that he is an American with no personal interest in this Administration renders this report a valuable one.”31 However neither Richardson nor Lambert were disinterested parties in the report’s production; Lambert wanted to ensure the governor’s support for his further plans, including the medical school and Pacific-wide co-operative action, while Richardson hoped that the Rockefeller Foundation would reinforce the administration by further oversight and reporting on the progress of health activities, and by providing emergency care in the event of future epidemics.32 The New Zealand government also looked to Lambert and the influential backing of the Rockefeller Foundation to validate their mandate in Samoa, and suggested that the Foundation have Lambert attend the 1926 session of the Permanent Mandates Commission of the League of Nations in Geneva as an authoritative voice on Samoa’s health and

29 Lambert, “Health Survey”, 1924, p. 15, NA II 1 8/21:1. There was actually already clear evidence that despite the ‘flu epidemic, depopulation had been reversed in Samoa.
30 New Zealand Herald 2 October 1924; Evening Post, 4 October 1924; Wellington Post, 21 February 1925 covered an address Ritchie gave to the Wellington Lyceum Club which also drew on the report. All in NA II 1 8/12:2.
31 Richardson to Minister of EA, 18 September 1924; EA memo, 3 October 1924, both NA II 1 8/12:2.
32 Richardson to Heiser, 30/09/1924, RFA RG 1.1, Series 419L, Box 1, Fldr. 6.
welfare. The Rockefeller Foundation executive tactfully declined on principle: its policy was co-operation with governments but careful avoidance of any involvement which could be construed as "usurping their functions", such as IHB staff participation in government conferences or League of Nation's Commissions. 33 This neutrality was belied by later Foundation approaches as well as by Lambert's later specific involvement in issues such as staffing.

By all official reports following the survey, Samoa's health future seemed assured, despite some complaints about 'conservative' Samoan responses towards the more 'enlightened' practices being introduced. Ritchie reported over 53,000 yaws injections given by the mobile units in two years and with new sanitary legislation in place, intended to make the disease a "negligible factor" from 1925. Hookworm work also resumed that year. The CMO credited hookworm treatment of anaemic women as an important factor in the 1924-5 birth rate, the highest on record; women in better health breastfed longer, without weaning young babies onto diets medical authorities considered dangerous. 34

Attention turned to Samoa's high infant mortality rate (IMR), estimated at 149 per thousand for the 1924-26 period, and 106 in 1926-7 (compared to 43 for New Zealand in 1921-25). Considering an IMR over 50 per thousand preventable by sanitation, hygiene, and the instruction of mothers, the Medical Department established Child Welfare work, with high-ranking Samoan women recruited to lead women's committees in the villages under the guidance of European MOs and nurses. This was consistent with the approach taken in European (Pakeha) New Zealand, by the Plunket Society, rather than among Maori. 35 These committees had clearly defined duties, overseeing the cleanliness of the village and its inhabitants and the care and feeding of children, and were also encouraged to participate in community developments. 35 When Shiga dysentery and influenza epidemics hit during 1927, the lower mortality rate was attributed to improved village hygiene; the year recorded the highest rate of

33 Minister of External Affairs, F. Bell to G. Vincent, 20 January 26, and reply 10 March 26: IT 1 8/12.2.
34 Ritchie to Lambert, 9 April 1925, RFA RG. 5, Series 1.2, Box 229, Fldr. 2909; Ritchie to Lambert, 9 August 1925, RFA RG. 5, Series 1.2, Box 229, Fldr. 2909. According to the 1926 Medical Report, 15,613 hookworm treatments were given in 1925 concurrently with first injections for yaws: AJHR 1926, A.-4A., p. 2.
natural increase and the lowest death rate on record.\textsuperscript{37} A comprehensive new system of birth and death registration, colour coded and cross-referenced, began to provide detailed epidemiological data for assessing the state of the population and its response to health activities.

In his 1926 report on Pacific hookworm work, Lambert extolled Samoa’s efforts as “a fine piece of work demonstrating the value among a primitive people of public health work and preventive medicine”, which according to the Administrator was directly measurable by increase in Samoans’ copra production of 1200 tons.\textsuperscript{38} As Lambert pointed out, such success had been achieved without any financial assistance from the IHB, with his involvement limited to keeping “a friendly eye” on the work. However, political developments soon reversed Lambert’ optimism about progress, leading him to conclude that the Samoans had been pushed too far, too fast.

In 1927, the health campaigns were jeopardised as a movement opposing Richardson’s policies gathered strength. \textit{Mau} protests targeted a variety of issues: perceived racism,\textsuperscript{39} land reform, prohibition, village “remodelling”, and new penal regulations.\textsuperscript{40} Europeans wanting greater focus on commercial development joined in, attacking the administration’s spending on welfare programmes, and especially critical of the Health Department as inordinately expensive, inefficient and a contributor to increasing indebtedness.\textsuperscript{41} Samoan complaints about the medical service centred on the compulsory medical tax, and limited medical training and opportunities for Samoans.\textsuperscript{42} As its campaign of non-cooperation developed, the \textit{Mau} refused to follow regulations, pay taxes (including the medical tax), participate in government education, or register births and deaths. In 1928, it developed its own parallel provisional administration and withdrew from the Administration’s public health and sanitation initiatives, refusing to maintain latrines or co-operate with the medical \textit{malaga}, and disbanding the village child welfare programme; by 1929 women’s committees

\begin{itemize}
\item \textsuperscript{37} \textit{AJHR} 1927, A–4, pp 13-14.
\item \textsuperscript{38} Lambert, “Annual Report, Hookworm, South Pacific Islands, 1926, RFA RG. 3, Series 419H, Box 162.
\item \textsuperscript{39} O.F. Nelson, cited in Field, \textit{Mau}, p 82.
\item \textsuperscript{40} Lambert’s retrospective analysis of the issues is in “Samoan Yaws Campaign”, NA GG 1 8/31 pt. I.
\item \textsuperscript{41} Keesing, \textit{Modern Samoa}, p. 383. The Medical Department was allocated 19.5% of Western Samoa’s revenue. In 1927 it employed 27 staff, more than any other branch of the administration and nearly one quarter of the whole public service; cf. the Education Department (13), and the Agriculture Department (11). \textit{AJHR} 1927, A–4. For the European Committee’s arguments against the medical tax see \textit{AJHR} 1927, A–4, Appendix 2, pp. 41-41.
\item \textsuperscript{42} \textit{AJHR}, 1927A–4B pp 15, 17.
\end{itemize}
remained in only four villages, and the future of child welfare work, as with all health programmes absolutely dependant on the population’s co-operation, seemed dismal. Signifying its recognition that health and medical services were indeed a contested field, the administration admitted that it had lost “nearly all sanitary control in the villages”. It withdrew free medical treatment in 1929 directly in response to non co-operation. Hookworm and yaws treatments declined, and some outstations and dispensaries closed, with European MOs replaced by NMPs in all districts except Apia, where services were now consolidated.

Although non co-operation meant the government had no clear knowledge of health status in the districts, its official line during the “Mau crisis” was that health care was well maintained in spite of retrenchments. Though it had so recently promoted district clinics and free medical care as the way to improve Samoan health, the administration now asserted that withdrawing these primary services had little detrimental effect, as people had apparently sought help largely for minor ailments not really requiring medical attention. During the disturbances clinic attendance figures actually show a pattern of increased use of remaining outstations and dispensaries where NMPs or native nurses were in charge, but falling attendance at Apia Hospital. Here European staff and the most sophisticated facilities in the group now provided services for about 65 percent of Upolu’s population, and these districts included many Mau supporters.

The Rockefeller Foundation and co-operative campaigns

The government eventually reasserted control in Western Samoa after a violent clash between Mau supporters and military police late in 1929. A new assessment of health standards followed, with especially alarming reports of resurgent yaws and abysmal sanitary conditions. For Lambert, kept informed of developments by the Samoa’s new CMO, Dr Ernest Hunt, the Administration’s

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43 “Report on the Mandated Territory of Western Samoa” 1928, AJHR 1928, A-4A, p. 2
44 Lambert to Heiser, 25 September 1930, RFA RG. 11, Series 417, Box 1, Fldr. 1; “Report on the Mandated Territory of Western Samoa”, AJHR 1930, A-4, p. 27. The administration compensated for lost medical tax revenue by increasing indirect taxation, actually improving its revenue.
45 AJHR 1930, A-4, p. 7.
46 AJHR 1930, A-4, pp. 6-7. Not only the political situation led to closures - illness and marriage of five Samoan nurses were responsible for the closure of three clinics in 1927: AJHR 1928, p. 3.
difficulties provided a perfect opportunity to encourage Western Samoa into further involvement in the co-operative IHD programmes and united Medical Service he was nurturing in the Pacific territories. Western Samoa had readily participated in the other regional projects - the Central Medical School for training NMPs, and Makogai Leper Station. Of its public health work in the 1920s Lambert wrote: “Rarely has there been a finer demonstration of the possibilities of preventive medicine in the tropics ... in other groups this work served as a model [and] ... had a tremendous indirect influence...”

If recent events had tarnished Western Samoa's reputation, public health now offered a chance to reinstate it. New Zealand, with confidence in its administrative ability shaken by events in Western Samoa and its finances reduced by deepening international depression, was prepared to reassess its independent stance in providing health services and consider Rockefeller assistance. Co-operation would also allow the Administration to resume health work without appearing the direct instigator, thereby avoiding Mau opposition. Lambert described the situation to Heiser:

The Mau is slowly relenting and the Administration would like to yield a bit also. In a year or so the time will come when an outside body could do an immense amount of good by acting as a meditative agency.\footnote{Lambert, “Samoa Yaws Campaign”, IT 1 8/31:1.}

Instigating treatment programmes remained Lambert’s route to expansion, providing a \textit{raison d’être} for staying in the South Pacific at a time when Heiser was indicating the Rockefeller Foundation’s readiness to withdraw from the region once its existing commitments expired the following year, unless there was proven urgent need for further co-operative projects.\footnote{Lambert to Heiser, 25 September 1930, RFA RG. 1.1, Box 1, Fldr. 1.} Involving Western Samoa enhanced Lambert’s access to New Zealand’s other dependencies and made his plans for a comprehensive Pacific service more viable.

With all this at stake, Lambert developed an influential discourse that set the redeeming, beneficent powers of colonial medicine against ignorance and self-obsessed rebellion. In the aftermath of the Mau:

... the beautiful Samoan children were pitiful little things, their skins a scab, their faces eaten with yaws. The tea-rose skin had faded to grey; intestinal parasites were sucking again at their blood and lymph. The Mau had turned against its own people instead of its enemy.\footnote{Heiser to Lambert, 14 October 1930, RFA RG. 2, Box 43, Fldr. 353.}
Emotive language particularised a widespread biomedical problem. The recrudescence of yaws was not just a local Samoan event; medical authorities world-wide were reluctantly re-evaluating their earlier belief in the new arsenical drugs as a cure for yaws. Treatment had a miraculous clearing action on lesions, especially at the primary stage, but needed more repeated doses to maintain this effect. Treatment could also compromise immunity to the disease, especially in the young.\footnote{The Royal Society of Tropical Medicine and Hygiene established a sub-committee to deal with questions raised by the Colonial Office about recurrent yaws and its treatment; its "Memorandum on the Treatment of Yaws and Syphilis in the Tropics", 24 January 1930, recognised the limited and inconclusive scientific understanding of prophylaxis and treatment practices. Treatment causing the disappearance of skin lesions apparently rendered cases non-contagious; however laboratory research indicated that allowing yaws to run a more prolonged course before beginning treatment, produced a greater degree of immunity: IT 1 8/31:1.} Pacific Islanders' conception that opposing the disease in childhood had scientific validity, after all. Even Lambert admitted that "experience has taught medicine that this disease is stubborn and may reappear in deep-seated conditions after the superficial symptoms have vanished." However, these new understandings of yaws aetiology did not feature in Lambert's assessment. His presentation of hookworm as a major, Mau-perpetrated problem was also dishonest, for there was no past, present, or future indication that hookworm infection in the Samoan communities was anything other than mild, even with poor sanitation.\footnote{Despite wet conditions (which favoured hookworm infestation), those trying to get the hookworm campaign underway noted, "Attempts to obtain supplies of hookworms during the year showed that even where they were present in patients they were very few in numbers." AJHR 1927, A-4, p. 14.}

Despite his prestige, Lambert's representation of devastated Samoan health was not accepted uncritically. After Lambert visited Apia in December 1930 to discuss possible IHB involvement in yaws and hookworm campaigns, Administrator Allen wrote to his superiors in Wellington,

> I have only approved the scheme provided I am satisfied of its necessity. At present I am inclined to think it would be wise to take the opportunity of assistance from the Rockefeller Foundation and that the general health of the community would benefit greatly in proportion to the expense involved, though I should not regard the scheme as absolutely essential. From the political point of view, however, I think the benefit would be decided.\footnote{Allen to Minister of External Affairs, 17 March 1930: IT 1 8/31:1. The CMO also argued the benefit to the Administration's standing, as well as Samoan health. Hunt to Allen, 13 December 30: IT 1 8/31:1.}

Allen's political needs nested with Lambert's ambitions for a larger Pacific scheme, neither of them motivated by strictly medical need alone. Both were
taking advantage of ambiguous medical data for what they saw as more consequential purposes.

Lambert went to Wellington in January 1931 to discuss the draft proposal with C. A. Berendsen, the Secretary for the Department of External Affairs, which was now more actively overseeing affairs. Berendsen was impressed by Lambert’s reputation and his proposals for the management of health programmes and medical organisation in Samoa, and confirmed the New Zealand government’s willingness to co-operate with any Rockefeller funded programme as well as its agreement “in principle” with Lambert’s suggestions for a combined Pacific Islands health service.\(^54\) Lambert also laid the groundwork among influential officials for Heiser to visit.

In August 1931 both Hunt and Lambert were in New York to present a yaws and hookworm campaign plan to the IHD, which earlier had promised to consider carefully Hunt’s request for Rockefeller Foundation assistance.\(^55\) Hunt was frank about the political aspect, stating that:

... although the Government is unable officially to admit it, the treatment of these two diseases would probably be of inestimable value in establishing more satisfactory relations between the natives and the Government.

The IHD was interested, but its response demonstrated the stronger research focus it was assuming under its new head, Frederick F. Russell. It had moved away from using treatment programmes as an induction into wider public health developments, and would consider action only if a survey showed hookworm severe enough to warrant treatment and the government committed itself to ongoing work. Samoa did not meet the criteria of the new model, as neither Hunt nor Lambert could give accurate figures for hookworm disease in Samoa, nor definitively assess the value of treatment. Similarly, the IHD ruled that yaws work must go beyond routine treatment, and instead research best treatment methods, to complement IHD studies being undertaken elsewhere.\(^56\)

A draft scheme was formulated around these conditions. It followed the usual IHB format: the costs of a 2 year campaign (£1620 per annum) to be shared equally between the Rockefeller Foundation and the Samoan administration; free

\(^54\) Berendsen to Lambert, 3 February 1931 (2 letters); IT 1 8/31:1.
\(^55\) T.B. Appleget, Interviews, 6 May 1931; F.F. Russell to Lambert, 15 May 1931, and reply, 15 May 1931, all RFA RG I.1, Box 1, Fldr. 2.
\(^56\) Heiser, Memos, 20 August 1931 and 21 August 1931, RFA RG I.1, Box 1, Fldr. 2; Heiser memo “Final conference with Dr S.M. Lambert preparatory to his returning to the South Pacific”, 27 October 1931; APS/VHP, “Memos 1930-31.”
customs, mail, telecommunications facilities and transport; a Rockefeller Foundation campaign director working part-time in conjunction with the Western Samoan CMO to plan and supervise the work; and the Administration’s commitment to soil sanitation measures and to continue the campaign beyond two years if necessary. The proposal was presented to the IHD’s Scientific Directors in October as part of a raft of co-operative ventures that Lambert recommended to re-activate health efforts in island groups where the Depression was undermining the progress made earlier through hookworm work. The Directors’ subsequent approval assured Lambert of a further period in the Pacific and the opportunity to effect his plans for a centralised, unified health service.

The co-operative campaign: surprises in the field

The Samoan administration agreed to the IHD’s conditions, and despite a decline in trading income and further retrenchment and reorganisation of government departments, voted funds to begin the campaign in April 1932. Lambert and Hunt directed the work, with Samoan NMPs Ielu and Togamau heading teams of Samoan medical cadets. These visited every village to survey sanitary conditions, register every inhabitant, and call on all to submit themselves for examination and treatment. The results were surprising, and problematic. The 1926 census had been the last accurate count before Mau refusals to register birth and deaths, after which the Administration relied on population projections. Now the headcount showed a net increase in population far greater than expected, over 3 percent a year, surpassing even the government’s nervously optimistic assurances that health status was being maintained though sanitary control lost. Such growth also countered Lambert’s warnings about the dire consequences and extent of yaws and hookworm. Despite the demise of the village child welfare programme, the infant mortality rate – an accurate indicator of health status – had dropped considerably by the early 1930s. This decline was apparent though statistics were incomplete and there continued to be variations around the downward trend (see table).

57 “Draft agreement for the control of yaws and hookworm” 21 August 1931: IT 1 8/31:1.
58 “Docket Material for Scientific Directors Meeting, October, 1931” “Memos 1930-31” APS/ VHP.
<table>
<thead>
<tr>
<th>Year</th>
<th>IMR</th>
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<tr>
<td>1923</td>
<td>200</td>
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<td>1924</td>
<td>153</td>
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<tr>
<td>1925</td>
<td>186</td>
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</tbody>
</table>
| 1926 | 106 | Years of non-notification by Mau of births and deaths
| 1927 | 101 | Gradual “normalisation” of relations, including registration.
| 1928 | 58  |
| 1929 | 70  |
| 1930 | 61  |
| 1931 | 111 |
| 1932 | 121 |
| 1933 | 114 |

*Source: AJHR, 1933, p.16.*

Also unexpected, given the perception of *Mau* intransigence, was Samoans’ eagerness for treatment. The campaign census recorded 39,049 people, and of these more than 87 percent presented for examination, with 60 percent showing yaws. However, 86 percent received first injections, as many without active yaws requested prophylactic treatment and the campaign was reluctant to discourage this enthusiasm for western medicine. Altogether 74,088 injections were given in 1932.\(^{59}\) Having so underestimated Samoan population and interest, Lambert now found the drug budget inadequate, and the New Zealand Treasury and the IHHD had to supply extra funds to keep “the flame of public health ... burning” despite deepening global depression.\(^{60}\)

**Politics and problems: poliomyelitis and impurities**

Lambert professed a disinterested neutrality as Rockefeller representative, but as he cemented his relationship with the New Zealand authorities, especially Berendsen, he crossed the line between medical advisor and political commentator. Interviewed when he left Samoa in 1932, Lambert exaggerated the extent of current infection and used the campaign response rate to demonise the *Mau*, accusing supporters of past negligence and deliberately hiding afflicted

\(^{59}\) Various official statistics for the campaign give different figures for census, infection and treatment rates - there are two versions of statistics for the “Yaws Campaign, Western Samoa, 1932-33” from the Western Pacific Health Service: IT 1 8/31:1.

\(^{60}\) Hart to Minister of External Affairs, 22 July 1932, IT 1 8/31:1; Heiser, “Docket Material for Scientific Directors Meeting, October 1932”, “Memos 1930-32”, APS/ V/F/P.
children. His claims vindicated the decision to run the campaign, but the misuse of infection statistics was bad publicity, with the High Commissioner in London alarmed that the Permanent Mandates Commission might ask awkward questions about the "appalling" health conditions alleged in the *Samoa Herald*. Official explanations—annotated "endorsed by Dr Lambert of the Rockefeller Foundation who must not however be quoted in this context"—focused solely on Samoans' culpability, through their earlier failure to avail themselves of medical care. There was no mention of factors such as cost and accessibility of medical treatment after free care was withdrawn and clinics closed, or the pertinent question of arsenicals' long-term efficacy. Thus setbacks in health work continued to be linked to *Mau* activity, a perspective which led health authorities, including Lambert, to misinterpret problems arising in the campaign. When Samoans complained about side effects from treatment, their reaction were dismissed as political scaremongering, until later investigation revealed an impure drug batch. When treatment proved less popular in 1933, with only 38,644 neoarsphenamine injections given, the cause was officially attributed to renewed dissension on the return of *Mau* leader, 0. Nelson, from exile in New Zealand. Since July 1932, however, paralysis had appeared in some children after yaws injections, and is news spread among the villages deterred Samoans from treatment. By the end of 1932, at least 150 (8.5 percent) of the 1766 children under 5 years who had been treated in Savai'i had paralysis; of these 12 died.

Early investigation connected the paralysis either to the drug or the method of injection used by Ielu, the highly respected Senior NMP who headed the treatment team. When the paralysis cases came to light, Lambert was in Samoa and vigorously defended the quality of drugs used and the fatality-free record of the Rockefeller Foundation-Western Pacific Health Service campaigns. Later,

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61 "Yaws Campaign: Big Percentage of Infection: Conditions worse than expected", *Samoa Herald*, 22 July 1932; correspondence and memos, New Zealand High Commissioner to Prime Minister of New Zealand, 12 September 1932, Secretary of the Western Samoa Administration to Secretary of External Affairs, Wellington, 19 October 1932, External Affairs to High commission, 12 September 1932, IT 1/831:1.

62 "Yaws campaign".


64 Lambert to Russell, 22 February 1935, RFA RG. 1.1, Box I, Fldr. 6. Contemporaneously, a polio outbreak in NZ caused great concern, with 148 cases and 19 deaths: Heiser Diary, NZ 1934, p. 3., APS/V12P.
from Suva, he diagnosed poliomyelitis, although Hunt disagreed. Despite his position as the Rockefeller Foundation’s campaign director, he did not make a field investigation until he accompanied Heiser to Samoa in May 1934, although he had visited Apia beforehand. Nor was the programme stopped nor were the paralysis cases reported to Wellington. There was no mention of paralysis in the draft campaign report that Lambert sent to Berendsen for comment prior to publication; instead Lambert was pre-occupied with explicating the political context for Samoa’s troubles, emphasising a well-intentioned administration sabotaged by misguided Mau. Berendsen, unaware of current medical problems, responded with a more nuanced interpretation of recent conflict, and a more optimistic outlook:

... despite all the claptrap to the contrary, it seems to me that the results have not been so bad. These troubles are I think transitory and in the meantime ... the Samoans are being protected against the worst evils of the present day, are healthy, happy, and increasing in numbers, which in the last resort is, I should imagine, the acid test.\(^5\)

He was therefore astounded at the “untoward results” revealed in Lambert’s final report. These included: three deaths following treatment (though in only one did Lambert contemplate any possible connection to neoarsphenamine); increasing evidence of yaws as a complex and obdurate disease, not easily cured, and in some cases even exacerbated by treatment; and first mention of the paralysis epidemic which had so disastrous an impact on the campaign. Lambert asserted that it had no connection to yaws treatment, but was indeed poliomyelitis, brought from American Samoan by delegates to the London Missionary Society’s celebrations and then disseminated throughout Savai’i by villagers as they returned home.

Lambert concluded that the campaign had improved the situation by reducing open infectious yaws lesions, but failed to cut the disease back to the low levels of 1926. The research project he ran alongside the treatment programme showed that mass treatment was effective only as a preliminary control; keeping the disease within “reasonable limits” demanded constant follow-up work on individual cases. This corroborated other recent Rockefeller Foundation research showing that mass treatment, so long promoted as the best

\(^5\) Berendsen to Lambert, 27 April 1934, in response to Lambert’s letter, 9 April 1934, and draft report, all IT 1 8/31:1.
way to eliminate infections widespread in a community, could not adequately control yaws, let alone eradicate it.\textsuperscript{66}

Lambert also depicted the *Mau* as rampant soil polluters, responsible for stinking, atrocious conditions in the villages, and he intimated that hookworm and roundworm were rife (the requisite survey had still not been done, though a sanitary survey had detailed the state of village latrines and water supplies). Samoans' own short-sightedness left them vulnerable to epidemics of 'filth' diseases like dysentery and typhoid, he warned, and they desperately needed a concerted educational soil sanitation campaign programme and more Native Medical Practitioners. Otherwise, "yaws, roundworm, hookworm and soil pollution diseases will continue to flourish and the country will continue to be threatened with epidemics difficult to control."\textsuperscript{67}

Berendsen was stunned by Lambert's dire depiction of Samoan health, especially after his earlier assurances.\textsuperscript{68} The claims about yaws and sanitation, and the silence over the paralysis epidemic, raised serious questions about the Medical Service and Administration's competence, but Berendsen also had trouble reconciling Lambert's alarming assessment with other evidence:

...I still find it difficult ... to understand how the Samoans can nonetheless have contrived to increase rapidly in numbers and to bear generally and comparatively speaking every outward indication of health.\textsuperscript{69}

Nevertheless, Berendsen had to take into account Lambert's authoritative reputation in Pacific health affairs.\textsuperscript{70} Lambert assured him that the report was not sensationalised, but "simply an exposition of the situation."\textsuperscript{71} As an exposition, of course, it had potential for political mileage, to the Government's discredit. This Lambert acknowledged, and although he denied any intention to pressure Berendsen, Lambert obviously appreciated the report's probable effect would be Berendsen's agreement to earlier suggestions for a two to three year soil sanitation campaign, and Samoan's participation in a United Pacific Medical Service.\textsuperscript{72} However changes had been put on hold by an Administration still constrained by the economic uncertainties of the Depression.

\textsuperscript{66} Turner, memo to F.F. Russell, 8 January 1935, RFA RG. 1.1, Box 1, Fldr. 6.
\textsuperscript{68} Berendsen to Lambert, 18 August 1934: IT I 8/31:1
\textsuperscript{69} Ibid.
\textsuperscript{71} Lambert to Berendsen, 27 August 1934, IT I 8/31:1.
\textsuperscript{72} Lambert to Berendsen, 12 March 1934, NA IT I 8/34:1
These economies also motivated Samoa's earlier decision to end its participation in the Central Medical School, arguing that its current number of seven NMPs was adequate for the group’s medical needs; this appalled Lambert.\textsuperscript{73} The move would undermine the school, a major project of Lambert's, who saw the provision of NMP education as essential to improved medical services for the Pacific. Lambert had also been discouraged by the administration’s entrenched eurocentrism and attitude of racial superiority which led it to disregard Samoans’ expressed desire for more NMPs and district dispensaries, which had been closed in favour of the more expensive service maintained by a cluster of white MOs in Apia alone. Lambert reiterated his vision of an ideal service: a backbone of accessible, affordable, mobile NMPs in the districts, treating the sick, continuing yaws work, and educating people in soil sanitation and infant welfare. He had suggested that the Foundation might finance his services for a soil sanitation campaign and, ever aware of the Foundation’s preference that governments take the initiative, added "It might be better not to say that I propose such a thing for myself."\textsuperscript{74} From correspondence with Miss Mary Lambie, Director of the Division of Nursing in the New Zealand Health Department, he also pressed for extending the training of native nurses, as their influence in maternal and child welfare programmes far exceeded that of European nurses.\textsuperscript{75}

Heiser supported Lambert's assessment of unsatisfactory medical coverage for most of the Samoan population, and considered that a disproportionate amount of an otherwise adequate medical expenditure went on curative medicine. With almost nothing spent for preventive work, the real cause and incidence of disease would not be addressed. The focus of resources and staff on Apia hospital needed revising, and with Hunt’s retirement, a public health man should be selected as CMO (as suggested back in 1921). Meanwhile he offered Lambert’s services, to accompany the New Zealand Director-General of Health, Dr M.H. Watt (whose public health work had impressed him during his recent visit to New Zealand) on a survey to determine the Samoan health situation.

\textsuperscript{73} Lambert to Heiser, 15 January 1934, APS/VHP.
\textsuperscript{74} Lambert to Berendsen, 18 January 1934, IT 1 8/34:1; and 28 February 1934, IT 1 8/31.
\textsuperscript{75} Lambert to Watt, 19 February 1934, NA H1 12651 170/436; Lambert to Heiser, 20 February 1934, APS/VHP. Lambie’s conviction that the Samoan nurses were inadequately instructed and under-utilised came from a month spent reorganizing Apia Hospital early in 1934, Lambert to Heiser, 12 March 1934, APS/VHP.
Officials were unsure if the benefits were worth the expense. From their perspective, the IHD representatives were pushing too hard without an accurate appreciation of Samoan conditions. Lambert's recommended latrine construction campaign would be expensive given Samoa's volcanic geology, and the communal latrine arrangements Lambert proposed were not culturally acceptable to Samoans. Legislating to enforce latrine use would lead to problems; compliance would come only from an intensive education campaign beforehand, but NMPs were unavailable until yaws campaign work was completed. Berendsen, assuring Lambert that they appreciated his offer of Rockefeller assistance and anticipated of future co-operation, therefore declined Lambert's suggestions.

Lambert's subsequent yaws campaign report overturned this decision. Berendsen cabled a request to him that he arrange the survey for Watt immediately. Watt toured Savai'i with Lambert and had time in Apia. Lambert also arranged for time in Fiji so that Watt could make a comparative assessment between the two territories. Watt concluded that Samoan health services needed major reorganisation and recommended Dr H.B. Turbott, who had worked extensively among Maori in New Zealand. Lambert reported happily both Administrator Hart's new, more active interest in sanitation and public health, and new enthusiasm for the NMP system:

It is my personal mature opinion that New Zealand is on the right lines now in ... that the answer to her problems there will lie chiefly in several generations of Samoan children being taught in native schools by Samoan teachers and in the NMP system in which Samoan illnesses will be treated by Samoan natives.

He credited the Administrator with setting up an effective plan for Samoan sanitation. Model latrines installed at schools, hospitals and NMPs' homes would demonstrate practical, proper sanitation, this reinforced by simple sanitary and preventive medicine in the schools. Berendsen was anxious to begin immediately, once Ministerial support came through and a suitable Principal Medical Officer was appointed (preferably Turbott). Berendsen confirmed

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76 Berendsen to Turnbull, Secretary to the Western Samoa Administration, 13 July 1934: IT 1 8/31:1.
77 Turnbull to Berendsen, 26 July 1934: IT 1 8/31:1
79 Lambert to Berendsen, 6 November 1934, IT 1 8/31:1.
80 Lambert to Berendsen, 7 November 1934, IT 1 8/31:1.
81 Berendsen to Lambert, 20 November 1934, and 10 December 1934; Lambert to Berendsen, 21 January 1935, all IT 1 8/31:1. Turbott was vacillating, despite the carrot from Lambert of a
Lambert’s primary influence in decisions on Samoa by requesting his detailed opinion of Watt’s recommendations. Even when Lambert was subsequently scathingly critical of Samoan affairs unrelated to medical issues, Berendsen urged him to continue commenting freely.

Now it was Lambert feeling the pressure to get developments underway, for with Heiser’s retirement from the Rockefeller Foundation and Director F. F. Russell keen to know Lambert’s plans, his time in the Pacific was apparently approaching its end. Pointing out that Samoa was the only group in Central Polynesia not to have had an IHD demonstration of simple soil sanitation, Lambert suggested that this was the time to take advantage of Rockefeller assistance. Berendsen, still facing the Samoan Administration’s objections to public health work because of its expense, but also chafing to get the sanitation campaign underway, welcomed any co-operation. With New Zealand slowly surfacing from the Depression, finance was no longer an impediment; but Berendsen was conscious of Lambert’s warnings that too rapid progress had caused Samoa’s earlier political problems. Problems also remained with finding suitable Medical Officers.

Berendsen hoped for a sanitation campaign to begin in March 1936, though the administration was apparently ill prepared. During 1935 Turbott investigated public health possibilities in Samoa and found that Lambert had underestimated obstacles to sanitation work. Technical difficulties (solid lava substrate and absence of water) demanded intensive labour and recurrent capital expenditure in any campaign adopting the favoured bored hole latrine. Nor had Lambert accounted for the “human factor” - Samoans’ apparent obdurate indifference to developing any “sanitary sense”. Turbott and the NMPs easily persuaded villagers to erect hundreds of privies at their own expense, only to have them “serving but as monuments of the sanitarian’s good intentions ... they listen willingly to talks on the danger of broadcasting faeces ... but the privies remain mostly unused”, though often “resplendent with paint and well kept.” Turbott concluded that any soil sanitation campaign was premature.

Rockefeller public health scholarship at the prestigious Johns Hopkins University in Baltimore afterwards.

12 Berendsen to Lambert, 10 December 1934, IT 1 8/31:1
13 Correspondence on this issue, Lambert to Berendsen, 6 November 1934, Berendsen to Lambert, 10 December 1934; Berendsen to Lambert, 7 January 1935; Lambert to Berendsen, 21 January 1935; all IT 1 8/31:1.
14 Lambert to Berendsen, 6 November 1934, IT 1 8/31:1.
15 Memo, A.C. Turnbull to Berendsen, 24 June 1935, IT 1 8/25:1
Turbott dismissed as "the old method" the Rockefeller Foundation model of special campaigns that swept whistlestop through the community in the hope that seeds of health consciousness would be sown.\textsuperscript{16} As CMO, Turbott introduced two new elements to Samoa's health service. He had a strong public health orientation and expertise lacking in his predecessors, and devoted time to understand conditions and establish personal contact with every village. With his approach, "preventive medicine [was] woven into a curative medical service, and both brought to the fale in the village." He undertook a thorough overhaul of administration, practice and standards at Apia Hospital, but saw the CMO's role primarily as the close, energetic, supervision of field health work. Like Lambert he believed the NMP system critical to development, especially of preventive health services. Previously NMP services had been available only at district clinics, which led to an emphasis on curative treatment and surgery and a tendency to evolve into "young hospitals". Turbott re-oriented this by systematising NMP work into a three-fold village service with a monthly schedule taking them to a fresh village daily for school inspections and health talks, work with the Women's Committees demonstrating simple treatments and care, and inspecting the fales for sickness and advising on sanitation. NMPs now sent all but minor surgical cases to Apia. Diseases previously the focus of special campaigns (yaws and hookworm) were now routinely treated in the villages. Turbott reported that this approach, with its unobtrusive propagandising, was a great success. Both NMPs and villagers appreciated its benefits, villages were cleaner and more hygienic, and latrines were being built voluntarily without any cost to the government.

Turbott had revived the Women's Committees as a valuable aid to the NMPs' work, and found the members avid for instruction in preventive medicine and health care. Basic medical supplies were provided at a small charge, and mothers were encouraged to take responsibility for the village children, as well as overseeing village cleanliness and water supplies. Another Turbott initiative was baby welfare work. This training co-ordinated work by a London Missionary Society teacher, Evelyn Downs, for seniors at its Papauta Girls' School with nursing training, with the mission's participation reducing the cost to government. The Samoan graduates worked with women's baby welfare committees, under faipule supervision. Establishing a system of health education in all village, mission and government schools, with simple hygiene lessons

\textsuperscript{16} Undated memo, IT 1 8/36.1.
compiled in *Maloloina mo Samoa* reinforced this preventive work further. Turbott's other programmes included beginning inoculation programmes against typhoid and smallpox, upgrading sanitary conditions in Apia, and systematising the medical education of both cadets and nurses at Apia hospital. He was happy with the standard of nurses produced by training there, advising against any proposals from Suva that native nurse training should be centralised in Fiji. His improvements at the hospital and the importance he placed on indigenous medical staff led to increased interest from Samoans in medical training, with 27 applicants for the annual cadet examination. The cadet scheme prepared the most medically inclined for later training at the Suva Medical School.87

Lambert was impressed with Turbott's obvious public health ability and particularly his extension of the NMP system. Despite his own earlier drive for soil sanitation, Lambert expressed himself "glad to be rid of the burden of the latrine campaign in Samoa, and the Board is happy to be spared the expense."88 In part this was because the Rockefeller Foundation was also losing interest in the campaign approach, with research taking a higher profile. Lambert could now focus on lobbying for funds for major extensions to the Medical School.

Although Lambert maintained an interest in Western Samoa, Turbott's term as CMO marked a re-assertion of New Zealand's autonomy in directing health programmes there; Lambert had little further direct involvement. Overall, the Rockefeller Foundation had made no more than a minor financial contribution in attempts to resolve the Territory's medical problems and improve the health status of the indigenous population, but nevertheless Lambert had been influential in persuading the authorities to adopt, at least temporarily, its perspectives and methods of promoting public health. The efficacy of these was limited partly by the inherent weaknesses of the mass treatment model which relied on short term spectacular results as propaganda for western medicine but was based on inadequate knowledge of disease aetiology, and partly because in his drive to institute his next step, Lambert misinterpreted, or failed to fully consider, local conditions. Lambert's real contributions to improving public health in Samoa were mainly indirect, by his constant advocacy of the value of NMPs as the foundation of an island health service, and by using his authoritative voice to focus Wellington officials' attention on the issues and possibilities.

87 Details drawn from two comprehensive reports Turbott presented to the Western Samoan Administration, 17 September 1935 and 23 January 1936, and Turbott to Irwin, 20 January 1936, all in IT 1 8/36:1. Regarding the standard of past NMP candidates from Samoa, Lambert had also commented on their variable suitability: Lambert to Berendsen, 27 December 1934, IT 1 8/31:1.
Rockefeller involvement in the Cook Islands

The IHB's involvement in New Zealand's other dependency, the Cook Islands, was without the acute complications encountered in its participation in health services in Western Samoa. Rather, the group suffered more from the chronic structural problems - especially poor communications and transport, political expectations that social and economic development be self-funded, and the difficulty attracting and holding good medical staff - with which Lambert was familiar in varying degrees from elsewhere in the Pacific. Again, extreme geography was a feature; the fifteen islands which made up the group constituted a mere 240 sq. km. of land, dotted over more than 2,250,000 square kilometres of ocean, and 1000 kilometres from its nearest neighbour, Tahiti. New Zealand did little to relieve these circumstances.

New Zealand's commercial, strategic and political interests featured strongly in Prime Minister Richard Seddon's arguments when he engineered New Zealand's annexation of the group in 1900. Altruism was also expressed; annexation would enhance Islanders’ wellbeing, for New Zealand claimed success in enlightened care and protection of indigenous populations, as demonstrated in governance of its own Maori people.

Despite promises of increased material benefit for the Islanders, subsequent colonial assistance extended only to paying some of the newly created public service salaries, with inadequate local resources limiting progress in education and health, and also constraining economic development. Concern at high mortality rates and low birth rates was counterbalanced by the powerful

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89 Similar arguments were used when a British Protectorate was established in the southern Cook Islands in 1888.
contemporary discourse that constituted depopulation as logical and inevitable.\textsuperscript{91} Population decline stabilised by 1906, significantly the year that Dr Maui Pomare (then New Zealand’s Health Officer to Maori) made the first thorough health inspection of the group, but spending on medical services remained low, only reaching £500 in 1908.\textsuperscript{92} Although some improvements followed, with a new hospital opened and an Assistant Medical Officer employed in 1911,\textsuperscript{93} the Resident Commissioner in 1914 reported the population’s health as “deplorable”, with rampant yaws, filariasis, tuberculosis, venereal disease and leprosy all requiring immediate attention. Annexation brought responsibility for indigenous health and therefore, he asserted, “we are criminally negligent if we do not adopt some more effective measure ... to reduce the enormous mass of contagious and infective disease now existing.”\textsuperscript{94}

Undoubtedly such warnings contributed to the New Zealand administration’s favourable response to Heiser in 1916, when he first indicated the Rockefeller Foundation’s interest in the Cook Islands. His visit to New Zealand was unofficial, but he was given every assistance in his inquiries regarding health in the island territories. Shipping schedules ruled out any visit to the Cook Islands, so his remained a distant view, gleaned from past medical reports and conversations with officials in the Cook Islands’ Department in Wellington. These sources confirmed poor health conditions, but made no mention of hookworm infection. Heiser, however, assumed that in all probability the disease existed; it was just that no one had ever looked for it.\textsuperscript{95} His impression was that New Zealand was “much ashamed” of its past failure to promote the Islanders’ health, but was now ready to redress the slow pace of social and economic development, having in 1915 consolidated Cook Islands’ affairs into a single administrative Department in Wellington and appointed Dr Pomare as Minister.\textsuperscript{96} The Government was therefore receptive to Heiser’s suggestion for an infection

\textsuperscript{91} F.J. Moss, first British Resident, 1890-1898 had hoped that population decline might be reversed through remedial health initiatives: Raeburn Lange, “Health and Ill-Health in the Cook Islands”, (PhD Otago University 1982), pp. 210-218. His successor, W.E. Gudgeon, Resident Commissioner through the early years of annexation, (1900-1909) held strongly to the inevitable demise of Cook Islanders as a nice, and was therefore unwilling to waste resources on medical services. Gilson, *The Cook Islands*, pp. 179-180; Wilson, *Cook Islands and Niue*, p. 49.
\textsuperscript{92} Medical Services - Cook Islands”. IT 110/1:1.
\textsuperscript{93} See Medical Reports in *AJHR*, 1910, A-3A, pp. 3, 22; *AJHR* 1911, p. 6; *AJHR* 1913, A-3A, p. 4.
\textsuperscript{94} *AJHR*, 1915, A-3, p. 7.
\textsuperscript{95} Heiser, ”Report on Hookworm Infection and New Zealand”, 6 April 1916, p. 1, RFA RG. 5, Series 2, Box 40, Flhr. 239.
\textsuperscript{96} Heiser, “Notes on 1916 Trip”, pp. 97-98, APS/VHP
survey and subsequent co-operative hookworm treatment if appropriate. To both the IHB and Pomare he stressed that an extensive field survey would not only immediately ameliorate health conditions but would also indirectly effect subsequent improvements to health and medical services. Heiser also recorded the Government’s difficulties obtaining staff for the Cook Islands Medical Service, which currently had only one doctor, and discussions on the segregation and treatment of lepers.

The IHB’s withdrawal from Pacific work in 1918, the war, and strong opposition to the Government increasing subsidies to the Cook Islands conspired against any action on Heiser’s suggestions. However, Maori Ministers for the Cook Islands continued to support improvements in education and health services, and now Islanders, including those away from the southern main island of Raratonga, also pressed to have medical facilities extended. With insufficient staff and irregular shipping, the small distant islands, especially in the Northern Group, received only sporadic visits from medical officers and here missionaries, Resident Agents and European volunteers remained the back-up for an inadequate medical organisation.

Post-war improvements included: European district nurses appointed permanently for Aitutaki and Mangaia, which had large populations; beginning neosalvarsan treatment for yaws; increasing public health work with sanitary inspections, improved drainage and water supplies; and encouraging healthier housing. Following a visit in 1922, the Minister also decided to initiate health and hygiene education initiated in Cook Islands schools, following the Samoan model.

\[98\] Heiser to Pomare, 30 May 1916, “Notes on 1916 trip”, APS/VHP.
\[100\] Gilson, *The Cook Islands*, p. 167.
\[102\] *AJHR* 1922, A.-3, p. 7.
\[103\] Wilson, “The Cook Islands and Niue”, p. 50.
\[104\] “CI Medical - General School Hygiene 1922-48”: IT 1 110/1/3:1.
Lambert - extending hookworm

These moves to develop health services coincided with Lambert's plans to include the Cook Islands in his activities,\textsuperscript{105} even though IHB representatives had been assured as recently as 1919 that the Group harboured no hookworm.\textsuperscript{105} Medical personnel were obviously cognisant of parasitic infections and their clinical manifestations, having already identified \textit{Ascaris} (roundworm) as a health problem,\textsuperscript{107} yet saw no evidence of hookworm on which to comment. However, the publicity surrounding Lambert's work undoubtedly increased the attentiveness of others wanting to maintain their professional credibility, and in 1924 Dr McKenzie reported hookworm ova in the stools of 32 Rarotongan patients, 20 of whom were treated with thymol. That many of those infected were young children led McKenzie to surmise that the adult infection rate would be higher than expected. When a latrine survey in two villages found only six earth closets for 500-600 people,\textsuperscript{108} Resident Commissioner Ayson noted the disparity with previous reports on hookworm and the "very lax" public health efforts of past administrations, and proposed monthly inspections of all villages. The Medical Officer, the ariki, and village council members would combine efforts to encourage interest in improving sanitary conditions.\textsuperscript{109}

After his survey of Samoa, Lambert used Richardson as a liaison with Dr T.H.A. Valentine, the New Zealand Director-General of Health, to declare his eagerness to visit both the "Rarotonga Islands" and Niue, with his object the "betterment of the native races" there.\textsuperscript{110} His interest was the sanitary conditions and "the intestinal parasitic content" of Cook Islands Maori. Current underdevelopment could only be remedied by a large increase in population, and he suggested that a full survey would benefit both Cook Islanders and New

\textsuperscript{105} Lambert to Heiser, 18 August 1923, RFA RG. 5, Series 1.2, Box 167, Fldr. 2158.
\textsuperscript{106} Sawyer to Heiser, 10 August 1919, RFA RG. 5, Series 1.2, Box 81, Fldr. 1152.
\textsuperscript{107} \textit{AJHR} 1922, A.-3 p.8; \textit{AJHR} 1923, A.-3 p.4.
\textsuperscript{108} A. McKenzie to Ayson, 1 April 1924, IT 1 110/2:2:1
\textsuperscript{109} Ayson to CI Department, 3 April 1924, IT 1 110/2:2:1.
\textsuperscript{110} Lambert to Valentine, 8/1/1924, H.1 12651 170/436; Lambert to Heiser, 12 January 1924, RFA RG. 5, Series 1.2, Box 197, Fldr. 2515.
Zealand.\textsuperscript{111} Lambert's proposal was passed on to the Minister for the Cook Islands, who returned an invitation and assurances of every possible assistance.\textsuperscript{112}

Lambert, his family, and NMP Malakai Veisamasama had just completed several gruelling months of work and Pacific travel. After Western Samoa, the New Hebrides survey, during which Lambert contracted malaria, had taken five months through to September 1925. Lambert then travelled to Wellington where, meeting Pomare for the first time, he elicited the Minister's support for the health service scheme and medical school proposals. Moving on to Australia, Lambert spent time there recovering from malaria and propagandising for Papua and New Guinea involvement in the NMP school.\textsuperscript{113} The Cook Islands work, from November 1925 to January 1926, was to be the last of the hookworm-oriented investigations before the Lamberts returned to the US on leave, checking progress of the various campaigns in Fiji, Tonga, and Samoa en route, at the end of eight years in the Pacific region.

The Cook Islands programme was immediately circumscribed by the very factor which limited development of a satisfactory medical service: the complete absence of any regular shipping service, government or private, to transport medical staff and supplies among the islands. Lambert was fortunate, especially as it was hurricane season, that his visit coincided with a 5-week stock-taking cruise by a small Cook Islands Trading Company schooner, Tagua, although this excluded seven of the Northern islands from the survey.\textsuperscript{114} A hurricane disrupted progress but he managed several days each at most of the islands in the Lower Cooks, where with the Resident Agents' assistance Lambert and Malakai screened most of the people for medical conditions and made comprehensive filarial surveys. The usual lectures and display of preserved parasites preceded hookworm examinations, with Lambert observing that the standard hookworm

\begin{itemize}
\item\textsuperscript{111} Lambert to Valentine, 31 March 1925, HI 12651/436.
\item\textsuperscript{112} R. Burns to Gray, 27 April 1925: IT 1 11/5/2-1; Pomare to Lambert, 24 April 1925, HI 12651/436.
\item\textsuperscript{113} Lambert to Heiser, 1 September 1925, 31 October 1925 and 28 November 1925, all RFA RG. 5, Series 1.2, Box 229, Fldr. 2909. He was also invited to survey Niue, but because the "tide of population" had been thoroughly turned there, felt the trip unjustified. Niue's CMO, E.P. Ellison similarly commented, "I view the future of this branch of the Polynesian race optimistically. The old idea of their being doomed to extinction I do not entertain." AHR 1921-22, A.-3, p. 12.
\item\textsuperscript{114} Suvarov, Palmerston, Penrhyn (Tongareva), Manihiki, Rakahanga, Pukapuka and Nassau At least, "not easily enough to pay for the survey of so few people": Lambert to Sawyer, 8 January 1926, RFA RG. 5, Series 1.2, Box 262, Fldr. 3323.
\end{itemize}
chart "proved entirely satisfactory to these primitive people, who have not been made blasé by the modern cinema."\textsuperscript{115}

This was Lambert's most enjoyable survey, a strong contrast especially to recent experience in the New Hebrides. He was working on islands whose fertility, abundance, and beauty approached "the average man's conception of the ideal Pacific island", and he had the ready co-operation of Europeans and Islanders. If anything, Islanders' enthusiastic reception and feasting almost derailed the hookworm survey. As McKenzie had anticipated, the hookworm infection rate was high, averaging 70 percent for Polynesians and 56 percent for Europeans, but the level of infection light. Lambert found inexplicable variation among the islands, and for gender and age.\textsuperscript{116} Again, it was difficult to get accurate worm counts to determine the severity of infection — but this time hospitality and interest were to blame, rather than inexperience or indifference:

To rush on to an island, talk of a strange new disease, subject people to tests during which they must suffer confinement for forty-eight hours, the total length of the visit being three or four days, requires persuasive powers. Our visit was the most important affair of years on some islands, and each one who consented to tests was robbed of much of the pleasurable excitement...\textsuperscript{117}

Of 23 worm counts, only the seven obtained from prisoners in the Avarua gaol were fully reliable. In keeping with the general Polynesian trend, which Lambert attributed to "more cleanly habits of life", the counts showed fewer worms per person than results from Melanesians or East Indians living under similar climatic conditions.\textsuperscript{118}

Based on clinical evidence of parasite infection, including an unusually high rate of Ascaris lumbricoides, Lambert recommended mass treatments campaigns in two consecutive years, which with a subsequent campaign of hygiene education and latrine installation would eliminate parasites as an "economic factor". Lambert acknowledged that the Cook Islands was "a young colony with small means" but warned that its negligible sanitation practices required immediate action to control parasites and avoid Tonga's experience of epidemic typhoid. With sanitation the most important factor in tropical health, Lambert's

\textsuperscript{115} Lambert, "Health Survey of the Cook Islands, with special reference to hookworm disease", Appendix to Cook Islands Report, AJHR 1926, A.-3.
\textsuperscript{116} Ibid, pp. 36-37.
\textsuperscript{117} Ibid.
\textsuperscript{118} Ibid, pp. 37-38.
call to arms was straightforward: "Lock the stable door in the islands where the typhoid thief has not arrived! Build suitable latrines throughout the Group."  

Lambert did not consider the Cook Islands' other public health problems serious. Leprosy was widespread but could be eliminated by removing all lepers to Makogai for treatment. Yaws was under control. Filariasis and its accompaniment, mosquito control, he dismissed as outside the range of current knowledge; perhaps for the same reason, the widespread problem of tuberculosis went unmentioned.  

The Cook Islands survey report provided Lambert with a last opportunity to promote his aims before he left the Pacific, ostensibly on leave but with his future undecided. He concluded with a reminder that despite the diversity of colonial administrative systems, the Pacific groups faced similar social, economic, and medical problems, which reciprocity and a unified approach would handle more effectively than parochialism. Makogai was proof of this. Similarly, the proposed development of a regional Medical School would produce Native Medical Practitioners, who, "well-trained in western medicine, and understanding the Native mind, will do more than any other thing to check the decline of Native races and start the population on the up-grade, with a resultant productivity and prosperity of the South Pacific."  

**Taking Action**

The survey report, serialised in the New Zealand press, was a stimulus to action. Pomare was generous in his praise to both Lambert and the Rockefeller Foundation. Ayson also commended Lambert's work to the IHB, but disputed claims of poor public sanitation and increasing typhoid that were central to Lambert's recommendations. As in Western Samoa, the local administration considered Lambert's analysis inaccurate. Lambert conceded that he possibly

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110 Ibid, pp. 32, 40.  
120 Ibid, p 39. In the same annual report to which Lambert's was appended, the Acting CMO noted that pulmonary tuberculosis was responsible for 39.5% of the year's notified deaths. AJHR 1926, A-3, p. 7.  
121 Ibid, p. 40.  
122 Dominion 11, 12, 13, and 19 February 1926. IT 110/52.  
123 Pomare to Lambert, 8 February 1926. IT 1 110/52; Pomare to G. Vincent, 8 February 1926, RFA RG. 5, Series 1.2, 262, Fldr. 3320.
overstated typhoid figures but added, "... if Ayson wants to gild the Report too much it detracts from its value." 124 Despite this question over his conclusions, Lambert’s recommendations were accepted and hookworm work went ahead.

Apprehensive of criticism from Heiser that he was taking too long in the Cook Islands, 125 Lambert left without seeing the campaign established. But he trained a local Medical Officer in IHB examination, testing, and research methods. 126 The Administration ordered bulk drug supplies – 120 pounds of carbon tetrachloride, 8 pounds of chenopodium and a ton of magnesium sulphate – from the IHB, and a mass treatment programme began once these arrived. 127 By mid 1927, the populations of Rarotonga, Pukapuka, Manihiki, Rakahanga, and most of Mangaia and Aitutaki had been treated, except for a few Ratana adherents and others “still steeped in superstition.” 128 Ayson reported “splendid results” and ordered further drug supplies from the IHB. 129

A new CMO, Dr. E. F. Ellison, 130 arrived in May 1926, and directed fresh attention to health conditions on the islands away from Rarotonga. The Administration finally had its own vessel, the NZGS Hinemoa, which immediately collected forty lepers from around the Group and delivered them to Makogai. Improved access facilitated medical visits to the islands, but Ellison saw other measures as necessary to improve medical welfare. With their permanent health workers, Aitutaki and Mangaia showed consistent overall health improvements, and Ellison aspired, like Lambert, to the long-term goal of either an NMP or a nurse – or both – on every island. In the meantime alternatives were necessary. Given meagre financial resources and staff, he encouraged voluntary community action to lower both the infant and general death rates by establishing Baby and Children’s Welfare Committees and Sanitation Committees. As with similar initiatives in Niue, Fiji, and Samoa, the

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124 Lambert to Gray, 3 April 1926. Correspondence around these points - Gray to Ayson, 6 March 1926; Gray to Lambert, 17 March 1926; Ayson to Gray, 12 April 1926, all IT 1 110/52.
125 Lambert to Heiser, 3 August 1926, RFA RG. 5, Series 1.2. Box 262, Flldr. 3323. Heiser had hinted that Lambert might be posted elsewhere after his leave.
127 Lambert to IHB, Ayson to IHB, both 8 January 1926, RFA RG. 5, Series 1.2, Box 262, Flldr. 3320.
129 Ayson to IHB, 16 May 1927, RFA RG. 5, Series 1.2, Box 300, Flldr. 3801.
130 Edward Pohan Ellison had been highly praised for his “willing, unselfish, and efficient” efforts to improve Niuean health despite the financial stringency imposed by the New Zealand government. In June 1927 he left Rarotonga to replace Dr. P.H. Buck as Director of Maori Hygiene for the Dominion, but returned to the Cook Islands as CMO from 1931-1945: AJHR 1921-22, A.-3, p. 10; AJHR 1928, A.-3, p. 5.
women were provided with simple medicines, and coached in pre- and post-natal care, the proper conduct of labour, weaning, and childhood ailments.

Two promising students were also sent to begin training at the newly extended school for Native Medical Students in Suva. Meanwhile Ellison stressed that a third doctor was urgently needed during the current intensive phase of medical campaigns against prevalent tropical diseases. His plea for extra medical assistance echoed that of local Cook Islanders increasingly accepting of the western medical approach, and recommendations from the Surgeon-Commander of H.M.S. Dunedin after a naval cruise in the Northern Cooks.

In 1929, the general health of the people was reported to be good, with an apparently improved rate of natural increase. Remaining leprosy cases had been taken to Makogai, and although further occasional cases were anticipated, the demonstrated success of treatment meant that people were more willing to present examination and earlier diagnosis. Hookworm and yaws work continued, though the former was now considered endemic and the response to treatment varied. Tuberculosis, still the most serious and prevalent disease, claimed attention, with a sanatorium proposed.

By now, however, the Depression was biting deeply, and stringent economies followed. A slump in international copra prices worsened the Cook Islands' usual finance problems, leading to a reluctant curtailment of preventive and curative health services and public works. By 1931, the pressure on health services increased. The group was reduced to one doctor, and a severe hurricane caused loss of food crops, malnutrition and increased sickness on some islands. With New Zealand's finances in crisis, there were further steps to reduce its expenditure in the Cook Islands, and Ayson and Sir Apirana Ngata, Minister for the Cook Islands, battled to retain support and health services.

With limited resources, the Cook Islands Medical Department relied on community educational initiatives such as Ellison's to improve general hygiene

121 AJHR 1927, A.-3, pp. 6-7.
122 Ariki To'u to Pomare, (trans.) 15 December 1925: IT 1 110/5/2.
123 AJHR 1929, A.-3, pp. 10, 12.
125 6 new cases were diagnosed in the following two years: AJHR, 1930, A.-3, p. 5.
126 AJHR 1929, A.-3, pp. 9-12.
127 AJHR 1930, A.-3, pp. 1,4.
128 Aitutaki residents petitioned the Resident Commissioner for a doctor to alleviate resultant medical problems, 23 December 1931, forwarded by Resident Agent Luckham to Ayson, Ayson to Smith, 29 December 1931, IT 1 110/1:1; AJHR 1931, A.-3, pp. 4, 8-9
129 Smith to Ayson, 7 February 1931: IT 1 110/1:1
conditions, to avoid the cost of the soil sanitation campaign Lambert so strongly advocated. Apirana Ngata refused to accept the Public Service Commission recommendations to slash spending there, especially the 50 percent reduction in spending on leprosy patients.\textsuperscript{140}

Lambert appealed to the IHB to continue its public health activities in the South Pacific. He advocated an expanded version of the Rockefeller Foundation’s role, to ensure that public health projects continued despite reduced government spending. Western Samoa, Tonga, and the Cook Islands had followed Lambert’s advice on hookworm, yaws, and leprosy at their own expense; the only IHB contribution had been his time, some accommodation costs, and the savings it could offer through bulk purchases of drugs. Now these small Pacific groups entered a new co-operative relationship between this private philanthropic organisation and their governments.

\textsuperscript{140} Ibid, p. 3.
Chapter 10
The “excellent experiment” – Negotiating the Central Medical School

The hookworm and health survey programme during 1924-25 fulfilled the Rockefeller Foundation’s expectations for the Pacific, but for Lambert it was an unsatisfactory and inadequate enterprise to resolve the region’s health problems. Nevertheless it provided the opportunity to engage directly with colonial officials and medical staff in the Pacific territories, and persuade them of the value of co-operative activity, centralisation, and an indigenous medical workforce, which he saw as “the best final solution” to revitalising island populations. Inspired by Fiji’s Native Medical Practitioners, he advocated expansion of the Suva medical school to accommodate students from throughout the Pacific colonies. His enthusiastic plans secured local support, but not the requisite financial assistance he anticipated from the Rockefeller Foundation, which was committed to developing only high level professional scientific medical education. Despite this setback, the idea of a Central Medical School had developed enough momentum that island administrations agreed to fund the project themselves. The usual lack of resources forced compromises. When it became apparent that these might undermine the quality of future health services, the Rockefeller Foundation decided to give its support to the project, but only as part of a broader plan to establish centralised authority over Pacific medical administration. Again Lambert acted as a conduit for a Pacific initiative, transforming a local institution into one which catered for the wider region.

The Fiji Medical School

The Fiji Medical School and the NMP system on which Lambert based his plans for health development had been instituted over thirty years earlier, a response to the complex paradoxical interactions between colonialism and health status which Fiji demonstrated since its annexation in 1874.\(^1\) In 1879, approval was

\(^1\) The Colony’s first Governor, Sir Arthur Gordon, was determined to avoid the catastrophic consequences of conflict, landlessness and poverty that he saw as a corollary to colonisation elsewhere, and instituted policies intended to preserve to the Fijians their own land, labour and communal lifestyle, and thus prevent their exploitation by white settlers. Measles arrived in the
given to recruit labour from India. The full extent of indenture’s complications became apparent only in retrospect, but one problem was immediately obvious. Cholera and smallpox accompanied the first shipload of Indian labourers, constituting a serious threat to the non-immune Fijian population. Although a three-month quarantine was imposed on the immigrants’ arrival in Suva, such lengthy quarantine was expensive and difficult. Vaccination of the whole Fijian population was a more convenient protective step, but with the Medical Department already operating under the financial and staffing constraints which were to remain its perennial problems, employing European vaccinators was out of the question. Instead, the Chief Medical Officer, Dr William MacGregor, trained a team of young Fijians in vaccination techniques. Working throughout Fiji’s villages, they impressed MacGregor by also taking an interest in other diseases and conditions, and their reports revealed the extent of other health problems.2

With concern growing as the Fijian population continued to decline after the measles epidemic, McGregor proposed expanding the vaccination training programme,

... to form a class of students, carefully selected from among the most intelligent of the Fijian people, who, after completing a course of practical instruction in the hospital, including nursing, may be sent out to assist in healing the sick and arresting the spread of disease in ... the Colony.3

This project began in 1885, with a small group of youths given three years of instruction and clinical experience at the Colonial Hospital under the Superintendent and the Matron. The first three graduated after final exams in medicine and surgery in 1888, and were certificated as ‘Native Practitioners’ under an Ordinance passed that year. The scheme advanced steadily under the next CMO, Dr. B.G. Corney. The Chief Medical Officer had overall control, but once appointed to a district a Native Practitioner (NP) was under the direction and care of local native officials who provided living quarters and a small food plot. Salaries were paid jointly by the Province and the Government. Less than £10 per annum, this was an NP’s sole income, as they were prohibited from

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asking any further payment for their services and could not practise independently of government service.⁴

Although conceived of as ‘medical assistants’, the very conditions of remoteness, poor communication and European staff shortages that necessitated their existence meant that often NPs operated independently, frequently even without supervisory visits from District Medical Officers for many months. They assumed responsibility for communities, dispensaries and later, district hospitals and under these circumstances many became as skilled at handling local disease, sickness and surgery - if not more so - as some European medical staff.⁵ Yet the NPs remained a subordinate strata in the Medical Service.

However capable and conscientious, there was no consideration that they could ever be “real” doctors, with commensurate salary and social status. Europeans were yet to confront colonial relations. Although Fijians were so obviously able to acquire an acute understanding of the scientific principles and methods of contemporary medicine and surgery, they were deemed to be unready for the advanced education that would allow them the same level of professional qualification as Europeans. Skill in surgery, for example, was attributed to some intuitive familiarity with human anatomy inherited from cannibalistic forbears,⁶ rather than indicating a capacity for conceptual and empirical processing.⁷

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⁴ Hoodless, 1947, pp. 3-4.
⁵ Noteble were Aasaeti Tamaitiaokula, dispenser, anaesthetist and Government Pharmacist at Suva Hospital from 1891-1913 (Hoodless, 1947, p. 5) and Sowani Puamau in the Gilbert and Ellice Islands (Lambert, *Doctor in Paradise*, p. 387-388).
⁶ Lambert, *Doctor in Paradise*, p. 122; cf. E.H. Ackerknecht, *A Short History of Medicine*, Baltimore, 1982 (rev. ed.), p. 14. Whatever the explanation, skill in anatomy was possibly the most convincing proof to European of Fijians’ readiness for scientific medical training - this was after all the “foundation stone” from which all later specialisations of Western biomedicine evolved after the Renaissance, and an approach which differentiated Western medicine from other medical traditions, firmly establishing illness in the individual body rather than embedded in relationships to the wider cosmic or social world. R. Porter, *The Greatest Benefit to Mankind: A Medical History of Humanity*, New York, 1998, pp. 7-8.
⁷ Such misapprehension was general in the colony’s education system, which developed slowly because of the general attitude that “savages” could not, and furthermore, should not, be educated to be other than agriculturists or at most minor officials. Education, a mission rather than government enterprise, was oriented towards basic literacy in the vernacular, and it was this meagre grounding that supported the first students in their medical training. In 1902 the Council of Chiefs requested a government school of higher education for boys and began its own fund-raising. Opened in 1906, Queen Victoria College in Suva was later followed by Provincial schools which taught English and extended the curriculum beyond that provided in the villages. Of 5 provincial schools in 1917, only one received government subsidy, though a Board of Education constituted in 1916 aimed to increase government involvement and education standards. A handful received university education overseas, notably Oxford graduate, Ratu Laia Sukuna, and his brother, Ratu Jose Raibati Duivereita, whose education in New Zealand was opposed by many Europeans in Fiji. M. W. Guthrie, 1979, p. 11. After he graduated from Otago Medical School in the early 1930’s, the Administration was still unwilling to accept that he should be paid the same as a European Medical Officer.
However, as the Native Practitioner scheme demonstrated its potential, improvements were made. Accommodation and a classroom for lectures allowed a formal designation as 'The Fiji Medical School' in 1902. In 1905 their annual salary increased to £18, with annual £2 increments up to £50, and in 1917 it rose again, with three grades and a maximum of £150 for the most senior. Although their training was much less, many practitioners assumed workloads and duties little different from their European counterparts, and differential salary scales were based also on the assumption that Fijians had fewer needs and living expenses than expatriates. Situated in an indigenous communal subsistence lifestyle, logic followed that NPs should be paid less and did not need pension allowances. Affordability was a further rationale for using indigenous staff, so this inequitable system was maintained even when the Native Medical Practitioner programme was later elevated to a pivotal role in a centralised and accessible Pacific Health Service.

Fijian and European response to NMPs

The Native Practitioner (or Native Medical Practitioner) scheme began as the Chief Medical Officer’s response to the problems of delivering necessary health care, not as a Fijian initiative. However, Fijian leaders were already attempting to understand the dynamics of increased morbidity and mortality in their communities, and publicly expressing their concerns and looking for solutions. Population decline, infant mortality, nursing care and attitudes to the ill, and recourse to traditional medicines and the treatment provided in provincial hospitals, all came up for discussion at the Bose (Council of Chiefs) in the late nineteenth century. Yet the NMPs met with mixed response from Fijians, both leaders and commoners. Fijian leaders obviously approved of the scheme to train Fijians, initially providing most students from among their ranks, with two of the

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8 Lander and Miles, p. 9; Montague, Memo "Fiji Medical School", 5 February 1924, RFA RG. 1.1, Box 1, Fldr. 6.
9 Guthrie, Misi Um, p. 17; Governor’s addresses, Bose, 20/5/1914, and 30 May 1917, and Chiefs’ subsequent discussion, 2 June 1917. Until this increase, NMPs were paid less than Native Clerks in Government Departments (p. 12, 1914).
10 The same discriminatory practice applied to Indian Medical Officers in Fiji as well. Regarding one qualified surgeon, the Colonial Office recommended that because of prejudice, he should not be given rank above Sub-Assistant Surgeon, with a maximum salary of £250 and smaller allowances than his European counterpart: CO 83/146.
first three graduates coming from chiefly families. In the community, an individual practitioner who proved popular might find himself inundated with patients requesting his western-style medical treatment, while elsewhere villagers bypassed the hospital-trained, preferring traditional healers who offered herbal and massage therapies or supernatural alternatives. For various reasons, and even though they contributed through Provincial Funds, Fijians frequently avoided the hospitals provided in their districts. For some, earlier experience of poor facilities and staff inadequacies had left a poor impression of western therapeutics; others were fearful that they might die in the strange environment, as was often the case when the hospital was used as a last resort for patients in extremis after other remedies had failed.\textsuperscript{11}

The Administration valued the early NMPs’ work, seeing it worthwhile to encourage their experience and knowledge as an important contribution to population recovery.\textsuperscript{12} In 1911, Governor Sir Henry May suggested sending the best NMPs for extra training and qualifications in Australian hospitals, and allowing them to establish in private practice in the Group.\textsuperscript{13} Neither initiative eventuated, but indicated the government’s intention to raise NMPs’ profile. In 1920, Governor Rodwell specifically urged the Council of Chiefs to “not only comply yourselves with the orders that you receive from Native Medical Practitioners, but ... see that your people do not disregard them.”\textsuperscript{14} Fijians also demonstrated support for the Native Obstetric Nurses\textsuperscript{15} and NMPs. In 1914 the Provincial Councils readily agreed to increase their direct contributions to the Native Medical Service Council from £2,550 to £3,400 a year,\textsuperscript{16} and in 1917 the Chiefs expressed their “deep satisfaction” at the obvious increases in the Fijian population and voted that NMPs receive a salary increment of £5 annually rather than three-yearly as recommended by the Administration.\textsuperscript{17}

The quality and content of Native Practitioner education varied according to

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\item[12] Native Department Secretary to Colonial Secretary, 17 January 1911, 1911, p. 74.
\item[13] Sir Henry May, 27 June 1911, Proceedings of the Council of Chiefs, 1911. The following year May proposed that NMPs would be taught in English rather than Fijian, to improve training and better fit the students for education in overseas hospitals: Proceedings of the Council of Chiefs, 1912, pp. 8, 58.
\item[15] Native Obstetric Nurse training began about 1906.
\item[16] £5,509 was provided for “Medical Work among natives” that year: Governor’s address, 20 May 1914, p.12, Council of Chiefs, Proceedings, 1914.
\end{itemize}
\end{footnotesize}
the interests of current European medical staff at Suva Hospital. Improved elementary education facilitated training developments, gradually establishing a body of competent Fijian practitioners. Between 1888 and Lambert’s arrival in 1922, a total of ninety-seven practitioners had graduated, with a handful of these working in other Western Pacific High Commission territories. The influenza pandemic, which reached Fiji in 1918 and killed more than 7,000 people, proved without doubt MacGregor’s foresight in training Fijians. Many European Medical Officers were then away in the armed forces, and in their absence, with the Medical Service below strength, Fijian practitioners had administration of some provincial hospitals. Encountering influenza for the first time, they nevertheless provided all necessary care, although eight of the 40 NMPs then working in the group died as a result.\textsuperscript{18}

**Answer to a prayer? Lambert encounters NMP Malakai**

Reports of Fiji’s NMPs intrigued Lambert when he was working in Melanesia and nurturing his own ideas about the potential of indigenous medical staff. Assigned two as his assistants on the hookworm survey in Fiji, he soon had a first-hand opportunity to see these medically trained Islanders in action. After several months he was acknowledging the important part the Native Practitioners played in the Medical Department, and was ready to assign them a large degree of responsibility in continuing the hookworm work.\textsuperscript{19} In fact, it was the existence of district NMPs that allowed his radical proposal of annual repeat mass treatments to reduce hookworm rapidly throughout Fiji.\textsuperscript{20}

One recent NMP graduate, twenty year old Malakai Veisamasama, more than fulfilled every expectation of their capabilities, as Lambert explained:

… his inquisitive mind would never let a subject go until he had mastered it. He was a cannibal’s grandson, I have no doubt, so many of the best ones were. His favourite dish was scientific books, which he devoured. … He became the best microscopist … I have trained; his accurate eyes became mine in a work for which poor sight unfitted me. Moreover, he was father, mother, son, and valet to me. It was unseemly to set him to small drudgery. Malakai settled that question. When we were in the field

\textsuperscript{18} Rodwell to CO, “Report on Spanish Influenza”, 25 January 1919, CO83/145; M.W. Guthrie, 1979, pp. 17-18; Colonial Secretary’s Report, Fiji Blue Book 1918, p. 28, CO83/146.

\textsuperscript{19} Lambert to Chief Medical Officer, “Ankylostomiasis Campaign in Fiji”, 31 October 1922, RFA RG. 5 Series 3, Fldr. 162 “Fiji: Hookworm Disease Reports, 1918 and 1922”.

\textsuperscript{20} Lambert to Heiser, 22 February 1922, RFA RG. 5, Series 1.2, Box 141, Fldr. 1861.
he invariably laid out my clean clothes, and did laundry work among savages who were too ignorant for such things. At night he gave me my quinine, and he was always first up in the morning. ... Once my model Native Medical Practitioner fired the native cook and took over the job. Could he cook? Of course!\textsuperscript{21}

When Lambert began health surveys in the other Pacific groups, he made sure that Malakai always accompanied him. Lambert testified frequently to the numerous advantages of his Fijian medical assistant:

Malakai easily cuts the time of a survey in half especially in these islands where one is transported by Government or private boats and time is important with his assistance I can get many more places than alone [sic]. He goes third class when there is such a class.\textsuperscript{22}

Overall “he can save many times his salary in time”; as well, he was “very accurate and speedy”\textsuperscript{23} and altogether “a splendid advertisement for the of the value of the Fijian Native Practitioner [sic].”\textsuperscript{23}

Malakai’s propaganda value was essential in promoting Lambert’s strategy for Pacific health. Lambert himself was struck with the potential of an indigenous medical force, and determined to persuade others that this was the key to the recovery of Pacific populations. In accordance with standard IHB policy Heiser had urged him to train local personnel in soil sanitation work,\textsuperscript{24} to entrench the work and provide a nucleus as wider interest in public health developed. Lambert, however, had a sense of urgency, a desire for a more substantial transformation in the overall health service, rather than a slow conversion of the population by the example of a few relatively inconspicuous low-ranking hookworm assistants.

Aubrey Montague, Fiji’s CMO, shared his appreciation of Native Medical Practitioners, and agreed that the service could be extended to overcome medical problems throughout the Pacific territories. As part of their tripartite plan for developing a Pacific-wide medical service with key facilities centralised in Fiji (see Chapter 6), Montague had plans drawn up for an enlarged medical school, to be attached to the newly opened Colonial War Memorial Hospital in Suva.\textsuperscript{25} This

\textsuperscript{21} Lambert, \textit{Doctor in Paradise}, p. 125. Introducing his 1925 report on the Cook Islands, Lambert also made special mention of Malakai’s qualities as “a cheerful, competent, faithful assistant. ... He has been made much of in all the island groups, and has largely been treated there as a European: but now returns to Fiji the same simple, unspoiled Fijian gentleman as when he left.” Lambert “Health Survey of the Cook Islands”, p. 27, Appendix, A-3 \textit{AJHR} 1926.

\textsuperscript{22} Lambert to Heiser, 6 March 1924, RFA RG 5, Series 1.2, Box 197, Flkr. 2515.

\textsuperscript{23} Lambert to Heiser, 12 January 1924 RFA RG 5, Series 1.2, Box 197, Flkr. 2515.

\textsuperscript{24} Heiser to Lambert, 21 April 1923, RFA/Biographical File/Lambert, S.M./Folder 1.

\textsuperscript{25} This opened in 1923 to replace the original buildings which were ramshackle, overcrowded, and badly organised (the European women’s ward was exposed to people arriving, and the accommodation for native nurses was inadequate). The new hospital, “a fine ferro-concrete building including outpatient rooms, wards for 106 patients, operating rooms, clinical laboratory and x-ray
new concrete building, costed at £7,500, comprised a dissecting room, physiology lab, reading room and museum, and accommodation for thirty students, including fourteen from outside Fiji.\textsuperscript{26} Montague also readied his arguments for Governor Rodwell. The current hookworm treatment work would only be worthwhile if maintained permanently. British Pacific administrations needed to become self-sufficient, developing their own resources and adequate permanent staff. He reiterated Lambert’s premise: preventable diseases were “so prevalent ... as to greatly impair the general health and in some groups be leading to steady reduction of population.”\textsuperscript{27} Efforts in Fiji over the last 48 years had recently reversed population decline, but difficulties still existed there and in other Island groups. Islanders’ own ideas of disease causation and treatment methods meant apathy and passive resistance to seeking western medical treatment; furthermore, there were hundreds of small villages over a large area, accessible only by water or bush tracks, but it was impossible to get - let alone keep - European medical staff willing to travel among them attending to sanitation and the ill. The main problems were reaching Fijians in their homes and:

... convincing them that our methods are better for them than theirs. For this there must be an intermediary between the European doctor who is ignorant of their line of thought and the patients who believe that his methods are only good for his own race.\textsuperscript{28}

Fiji’s experience suggested that NMPs were the answer:

They know their countrymen’s mind and they can instil into it new thoughts, they cost comparatively little for salaries and so a considerable number of them can be employed; the people are naturally simple and honest, their economic system is largely a communistic one so that there is little or no danger of the Native Practitioner trying to obtain illicit gain.”\textsuperscript{29}

NMPs were willing to work in the villages, were competent under the supervision of European doctors, and by treating diseases that responded well to western medicine encouraged other Islanders to “place faith in western medicine and inclined towards a good will to civilisation.”\textsuperscript{30}

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\textsuperscript{25} Minutes, 28 September 1923, WPHC 1732/23. There were currently sixteen students, after the recent entry of four Fijian Indians.

\textsuperscript{26} Montague, Memo, 9 May 1924, WPHC 2339/1923.

\textsuperscript{27} Montague to Lambert, 11 October 1923, RFA RG. 1.1, Box 1, Fldr. 5.

\textsuperscript{28} Ihbid.

\textsuperscript{29} Montague, Memo, 9 May 1924, WPHC 2339/1923.
Rodwell retained the expanded medical school as central to a Pacific Health Service when he sent his modified version of Lambert’s proposal to the Colonial Office for approval.\footnote{31} Though he praised the existing NMP scheme, the Secretary of State concluded that current plans for development lacked detail.\footnote{32} Heiser also rejected Lambert’s suggestion that the IHB participate in establishing a Central Medical School, although Lambert argued that Rodwell and Montague were the “proper persons” to bring the plans to fruition, with profound and permanent benefits:

The Foundation gives cheerfully to help medical schools for Chinese, Spanish, English and where you please to people who are better able to help themselves than these poor blacks out here who are as eager for a chance of this sort as ever a white man was. ... They need it more here and the money would produce results at a far higher rate than in London or Canada or where you please.

It would put sanitation and public health work for BLACK fellows on a permanent basis in the Pacific.\footnote{33} [Lambert’s emphasis]

After this appeal for the Foundation to use its influence and Heiser his knowledge of the drastic consequences of Pacific ill health, Heiser referred the school proposal to Rockefeller advisors, in this case to Dr Richard M. Pearce, Director of the Foundation’s Division of Medical Education.

When Lambert applied for Rockefeller funding for a Pacific Medical School, the Foundation had been involved in medical education for a decade. Meanwhile it had refined its approach, establishing a model which was critical to the final success of scientific medicine as a privileged profession in the United States and which defined the particular character and direction of American medicine in the twentieth century. Under Rockefeller aegis, proponents also sought to establish the American model as the universal standard of scientific medical education.\footnote{34} Ironically, this Rockefeller-backed version of professional medicine ultimately

\footnote{31} See Chapter 6 above. Rodwell, Memo, 25 September 192, and Rodwell to Secretary of State for the Colonies, 9 October 1923, both WPHC 2339/1923.
\footnote{32} Secretary of State to Rodwell, 4 February 1924, WPHC 2339/1923.
\footnote{33} Lambert to Heiser, 12 October 1923, RFA RG. 1.1, Series 419L, Box 1, Fl dr. 5.
advanced clinical medicine to the detriment of its expressed interest in establishing preventive public health.\textsuperscript{35}

Like advocates for basic practitioner programmes elsewhere, Lambert perceived that the pragmatic rather than the theoretically ideal approach could best answer the region’s specific needs, and most successfully fulfil the Foundation’s aims of grafting scientific medicine into Island cultures. However, when he optimistically launched his proposition for a South Pacific Medical School, he came up against those in the Rockefeller Foundation who, having so recently established rigid parameters for professional medical education, would countenance no breach of them. Pearce sent Montague the standard exhaustive questionnaire on students’ pre-entry education levels, the facilities, faculty and planned syllabus, then unsurprisingly rejected the school as acceptably substandard.

Meanwhile, with the end of Governor Rodwell’s term in the Pacific, Lambert lost a key supporter of the project. Although the establishment in Fiji was convinced that the IHB-supported campaigns had been beneficial,\textsuperscript{36} and from familiarity with the NMPs’ work was in general agreement as to their value, other High Commission administrations, with different financial perspectives and priorities, and as yet without such happy exposure to Lambert or the value of NMPs, needed careful persuasion. The High Commission repackaged Lambert’s arguments for the Resident Commissioners in the Solomon Islands and GEIC: the NMP approach could resolve the whole problem of disease control among Pacific Islanders, and their current “variable” quality could be improved by concentrating medical teaching of the “most desirable boys” at one improved, central school. Furthermore, united efforts with centralised management and financial control over general health services would reduce costs and more likely ensure success than “individual and disjoined efforts”.\textsuperscript{37}

The response was lukewarm. GEIC Resident Commissioner McClure favoured tax relief over any new scheme though suggested reallocating funding earmarked for a second Medical Officer, to sending students to the proposed medical school.\textsuperscript{38} From the Solomon Islands, the Commissioner’s reply was

\textsuperscript{36} Lambert to R.H. Kirk (Comptroller, IHB), 22 January 1924, RFA RG. 5, Series 1.2, Box 197, Fltr. 2515.
\textsuperscript{37} Acting High Commissioner T.E. Fell, 4 June 1924, WPIC 2339/1923.
\textsuperscript{38} McClure to Fell, 18 September 1924, WPIC 2339/1923.
unequivocal: the scheme would be beneficial, it had the administration’s “entire sympathy”; but current medical provisions were adequate and all it could currently afford. Senior Medical Officer Dr A.G. Carment was more proactive, recommending that as there were no Solomon Islanders well enough educated to undertake three years' medical training, the Protectorate assist the Medical School so that Fijian NMPs could be trained for work in the Solomon Islands.

**Proselytising for Native Medical Practitioner training**

Lobbying for the scheme as he moved around the Pacific throughout 1924, Lambert received more encouragement. In Tonga he discussed the proposals with Queen Salote, Premier Tungi and the Privy Council, and despite Heiser’s constant warnings that the Foundation was not prepared to finance any further Pacific health projects, Lambert intimated that if all administrations indicated their “approval and moral support”, the Rockefeller Foundation would probably give favourable consideration to building a medical school. Tonga subsequently endorsed the proposed school as a solution to “one of the greatest difficulties with which small Island Governments are faced, viz., the proper education and training of native students in Western medical and surgical science.” Salote remained a staunch supporter, and her initiative later rescued the project when, contrary to Lambert’s expectations, the Foundation declined its assistance. The Western Samoa administration saw the advantage of more comprehensive training than it could offer through its medical cadet course at Apia Hospital, and Administrator Richardson promised to recommend the scheme to the New Zealand Government.

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39 This was surprising, as Rodwell had suggested that some of the Protectorate’s large surplus might be used to fund health work in the New Hebrides.
40 RC, BSIP, to Fell, 15 October 1924; includes SMO to RC, 26 July 1924, WPHC 2339/1923.
41 Heiser, in his Memo for Annual Report, 1923, noted that the IHB planned no financial participation beyond Lambert’s salary and travel expenses: Memo, 1924, APS/VHP.
42 McOwan to Acting High Commissioner, 18 July 1924, including Lambert’s memo, WPHC 1807/1924.
43 Lambert, A Doctor in Paradise, pp. 198, 211-212, 286.
44 Western Samoa also trained local nurses. In 1924 there were 9 graduate nurses in the Medical Service, with another 18 nurses and 11 medical assistants and medical cadets in training at Apia Hospital. Lambert, “Health Survey of Western Samoa”, p. 7, IT 1 8/21:1.
45 Richardson to Heiser, 3 September 1924, RFA RG. 1.1, Series 419L, Box 1, Folder 6. In Richardson to T.H.A. Valintine, the New Zealand Director-General of Health, (3 September 1924)
According to Lambert their support signalled the “irresistible logic” of the plan, which he now perceived emerged as much from latent local aspirations as his own idiosyncratic vision. However, the number of separate political entities wanting to participate inevitably meant difficulties in the School’s development and success, unless the Rockefeller Foundation – “a truly magic name” – combined with the Fiji Government to oversee the project. After all, he asserted, it exactly met the Foundation’s avowed humanitarian objectives and its economic criteria:

...such an investment by the Board would pay higher dividends in human lives (not health alone), than any other investment of a similar amount could give. Not a palliative treatment of the South Pacific question, ...but a drastic one, getting at the root of things. This is an investment that the Board looks for, which goes on and on in its dividend payments.\(^46\)

When Lambert attributed the idea of a Pacific medical school to local initiative and a substantial regional ground swell he was closer to the truth but still missing a crucial factor. In 1921 Fiji’s Methodist Mission applied for a government subsidy to build a nursing home and dispensary so that it could extend medical care to Indians. When the Fijian Administration could not subsidise the project, the Colonial Office authorised it to apply directly to the Rockefeller Foundation for assistance towards the cost of building a new hospital with modern, scientific equipment, and for the general running costs of the hospital and the Medical Department itself. The Foundation would not contemplate contributing to ordinary expenses, but indicated that it might consider an application to help improve the medical school, medical education, and training. The Governor pursued the subject the following year, for the first time mentioning training enough Fijian NMPs to send to other Pacific territories, and asking the Foundation for £10,000 for a school to increase both student numbers and efficiency. The Foundation was sympathetic but no longer encouraging.\(^47\)

Therefore Lambert, rather than the sole originator that later publicity about “Lambert’s school” implied, was a catalyst, whose position as conduit between colonial administration and philanthropy enabled him to give clearer expression

\(^46\) Lambert to IHB, 20 July 1924, RFA RG. 1.1, Series 419L, Box 1, Folder 6.

\(^47\) “Correspondence re proposed CMS for NMP training”, CO 83/177/8 Fiji 1927.
and direction to ideas already half-formed and emerging from an existing practice. The idea of indigenous medical practitioners was by no means novel or unique in the colonial world; as well as Fiji, other colonial administrations had long trained native assistants, and even fully-fledged doctors.\[^{48}\] In contrast to the narrow American prescription for medical education, such examples demonstrate continued acceptance of a wide range of medical training options within colonial imperatives, as does the Colonial Office’s praise of the existing Fiji Medical School and its encouraging response at least to the idea of its expansion, if not the expenditure. This could only increase as colonial outposts became increasingly responsive to the same revolution in scientific medical knowledge that was changing metropolitan concepts of health, disease, and possibility, as preventive and therapeutic developments intensified the need for trained medical personnel, and as new emphasis was placed on restoring vulnerable populations to health.

**Not a ‘Class A’ school**

Lambert’s experience meshed with the pragmatic British view that accepted tiered medical education both at home and abroad, but his superiors were less inclined to a flexible approach. When his proposal for a Pacific Native Medical Practitioner School was discussed at the November 1924 funding meeting of the Board in New York, Pearce responded, in Lambert’s words, with “an almost physical nausea.”\[^{49}\] Hyperbole aside, Pearce was disdainful about a school that would:

> ... prepare not doctors but men of the type of hospital stewards or hospital assistants ... DME [is] not prepared to enter any program which does not look forward to development of a school which gives men the right to practise under the laws of the country - in other words cannot consider schools for lesser grades of qualification.\[^{50}\]


\[^{50}\] Excerpt, Dr. Pearce’s diary, 11 November 1924, RFA RG. 1.1, Series 419L, Box 1, Folder 6.
He also questioned the economics of a Pacific school, given the small population and the difficulties of inter-island travel, the very conditions that Lambert argued made the school necessary. Cumpston also recommended assistance to the school during his visit in New York, but Pearce’s opinion was definitive, even though he professed “no interest”, considering the project more about public health than curative medicine. The project did not seem promising, IHB Director Frederick Russell subsequently told Heiser, and “it does not seem wise to have anything to do with a low grade medical school for natives.” By limiting its medical education support to university medical colleges (‘Class A’ institutions), the Foundation reiterated the higher value it assigned to curative medical practice, while denigrating public health training as ‘low grade’ effectively undermined its own professed interest in promoting public health.

The IHB advised Pacific administrations that the Pacific’s small population hardly justified the cost of a medical college; a more economic and efficient alternative could be to train medical students in New Zealand or Australia. Heiser assured Lambert that even if the Foundation had spare funds available, it would be unlikely ever to approve the project, but encouraged him to build on his “excellent beginning” as

It is also quite possible that the Governments of the South Seas would see this matter in a different light, ... and might be willing to organise a school along the lines which you have suggested.

Adapting an idea - local initiatives

Lambert chastised Heiser about the decision and the Board’s poor judgement in missing a “unique opportunity to show the catholicity of [its] endeavours”. Undaunted, he immediately looked for other ways in which he could access Rockefeller funding. He suggested that IHB assistance for yaws and hookworm could encourage the Island groups into building the school themselves.

51 F. F. Russell to Heiser, 13 November 1924, RFA R.G. 5 Series 1.2, Box 197, Fldr. 2512.
52 Heiser to Richardson, 21 November 1924, WPHC 333/1925. Russell suggested Rockefeller Foundation fellowships to Islanders to attend medical schools in New Zealand.
53 Correspondence, and Heiser to Lambert, 22 November 1924, WPHC 333/1925.
54 Lambert to Heiser, 9 November 1924, RFA RG. 5, Series 1.2, Box 197, Fldr 2517.
55 Lambert to Heiser, 12 January 1925, RFA RG. 1.1, Series 419f., Box 1, Fldr. 6.
setback proved short-lived, for discussions in Tonga early in 1925 reinvigorated the project. Consul McOwan agreed that the IHB decision deprived the medical school scheme of significant backing, but need not be a fatal blow to development. He considered training NMPs so vitally important for the future of Pacific races “that no spirit of parochialism should be permitted to enter into its consideration and no reasonable expenditure in funding ... should prove an insuperable difficulty.” The Tongan Government could approach the High Commissioner to invite all the Island Governments to proceed with the scheme, sharing capital expenditure on buildings and equipment in equal proportion. This was the opportunity to solve a difficult problem for all Island Governments, for whom a modest investment of around £1500 each could insure Islanders’ lives and economic efficiency. Even more than its benefits to their physical well being, McOwan valued the scheme as “a means of opening the way to the attainment of professional skill and knowledge in a Western science of definite value to the races”\textsuperscript{56}

Backed by Tungi and Salote, McOwan made a strong claim for regional identity and co-operation, as a “... first step towards a policy of federating island interests in matters of common concern.”\textsuperscript{57} Lambert also promoted more than health benefits from the school, including both “civilising” and “commercial” arguments when he referred the new proposal to Montague for his support:

Fiji cannot afford to let the chance go by. First it means a great improvement on the already high standard of her N.M.Ps. Second, it means £9000 most of it new capital spent in Suva with an additional outlay of an estimated £1400 to £1500 yearly of outside capital when the school is in operation. It will aid in making Fiji the central point in the South Pacific.\textsuperscript{58}

To be able to afford the school without any money from the Rockefeller Foundation, building plans had to be pared to the workable minimum: a classroom for 30 students, a small dissecting room, basic equipment, and an accommodation block with twelve small bedrooms and dining room. Costs would be proportional to the number of students admitted from each territory, with sixteen from Fiji, and four each from Tonga, the Gilbert and Ellice Islands, and Western Samoa. Annual cost for four students, for food, clothing, service, pocket money, equipment upkeep and incidentals, was calculated at £218. Ever

\textsuperscript{56} McOwan to Tungi, 29 January 1925; see also Tungi’s reply notifying the Privy Council’s approval, 7 February 1925, both in WPHC 333/1925.
\textsuperscript{57} McOwan to High Commissioner, 12 February 1925, WPHC 333/1925.
\textsuperscript{58} Lambert to Montague, 29 January 1925, WPHC 333/1925.
hopeful, Lambert suggested that the IHB might allow him to serve as tutor, thus saving the £800 salary needed to employ another Medical Officer; but the time of other medical staff was calculated, with each small administration paying one seventh. Because of its larger share of students, Fiji would pay four-sevenths of teaching costs and new capital expenditure, except the dormitory. It was also asked to donate a suitable site for the school.

There were now hopeful of confusing signs of the IHB’s interest in the region. The IHB would not assist the Medical School, nor, with its changing emphasis from public health demonstrations to research, would it agree to new co-operative treatment programmes. Heiser did suggest to Lambert, however, that some broader health plan might be favourably considered, and the IHB was therefore willing to keep him in the Pacific meantime to continue arousing further interest in health work. 59

Pearce continued to resist any DME funding except for a ‘Class A’ programme, even though this was neither feasible given the Pacific’s low education levels, nor warranted. To his mind the Pacific remained a public health problem rather than a medical one, more answerable by the IHB’s training sanitary inspectors or hospital assistants. This partly reflected his attempt the previous year to bring hygiene into the DME’s professional orbit, which Wickliffe Rose opposed on the grounds that hygiene should be kept as ‘pump priming’ public health training, accessible within the IHB’s overseas work. In their eventual compromise, the DME took over teaching hygiene to medical undergraduates, while the IHB focused on training for health officers. Again, rather than strengthening the position of preventive public health within medicine, as the Rockefeller Foundation hoped, this entrenched its subordinate position relative to the fundamental sciences.

Eventually, Pearce’s attitude to the CMS changed, and he became “very sympathetic” to Lambert’s perspective. Influenced by Heiser’s opinion of the NMPs’ medical work, Pearce realised that its extension could usefully relieve disease and ill-health elsewhere in the Pacific; and although adamant that the DME have no direct financial involvement, he hoped that the IHB could find a way to help the school, perhaps in an advisory capacity. The Board considered various options, then wrote encouragingly to Lambert, “we sincerely hope that

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59 Heiser to Lambert, 27 February 1925, RFA RG. 1.1, Series 419L, Box 1, Fldr. 6; Lambert to Heiser, 8 May 1925, RFA RG. 5, Series 1.2, Box 229, Fldr. 2909.
the objective can be realised. We see no objection to your giving as much time as you can spare to the development of the project.*60

Lambert, once again on the move, proselytised continuously, urging administrators to commit to the Medical School. In Australia, discussions with Cumpston on the Pacific scheme left him convinced that Papua and New Guinea would be keen future participants. The idea of the Medical School was gaining widespread support, he reported, and had the Secretary of State’s approval. Further progress depended on the new High Commissioner, Sir Eyre Hutson, who arrived in Suva in April 1925. Sir Maynard Hedstrom, an influential businessman and Fiji Legislative Councillor, promised active promotion of the School to the Governor; but this did not allay Lambert’s sudden anxieties over the fate of his plans. Under pressure from his survey schedule in the New Hebrides and uncertainty about the future, his railed against the IHB’s refusal to bestow funds and prestige on the School project.61 Stranded in the outer New Hebrides and unaware of Heiser’s growing sympathy for the project, his fretting intensified:

This school business seems so important in its bearing on the permanent establishment of public health in the South Pacific that it [sic] has become almost a disease with me. There are many many small obstacles in the way of it that may seem small, but will be big enough to stop it, that sometimes I get discouraged of its ultimate success. Meanwhile I talk talk talk and write write write and after a while things begin even if I may not get the school.62

Persuasion and progress

His talking and writing proved fruitful. Western Samoa, eager to enter the scheme once details were finalised, opened discussions with the new High Commissioner. The New Hebrides’ British Resident Commissioner, Smith-Rewse, agreed with Lambert on the potential of NMPs to meet medical requirements there and was hopeful that the French could be persuaded to commit

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*60 RF Memos, R. Pearce to Heiser, 21 April 1925, Heiser to Russell; Heiser to Lambert, 15 May 1925, RFA RG. 1.1, Series 419L, Box 1, Fldr. 6.
*61 Lambert to Heiser, 2 letters, 8 May 1925, RFA RG. 1.1, Series 419L, Box 1, Fldr. 6.
*62 Lambert to Heiser, 11 August 1925, RFA RG. 5, Series 1.2, Box 229, Fldr 2909. Lambert also used his report of the New Hebrides survey (pp. 40-41) to promote a medical education centre at Suva, WPHC 2494/25
to the new school. After considering the original Pacific Health Scheme proposal, Hutson informed the Western Pacific administrations and the Colonial Office that the complete scheme was too expensive, but the Central Medical School project was affordable and promised benefits that should not be delayed. McOwan wrote that Tonga considered the Medical School a “fait accompli” - at least on paper. Cumpston invited Lambert to a conference in Australia in late 1925, to discuss the future development of medical services in Papua, New Guinea and the Solomon Islands, and the Medical School scheme was on the agenda. Lambert’s hopes for Australian participation seemed justified when both Dr Cilento from New Guinea and Dr Strong from Papua promised to interest their Administrations in joining in the project. From Fiji Montague assured Lambert that it was “certain as anything” that building the extensions would begin early in 1926.

This general flurry of “hearty approbation” for Lambert’s school elicited favourable responses from Rockefeller officials, who also now saw his overall proposal for a Pacific health service as feasible in comparison to the kind of extravagant development Cumpston mooted during his subsequent visit to New York. Wilbur Sawyer, supportive of Lambert since their time working together in Australia, and now influential as head of the IHB laboratory service, reviewed the Board’s South Pacific file and reported on past and potential developments. Sawyer affirmed Lambert’s expertise and understanding of the Pacific situation, then gave critical support not just to the plan for the School, but for Lambert’s wider vision. “Doctor Lambert’s activities,” he said,

... seem to have prepared the way for some form of unified public health organization for the numerous small groups of people of this vast region. If a public health program can be presented which is broader than the present proposals, ... and more specific with regard to the later stages, I feel that the Board would be justified in contributing toward the expenses and that Doctor Lambert would be the man to represent the Board during the stages of organization.

Sawyer supported Lambert’s analysis of the School as “a means to an end”, and the proposed treatment campaigns a first stage in the development of a

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63 Lambert to Heiser, 1 September 1925; Smith- Rewse to Lambert, 17 September 1925, RFA RG. 1.1, Series 419L, Box 1, Fldr. 6.
64 Hutson to Western Pacific Resident Commissioners, 18 August 1925. CO 83/177/8.
65 McOwan to Lambert, 2 October 1925, RFA RG. 5, Series 1.2, Box 262, Fldr. 3322.
66 In the event Cumpton chose to advance his own plan on his subsequent visit to New York, rather than Lambert’s.
67 Lambert to Heiser, 20 October 1925, and 31 October 1925, RFA RG. 5, Series 1.2, Box 229, Fldr 2909; Lambert excerpt, n.d., unaddressed, RFA RG. 1.1, Series 419L, Box 1, Fldr. 6.
68 Sawyer to Russell, 20 November 1925, RFA RG. 1.1, Series 419L, Box 1, Fldr. 6.
permanent unified health organisation. He then outlined a plan which built on Lambert’s but was even more ambitious, combining central supervision with local autonomy in developing permanent local health units, mobile hookworm and yaws units, and a medical school which emphasised training in preventive medicine. With a recommendation that challenged previous policy, he suggested “that the Board would make no mistake in contributing toward such a program on a descending scale for five years, or possibly ten.”

With such support, a Pacific Medical School seemed unstoppable. In New Zealand Lambert discussed the plan with Sir Maui Pomare, Minister for the Cook Islands, who was “keenly interested” in the Cook Islands participating. Lambert also suggested to Hutson that the time was right to invite New Guinea, Papua, and American Samoa to enter. Western Samoa was so keen for NMPs that the New Zealand Government negotiated with the Western Pacific High Commissioner for two Samoan students to begin training at the existing school, and authorised Samoa to contribute to the costs of the enlarged one. Hutson, anxious to proceed, sent carefully prepared detailed plans to the Colonial Office for its approval, after which Fiji’s Legislative Council would make a final decision.

In his final report for 1925, Lambert noted, “Nothing definite to be said on [the school] as yet but I hope matters will be settled by end of this year. The matter is decided; only the question of size remains and money quotas.” Lambert thus touched on a main problem for the project; ironically, it came from his ally, CMO Montague, whose only fault in Lambert’s eyes was his “dreadful economy streak” and over-zealous budgeting, which Lambert feared would jeopardise the whole scheme by undermining the quality of training. For him, the priority was the school and production of properly trained NMPs, to fill immediate needs until a fully unified Pacific Health service could be organised. Lambert used his hookworm survey report from the Cook Islands to promote the school and the

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69 Lambert to Heiser, 20 October 1925 and 31 October 1925; Sawyer to Russell, 20 November 1925; and Sawyer to Lambert, 23 November 1925, all in RFA RG. 1.1, Series 419L, Box 1, Fldr. 6.
70 Lambert to Heiser, 28 November 1925, RFA RG. 5, Series 1.2, Box 229, Fldr 2909.
71 Prime Minister’s Secretary to Governor General, 20 November 1925; External Affairs Department to Richardson, 8 December 1925; Hutson to Secretary, Samoan Administration, and Governor General of New Zealand, 22 December 1925, F.1. 8/24:1.
72 Lambert to Sawyer, 8 January 1926, RFA RG. 5, Series 1.2, Box 252, Fldr 3322; Lambert, Memo, 18 June 1926, RFA RG. 1.1, Series 419L, Box 1, Fldr 7.
idea of Pacific unity in education and services, ideas well aired by the New Zealand press.73

At this crucial juncture, with plentiful enthusiasm but still no commitment from any of the parties, Lambert left early in 1926 for leave in the United States. He had a final interview with Hutson, who although he still had concerns about cost and resources, subsequently pressed the Secretary of State for a decision. The Governor identified Lambert's influence as the impetus for the Central Medical School and medical services in the Pacific:

... whilst I agree with [Dr Montague] that it is wise to "creep before we walk", I nevertheless cannot shut my eyes to the fact that Doctor Lambert's mission and work in the South Pacific, extending now over eight years, has deservedly excited a very keen and somewhat impatient interest in the medical care of natives among the various administrations, that is difficult to restrain.

... Doctor Lambert continues to be most enthusiastic about the establishment of a Central Medical School. [He] expressed unhesitatingly his views (they are naturally influenced by his training under the well-endowed Rockefeller Foundation), viz.: that it would be imperially unsound and a short-sighted policy to refrain from establishing a Central Native Medical School even at double the initial cost to that now proposed.74

Taking the argument home

In New York Lambert concentrated on convincing the IHB that it could accommodate the school scheme alongside its policy on medical education. Heiser still had doubts, so suggested that the IHB's "possible participation" could be postponed for at least another year, giving Lambert time to prepare a more satisfactory proposal.75

Before he left New York Lambert had prepared a "sound matured plan" that he hoped Heiser would support. This again placed the Central Medical School alongside co-operative treatment programmes in the field, with both operating within the context of a comprehensive, centralised Pacific Health Service. In his document, which introduced the Western Pacific territories as "a compact

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73 Lambert, “Health Survey of the Cook Islands, with special reference to hookworm disease”: AJHR A.-3, pp. 32, 40; Dominion, 19 February 1926, 20 February 1926, IT 110/52.
74 Governor to Secretary of State, 12 February 1926: CO 83/177/8 Fiji 1927. Heiser, Memo, 16 June 1926, and Lambert, Memo, 18 June 1926, both RFA RG. 1.1, Series 419L, Box 1, Fldr 7; Hutson had received recommendations for approval from most WPHC administrations.
75 Heiser, Memo, 16 June 1926, RFA RG. 1.1, Series 419L, Box 1, Fldr 7.
governmental unit centrally located in the South Pacific” with “adequate transport facilities”, Lambert presented a multi-stranded justification for saving the Melanesian and Polynesian races that was designed to appeal to all sentiments:

Ethically, they are distinct entities who have shown a high order of intellectuality, and have accomplished notable things. There still may arise great problems to which they may supply the answers. ... We Westerners talk with pride of Cook’s discovery of the Pacific groups in the late 18th century. Cook with the assistance of modern scientific instruments. [sic] The Polynesian, in the Stone Age, with his families, overran the whole Pacific, reaching to its remotest corners, and penetrating to the Antarctic probably two thousand years ago at least.

We moderns are groping for a solution of the problems of the social and economic relations of civilized man. In another 200 years we may work out a social state which is equal to that of pre-white Samoan society. Right now, barring her ignorance of modern diseases, Samoa has more to teach than she has to be taught.

Politically all agree that it is best for the world that these islands should not lose their native population to be replaced by Asiatics.

Economically, the world needs the products of these islands and these can be best developed by their natives. 76

Lambert warned that achievements from the previous “four years and three months” in the Pacific would be wasted, despite best intentions, because the medical system relied on white government personnel who changed frequently, unable to cope with the difficult circumstances encountered on isolated tropical islands. Centralised health control would help redress this problem, with a Chief Medical Officer overseeing all medical officers in the High Commission area, rather than leaving them responsible to individual Resident Commissioners. To drive the point home, Lambert painted a bleak picture of the expatriate Medical Officer:

He comes out to the islands, often with no knowledge of tropical medicine, frequently an alcoholic, usually a medical cripple of some sort. ... He does what he chooses. Often at the start he wants to learn his work and do his best for the native but he is handicapped by a lack of knowledge of the languages and customs and his best efforts for something better are apt to be opposed by his lay superior who is sure from his experience (and lack of knowledge) that such efforts are useless. The result is that good men get out and the others resign themselves, each year more easily, to letting things take their course. 77

76 This citation and all subsequent information on the scheme comes from Lambert to Heiser, 30 July 1926; Lambert, “The South Pacific”, Lambert, Memo and 1927 South Pacific Budget, 3 September 1926, all in RFA RG. 1.1, Series 419L, Box 1, Fltr 7; Lambert to Heiser, 17 August 1926, RFA RG. 5, Series 1.2, Box 262, Fltr 3323.
77 Lambert, “The South Pacific”, p. 6, RFA RG. 1.1, Series 419L, Box 1, Fltr 7.
Costly salaries, cultural unfamiliarity, and hard conditions made a wholly white-staffed medical service unsuitable. Health and medical work was unsystematic, uncoordinated, and wholly dependent on the enthusiasm of individuals. Native doctors were the obvious solution, but the current education system mitigated against training them to Western standards, which in any case would reproduce existing problems: the cost of training and employing the number required, if fully qualified; and as had been experienced elsewhere, the reluctance of an educated elite to "go out in the wilds and work." Besides, the current Fiji training was completely adequate.

A coherent plan

The IHB's work had aroused interest in public health, and Lambert intended to build on this with a plan that brought current developments together into a permanent and coherent health service for the Western Pacific. First, Suva would become the centre of a High Commission Medical Service, with Fiji's Chief Medical Officer overseeing all its European Medical Officers. The prohibitive cost of employing enough white doctors to meet the region's needs took Lambert from centralisation to devolution in his second step: enlarging the Medical School to supply qualified indigenous practitioners who would be responsible for small local hospitals and communities, but still under European medical supervision. The third crucial aspect of the plan was the Travelling Medical Officer of Health (TMOH), who would liaise between all levels and regions. Fourth, with health issues such as yaws, hookworm and soil sanitation, together responsible for around 90 per cent of preventable illness, ambulatory treatment and education field units were essential, until the NMP service was adequately established. Finally, the Medical School needed to be able to provide regular refresher courses for graduate NMPs, and to accommodate students for the Australian and New Zealand dependencies. With a flexible approach to structure and participation, the initial High Commission Health Service might eventually develop into a South Pacific Service for all the British territories.

Lambert stressed that the Central Medical School met the Pacific's needs and was critical to future public health developments there, and he therefore suggested a compromise to overcome the Foundation's unease at being identified as initiator of a school that compromised its principles. Rather than current
inadequate Pacific plans to expand the school to thirty students, he proposed planning for forty, with a full-time teacher and a longer professional training. His main fear was that difficulty getting capital funds for building would mean necessary economies but ongoing problems.

Lambert itemised the costs:

For a Central Health Authority in the Western Pacific High Commission

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Cost (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 1</td>
<td>40 medical students @ £90</td>
<td>£3600</td>
</tr>
<tr>
<td>*Item 2</td>
<td>Travelling treatment units</td>
<td>£3610</td>
</tr>
<tr>
<td>Item 3</td>
<td>CMO salary</td>
<td>£300</td>
</tr>
<tr>
<td>Item 4</td>
<td>Office Budget</td>
<td>£600</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>£8100</td>
</tr>
</tbody>
</table>

*For two mobile units to treat hookworm, soil pollution and yaws

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Cost (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary of TMOH</td>
<td></td>
<td>£1000</td>
</tr>
<tr>
<td>Travel and expenses</td>
<td></td>
<td>£300</td>
</tr>
<tr>
<td>Salary of lay unit leader (European)</td>
<td></td>
<td>£500</td>
</tr>
<tr>
<td>Travel and expenses</td>
<td></td>
<td>£150</td>
</tr>
<tr>
<td>Salary of 3 NMPs</td>
<td></td>
<td>£360</td>
</tr>
<tr>
<td>Travel and expenses</td>
<td></td>
<td>£100</td>
</tr>
<tr>
<td>Drugs and equipment</td>
<td></td>
<td>£800</td>
</tr>
<tr>
<td>Contingent</td>
<td></td>
<td>£400</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>£3610</td>
</tr>
</tbody>
</table>

The Board’s initial 75 percent subsidy would decrease gradually to 15 percent by 1931, when the Pacific governments would assume full costs with all except the mobile units being permanent. Lambert also asked the IHB to grant an extra £2000 in 1927, as the local administrations had so far been able to raise only £5000 towards the school’s construction. By 1931 the IHB would have contributed £17,000 and the Western Pacific High Commission, a weighty £20,000 to £23,000.

Lambert had to wait until the IHB annual meeting in November for a decision on this new scheme. Heiser contacted Cumpston, who was organising an international conference on Pacific health to be held in Australia in December, informing him that the Foundation was now favourably considering Lambert’s, rather than his, recommendations for the Pacific. The Foundation wanted to

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78 Heiser to Lambert, 27 September 1926: RFA RG. 1.1, Series 419L, Box 1, Fldr 7.
make sure that such a move would not conflict with any Australian plans. Heiser and Rockefeller President George Vincent also cleared the IHB's possible involvement with Pearce, who was agreeable as long as his own Medical Education Division remained untainted by association with a "low-grade medical school".

Meanwhile, Pacific administrations were proceeding with their original plan for enlarging the school. Health work initiated earlier by the IHB maintained a high profile for the scheme; so too did a Methodist Mission request for Fijian NMPs to work in Papua and New Guinea, which Lambert thought indicated inevitable Australian participation. Certain of the Secretary of State's approval, arrangements were made for two Samoan and two Gilbertese students to begin training immediately. However, the Colonial Advisory Medical and Sanitation Committee, although supportive, now wanted matters clarified further.

Approval, confusion, compromise, and clarification

In November 1926 the Rockefeller Foundation finally approved Lambert's proposal for the CMS, voting $10,000 for public health education in the South Pacific for the following year. The School was accepted as an integral step towards a wider unified Pacific Health Service, supplying a native rural service under European control and permanently entrenching the results of the hookworm campaign and other IHB activities in the Pacific.

At the same time, however, the Fiji Legislative Council unanimously agreed to the earlier regional plan, to enlarge the medical school to take 30 students. The IHB accepted this as a significant signal of Pacific interest and commitment, but was now apprehensive that - as Lambert had argued - such a school would be

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79 Heiser to Cumpston, 10 September 1926, 9 November 1926, 20 November 1926; Cumpston to Heiser, 14 October 1926 and 10 November 1926, all in RFA RG. 1.1, Series 419L, Box 1, Fl dr 7.
80 Russell to Pearce, 20 October 1926, Vincent to Pearce, 21 October 1926, both in RFA RG. 1.1, Series 419L, Box 1, Fl dr 7.
81 Lambert to Heiser, 17 August 1926, Heiser to Lambert, 27 September 1926, Lambert to Heiser, 3 October 1926, all RFA RG. 5, Series 1.2, Box 262 Fl dr 3323; Heiser, Budget estimates, RFA RG. 1.1 Series 419L Box 1, Fl dr 7; Secretary of State, CO, to Governor Fiji, 28 August 1926: CO 83/1778.
82 The Rockefeller Foundation's total budget for public health education projects world-wide for 1927 was $1,552,500: Heiser, Budget estimates for November meeting, RFA RG. 1.1 Series 419L Box 1, Fl dr 7.
83 'Minutes if the IHB, 4 November 1926 - Working Program for 1927, South Pacific', RFA RG. 1.1 Series 419L Box 1, Fl dr 5.
inadequate, and offered Lambert's services to negotiate the larger project. This cleared the way for his return to Fiji in January 1927 with the anticipation that the scheme would begin that year.84

The Foundation's new proposals meant that the High Commissioner had to re-present the scheme to all parties - the Secretary of State, Fiji's Legislative Council, the Samoan and Tongan administrations, the New Zealand government, and the British Resident Commissioner in the New Hebrides, who had to confer with his French counterpart. Fiji's Executive and Legislative Councils, eager at the chance to enhance Fiji's pivotal position in the Pacific, registered their unanimous compliance with the Rockefeller terms for the school, and voted £5000 for an immediate start to building. In his capacity as Governor of Fiji Hutson was happy to accept the motion, which demonstrated to the Foundation "that this Colony is quite alive to the importance of the establishment of a Medical School and is willing to do what it can to meet the views put forward by their Director." As High Commissioner of the Western Pacific, however, he anticipated problems as the Foundation's offer to contribute to the school was conditional on the adoption of the scheme as a whole, including the Central Authority and the co-operative treatment programmes.

Most potential difficulties centred on the proposal that Fiji's Chief Medical Officer become the controlling authority over health schemes in all the Commission's territory. Hutson anticipated that the French in the New Hebrides would reject this outright, but also saw it as problematic for the British dependencies, each with its distinctive system of administration, revenue and employment. Communication difficulties and the CMO's lack of familiarity with conditions outside Fiji would create further problems. Also disturbing to colonial officials was the IHB offer to partly fund a £300 salary increase to reimburse the CMO Fiji for his increased responsibilities. To public servants like Montague, imbued with British civil service sensibility, payment from an extragovernmental source (especially one that was private, American, and big business) was an anathema.85

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84 Hutson to Amery, Secretary of State, 9 December 1926: CO 83/177/8; Heiser to Montague, 20 November 1926, Montague to Heiser, 22 November 1926, Lambert to Heiser, 24 November 1926, Heiser to Lambert, 30 November 1926, Vincent to Richardson, 20 December 1926, Heiser to Cumpston, 14 January 1927, all in RFA RG. 11 Series 419L Box 1, Fldr 7; Heiser Memo, 30 December 1926, RFA RG. 5 Series 1.2 Box 262 Fldr 3323.

Having mostly expected opposition to the financial expenditure, Lambert had not fully considered the political ramifications of centralising health administration in Fiji - apparently akin, he now reported to Heiser, to suggesting a subversive change in the High Commission Government. The advisory and consultative relations between the medical authority and Resident Commissioners that Lambert defined as necessary for centralisation would alter the established administrative hierarchy: authority over medical activities and recruitment, currently the prerogative of Resident Commissioners, would be transferred to the CMO Fiji. Lambert stressed that while the scheme was flexible in many aspects, commitment to a Central Medical Authority for the Western Pacific was non-negotiable; neither he nor the Board would compromise on the concept, which was equal in importance to the Central Medical School:

I believe that that idea of centralization was the thing that won my Board to this plan of co-operation and I certainly would not feel honest to recommend them to consider any other alternative. ... It will establish the principle of centralization in health matters in the South Pacific and the sharing of common experiences between all British groups and eventually it will mean a common Health Service there. ... I have fought for an enlarged Central School with my people, and a beginning of a Central Health Administration. If I don't [sic] get it I will have to go home and tell my people I have failed in that venture.  

Although Lambert remained mystified by the political reasoning behind it, a change of name from “CMO for the High Commission” to “Central Medical Authority for the South Pacific and Advisor to the High Commissioner” finally cleared the way for Hutson’s commitment to centralisation, at least in principle. Lambert settled for Fiji, the British Solomon Islands Protectorate, and the Gilbert and Ellice Islands as constituting the ‘Western Pacific High Commission’, conceding Hutson’s inability to speak on behalf of the New Hebrides Condominium or Tongan governments, and hoping that the benefits demonstrated by unified health efforts would persuade these administrations to join later, along with Western Samoa and Rarotonga. The scheme still depended on agreement from the various dependencies, where Senior Medical Officers would now also be answerable to the Central Medical Authority but would nevertheless, Lambert reassured Hutson, “figure largely in the local direction of these plans. There is

87 Lambert to Heiser, 1 March 1927, RFA RG. 1.1, Series 419L, Box 1, Folder 7.
88 Hutson to the Secretary of State, 28 February 1927: NHISS 1/1329/1928.
not the least intention of superseding them. The whole intent is to strengthen their position and help their efforts. 89

Success by strategy

It was March 1927 before Hutson’s had his recommendations ready to forward to the Colonial Office. 90 Privately, Lambert chafed at the High Commissioner’s circumspect approach:

They forgive me a lot here I think as I only pretend to be a broad ax diplomat, ask for what I want and why, and cheerfully take what I can get. But I’ll be truly glad to get away from the British at the end of this term, for although they are nice to me they don’t like America or Americans in general and are altogether another kind of folks. Me, they regard as a reformed American. 91

He eventually negotiated behind the scenes with Sir Maynard Hedstrom to push the proposal through the Legislative Council. Once Fiji committed to building a medical school according to the Rockefeller plan, further protracted correspondence among the administrations was effectively circumvented. Finally, Lambert could inform Heiser that all essential aspects of the proposed scheme had been settled, except for establishing the travelling Medical Officer as a permanent position. 92

The Colonial Office, now taking a fresh interest in the Empire’s health issues, 93 also approved arrangements. In contrast to the United States, the British had no philosophical objection to developing “subordinate medical services”, supporting such training elsewhere in the Empire. There was no objection to colonies accepting financial assistance from the Foundation and proposed centralisation of medical services matched Colonial Office policy which

90 Enclosed correspondence in the despatch (48) tracked the proposal since Lambert’s return to Fiji. Governor to the Secretary of State, 28 February 1927: CO 83/177/8
91 Lambert to R.C. Dean, 2 March 1927, RFA RG. 5 Series 1.2 Box 300 Fltr. 3803.
92 Lambert to Heiser, 1 March 1927: RFA RG. 1.1 Series 419L, Box 1, Fltr. 7. Hedstrom later confided to Heiser the difficulty in getting the government to undertake the NMP project: Heiser, Diary, 4 July 1928, APS/VIIP.
93 An enthusiastic medical advisor, Dr A. T. Stanton, had recently been appointed. Stanton was given the status of an Assistant Secretary, with direct access to the Minister for the Colonies - a distinction which, Heiser noted, aroused the hostility of the ‘old fossils’ in the Colonial Office. During Heiser’s visit to England in October 1927, Stanton wanted to discuss many issues, including
"consistently advocated the grouping of Medical Departments, where possible, under one Head."^34

Further problems

In May 1927 the Rockefeller Foundation’s Executive Committee resolved:

that $10,000 be appropriated of which so much as may be necessary shall be used to purchase £2000 to be paid toward enlargement of the buildings of the school for native medical assistants at Suva.

... that the Rockefeller Foundation hereby pledges itself to contribute towards the maintenance of the school for native medical assistants at Suva, Fiji, and the health service of the High Commission group of islands, the sum of £15,247 during a period of 4 years.^35

In the IHB, action promptly followed a considered decision, demonstrating the incisiveness that differentiated the agency from government bureaucracies and allowed it to become a leading force in international health programmes. Funds were immediately provided to begin the scheme. This affirmation and Frederick Russell’s hearty congratulations to Lambert, signalled that the latter had triumphed in his challenge against established Foundation policy on medical education. To Lambert, the draft plans for the new school buildings looked “very sweet”, no matter how paltry they appeared in comparison to other Foundation efforts.^36

Although he had also negotiated the labyrinth of colonial government and gained approval for the project, Lambert now found himself mired in convoluted bureaucratic process, with final details and ratification of the agreement in Fiji taking “more time with this small Government than the Versailles Treaty.”^37

Finally, at the end of June the Fiji Government signed the terms the Foundation had set regarding its appropriations for the Central Medical School: £2000 outright in 1927, and a decreasing percentage of £2,750 (the difference between

the CMS. His poor understanding of the School surprised Heiser: Heiser, 27 May 1926 and 18 October 1927, ‘Travel Notes for Several Years’, APS/ VHP.

^34 Secretary of State to Fiji Governor, 28 August 1926, Minutes, Despatch #48, all CO 83/177/8.
^35 Minutes of the Rockefeller Foundation 25 May 1927 - South Pacific, RFA RG. 1.1, Series 419L, Box 1, Fldr. 5.
^36 Russell to Lambert, 26 April 1927; Lambert to Heiser, 20 April 1927, both RFA RG. 1.1, Series 419L, Box 1, Fldr 7.
the original plan and the increased annual cost of the enlarged school) over the following four years, with Fiji providing Lambert with free office space, telephone services, postage, printing, and exemptions from Customs duty and income tax.\textsuperscript{98}

Fiji’s commitment was an essential step, but there were other problems. The success of the school depended on the full participation of all those who had originally pledged support, and Lambert was faced with an apparently inexplicable loss of interest in the Central Medical School scheme by one of its early enthusiasts, the Cook Islands. Eventually he found the cause. In 1926 New Zealand’s Minister for the Cook Islands, Sir Maui Pomare, had accompanied the first boatload of Cook Island lepers to their new quarters at Makogai leper station, and after a long rugged passage, had overseen the careful landing of the patients. When he went ashore Pomare was stopped by the receiving Medical Officer, and directed to the “coloured” area. The incident reflected the endemic racist attitudes and assumptions in the colonial service. The Minister, furious at this treatment from a white colonial officer, immediately refused any further participation in High Commission-sponsored health projects, including the School. Late in 1927 Hutson asked Lambert to visit Wellington as an unofficial representative, in an effort to persuade Pomare to bring the Cook Islands back into the scheme.\textsuperscript{99} He succeeded.\textsuperscript{100}

The Foundation’s assistance with the new medical school was predicated on the Western Pacific territories agreeing to co-operative medical programmes against hookworm and yaws, with the Solomon Islands and New Hebrides prime targets. Effectively still outside the reach of scientific medicine, their large populations were a tantalising virgin territory for setting up a health services infrastructure and represented crucial substance for the vitalised Pacific network that Lambert envisaged. With his earlier successful hookworm demonstration in

\textsuperscript{97} Lambert to Heiser, 8 June 1927, RFA RG. 5, Series 1.2, Box 300, Flldr3803; Lambert to Rockefeller Foundation, 8 June 1927, RFA RG.1.1, Series 419L, Box 1, Fldr. 7.
\textsuperscript{98} Seymour to Lambert, 28 June 1927 and Lambert to Heiser, 4 August 1927, RFA RG. 5, Series 1.2, Box 300, Fldr. 3804.
\textsuperscript{99} Describing this incident in A Doctor in Paradise, (1946, pp. 281-284) Lambert distorts the sequence of events, stating that he visited Pomare in New Zealand to salvage the situation in January 1927, almost immediately after arriving back from his US leave and hearing of the events from Montague. In fact his correspondence shows that it was months before he understood the reasons for Pomare’s withdrawal from the scheme, and October before he actually went to Wellington to confer with the Minister: Lambert to Heiser, 22 June 1927, RFA RG. 5 Series 1.2, Box 300, Flldr. 3803; also 31 August 1927, 28 September 1927, 29 September 1927, 2 November 1927, all RFA RG. 5, Series 1.2, Box 300, Fldr. 3804.
\textsuperscript{100} Lambert to Heiser, 19 January 1928, RFA RG. 2, Series 419H, Box 9, Fldr. 75; Lambert, “South Pacific Islands, Report for 1927”, p. 3, RFA RG. 5, Series 3, Box 162, Flldr. Fiji Hookworm Disease Reports, 1923-27.
the Solomons, Lever’s follow-up treatment programme with its acknowledged benefits, and the High Commissioner’s support, the Protectorate’s participation was assured.\textsuperscript{101}

There was no similar commitment from the New Hebrides, where the French and British were jostling for economic and political control, and Lambert had little direct influence despite successfully engineering agreement on a rudimentary Condominium medical service after his 1925 survey there. Relations between the two Condominium administrations were at a new low. Hutson, wary of further complications, stopped Lambert pursuing the matter himself, preferring to have George Joy, the British Resident Commissioner, negotiate with his French counterpart, Msr Henri d’Arboussier.\textsuperscript{102} Joy’s claims that the Condominium completely disregarded its responsibility for native well-being drew a counter-response from d’Arboussier, who was unmoved by assertions that it was:

... unlikely that the future will again hold out to us such a carefully thought out, organised, philanthropic medical scheme by an Institution which has no ulterior motive than the welfare of the native races of the Pacific.\textsuperscript{103}

Lambert was anxious that the French might refuse the scheme altogether, and with Hutson’s approval prepared a letter for d’Arboussier reminding him that the Rockefeller Foundation was outside politics, and that their past conversations had implied agreement that the New Hebrides would participate.\textsuperscript{104} This approach had results: the Condominium Government approved 100,000 francs for the medical campaign and NMP training, conditional on agreement from the French High Commissioner in Noumea.\textsuperscript{105} However, the Budget allocation fell £30 short of that required for the Rockefeller project, and with Joy loathe to press for the extra, the New Hebrides was excluded from the Western Pacific Health Campaign which was formally inaugurated late in 1927.\textsuperscript{106}

\textsuperscript{101} Vaskess to Lambert, 16 July 1927, WPHC 230/1928; Lambert to Heiser, 22 June 1927, RFA RG. 5, Series 1.2, Box 300, Fldr. 3803; Lambert to Heiser, 4 August 1927, RFA RG. 5, Series 1.2, Box 300, Fldr. 3804.

\textsuperscript{102} Lambert to Heiser, 15 June 1927, 22 June 1927, RFA RG. 5 Series 1.2, Box 300, Fldr. 3803.

\textsuperscript{103} Joy to d’Arboussier, and d’Arboussier to Joy, 12 September 1927, WPHC 2173/1927

\textsuperscript{104} Lambert to d’Arboussier, 19 September 1927 and Vaskess to Lambert, 20 September 1927, WPHC 2173/1927; Lambert to Heiser, 29 September 1927, RFA RG. 5, Series 1.2, Box 300, Fldr. 3804.

\textsuperscript{105} Joy remained pessimistic about the Joy to High Commissioner, WPHC, 6 October 1927, WPHC 2173/1927.

\textsuperscript{106} This also established the Central Medical Authority as a permanent officer of the Western Pacific High Commission, with Lambert appointed Deputy CMA.
Later the French High Commissioner began to show serious interest in the treatment programmes, but a continued refusal to participate in the Central Medical School\textsuperscript{107} met with equal obduracy from Lambert. Access to the Foundation's investment in demonstration fieldwork was now dependent on agreeing to systematic follow up work by Native Medical Practitioners.\textsuperscript{108} The stalemate in the New Hebrides continued even after Lambert, unwilling to let the opportunity pass for some "salvage work" there, suggested as an alternative that the IHB contract with the British Condominium Government alone.\textsuperscript{109} Even then the British procrastinated for months, only acting when it seemed that Rockefeller funding might be permanently diverted to other Groups. Again trying for French co-operation, Joy argued that "The whole idea is entirely humane and philanthropic, and has no object whatever in view, other than the medical care and preservation of the Pacific races." To his frustration, d'Arboussier remained unmoved, claiming "no connection between the two schemes nor reason why adoption of one should involve adoption of [the] other." From this, the High Commission Secretary concluded:

I imagine that the French made up their minds long ago that the scheme should never operate in the New Hebrides and not daring to openly oppose it and thus admit that the native welfare is a matter of indifference, decided to kill it by indirect method.\textsuperscript{110}

The Secretary of State then decided to act, offering to approach Treasury for British funds so that the British Condominium could secure its place in the Foundation's scheme, even if the French continued their refusal.\textsuperscript{111} As Lambert later recounted:

After an interval of two months or four, [the British] accepted, so informing the French of the fact. Whereupon in twenty four hours the French accepted the original scheme in all its branches; evidently fearing they were missing something good.\textsuperscript{112}

\textsuperscript{107}Joy to Acting High Commissioner, 25 November 1927; Lambert to CMO (Montague), 13 December 1927, both WPHC 2173/1927, Lambert to Heiser, 12 December 1927, RFA RG. 5, Series 1.2, Box 360, Fldr. 3804; Lambert to Heiser, 1 February 1928, RFA RG. 1.1, series 419L, Box 1, Fldr. 8.

\textsuperscript{108}Joy to Acting High Commissioner WPHC, 3 February 1928, Lambert to Montague, 9 February 1928, Acting High Commissioner to Colonial Office, 14 March 1928, all WPHC 414/1928.

\textsuperscript{109}Lambert to Montague, 9 February 1928, WPHC 414/1928. Lambert noted that white contact in the southern islands where British interests were stronger showed devastating effects.


\textsuperscript{111}Secretary of State to High Commissioner, 1 September 1928, WPHC 2222/1928. This file contains full correspondence on the matter between Lambert, the Western Pacific High Commission, Joy, and the Secretary of State.

\textsuperscript{112}Lambert to Heiser, 7 September 1928, RFA R.G. 2, Series 419L, Box 9, Fldr. 75. Hutson's handling of negotiations with the Colonial Office (stressing that Rockefeller funding might be lost
Conclusion

With the French capitulation Lambert had achieved both a personal dream, simply conceived, and a significant political coup. What had initially appeared to him as an obvious and reasonable solution to the difficulty of providing small scattered island communities with medical care had taken seven years of planning and careful navigation through complex bureaucratic and diplomatic channels. Committed to the Rockefeller Foundation’s scientific approach to health, he nevertheless had to challenge the organisation’s policy on medical education, a policy founded on historical developments in the United States, and deliberately constructed towards a universal standard of professional medical practice that would complement the technological focus and aspirations of industrial society. In doing so, Lambert took on some of the Foundation’s most influential senior advisors, and won. His suggestions of what was possible and necessary in terms of medical education in the Pacific reopened the debate, so recently settled, on the constitution of a ‘proper’ medical profession, effectively critiquing his American employers’ approach. The British, still comfortable with different levels of practitioner in the medical hierarchy, had fewer philosophical problems with Lambert’s proposals for a ‘second-class’ medical school, but here obstacles arose from racialised perceptions of Islanders’ incapacity for higher education; perennial, short-view, parsimony; and the complications of integrating diverse forms of colonial authority. Further, Lambert’s close working relationship with the Fiji-based British colonial administration contributed to French alienation from the Foundation plan, despite his assumption that its scientific, medical, orientation gave it neutrality. Nevertheless, he was able to manipulate both governments, through their habitual fears and prejudices towards each other, to elicit his goal of a Central Medical School to train Native Medical Practitioners.

to the Condominium if the British passed on this opportunity) elicited Lambert’s admiration: ibid., Lambert, 7 September 1928.
Chapter 11
Half a Loaf?

The agreement on the Western Pacific Health Service co-operative programme and the Central Medical School brought to an end the first long phase of Lambert's efforts to achieve his aspirations for the Pacific. Making himself known through his health surveys of individual Territories, he had positioned himself as a trusted expert medical advisor, well able to use the beguiling inducement of Rockefeller funding to lay the groundwork for a centralised health service. Like Makogai leprosarium, the Central Medical School built on an existing, reasonably proven institution, and offered similar undoubted economic advantages to Pacific administrations. However, it was a more radical proposition with its long-term, preventive approach rather than immediate benefits, yet demanding substantial commitment, new perceptions of indigenous ability, and a revised approach to medical services and education, which elicited administrative and professional rivalries.

Establishing the Central Medical School had been the focus of Lambert's plans for several years, and although not an end in itself, it remained a crucial part of the much broader programme to centralise administration of services that he planned for the South Pacific region. He relied on the school's success as a model for co-operation to encourage administrations to further rationalise their health management by incorporating all Medical Officers into a full Unified Pacific Medical Service. This would offer improved career prospects and conditions, thus encouraging a higher standard of doctor in the islands, and foster co-ordinated prevention and treatment programmes, at least in the British-administered South Pacific territories. To maintain enthusiasm for such reform, the School now had to prove, both to Pacific governments and public, and the Rockefeller Foundation, that it could produce quality graduates able to provide fundamental medical care economically and efficiently, as Lambert claimed. He therefore remained absorbed with the institution and the development of NMP education.

Construction of the dormitory and classrooms for the Central Medical School began in August 1927 with the official opening planned for November 1928.\(^1\) In the meantime staff, students, and resources were organised. Previous

\(^1\) Lambert reported regularly on progress to Heiser, 31 August 1927, 28 September 1927, 29 September 1927, 10 November 1927, all RFA RG. 1.1, Series 419L, Box 1, Fldr. 7. At the
NMP training had relied on the rather haphazard contribution of Suva Medical Officers, but IHB criteria and an expanded school demanded a full-time Principal to direct education in an appropriately professional manner. Lambert, hoping to influence the curriculum according to IHB priorities, suggested he fill the position, but Fiji had its own candidate in David Winn Hoodless.²

Hoodless had arrived in the Colony in 1912, as Assistant Master at Queen Victoria College. During a later stint at the Lau Provincial School in Lakeba he developed an interest in medicine, studying anatomy and physiology from borrowed textbooks and dispensing elementary first aid and hygiene information to students and villagers. He decided to become a doctor but, unable to afford full-time medical study, he continued teaching in Fiji until he accumulated enough leave to spend 1919-1921 at Kings College Hospital Medical School in London. With his degree partially completed, he returned to Fiji as Superintendent of Schools, also lecturing unpaid to NMP students. His educational expertise, medical knowledge, keen interest in Pacific culture, and commitment to higher education for his Fijian students made him the ideal candidate to head the new operation. Montague considered his appointment "would go far to ensure the success of the school, and it is unlikely that any Medical Officer appointed from outside Fiji would be equally useful."³ Hutson agreed, supporting Hoodless’s application for two years’ leave to allow him to complete his medical degree, with the assurance of the position on his return.⁴

Leaving his wife and daughter in the Pacific, Hoodless undertook an intensive programme in London during 1928-29. Unfortunately, he became very ill at the time of his final examinations and was forced to return to Fiji again without the full medical qualification.⁵ However he held the position of Tutor, responsible for overall administration and discipline, and also lecturing in anatomy, physiology, and pathology, until he was finally able to return to England to complete his degree in 1935, whereupon he was appointed Principal.

The new one-storey concrete school building and the two-storey, 28-room dormitory were well underway when Heiser made a rare trip to the Pacific in

² See M. W. Guthrie's personal account of her father's life and work in Fiji, Miti Uru: Dr D.W. Hoodless and the development of medical education in the South Pacific, Suva, 1979.
⁴ Hutson to Secretary of State L. S. Amery, 22 June 1927, Ormsby Gore to Hutson, 14 September 1927, both CO 83/177/8.
⁵ M. Guthrie, Miti Uru, 1979, p. 15; Lambert to Heiser, 6 February 1930 and 26 February 1930, RFA RG. 1.1, Series 419L, Box 1, Fldr. 9.
mid-1928. Long requested by Lambert, this visit was a timely and potent reminder of the IHD’s vital role as funder and participant in the CMS. Heiser took full advantage of the opportunity to review the Pacific situation, establish warm relations with the Administration, and assert his own professional expertise in support of Foundation interests during discussions on the School project. At the Medical School he emphasised the students’ responsibility to meet the high expectations contained a strong public health reminder for students and:

...great responsibility to live up to the high expectations that have been formed towards their meeting the medical needs of the Polynesians; ...as pioneers in this field the whole success of the movement depends largely upon their ability to make a success of the work. ...Emphasized that prevention is even greater than cure, that a good part of the world’s ills comes from impure water and from intestinal borne diseases and that man possesses adequate remedies for these.\(^6\)

Heiser had several concerns about the School. Based on the immediate overwhelming demand for NMPs, the Advisory Board established to oversee administrative terms pragmatically decided on a temporary three-year course rather than the preferable four years of study. Heiser met with some opposition when he pressed for a more science-oriented syllabus, with obstetrics included, so suggested they send the curriculum plan to experienced medical educators in England for review.\(^7\) He also took Lambert to task for letting the Government discard the appointment of a full-time Travelling Medical Officer (TMO) from the final agreement, when the Foundation had made this a prerequisite for its participation. Heiser believed ongoing support for NMPs in the field was crucial to the scheme’s success and insisted that the position be reinstated. Publicly professing himself “much gratified over [the] wholehearted way Government was carrying out [the] medical school project in which Rockefeller Foundation was cooperating,” he ensured the Governor’s compliance.\(^8\) However, the TMO role was never maintained, creating a weak point in the programme for many years.

Heiser also took Lambert to task over his resentment towards Cumpston, whom Lambert blamed for Australia’s refusal to participate in the school. “Hope Lambert is beginning to see that in our work he should use all favorable influences and not waste time hating and putting blocks in the way of those who

\(^{6}\) Heiser, 29 June 1928, Diary, APS/VHP.

\(^{7}\) The Board consisted of Montague, Lambert, Dr P. Harper, (the Medical Superintendent of the Colonial War Memorial Hospital), and H. H. Vaskess, the Acting Colonial Secretary. Heiser, 29 June 1928, Diary, APS/VHP.

\(^{8}\) Heiser, 29 June 1928, 5 July 1928, 6 July 1928, Diary, APS/VHP.
do not happen to agree with us,” Heiser recorded, though Hutson had volunteered that “they were much pleased with Lambert and intimated that they gladly overlooked his crude ways in which he indulged at times.” “He is apparently liked everywhere and enjoys the confidence of the officials and public to an unusual degree,” Heiser observed with some wonder. “He is generous to a fault. Suspect that he enjoys the fleshpots of Suva, specially his motor and his home, and is not as ready as in the past to undertake difficult field work. Many inspections were waiting to be made.”

Altogether Heiser had mixed feelings by the end of his visit. He stressed to Lambert his duty to ensure the best possible graduates, noted that the project looked “hopeful” but he would feel easier if a more experienced full time educator headed it; and although he questioned the wisdom of the IHD’s approach through the CMS and co-operative programme, it was nevertheless “a step that must have been taken.”

Most of Heiser’s suggestions were acted on. The first year course now included seventy-eight lectures each of physics and chemistry along with anatomy and physiology, full body dissection and practical demonstrations. Pathology and bacteriology demonstrations augmented lectures in medicine, surgery, materia medica and therapeutics in the second year, with practical work in the hospital from mid-year. Third-year courses covered eye diseases, obstetrics, and childhood diseases and infant welfare (twelve lectures each), hygiene, medicine and surgery (thirty-nine lectures each), with associated practical work, including infant and invalid feeding. Anticipating NMPs’ isolated and solitary postings, there were also classes in Storekeeping and Accounting.

Promoting professional education

Although not that of a ‘Class A’ school, this syllabus constituted a completely new level of professional education in the Pacific. Previously, Suva Medical School proved that Fijians were capable of skilled technical training; now the

9 Heiser, 6 July 1928, Diary, APS/VIP.
10 Minutes of Central Medical School Advisory Board, 10 July 1928, 17 July 1928, 1 August 1928: NHB 1/1 329/1928; Syllabus details: IT 1 8/24:1. Heiser’s urging of core physics and chemistry accords with the trends in western medical education, which ultimately undercut the public health approach theoretised by the Rockefeller Foundation; chemistry became a ‘critical barrier’ to medical training.
advanced Central Medical School course indicated an official acceptance of their intellectual capacity and extrapolated this to Islanders from other groups. Yet colonial administrations whose push had always been for commercial expansion, requiring from Islanders their manual rather than mental labour, were only slowly accepting education as a government responsibility. Like health services, education in many areas had struggled along largely as a voluntary missionary effort, focusing on the fundamentals of reading, writing, and basic technical skills. Even as government became involved it favoured vocational training over academic advance. In Fiji much of the impetus and funding for higher education came from the Fijians themselves, as with Queen Victoria College at Nasinu, the Provincial Schools, and the 1912 Bose’ proposal that the provinces gather £850 annually for a scholarship fund to educate the brightest youths outside the Colony, with several eventually attending Wanganui Technical School in New Zealand in preparation for later university studies.\textsuperscript{11}

The Government only took a directive role in education after 1916, subsidising village mission schools where these complied with conditions set by the newly constituted Board of Education. Even then, David Winn Hoodless was unusual with his support for teaching English and his more academic approach, which along with improvements in Provincial Schools raised graduate standards and expanded professional opportunities for Fijian youths.\textsuperscript{12} Given the government’s record, it was rather remarkable that Rodwell, commemorating the fiftieth year of British Rule in Fiji in 1923, cited educational improvements when exhorting the chiefs to refrain from criticism of the administration and instead consider what had been achieved “in a spirit of thankfulness that something at any rate has been accomplished.”\textsuperscript{13} When Hutson arrived in 1925 he acknowledged the administration’s shortcomings and its responsibility for educational progress, recruiting an independent Commission to advise on necessary reforms. Nevertheless he considered that academic qualifications for Fijians had limited scope.\textsuperscript{14} Fijians themselves had higher aspirations, and perhaps inspired by the Medical School’s opening, in 1928 the Council of Chiefs established another scholarship for higher education overseas. Awarding the first

\textsuperscript{11} Fijians had requested and funded the construction of Queen Victoria College, opened in 1907: M. Guthrie, \textit{Misi Uru}, 1979, p. 5. The Ratu Tui Ra’s suggestion of a scholarship fund could be seen as a response to concern voiced earlier at the Bose that higher education in Fiji was being actively discouraged by some principals who believed “the natives know quite enough already.”: Proceedings of the Council of Chiefs, 1912, pp. 32, 47-49.


\textsuperscript{13} Governor’s address, Proceedings of the Council of Chiefs 1923, pp. 1-2.

\textsuperscript{14} F. Hutson, Council of Chiefs, 7 September 1926, L.C. Paper No. 50, p.3.
to Ratu Joni Dovi Madraiwiwi for study at Otago Medical School, the Council declared "We believe that this is a form of education which is going to be of most benefit to us."

Fiji’s educational experience was generally shared by other Pacific dependencies. In a brief review of Pacific education, Lambert restated the common European perspective that considered Polynesians “mentally superior” to Melanesians. Those of the New Zealand territories were especially so due to the more advanced educational opportunities available there. However he considered education in all the Pacific groups adequate to supply students for the Central Medical School, except for the New Hebrides and Solomon Islands, where, he noted, “education is at a low point, even for the Pacific.” He suggested that until the standard improved adequately, top students from Solomons and New Hebridean mission primary schools could be prepared at Queen Victoria; meanwhile extra Fijian students, on the basis of their “close racial affinities” and the precedent of indigenous missionary evangelism, would fill the Melanesian quota and be posted to these groups.

Despite Lambert’s confidence in Islanders’ intellectual potential, he was aware of the huge pedagogical step being undertaken, cautioning:

> The danger will be in pushing the new students too hard; the character of their preliminary training, and their customs and habits of life which are emerging from a European standard of a thousand or so years ago must be considered. They are progressing to modern standards rapidly, but must not be urged too hard or they may crack.

In the event, most students were able to make the transition from “primitive” to “scientific” modes of thinking, and complete their training. For some, this was indeed an extraordinary achievement, absorbing the knowledge and paradigm of biomedicine and incorporating these into workable relationships with their pre-existing world view, and doing so in English, a language to which many students had minimal previous exposure. But as will be seen later, their difficulties more

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12 Reply to Governor’s address, pp. 6, 10, Council of Chiefs, 22 November 1928 (CP. No. 65).
13 Lambert, "Brief Remarks on South Pacific Education", 3 September 1926: NHBS 1/1 329/1928; file also contains correspondence on the difficulties selecting students for the New Hebrides. “New Hebrides, Report for the Year 1927” (NHBS I/1 149/1928) outlines the minimal New Hebrides education system and explains the limited choice of suitable students described by Joy to Hutson, 26 March 1929, WPHC 11/1/1929. On French antipathy to potential NMF students from among New Hebrideans educated by the Presbyterian Mission, see Joy to Hutson, 10 May 1928, WPHC 414/1928.
14 Lambert, Quarterly Report, 1 April to 30 June 1928, RFA RG. 5, Series 3, Box 162. In this regard, Albert Maori Kiki’s account of his struggle with medical school classes in Fiji in the early 1950s is of interest, perhaps even more so for being from a later period: A.M. Kiki, Kiki: Ten Thousand Years in a Lifetime: A New Guinea Autobiography, Melbourne, 1968, pp. 73-74.
frequently came, not with the learning or the practice of medicine, but with their relationships in the field.

'Dream Come True' or "a short measure of fine gold"?

Arrangements continued for the planned opening of the new Central Medical School in late December 1928. From the start there were severe financial restraints, with Lambert anxious to keep the idea of a substantially enlarged school financially palatable to all participants, and Montague holding the budget firmly in check. This meant the bare minimum for facilities and equipment. Essential laboratory supplies came from England, but to establish a basic medical library, he resorted to petitioning the Foundation for discarded, out-of-date texts in any condition, and had them rebound in Suva. This project appealed to the charitable instincts of other institutions, with the New York Academies of Science and Medicine eventually donating hundreds of volumes. Lambert also inspired visiting Americans to contribute essential items to the school. Millionaire Templeton Crocker, a keen amateur anthropologist who later took Lambert on his yacht Zaca to survey health on Rennell and Bellona Islands, gifted a baumanometer, opthalmoscope and otoscopic attachments after his first visit to Suva in 1930, and Lambert seized every opportunity to secure support from others.

At its opening on 29 December 1928, Governor Sir Eyre Hutson particularly acknowledged Lambert’s role in the Central Medical School:

... the various administrations in the Pacific who have co-operated in the scheme, owe a deep debt of gratitude to Dr Lambert for his strong faith ... and his able and persistent advocacy of the proposal with the governing body of the Rockefeller Foundation which happily resulted in ... substantial and generous financial support.

Lambert publicised the achievement as a regional co-operative effort, but in Foundation circles too the medical school was largely perceived as Lambert’s

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18 Lambert to Heiser, 28 September 1927, RFA RG. 1.1, Series 419L, Box 1,Fldr 7; Lambert to Dean, n.d., RFA RG.1.1, Series 419L, Box 1,Fldr. 8; Lambert to Heiser, 26 September 1929, RFA RG.2, Series 419H, Box 25, Fldr. 210.
19 R.W. Johnson, founder of the giant pharmaceutical company Johnson and Johnson, promised a substantial contribution after meeting Lambert in Fiji but was thwarted by severe American tax laws. Heiser to Lambert, 23 October 1934 and Lambert to Heiser, 30 November 1934, both RFA RG. 1.1, Series 419L, Box 1, Fldr.10.
project. His successful challenge to the Pearce’s powerful Division of Medical Education added to his reputation as a memorable character within the Foundation. Mainly through Lambert’s prominent role, the Central Medical School remained for many years more strongly identified with its Foundation benefactors than with colonial governments, which actually carried most ongoing financial responsibility.

Fiji’s Council of Chiefs expressed their gratitude to the Rockefeller Foundation for the new institution, and its significance “not only for our young men but also for our girls.” Interest in its potential was widespread, with a request from the Australian Board of Missions to admit two privately funded Papuan students for its own medical mission. Lambert was delighted; the request was:

... a straw, indicating a favourable wind in the direction of health in the Pacific and our particular schemes. ...The point is that the idea is spreading and in the right direction, as I always wanted Papua and New Guinea in the scheme as they need it most.

Hermant and Cilento, studying Pacific health for the League of Nations in 1929, advised Cumpston that the reorganised School was a valuable opportunity that should be taken up by all English-speaking Pacific islands. “The School exceeds my fondest hopes,” Lambert exulted. The first year ended with notable speeches, awards of gold medals donated by local businessmen and participating Governments, and praise for the school by Australian medical specialist Sir James Barrett. This elicited an unusually jovial response from Heiser:

I am just wondering how many whiskey and sodas you had to buy for the gentleman in order to bring about so favorable a report on one of your pet children, but regardless of how you obtained the reaction, we are glad to know that people outside of Fiji are willing to be quoted as favoring the work done at the school.

By 1930, however, even its staunchest defenders were acknowledging cracks in the planning. To everyone’s great disappointment, Hoodless’s illness left the

21 Sawyer to Lambert, 15 February 1929, RFA RG. 1.1, Series 419L, Box 1, Flr 8; and 11 March 1929, RFA RG. 2, Series 419H, Box 25, Flr 210.
23 Lambert to Heiser, 23 January 1929, RFA RG.1.1, Series 419L, Box 1, Flr 8.
25 Lambert to Sawyer, 12 February 1929, RFA RG. 1.1, Series 419L, Box 1, Flr 8. Lambert’s only real concern was an unexpected shortage of bodies for dissection, when the ready availability of corpses (indigent and convicted Indians) had been one of Lambert’s arguments for locating the Medical School in Fiji. Lambert to Heiser, 19 June 1929, RFA RG. 2, Series 419, Box 25, Flr 210.
26 Lambert to Heiser, 15 January 1930 (with enclosed James Barrett article on CMS, from the Melbourne Argus, n.d.) and Heiser to Lambert, 7 February 1930, both RFA RG.2, Series 419H, Box 43, Flr 353.
school without its anticipated full-time Principal; despite urgent appeals to the Otago Medical School and then Aberdeen University for a suitable "medical pedagogue", none was forthcoming, and Lambert took on extra teaching meantime.\textsuperscript{27} He was relieved when a recuperated Hoodless finally became full-time Tutor responsible for the School's management and "turned out to be splendid."\textsuperscript{28} Lambert felt a strong sense of responsibility to the participants in the School to ensure its establishment on "sound lines",\textsuperscript{29} but his proprietary approach eventually led him into conflict.

Curriculum Review

In 1929 the Colonial Office appointed educators from Medical Schools in Uganda and Singapore to review the school's new syllabus. While tentative in their critique, they both considered the course length - three years - inadequate to produce well-qualified medical men, for which a four-year course was the minimum. The reviewers also noted the exclusion of biology (basic to any advanced medical understanding), the apparent lack of practical work, insufficient coverage of some subjects, but too much emphasis on medicine and surgery, and the first year of study too intensive and probably beyond the students' abilities.\textsuperscript{30} Dr T. Clunie, Hospital Superintendent and chief tutor at the time, responded with a bristling defence of the School and its students. Like Lambert, he promoted a new view of indigenous ability: Islanders were "far more intelligent than is generally thought", and with a good basic education, "the Polynesian and the Fijian could take his place with any coloured race in the world."\textsuperscript{31} With this in mind, the CMS objectives were finely tuned to regional needs:

\textsuperscript{27} Lambert to Heiser, 6 February 1930 and 26 February 1930, RFA RG. 1.1, Series 419L, Box 1, Fldr. 9.
\textsuperscript{28} Lambert to Heiser, 14 October 1930, RFA RG. 1.1, Series 419L, Box 1, Fldr. 9.
\textsuperscript{29} Western Pacific Health Service, Narrative Report, Fourth year, First Quarter, 1931, WPHC 1447/1931; Lambert to Heiser, 4 August 1931, RFA RG. 1.1, Series 419L, Box 1, Fldr. 9./ RFA RG. 2, Series 419, Box 59, Fldr. 486.
\textsuperscript{30} H. B. Owen, 19 July 1929, and G. H. Macalister, 4 September 1929, both to the Under Secretary of State, in "Correspondence on the subjects of the syllabuses and the four-year course for students of the Central Medical School for the information of the Administrations concerned", IT 1 8/24 pt. 1.
\textsuperscript{31} "Correspondence on the subjects of the syllabus", pp. 2 -3, IT 1 8/24 pt. 1. Clunie and his wife [a science teacher] had already re-written the first year courses in chemistry and physics after seeing these were beyond students' capabilities.
Experience proves that fully qualified Natives are inclined to desert their people and seek fortune abroad among the whites. On the other hand the dresser-dispenser is not of high enough standard to treat his own people except under the direct supervision of a medical officer. Our aim, especially when the four-year course is introduced, is to graduate Natives who will look after their people medically under the guidance but not necessarily the direct supervision of a medical officer.  

Both reviewers recognised that medical education needed to respond to local circumstances, and Uganda Medical School's Dr H.B. Owens was especially placatory, concluding, "I think that all medical schools for natives must have modest beginnings and are bound to be in the nature of experiments in the early stages"; to which Clunie, retorted scathingly, "The Fiji School ... has been learning for a little short of half a century. Able men have known what they wanted [for the CMS] but finance and local politics have stood between them and the ideal."  

External criticism expedited improvements. The Advisory Board had always intended to introduce a longer course, and now Governor Fletcher requested immediate syllabus revision to establish a four-year course. With Fiji committed to that from 1931, Fletcher urged other participants to follow suit, even though their immediate concern might be to get NMPs in the field as soon as possible rather than higher standards of training. There were clear advantages to the longer course, but its introduction faced problems. New Hebrides Resident Commissioner Joy feared that any changes from the original agreement might substantiate French suspicions about the School's purpose. Heiser urged "experienced and serious consideration" in any curriculum rewriting, but a copy of the revised course forwarded to the DME found the Foundation's own experts ignorant of the requirements for such a medical school.

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32 T. Clunie, "Correspondence on the subjects of the syllabus", p. 2, IT 1 8/24 pt. 1  
33 Ibid. p. 3. Owens was involved from the start of formal medical education development in Uganda, where the first four students began a 2-year pre-clinical training at Makerere in 1924, followed by an equal time in medical sciences and clinical practice, and a year's internship. For an account of African Medical Assistants training, see J. Iliffe, East African Doctors: A History of the Modern Profession, Cambridge, 1998, chap. 4.  
34 Lambert to Heiser, 26 February 1930, RFA RG. 1.1, Series 419L, Box 1, Fldr. 9; Fletcher, 14 February 1930, and Montague, 13 December 1929, "Correspondence on the subjects of the syllabus and the four-year course for students of the Central Medical School for the information of the Administrations concerned", IT 1 8/24:1; Fletcher to NH Resident Commissioner, 22 May 1930: NHBS 135/1930.  
35 Joy to Fletcher, 7 July 1930; Blandy, Acting Resident Commissioner to French Resident Commissioner, 5 December 1930; Blandy to High Commissioner, 29 December 1930 and Tronet to Blandy, 14 January 1931, all NHBS 135/1930
and unable to comment. Experiences in the first year also guided the Advisory Board in other curriculum changes, with courses in surgery, materia medica and medicine modified after they proved too difficult for students and unsuited to Pacific medical conditions. Sawyer and Lambert agreed with Owen: getting the syllabus which best met the Pacific’s needs and the students’ capabilities was a process of learning and careful experiment.

With the longer course, errors in planning became apparent, confirming Lambert’s fears that excessive cost cutting would ultimately create needless problems. New accommodation had been built only to cater for the extra students, with Fijians still in the original dilapidated dormitory some distance away. This separation was inconvenient, especially during wet weather; it made discipline difficult, and jeopardised the development of “esprit de corps” considered so vital in the students’ transition from village life to awareness of their wider role in the Pacific. The four-year course also meant restricting the number of students able to be admitted each year, creating serious staffing problems at the War Memorial Hospital, which relied heavily on the senior students for routine clinical duties and dressings in the wards. In 1932, for example, only eight rather than the expected twenty-two students were available.

Developing character

Under the steady direction of Hoodless, these adjustments were consolidated through 1931 and the school settled into its routines. Clinic took a strong interest in the students’ development, instigating a bi-annual journal, The Native Medical Practitioner, to provide stimulation and a point of contact for NMPs out in the

36 Heiser to Lambert, 25 March 1930, RFA RG 1, Series 419L, Box 1, Fldr. 9/ RFA RG 2, Series 419H, Box 42, Fldr. 353; Lambert to Heiser, 31 July 1930; Heiser to Lambert, 19 August 1930; Heiser, 19 August, and reply 25 August 1930, all RFA RG 2, Series 419H, Box 43, Fldr. 353. Cf. one of the reviewers who suggested several colonial medical schools which might provide relevant advice.

37 Sawyer to Lambert, 30 December 1930, RFA RG 2, Series 419H, Box 43, Fldr. 353; Lambert, 3rd Annual Report, Western Pacific Health Service 1930: WPHC 634/1931.

38 Lambert to Heiser, 31 July 1930, 28 August 1930, 14 October 1930, RFA RG 1, Series 419L, Box 1, Fldr 9.

 Students found the revised syllabus more manageable; better English (the language of instruction) and greater facility with the medical vocabulary indicated their growing confidence with course content. For the first eighteen months, students were treated much as schoolboys, and work centred on the classroom and demonstrations. In the senior school they began clinical and night duties at the hospital, though the latter were eventually stopped because they impinged so much on students’ morning class attendance. There were few breaches of discipline, despite the temptations of “night life” in nearby Suva, as Hoodless observed, neither regular exams nor pocket money of only ten shillings per month was “conducive to a riotous life.”41 Sports and physical training were actively encouraged as a way to maintain health and build students’ resistance to the many diseases they encountered, so that the investment in their education was not lost.42 Games, especially the favoured rugby and cricket, also served to inculcate the consummate “civilised” attributes of sportsmanship, teamwork, and fair play that facilitated the discipline expected of students at the School and, later, as public service professionals.

Building esprit de corps was crucial. Commentators invariably marvelled at the unique situation of diverse ethnic groups brought together to cohabit and study at the CMS. Administrators themselves ascribed stereotyped “temperaments” according to a student’s island of origin: Polynesians were “sanguine”, Melanesian Solomon Islanders “phlegmatic”, and Micronesian Gilbertese “choleric”.43 Staff were at pains to maximise students’ pride in their particular “traditional” practices as long as these did not interfere with acquiring scientific medical knowledge. Realistically, the School had to recognise and accept difference to exist. There was, for instance, a deliberate policy against a uniform selection procedure for entry, as to impose rigid academic conditions would make filling student quotas difficult for some groups. A general education was considered adequate, but each Administration set its own requirements. Fiji had a specific entrance exam; Tonga offered its top high school student a

40 Vol. 1, No. 1 was printed in November 1930, with 30 copies sent for Rockefeller Foundation perusal: Lambert to F. Russell, 20 December 1930, RFA RG. 1.1, Series 4191L, Box 1, Fldr. 9. Though initially European medical staff contributed most articles, NMPs increasingly shared their experiences; by its third volume four of its twelve articles were written by NMPs; Hoodless, p. 47, “Fiji Annual Medical and Health Report, 1931”, WPHC 3783/1932; M. W. Guthrie, Misfit Ute, 1979, pp. 23-29.
scholarship in Australia, while second and third ranked students received studentships at the CMS. Western Samoa drew candidates from among its medical cadets, who had a head start from one or two year’s experience in Apia Hospital. Students from Gilbert and Ellice Islands came straight from Government schools there, while Cook Island applicants had secondary education at Te Aute College in New Zealand, alongside sons of the Anglican Maori elite.\(^{44}\)

Despite this range of education and cultural experience, the CMS sought to foster a sense of overarching cultural commonality among its trainees.\(^{45}\) Building around a representation of generous and simple South Seas communalism, which subsumed inherent “race-group” differences, encouraged this.\(^{46}\) The school was for “Native Medical Practitioners”, emphasising a collective identity demarcated from “Medical Officer.” Students were expected to wear standard issue “traditional” lavalavas, and apart from shirts were discouraged from more overt signs of Europeanisation such as shoes and trousers. Although crucial to the rationale of an NMP service, this aspect became increasingly unstable and problematic, exemplifying at an advanced level the rising debates over “culture-contact” and the general problem of how to “train natives to be better and still better natives, and not to train natives to be even perfect imitations of Europeans.”\(^{47}\) It was important to maintain as many “native habits” as possible, and dissuade European ones, for both sociological and economic reasons, as Dr. V. W. T. McGusty explained:

_The aim of the Central Medical School is to fit its graduates for the normal responsibilities of medical practitioners and health officers without removing them from their native environment. The success of the ...service depends on its conforming with native society, and its maintenance at an economic level that is within the capacity of each administration._\(^{48}\)

Hoodless, more closely involved with the students on a daily basis, appraised more realistically the dilemmas of education. Cook Islands students, after years at New Zealand schools,


\(^{45}\) V.W.T. McGusty, ‘Note on the Central Medical School in Suva in relation to the Health Problems of the Pacific’ in “Fiji Annual Medical and Health Report, 1937”, p. 33.

\(^{46}\) Fiji Indian individuality was explicitly exempt.


... are almost completely Europeanised and wear trousers, shoes, &c. and the Fijian student in his short loin-cloth and bare feet looks with envy at his Cook Islands colleague if they are both on night duty and the mosquitoes are bad. Every endeavour is made to encourage the Fijian student to remain true to his own culture and customs, but it is obviously impossible to give a medical training to these native students from Fiji, Tonga, and Samoa, &c., without at the same time giving a large measure of Western culture. We cannot throw away the test-tube and the microscope and go back to the methods of the old bush-doctor with his herbs and mystic incantations.  

If maintaining the ideal, crucial balance between “native” and “European” within the structured school environment was difficult, some graduates experienced even more conflicting influences once assigned to their posts.

The third year of the new School, 1931, was “epoch making”. It inaugurated the longer, more professional course, with biology and clinical obstetrics now included, and also provided the first eleven CMS graduates, from thirteen third year examinees. Produced at an average cost of £80 per annum (less than the £90 originally budgeted), these included the first Solomon Islander NMP, a Fijian who had volunteered for that Group; another Fijian volunteer, Mesulame Taveta, for the New Hebrides; and two NMPs each from Tonga, the Cook Islands, and the GEIC, all now ready to begin Native Medical Practitioner Services in their own communities. Hoodless’ comments reflected the expectations on them:

The future progress of all these newly-qualified Native Medical Practitioners will be most carefully followed, and we look to [them] to maintain a very high standard of conduct both as Native Practitioners and in their ordinary social life.

Assessing NMPs

Fijian graduates of 1931 joined an established service consisting of 54 NMPs and 5 Indian Medical Practitioners (IMPs). Their performance was publicly reviewed in Fiji's Annual Medical and Health Reports, where District Medical Officers commented frankly (generally favourably, but on occasion highly critical), on

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50 Hoodless, "Fiji Annual Medical and Health Report, 1931" p. 50., WPHC 3783/1932.
individual practitioners. The reports indicate that, even with some shortcomings, NMPs provided extensive health care – and frequently did so with little support from European doctors. Fiji had 19 provinces, of which twelve were organised into ten medical districts, each headed by a Medical Officer. In 1931, when they treated 35,017 cases, only fifteen NMPs worked under a Medical Officer; the remainder was in charge of dispensaries and the smaller Provincial Hospitals.

In theory, DMOs were to tour their operational districts regularly, but as Dr. McGusty noted of his own practice in Rewa in 1926, "the greater part of the Medical Officer's time is occupied within the economically highly developed area in which the Colonial Sugar Refining Company's mill at Nausoori is the centre, and he visits more distant places in accordance only with necessity or opportunity."

A weak link - the Travelling Medical Officer

At the time, McGusty was urging an increase in NMP numbers so that Fijian villagers could receive at least some of the medical care available to Indian cane workers. His comment was also an uncomfortable reminder that many NMPs were in effect operating outside the Medical Service, sometimes unvisited by a superior officer for several years. The scenario of "lower grade" ancillary practitioners practising without supervision, was unacceptable to the Rockefeller Foundation, which made its funding of the CMS development conditional on the appointment of a Travelling Medical Officer (TMO), whose specific responsibility would be regular supervision and support. For reasons largely economic, the British ignored this crucial requirement until Heiser made it a major issue during his 1928 visit to Fiji, when he secured the Governor's promise to the extra full-time appointment. However, the government side-stepped the Foundation's requirements, and incorporated the position within the newly established child welfare scheme, which in 1929 was equally funded from

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51 See, for example, "Fiji Annual Medical and Health Report, 1926", pp. 21-23, 37: CO 83/178/16; "Fiji Annual Medical and Health Report, 1928", pp. 32, 34, WPHC 835/1930.
52 "Fiji Annual Medical and Health Report, 1931", pp. 11-12, 34, WPHC 3783/1932

54 Also referred to as the "Inspecting Medical Officer" (IMO).
General Revenue and a £2000 donation from the Colonial Sugar Refining Company. The selected appointee was to supervise Native Obstetric Nurses as well as NMPs, but unfortunately proved “temperamentally unsuited”, whereupon the scheme was judged a failure and quickly discontinued.

Lambert deplored the Government’s failure to fulfil their agreement, recording in the 1930 Western Pacific Health Service report his regret “that this important link in the health system of Fiji, obtained after so long an endeavour, should be apparently lost.” He was more perturbed when the supervisory role was separated from the Medical Department in 1931, and added to the numerous duties of the Governor’s Commissioner and Child Welfare Officer, a position now filled by McGusty. Despite Lambert’s disquiet, McGusty managed to visit every station at least once during the year, with those more remote visited more often. He found no problems of misconduct or negligence; rather, the NMPs were “as a body … doing a service of the utmost value to their race, and maintaining on their own initiative a high standard of professional conduct.”

After McGusty’s subsequent promotion to Chief Medical Officer, the TMO post remained empty. Lambert defined the lack of a full-time inspecting officer as the “greatest weakness” in the NMP system, embarrassing the administration when a copy of his criticism was inadvertently sent to the Secretary of State without the offending allegation being censored. There was no action, however, and Heiser again pressed the issue during his 1934 visit. Despite IHD disquiet, no co-ordinated backup was organised until 1936 when Doviverata, the first fully qualified Fijian medical doctor, returned from practice in New Zealand.

Lambert defended the NMPs’ abilities against any detractors, but his stance on the IMO issue indicated some apprehension that they might not be up to the burden of expectations placed on them, that the new level of professionalism and scientific practice needed careful nurture if it was to develop as he envisaged, into a successful medical service. In contrast was the more laissez-faire attitude of the colonial administration which gave less credence to native capacities and competence, but was willing to leave the NMPs to meet the demands of their posts as best they could; difficulties or failure were then ascribed to inherent
native ineptitude. In general, the administration expected more NMPs, as an economical subordinate component in a medical service run by "real" European doctors; Lambert expected more of NMPs, as an ever more competent and confident core group delivering proficient medical care within a centralised service. European MOs might retain a managerial and specialist role, but the NMP was to be consistently developed as a skilled professional. Away from Fiji, other administrations approached the issue of support and inspection according to the place and value they assigned to NMP work within their medical structure, and their understanding of the practitioners' role and potential difficulties of fieldwork. The experiences of the first NMP destined for the New Hebrides gave substance to Lambert's worst fears, and provide a graphic demonstration of the inimical effects of these crosscurrents of expectation and assumption.

Lamb to the slaughter - NMP Taveta

When the Condominium agreed to participate in the CMS, no adequately educated New Hebrideans were available to train; instead, two Fijian students volunteered for service there. The British Resident Commissioner, relying on the arrival of NMPs to stimulate native welfare and therefore increase French interest, was anxious that only "the best and cleverest type of student" be sent to the group as it was "politically desirable that nothing should be found wanting in the final presentation of an excellent and highly economical medical service."

The French had reason to criticise recent British efforts to direct and expand medical work. For one thing, only the French had established government medical facilities in the Condominium (and had recently provided more doctors); whereas despite their claim to more humanitarian and enlightened governance, the British administration had limited itself to small subsidies for hospitals run by compatriot missionaries; even the largest of these, the Paton Memorial Hospital in Vila, periodically struggled even to provide a resident doctor, forcing the British into the ignominious position of having to send their nationals to the French hospital for treatment. Nor had the earlier experiment with NMP

61 Joy to Fletcher, 7 July 1930, "Reports on NH students (Fijian), December 1930": NHBS 1/1 135/1930.
62 For an interesting review of the relative French and British medical services in the Condominium, see Joy's letter to the Western Pacific High Commissioner (16 July 1928, WPHC
services in been a complete success. Two British planters wanting a medical centre at Bushmans Bay to service their own labour had originally suggested that such a clinic would counter the influence of a nearby French hospital; the venture nevertheless had d’Arboussier’s agreement and some Condominium funding. However facilities and support were poorly organised and, finding his isolated position untenable, the NMP signalled his resignation less than halfway through his three-year term. Promised improvements, he stayed on for another few months, but the problems were never resolved. He became dispirited and ill, and after nearly dying of blackwater fever returned to Fiji. British disregard for the difficult situation into which they placed Malakai demonstrated incompetence, indifference, and disrespect for the NMP’s capabilities, and the outcome did not advance the cause of Condominium participation in the CMS. Instead of proving that effective indigenous health programmes were viable, the episode only undermined the credibility of British complaints that they could develop better, more extensive, services if only the French would co-operate. By association, it reinforced French scepticism regarding the Rockefeller-backed hookworm and yaws programme itself.63

In 1931, the activities of the Rockefeller-Western Pacific alliance became even more vulnerable to French critique when villagers began attributing certain deaths to yaws injections administered by Bill Tully, Lambert’s long-term employee, in the course of the campaign. The deaths, first reported by the French, may have been purely coincidental - in fact, there appears to have been no official investigation of them - but as Resident Commissioner Tronet noted caustically, Tully’s wider behaviour had not been “exempte de reproches.”64 His failure to report on campaign activities and very public drunken binges in Vila certainly worked against the British cause. “[A]las!, politically he has played into hostile hands,” bemoaned Resident Commissioner Blandy,65 fearing not only that the French would push for the campaign’s closure, but also that there was now little chance of success for CMS graduates in the New Hebrides:

In the beginning, these were looked on as a doubtful experiment by high authorities. What will happen to them when they come to the New Hebrides? It will be practically impossible to separate them from control

1320/1928) outlining his reasons for not recommending the British administration take-over of the Paton Memorial Hospital, for staffing problems at the mission hospital, see 1935 correspondence in the same file.
63 For correspondence relating to this venture, see NHBS 1/I 105/1925, WPHC 2936/1927, and NHBS 1/I 61/1928.
64 Tronet to Blandy, 5 February 1931, NHBS 1/I 146/1930.
65 Blandy to Lambert, 27 April 1931, NHBS 1/I 146/1930.
by French doctors, whose language they do not speak and who are bound
to belittle them in any case. The Fijians will not know any pidgen
English and will, at first at any rate, be quite out of their element. I am
extremely doubtful if they will ever settle down in a strange country and
under such circumstances. My honest opinion is that they will not last
very long. 66

The chances looked even less promising when one of the NMP students assigned
to the New Hebrides failed all subjects in 1931, his second year. Carlotti, the
new French Resident Commissioner, challenged the value of NMP training: only
a full medical degree could guarantee competence, and anything less was false
economy. 67

Carlotti also refused to be drawn on the New Hebrides' future involvement
in the Central Medical School, although Governor Fletcher pursued the matter
during a tour of the group. Carlotti argued that the New Hebrides had only
committed to the two students currently training, pending assessment of their
value. Medical services in the Condominium were already adequate, and
clothing and diet were more significant to health. Besides, there were no youths
educated to the requisite level for medical study — and if there were, they could be
trained more economically in Vila as dressers. In Suva, officials ruefully
concluded that the New Hebrides was a hopeless case. 68

The second volunteer, Mesulame Taveta, newly qualified and awarded a
gold medal as best Fijian graduate, entered this environment early in 1932 to
represent the Native Medical Practitioner system. Fletcher's counsel to the
British Resident Commissioner seemed ingenuous under the circumstances:

Experience has shown that these young NMPs require careful and
considerate handling in the early stages of their career until they mature
and gain confidence, and that they are particularly susceptible to
"atmosphere". Anything in the nature of ridicule from their superior
officers, or an atmosphere of hostility, however slight, or impatience will
do incalculable harm. ... so far as practicable, give your personal

66 Blandy to Fletcher, 28 February 1931, WPHC 883/1931.
67 Carlotti to British Resident Commissioner, 9 September 1931 and 16 October 1931; Blandy to
Fletcher, 10 September 1931, NHBS 1/1 135/1930. The French later decided to open a similar
school in Tahiti. Tuidraki improved in 1931, while Taveta was ranked second student for the year.
Reports, 1st Quarter, 1931, NHBS 135/1930.
68 Blandy to Fletcher, 11 September 1931, WPHC 2669/1931 [encl. Blandy to Carlotti, 8 July 1931;
Carlotti to Blandy, 9 September 1931]; also Blandy to Carlotti 5 August 1931, and Fletcher to
Secretary of State, 5 February 1932, both NHBS 146/1930. Note that even by 1939 there were still
problems finding suitable New Hebridean students. From enquiries to all the missions, only one
candidate was found, but he was uninterested. The Bishop of Melanesia explained to the Resident
Commissioner (26 June 1939) that "our present inability to supply candidates is largely due to the
long continued use of Mota as the language of instruction in our Mission schools and the
comparatively recent introduction of English." NHBS 1/1 106/1939. Even in 1941 when a New
Hebridean student being educated in the Solomons was enthusiastic to enter the Central Medical
School in the 1943 intake, the British were anxious about securing French agreement.
attention to Mesulame's welfare, and endeavour to ensure that he is not placed under unsuitable control.69

Lambert also sent a protective amulet of words for one of his favoured students:

... he is the most able or one of the most able boys who graduated in this year's class and I reckon he is the next thing to a qualified physician. There is no need for me to tell you the conditions that he has to face... these boys respond to the treatment they receive, if they are treated like decent self-respecting citizens they will respond by giving you a surprisingly good service. If you treat them like niggers then you will have a nigger on your hands. Mesulame has been educated in the Queen Victoria School on the lines of an English Public School ... he has good manners and knows how to act like a gentleman.70

Still, there was no way to separate Mesulame's appointment from the burden of Condominium politics. The beleaguered British were struggling to retain their place in the New Hebrides, against French numerical and economic dominance. There were both humanitarian and pragmatic aspects to the new British focus on indigenous health and the provision of medical services: improvements here would substantiate British claims to enlightened guardianship, but would also replenish vital local labour for the remaining British plantations. An economic Condominium health service was therefore essential, and despite Malakai's previous dismal experience, NMPs were destined a crucial role in it. Those who were CMS graduates were, if not the "British agents" the French suspected, at least unavoidably representative of an Anglo enterprise within the currently French-dominated Condominium Medical Service. They were therefore subject to expectations of exemplary behaviour.

NMP Taveta was initially placed at the French Hospital in Vila, to assess his medical knowledge and surgical skills, teach him French methods of treatment, and instil the expected standards.71 Taveta worked mornings under the Condominium CMO, Dr Morin, but had afternoons at the Presbyterian hospital, where he also had quarters. He appeared to settle in well, with both French and British "favourably impressed" with his work, and Morin's later report ("Excellent medecin auxiliaire. Esprit vif, ouvert, comprenant bien et desireux de s'instruire. ...technique tres correct") happily quoted in the 1932 Fiji Annual Report.72

69 High Commissioner to Resident Commissioner New Hebrides, 4 January 1932, NHBS 1/1 10/1932.
70 Lambert to Joy, 4 January 1932, NHBS 1/1 10/1932.
71 Morin to French Resident Commissioner, 23 January 1932; Carlotti to Joy, 25 January 1932; Joy to Carlotti, 26 January 1932, all NHBS 1/1 10/1932.
72 Joy to High Commissioner, 19 February 1932, Morin to Joy, 15 June 1932, both NHBS 1/1 10/1932.
Nevertheless the pressures of bridging multiple cultures and expectations quickly told on Taveta, and he was soon reported to be making a practice of heavy drinking, “his excuse being...that he is “fed up” with his life here and is “treated as an ordinary native at the Paton Memorial Hospital and elsewhere”.”

He had apparently got into “bad company - notably that of the Japanese tailor.” He was forbidden to drink at all,73 and avoided further incidents until March 1933, when Peni Tuidraki arrived after finally qualifying, and both NMPs went absent without leave for four days. Taveta was immediately posted to the large French Cotton Company hospital at Norsup, Malekula, with Medical Superintendent Laporte asked to prevent him from drinking alcohol, “as if he develops that habit it will in time spoil his usefulness.”74

Appreciative reports followed of Taveta’s yaws work in the east and South West Bay districts of Malekula, an area where he had operated the previous year with Dr Burrell of the Paton Memorial Hospital.75 In a series of tours, often alone, between July and November he gave 2,470 novarsenobenzol injections, a similar number of carbontetrachloride hookworm treatments, advised on sanitation, and studied other diseases in the villages and hospital.76 Local missionary John Gillan noted that he was “thoroughly keen on his work and competent to do it”, unfazed when rough wet weather forced him to walk the difficult coastline, treating 761 villagers. Gillan's observations seemed to fit all prescriptions of the model NMP:

He is able to adapt himself to village life and food, at the same time commanding the respect of the natives. ...Further, he is able, on tour, to do his work on his own initiative without being limited to hospital routine.77

He was apparently ambitious, planning to do post-graduate work in Suva or Sydney, but “his heart seems to be in the work here and he hopes to be able to return.”

CMO Tassy's official report on the NMPs echoed Gillan's observations: Taveta had given complete satisfaction, his work in Malekula demonstrating diligence and intelligence. Again, however, came warning on his behaviour “sous l’influence de mauvaises fréquentation”. Tassy concluded that the NMPs were capable of rendering great service in the Group, under certain conditions:

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73 Memo, 18 March 1932, NHBS 1/1 10/1932.
74 Joy to CMO Tassy, 23 March 1933; NHBS 1/1 10/1932.
75 Joy to French Resident Commissioner, 12 August 1932, NHBS 1/1 59/1932; “Report by Burrell and NMP - Medical Tour, South Malekula”, and associated correspondence. NHBS 1/1 385/1932, WPHC 3726/1932. In six weeks, they gave 3604 yaws injections as well as hookworm treatments.
77 Gillan to Joy (two letters), 25 November 1933, NHBS 1/1 10/1932.
Intelligents, instruits, dociles, disciplines, mais malheureusement de caractère faible et manquant de volonté, comme la plupart des indigènes d'ailleurs, ils font merveille quand ils sont guidés et surveillés par un médecin ou délégué Européen. Mais leur emploi reste limité de ce fait aux centres et il serait à mon avis temporaire et quelque imprudent de les charger d'un rôle où ils auraient à faire preuve d'initiative loin de toute direction et tout contrôle immédiats.78

Mesulame was obviously equivocal about his situation; within days he gave substance to these cautions. On leave in Vila, he resisted police attempts to eject him from a bar where he was drunk and:

... somewhat excited, threatening violence to all and sundry and using obscene language in English and French. ... He ... endeavoured to reenter the bar, ... voicing threats as to what he would do to the Police, Mr Adam, Mr Keegar, and the inmates of the bar, at the same time reviling the Condominium Government and the conditions of his service.79

The Police Commander saw the NMP's status and "the peculiar conditions under which he labours in this Group" as extenuating circumstances, and decided against jailing him, suggesting prosecution for repeat offending instead. Joy recommended that he be imprisoned if found drunk and disorderly again, but dealt with the current incident administratively. Strongly censured, his leave cancelled, Taveta was sent back to Norsup, and later informed that further salary increments were suspended and conditional on good behaviour.79

The situation posed more than one dilemma. In Joy's view it was the French who constituted the bad influence. The French willingness to supply alcohol to non-Europeans in the Condominium was a major vexation to the British, who regulated against it. The missionaries classed alcohol as a leading cause of depopulation; the British planters saw it as a bribe that enticed labourers away to the French plantations, which allowed weekend grog sessions. Now it presented further dangers, exposing the Fijian NMPs to intemperance and "association with Frenchmen who treat them on a basis of perfect equality. ... They will invite them to their tables and share the bottle of vin ordinaire." Joy hastened to add that overall the NMPs' behaviour was "extraordinarily good" and their work excellent given "the temptations to which they are exposed and the lack of companions of their own race." The Acting High Commissioner responded with a similar mix of understanding and disapprobation, concerned at the potential damage not only to the School's prestige but also to the NMP's health and work, leading to certain dismissal.80

78 Tassy to Joy, 1 December 1933, WPHC 2313/1932.
79 Seague and Joy, 4 December 1933, NIISO 1/1 10/1932.
Despite efforts to keep alcohol from Taveta, he was soon involved in further incidents at Norsup. "Quand il a bu la moindre boisson ... son caractère doux et poli change complètement et il devient agressif et brutal, il n'écoute aucun ordre," Laporte reported. Apparently drunk one evening, the NMP refused leave his dinner (apparently his first meal in two days) to care for a seriously ill European patient. He abused the European Medical Officer, who cabled Vila for an immediate replacement.\textsuperscript{81} Sautot, noting "un spirit d'indiscipline qu'il n'est pas possible de tolérer plus longtemps", recommended tough disciplinary measures which Joy could not refuse. They halved Taveta's pay for two months, and formally censured him for "disgraceful conduct" that cast doubt on his fitness to be a Native Medical Practitioner. If repeated, he could be dismissed, which would discredit the NMP Service, the CMS, and his fellow practitioners, and shame his parents so that they would not want him to return home.\textsuperscript{82}

However, Laporte stressed that neither he nor the planters and missionaries had any complaints about the practitioner's work on tour; and Sautot, that his mistakes in no way diminished "la haute estime que je professe pour l'Administration britannique de l'Archipel et pour l'excellente école de médecine de Suva."\textsuperscript{83} When the French did not use Taveta's actions as an opportunity to condemn the overall NMP system or training, indicating a possible change in their attitude, Joy advised Fletcher against further remonstrance. Taveta's conduct, he reassured:

... looks worse than it really is for the reason that there is no half measure about it. When he gets drunk he does it thoroughly and unfortunately he usually manages to combine it with circumstances which make it blacker than it otherwise would be. On the other side of the picture is the fact that there is also no half measure about his work when in his normal senses. He has done excellent work..., particularly when on tour.\textsuperscript{84}

Joy concluded that Taveta's main problem was inactivity and boredom, as Laporte discouraged inpatients at Norsup Hospital; a more energetic Superintendent would keep the young practitioner occupied and therefore out of trouble.

Responses from Suva revealed various perspectives on indigenous alcohol consumption, the position of NMPs, and cultural relations. Lambert observed:

\textsuperscript{81} Laporte to CMO, Vila, 30 April 1934, WPHC 2313/1932.
\textsuperscript{82} Sautot to Joy, 8 May 1934; Sautot and Joy to Mesulame, 10 May 1934, both WPHC 2313/1932.
\textsuperscript{83} Laporte to Sautot, 30 April 1934 and 2 May 1934; Sautot to Joy, 14 May 1934, all WPHC 2313/1932.
\textsuperscript{84} Joy to High Commissioner, 5 June 1934, WPHC 2313/1932.
The idea of a native, especially, being affected by drink of natural course damns him irrevocably when it appears in a minute paper. However in my eyes this is not so bad as it appears. The New Hebrides is one of the hardest places in the Pacific for a native to work. Here he has to contend with several difficulties which he has not in other countries. The Frenchmen treat the Native Medical Practitioners as their social equals. As a matter of fact, the boys we turn out ... rank probably higher socially than the average Frenchman in the New Hebrides, and have a better education than most... But it goes to the native's head a bit to be treated as a social equal by a man with white skin as he is not accustomed to it. It is almost impossible under such circumstances for a Fijian to refuse to drink.85

Lambert contended that NMP students were taught about alcohol's poisonous effects on Islanders (they supposedly lacked Europeans' "acquired immunity" to the drug — though the Pacific abounded in examples of non-immune whites), abstinence was difficult when most of the New Hebrides' community were free to drink.

Clinic, who vehemently opposed sending NMPs outside their own group, opined, "Very few natives lifted out of their natural sphere escape death from alcoholic poisoning".86 Criticising Mesulame as "surly, bad-tempered, and averse to disciplinary measures", he advised "Leave him where he is and let him work out his own destiny. He will never be any use to Fiji." Lambert, on the other hand, perceived a strong-willed independent personality, who would make an "outstanding" Native Medical Practitioner in rural Fiji, but was vulnerable in the Condominium environment. Acting CMA McGusty agreed, citing his "almost invariable experience that natives of ability and strong character are of the class that is most frequently found in hot water."87 Neither was keen to harm a potentially talented career; both urged his return home.

Indications of how Taveta perceived his own situation can only be gleaned from the official record. His formal apology to Joy conveyed remorse and subsequent reports from Norsup bore out his intentions to do better. Sautot immediately urged that his regular pay scale be reinstated.88 Indications of an Administration sympathetic to his difficulties did not revive Mesulame's spirits. He requested leave, expressing to Joy concerns about his lowered efficiency and hopes that three months in Norfolk Island's different climate would restore him to

85 Lambert, 19 July 1934, NHBS 1/1 10/1932.
86 Clinic to CMS Board Secretary 6 July 1934, Minutes, WPHC 2313/1932.
87 Lambert, 19 July 1934; Clinic, 18 July 1932; McGusty, 21 July 1932, all NHBS 1/1 10/1932. In contrast, Clinic assessed Peni Tuidraki as "a sportsman and a gentleman. He will never be brilliant but will always be trustworthy and conscientious."
88 Correspondence, 9 June 1934 - 21 August 1934, NHBS 1/1 10/1932.
full strength so that he could return "with renewed vigour and enthusiasm."85  The
High Commissioner approved his leave from January 1935, the end of his three
years service, withholding a decision on his return to the New Hebrides.91

However, Anglo-French wrangling over his service entitlements forced the
NMP to wait in Norsup an extra three weeks. Just as he was cleared to leave,
Ortholan, the new doctor at Norsup, urgently requested postponement so that the
NMP could attend a European seriously ill with malaria 50 miles from Norsup.
Both Resident Commissioners acquiesced in deferring his leave until the next
boat. The consequences were tragic. Eighteen days later an abrupt telegram
reached Vila: Mesulame Taveta had died of blackwater fever, as had the solitary
European he had gone to assist.91

The Bushman's Bay planter, Corlette, who helped nurse the Fijian on the last
day of his illness, later provided details. Taveta had apparently been recovering
from ptoemaine poisoning when sent off on the long arduous journey to Siller's
remote hut; halfway there, he himself suffered a severe attack of malaria that
forced his return. After two days he felt well enough to try again, but when he
arrived, was shocked to find Siller beyond help. On the walk back he slept nights
in the open, arriving at Norsup "knocked up and feeling unwell." Apparently he
prescribed himself a large dose of quinine and a tot of rum. Though both
common therapies, in combination they were commonly implicated in
transforming malaria into deadly blackwater fever. Dr Ortholan, no doubt
drawing on the NMP's past record and assuming that he was more drunk than
seriously ill, treated him perfunctorily. Left unattended, he was later found
delirious, "lying in vomit and other filth", by the plantation overseer, who then
moved him to his own house and tried to care for him over the following days.
According to Corlette's detailed narrative, Ortholan, anxious about payment,
refused to move him to the hospital. After Corlette arrived to relieve the
overseer, Taveta revived only briefly. The doctor, indifferent to his associate's
condition over previous days, arrived and attempted urgent ministrations.

85 Mesulame Taveta to Joy, 1 September 1934, NHBS 1/1 10/1932. His reason's for choosing
Norfolk were not given; possibly they were entirely practical, but it is also possible that he feared
humiliation and shame in a return to Fiji at that time, given Joy's suggestion of his family's
response.
86 High Commissioner to Joy, 27 October 1934, WPHC 2313/1932.
91 Sautot, 18 February 1935; Joy, 21 February 1935; Ortholan, 21 February 1935; Sautot, 22
February 1935; Harrison (BDA Malekula), 11 March 1935; Blandy, 11 March 1935; Sautot, 11
March 1935, all NHBS 1/1 10/1932.
Despite his efforts, which culminated in injections of oil of camphor, Mesulame Taveta lapsed into a coma and died.\textsuperscript{92}

Lambert and McGusty had warned of the risks and potential loss if Taveta was kept in the New Hebrides; even Clunie could not have wished this particular 'destiny' on him. His death shocked all associated with him, but its circumstances were never subjected to more than cursory investigation. Corlette, anxious not to spark a diplomatic furore in the tinderbox of Condominium politics, set out to give a balanced review of events; his account avoided direct criticism, but nevertheless underscored Ortholan's negligent response, his disregard for the well-being of a staff-member, and his inexperience with medical conditions of the tropics. Forwarding this damning report to Sautot, the British Resident Commissioner warned that Fletcher was "certain to take a serious view of the matter" but left the French administrator to decide on a further investigation. The subsequent French report attributed no fault to Ortholan, who insisted that he had provided generous care even though the Fijian had refused to be admitted to the hospital. Its final inference was that Taveta was himself responsible for his fatal condition by self-medicating for malaria and exhaustion without first consulting the doctor.\textsuperscript{93} The British Resident Commissioner privately doubted the evidence but considered that "[no] useful object would be gained by pursuing the subject."\textsuperscript{94} It was impolitic to hold the French overtly to account; better to exploit the opportunities for moral suasion that the incident afforded, and hope for a more co-operative attitude from the French in future.

Only Lambert expressed disquiet at Taveta's treatment, railing against the double standards permeating Pacific relations:

With sympathy NMPs are as trustworthy as Europeans. The more you trust and require of them (really trust) the more you get from them. Trust them as human beings and with respect due to their education and they become trustworthy but they will when treated as human cattle. Why judge them differently than white personnel or treat them differently? How many white men are worth a dam (tinker's) in the Tropics? Out of forty some Europeans ... to whom I have been willing to pay good salaries, about 8-10 are not at all trustworthy when not under my eye

\textsuperscript{92} Corlette to Blandy, 11 March 1935; NHBS 1/1 10/1932. Mesulame (died 8 March 1935) had previously noted Malekula's high morbidity and mortality from malaria, and that all four cases of blackwater fever admitted to the hospital in 1934 had been successfully treated: Quarterly Report, May 30th, 1934, WPHC 1171/1934.

\textsuperscript{93} Corlette to Blandy, 11 March 1935, NHBS 1/1 10/1932; British Resident Commissioner to Sautot, 2 April 1935; Sautot, 4 April 1935; Jabin-Dudognon to Sautot, 22 April 1935, all NHBS 1/1 10/1932.

\textsuperscript{94} Resident Commissioner to High Commissioner, 27 April 1935, NHBS 1/1 10/1932.
constantly. About 3 are excellent. The New Hebrides wrecked one of those.55

Lambert's colonial colleagues ignored his accusations of prejudice – and the fact that he had long argued for a Travelling Medical Officer to provide regular support for NMPs in the field, to relieve precisely the pressures of isolation (particularly acute in the difficult New Hebrides environment) that Taveta confronted. British reaction to the Fijian NMP's death was restrained, surprising if for no other reason than that the expense of producing an NMP was so frequently an item for consideration. Where Lambert perceived in French comments criticism of the NMP training and abilities, his colleagues discerned an appreciation of the scheme's general acceptability.66

Corlette's experiences in Malekula give further insight into the Condominium approach to NMPs. Critical at the absence of any systematic preventive services in his isolated region, and only grudgingly allowed access to NMP Tuidraki's services, he applied for drugs to treat local diseases himself. When these were refused he blamed "professional jealousy of French [sic] medical practitioners" who rejected lay assistance and "have always been against the N.M.Ps. though only too ready to use them as assistants. The last man here," he continued, "actually forbade Messalami[sic] to go round treating natives, and Dr Laporte was contemptuous.77 An ambiguous French response – criticism of his administrative ability in the hospital, yet withholding him from the fieldwork for which he had trained and in which, by all other accounts, he excelled – could only compound the NMP's difficulties.

Mesulame: Taveta's short career and untimely death highlighted the inherent contradictions of the NMP's position. The role of intermediary was a process of complex negotiation. Practitioners, educated in English, by a European pedagogical system, had to absorb, then practise from, western concepts of scientific medicine and the world view that entailed. They also had to remain "native" in dress, adherence to customary ways, language, dependence on a communal subsistence lifestyle, and deference to European authority. Further,

55 Lambert, Minute, 7 June 1935, WPHC 2313/1932.
66 Minutes, Macpherson, 14 June 1935 and Clunie, 14 June 1935, WPHC 2313/1932. Significantly, Mesulame's grave at Norsup remained unmarked and overgrown until Lambert, concerned at this lack of recognition and the message that it sent to other NMPs, asked "as a personal favour" that it be marked with a concrete slab and simple inscription. In belated acknowledgement, the administrations hastened to comply: Lambert to Joy, 7 May 1936; French Resident Commissioner to Joy, 17 June 1936 and 28 July 1936; Joy to French Resident Commissioner, 19 June 1933, all NHBS 1/1/10/1932.
77 E. Corlette to Joy, 23 January 1936, NHBS 1/1/31/1933; the same file contains other correspondence regarding the difficulties of accessing medical care and supplies.
these spheres of behaviour and thought, and their variable and often confusing synthesis, were circumscribed by European designations of appropriateness. Those practitioners who sought to create their own balance in the dynamic role of intermediary risked trouble. Mesulame, obviously intelligent and ambitious, was one of these. In his case the Condominium situation multiplied the cultural dimensions he had to mediate; by presenting alternative models of Islander-European interaction, professional and administrative relations, and medical practice, it compounded the difficulties of decoding and integrating expectations. French dominance in the group exposed the clay feet of customary British authority. Unwilling to provoke, Joy's administration ceded Taveta to the French system, and despite a paternalistic approach provided little real support thereafter. The French were seductive with their apparent egalitarianism, hostile in their demoralising under-utilisation of his professional services and restriction of the primary health care that was at the core of NMP training. Although Mesulame found solace in his medical tours, the assumption that he had some kind of natural affinity to Kanakas solely on the basis of being “native” himself, was unfounded. Removed from the reference points of his own society, neither European nor doctor nor indigene but expected to express all three categories as required, Mesulame exemplified the intermediary's dilemma at its most acute. In the serum of Condominium politics, the pressure proved intolerable.

Mesulame's experience was extreme; as such it throws the NMP's predicament into stark relief, and serves as a useful counterpoint to assess the conditions that allowed other practitioners to function so that the scheme was judged contemporaneously as succeeding in its overall aims.

Peni Tuidraki, for example, followed Mesulame Taveta to the New Hebrides in 1933. Earlier rejected by the French for his poor performance in his medical studies, he became a model NMP and an integral part of health service developments there. Several factors accounted for his success. He was more willing to work within the parameters and discipline established for Native Medical Practitioners. Furthermore, Taveta's experiences ensured that he was given more support from the start. He was kept in Vila for a considerable period to find his feet, and had the back up of both British administration and residents there, though working at the French hospital. It was three years before he was sent on tour, in company with British missionaries and agents who were keenly interested in promoting medical work. With matured confidence and familiar with the languages and systems of the New Hebrides, he handled further responsibility for field work without problems.
Yet the NMP concept, and the service in practice, was fraught with contradictions. It entrenched a hierarchical system of medical education and employment, in which race (or at least white and non-whiteness) determined options, career prospects, and income. Native Medical Practitioners were only eligible for Government employment, mostly in primary care, while European Medical Officers took on specialist clinical work at central hospitals. Through their practice of European medicine, Native Medical Practitioners were to be agents of civilisation, but were themselves expected to remain uncontaminated by “Europeanisation”, which was considered to endanger proper performance of their duties in the community, the concept of a cheap auxiliary medical service, and the social status quo.98 Post-war, this emphasis became more difficult to maintain, and the indigenous medical practitioner system was drawn into a new level of professionalisation that had consequences for preventive public health care.

98 Cook Island and Western Samoa students who attended college in New Zealand were considered a particularly disturbing Europeanised element, accustomed to wearing trousers and shoes and dissatisfied with conditions at the Central Medical School. V.W.T. McGusty, in “Fiji Annual Medical and Health Report, 1937”, p. 34, WPHC 4577/1938; Hoodless, “Report on Central Medical School”, “Fiji Annual Medical and Health Report, 1938”, WPHC 923/40; Hoodless to DMS, 23 March 1944, I1 8/24:1; Hoodless to Col. Voecker, 21 June 1946, I1 8/24:1.
Success in establishing the Central Medical School had augured well for Lambert’s further plans for a Pacific Health Service, but unfortunately the achievement coincided with the start of the Depression. This eroded the region’s tentative prosperity, reliant as it was on the world commodity market, and it became apparent that the gains made as a result of the surveys and the enlarged school might be lost. Administrations pruned public expenditure and halted further expansion in services; in this climate some perceived even Native Medical Practitioners as an unnecessary expense, having not yet unequivocally proved their value and economy. With indigenous medical education vital to his plans for a viable Pacific Health Service, Lambert entered on a new struggle just to safeguard the Central Medical School’s existence, directing all his influence and reputation to stop participants withdrawing. The Depression also quickened Rockefeller Foundation plans to leave the Pacific, an intention Lambert successfully reversed. He instead persuaded the IHD to subsidise new schemes, notably soil sanitation in Fiji and the Cook Islands and a treatment programme in Western Samoa. With this coup he secured the Foundation’s commitment long past the ten-year “demonstration period” it considered adequate to kick-start autonomous public health departments, and he maintained regional interest through a difficult period as despite retrenchment Governments were reluctant to lose such opportunities and scraped together their share. Thus Lambert not only weathered the Depression with his favourite schemes intact, but managed to extend public health work, guarantee himself more time in the Pacific to pursue his plans for a regional service, and surface more determined and confident about achieving his aspirations.

Heiser, witness to the 1929 crash on Wall Street and its desperate aftermath, sounded the first concerns at possible effect on student numbers at the CMS. Remote in the Pacific and euphoric over the new school’s potential, Lambert was
initially unperturbed.¹ By mid-1930, however, he reported that the tentacles of economic decline were extending their stranglehold on development in the Pacific, with an “almost desperate” economy in the New Hebrides,² and in the Solomon Islands, pessimism about further expenditure on the health work that had flourished since his survey there. Heiser, having just toured sixteen countries and found conditions in all below normal, commiserated over the inevitable reductions in Government expenditure, which “always seem to fall hardest on the health services.”³

Increasing austerity threatened the Medical School. Although 1931 was a fruitful year for the CMS, with successful graduations, transition to a more professional four-year course, and recognition from many in the international medical field, it faced renewed scepticism about the value of Native Medical Practitioner training. Hoodless addressed these doubts through the Annual Report, reinforcing the school’s numerous benefits to the colonies and the hospital (including free labour and spin-offs for nurse training), and the extent of Rockefeller Foundation financial input.⁴ Lambert also noted the irony that performing better than expected still had not guaranteed the School’s future. As well as using every resource of his influence and prestige to prevent participants withdrawing, he adopted strategies to secure the School’s position and future that were boldly expansionist. One approach was to extend its facilities and enmesh these within Fiji’s, and the Pacific’s, health organisation. Chapter 12 below covers Lambert’s campaign for a new pathology laboratory, promoted as essential to bring student training and the medical community’s clinical practice to modern scientific standard, and to promote Fiji as an international centre for research in tropical medicine. Another stratagem was to expand the context within which NMPs would operate, by promoting public health projects that established an immediate demand for their services. During his leave in 1931, Lambert persuaded the IHD that its financial assistance in such work was essential and worthwhile.

Even with Foundation support, such expansion required capital expenditure from administrations already struggling to meet their existing obligations in the

¹ Heiser to Lambert, 25 March 1930, RFA RG. 1.1, Series 419L, Box 1, Fldr. 9./RFA RG. 2, Series 419H, Box 43, Fldr. 353; Lambert to Heiser, 31 July 1930, 28 August 1930, and 14 October 1930; and Heiser to Lambert, 13 January 1931, all RFA RG. 1.1, Series 419L, Box 1, Fldr. 9.
² Lambert to Heiser, 25 July 1930, RFA RG.2, Series 419H, Box 43, Fldr. 353.
³ Heiser to Lambert, 19 August 1930, RFA RG. 2, Series 419H, Box 43, Fldr. 353.
Central Medical School. In 1932 the Cook Islands sent only one student. Lambert visited New Zealand to discuss various issues regarding its participation in the Pacific programmes, and expressed to S. J. Smith, Secretary of the Department of Island Territories, his concern at what he regarded as its cooling attitude to the NMP scheme. Urging a few years’ trial, he declared any withdrawal a retrograde step, when the “crying need” in the Cooks for medical work (in an otherwise well-run administration, he hastened to add) meant it would be twenty years before the supply of NMPs met needs. Smith, aghast at Lambert’s perception, strongly defended his total commitment to improving medical conditions in the Group with well-qualified NMPs; an efficient service was “the best means we have of impressing our prestige on these people.” His department’s cutback in the NMP programme was a small concession to mollify public and Cabinet perceptions that the dependency was an unnecessary extravagance. Lambert supported his battle to maintain one new student a year.

As the Depression dragged on, the CMS continued to reflect the struggling economies in the Pacific. Like the Cook Islands, the Solomons anticipated halving its number of students to the school in 1933 in an attempt to prune expenses, although the anticipated savings were a paltry £34.12.3. Lambert remained hopeful that other Groups would join the programme, thus reducing costs all round. American Samoa and Nauru had no other involvement with Rockefeller Foundation activities, but were both interested in the CMS; the former was granted a quota of two students from 1934, but entry was delayed until 1935, when Nauru also joined. After a period of French opposition, the Condominium Government suddenly decided in 1933 to resume its place, with a New Hebridean student entering the following year.

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5 Lambert to Smith, 20 November 1932, IT 1 110/6:1.
6 Smith to Lambert, 25 November 1932, IT 1 110/6:1. See also K. Litman’s comments in “The Colonial Office and the Population question in the British Empire, 1918-62”, Journal of Imperial and Commonwealth History, 27, 3 (September 1999) 57-58, on the provision of social services in relationship to racialised concerns about population and the maintenance of imperial power.
7 Lambert to Smith, 12 December 1932, IT 1 110/6:1.
8 Still committed to a share of the school’s capital costs, they were billed £44.10.3 for an unfilled studentship, fees and expenses only increased the cost of a student’s actual attendance to £79. 2. 6. Studentships filled and unfilled at the Central Medical School as anticipated in 1933, IT 1 8/24:1.
9 Western Pacific Health Service Sixth Annual Report, 1933, IT 1 8/31:1. Initially Lambert asked the HD to fund two American Samoans to the CMS (Lambert to Russell, 4 December 1932, RFA RG. 1.1, Series 419L, Box 1, Folio 9) but support came instead from an American educator. American Samoa joined despite severely critical comments on the NMPs and indigenous medical education, by Commander C. S. Stephenson, U.S.N., Public Health Officer, American Samoa.
10 Joy to Gillan NHBS 1/1 10/1932.
However late in 1933 the School's viability was seriously jeopardised when Western Samoa decided against sending further students. Originally one of the most enthusiastic supporters of NMP training, the administration now felt it could not afford the extra cost of students or an expanded NMP service as Depression made financial stringency increasingly necessary. Administrator Hart now suggested that once the two current third-year students joined the existing staff of five NMPs, the Territory's needs would be adequately met. Berendsen considered it "a retrograde step" to withdraw from Native Medical Practitioner training, but conceded financial necessity. Prime Minister and Minister of External Affairs George Forbes anticipated Lambert's disappointment when he communicated Hart's 'regretful' decision to Fiji.11

Lambert expressed more than disappointment. He vehemently opposed Samoa's decision to send no more students to the Central Medical School. While sympathising with the administration's circumstances, he considered Samoa's health services - four European doctors concentrated in Apia and seven NMPs for the remaining widespread communities - as entirely inadequate to cope with the medical conditions. Lambert had several reasons for resisting Samoa's application to the Advisory Board to reduce her quota: first, other participants had to continue paying their share even when unable to send students; Samoa would set a precedent for other Groups to pull out; if this happened the Central Medical School would be weakened, along with its contribution to public health work. Finally, all parties had agreed to participate for ten years, until 1938, and by then Lambert was sure the economic situation would have normalised and Samoa would regret its defection.12

Berendsen defended New Zealand's position while assuring Lambert, "We attach, as you know, the utmost importance to your views on this subject."13 A meeting between Governor Fletcher, Prime Minister Forbes, and senior New Zealand officials concluded the savings were negligible compared to the advantages of trained NMPs. The Samoan Administration compromised, withdrawing one unsatisfactory student and reviewing (downwards) the NMPs' current salary scale, thereby saving £130 yearly, but otherwise continuing their

11 Administrator, Western Samoa to Minister of External Affairs, 27 October 1933; George Forbes to Hart, 16 November 1933; EA Secretary to EA Minister, 19 December 1933; Forbes to Governor-General, 19 December 1933, all IT 1 8/24:1.
12 Lambert to Berendsen, 18 January 1934, IT 1 8/24:1 (two letters, one personal and confidential, in which he was more outspoken in his views).
13 Berendsen to Lambert, 27 January 1934, IT 1 8/24:1. Verschaffelt was New Zealand's Public Service Commissioner.
involvement. Lambert's influence and tenacity, his refusal to let austerity measures erode his pet project, ensured that the CMS programme emerged intact from the Depression. By direct intervention and pressure on administrations not to withdraw from the school, Lambert was crucial to the CMS' survival during the Depression years.

Digging In – the sanitation campaigns

From 1922, when Lambert and Montague first drafted their ideas for a Western Pacific Health Service, treatment programmes featured alongside the medical school. With co-operative agreements for hookworm and yaws campaigns Lambert organised mobile field units for the Solomon Islands and GEIC under men earlier trained in his methods. Lambert was confident that these were competent demonstrations which, along with the production of NMPs from the new medical school, guaranteed a permanent place for organised public health work. The Depression eroded such optimism. Further strengthening was required, and circumstances pointed to a soil sanitation campaign as the project to pursue.

By 1926, those involved believed that Fiji's four-year hookworm campaign had removed ankylostomiasis as a major disease throughout the Colony and markedly improved the population's general health; other intestinal diseases had also declined. Nevertheless the year's report from campaign director Chris Kendrick underlined the perennial conundrum of the treatment campaigns: the average hookworm infection rate had dropped to 23 percent, but in some areas it remained above 50 percent, which he attributed to inadequate latrines and continued soil pollution. Despite Lambert's hopes for carbon tetrachloride, eradication by treatment alone was obviously impossible. Kendrick identified "the occupation of the people, the geographical position of a home or settlement,

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14 Berendsen to Secretary, Samoan Administration, 7 February 1934; Turnbull to Berendsen, n.d., both TT 1 8/2:1. Hart justified the salary decision by comparing Western Samoan NMPs' pay (£123. 6s. for the 1st year) with the £84 the Tiketau NMP received. Hart to EA Minister, 28 November 1933: TT 1 8/2:1.
15 These included Bill Tully, NMP Malakai Veismasama (who with a recent CMS graduate took over when the European employed for the Gilbert and Ellice Islands proved unsuited to work in the isolated stolls), and Chris Kendrick, who ran the Government hookworm treatment team operating in Fiji.
16 "Fiji Annual Medical and Health Report, 1926", pp. 2-3, CO 83/178/16.
and a good latrine” as the main sociological and environmental determinants in hookworm infection and its control. After villagers blamed anthelmintic drugs for two fatalities, treatment rates declined, so he redirected the campaign towards latrine installation, prosecuting reluctant householders to enforce compliance; even then, it was difficult to command use. 

Because of the demand for healthy labour, the main thrust of the health campaigns had been directed first towards the Indians. It was also their settlements, like those in the Rewa district, that had been the focus of drainage and sanitation work - measures that had improved Indian health statistics. Less economically important, Fijian communities tended to be overlooked, and their sanitation remained unsatisfactory. This attitude changed after severe dysentery spread through the Colony in 1929, with Viti Levu suffering hundreds of cases and 10-15 percent mortality amongst the ill. Serious dysentery epidemics had ended in 1916, and Lambert suggested that a new organism arriving with the last ‘coolic ship’ from India probably caused this virulent infection, to which the community had no immunity. The epidemic’s return the following year, combined with the spread of typhoid into the Fijian population, alarmed administrators and civilians alike; so too did the continuing population drift to Suva. Overcrowding accentuated chronic defects in Suva’s sanitation infrastructure, and the town’s role as a centre of disease dissemination. A committee of Europeans formed to plan sanitary improvements, especially in suburban Suva’s non-white sectors and rural environs, with Lambert appointed to head a latrine campaign.

This was a perfect opportunity to promote a “new development in simple sanitation”, a recent IHD-favoured design which Heiser had introduced during his 1928 visit as an answer to many of Fiji’s problems, including typhoid. Though still experimental, the Bored Hole Latrine (BHL) was simple in principle, employing an enlarged post-hole boring apparatus to dig a deep, narrow pit which, properly finished, was apparently less likely to smell, attract flies, contaminate water supplies, or spread disease. In other words, it represented an

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17 C. Kendrick, Report of work done by the Ankylostomiasis campaign during the year 1926, "Fiji Annual Medical and Health Report, 1926", pp. 30-36, CO 83/178/16.
18 Lambert to Heiser, 23 July 1931, RFA RG. 1.1, Series 417, Box 1, Fldr. 2.
19 Lambert to Heiser, 26 February 1930, RFA RG. 2, Series 419H, Box 43, Fldr. 353.
21 Heiser, 6 July 1928, Diary 1928, APS/VHP.
affordable, acceptable solution to the long-standing problem of soil pollution. Lambert, impressed after testing a locally-built boring machine, commissioned six outfits. 22 Now, he set out to install a bored hole latrine for every house in the Suva area. As he explained to Heiser, he committed to beginning the work the next year without conferring with the IHD because:

...otherwise it would come slowly and inefficiently and the Fijians probably would lose out altogether. Their sanitation is very poor and as they live out of sight and are not very vocal, there is a tendency to forget them... my job... will only be less than half done till they have safe latrines here, and I want to get going while this Committee and the public are really interested. 23

Lambert presented Indian sanitation practices and the annual arrival of coolie ships with their exchange of Indians as a “constant threat to the Colony”, a claim which CMO Hunt disputed as overly pessimistic. Wholesale vaccination and improved water supplies, latrines and a European Sanitary Inspector had reduced typhoid to sporadic, easily countered cases in at-risk districts. 24 But Lambert intended taking the latrine campaign beyond Suva, using the dysentery epidemics as a catalyst for a systematic campaign to take [BHLs] everywhere, “even into the mountains and remote islands”. 25 The time was right to begin planning a colony-wide campaign to install a suitable latrine in every home. He asked Heiser:

Do you want me to start the wheels going and could I assure the Government that I could stay in the Colony...? would the Board participate financially in such a plan...? The demand for better soil sanitation is coming from the legislators who represent the people and it has been more or less publicly asked that I run the machinery. 26

Such a campaign was in full accordance with the IHD’s goals for preventive public health, but Heiser was non-committal: the Depression was stretching demand for funding; the South Pacific had already benefited from years of health

22 “Fiji Annual Medical and Health Report”, 1928, p. 80, WPHC 835/1930; also VGH Diary, Fiji 1928, p. 7. Heiser emphasised to Lambert that he would not support any increase in the IHD budget to cover soil sanitation.
23 Lambert to Heiser, 26 February 1930, RFA RG. 2, Series 419H, Box 43, Fldr. 353.
24 Vaskess to High Commissioner, 19 April 1930, and Hunt to Vaskess, 23 April 1930, WPHC 772/1930. Installation of 1260 bored hole latrines in 1931 and improved sanitary conditions were later credited with lowering the mortality rate from a Shiga dysentery outbreak in the first half of the year, though the disease was observed to be less virulent than previously. “Western Pacific health Service, Fourth Annual Report, 1931”, WPHC 1447/1931; “Fiji Annual Medical and Health Report, 1931”, WPHC 3783/1932. Lambert asserted to Heiser (31 July 1930, RFA RG. 2, Series 419H, Box 43, Fldr. 355) that neither Indians nor Fijians were interested in soil sanitation. Anthropologist Laura Maude Thompson seemed to agree, reporting that “The village is well supplied with latrines which almost no-one uses, but which are regularly inspected by the Board of Health.” “Letters from Fiji, 1933-34”, PMB 1027, p. 5, PMB Manuscript Series, Research School of Pacific and Asian Studies, ANU (microfilm).
25 Lambert to Heiser, 26 February 1930, RFA RG. 2, Series 419H, Box 43, Fldr. 353.
26 Lambert to Heiser, 31 July 1930, RFA RG. 2, Series 419H, Box 43, Fldr. 353. Lambert’s pragmatic use of a crisis to expand health systems was much the same as Cumpston’s response to the 1918 influenza epidemic in Australia.
demonstrations so government itself should be willing to finance work it considered worthwhile. Lambert responded that centralisation and soil sanitation were the two main themes driving IHD involvement in the region. Hookworm work had lapsed in Fiji, now the disease was no longer considered “an economic problem”, but public opinion would get behind a complete soil sanitation plan for Fiji, the Depression notwithstanding. He quoted Heiser’s own earlier words - soil sanitation “must be the foundation of preventive medicine in the tropics”, being the only way to get rid of hookworm, typhoid and dysentery.

An urgent cable followed: was the IHD willing to contribute half of a £1,500 surplus Lambert had accumulated, so that the Depression-wrecked government could begin a new latrine campaign in 1931? Heiser again demurred, explaining that the Foundation was struggling to cope in the economic circumstances, deluged with requests from many countries needing assistance. The Board of Trustees now required that the Foundation reduce its budgets, so there was “very little leeway” for new projects. Persistence again paid dividends for Lambert; he was to send a full plan and budget so that if savings made elsewhere could be diverted, the Scientific Directors might consider the proposal for submission later in the year. Lambert did so, detailing a five-year budget to construct 35,000 latrines in Fiji. £2070 per annum would cover the salaries for ten Indians or Fijians to head boring teams, general staff travel, central administration, and supplies, transport and contingencies. The Rockefeller Foundation contribution would decrease annually on a sliding scale, and householders would pay the cost of boring and for the concrete slab (with pedestal and seat if desired). Lambert stressed the British Administration’s long, amenable relationship with the Foundation, urging:

This work ought to be done; the time is ripe now, as there is administrative and public sentiment behind the movement, which is so often lacking, especially in a British community, when soil pollution is concerned. ... Our status is good with this Government, which I can assure the Board will give every co-operation.

As the economic situation deteriorated through 1930, Lambert’s optimism declined with it. His own future was uncertain. He left Suva in April 1931 for an extended break in the United States, where he regained his

27 Heiser to Lambert, 19 August 1930, RFA RG. 2, Series 419H, Box 43, Fldr. 353/ also , RFA RG. 1.1, Series 417, Box 1, Fldr. 1.
28 Lambert to Heiser, 28 August 1930, RFA RG. 2, Series 419H, Box 43, Fldr. 353.
29 Lambert to Heiser, 27 September 1930; Heiser to Lambert, 30 September 1930, all RFA RG. 1.1, Series 417, Box 1, Fldr. 1.
30 Lambert to Heiser, 13 October 1930, RFA RG. 1.1, Series 417, Box 1, Fldr. 1. Lambert refined this basic plan in: Lambert to Heiser, 23 July 1931, RFA RG. 1.1, Series 417, Box 1, Fldr.2.
equilibrium and drive enough to persuade Heiser and the IHD's Board of Scientific Directors to adopt new co-operative programmes for the South Seas, and secure his return to oversee their implementation.

Lambert was motivated by more than altruism. The end of current IHD contracts in the Pacific was looming, and Lambert's correspondence had begun to convey a strong sense of discouragement about his achievements and anxiety about future prospects, due to the Depression's effects on the progress of his centralisation plans, IHD reconsideration of its commitment to the Pacific, and personal circumstances, including burn out.\(^31\) Having succeeded in establishing the medical school, he needed challenging new projects to justify his presence—and the IHD's—in the Pacific. An overdue four month inspection tour of the Solomon Islands, Norfolk, and the New Hebrides provided some relief and encouragement, especially as it included nearly a month at isolated Rennell Island with the Whitney South Sea Expedition, a visit he described as "very successful and the most interesting experience I have ever had in the South Pacific."\(^32\) Until there was some firm decision over future directions, he was bored and losing confidence, complaining plaintively, "No-one minds writing reports that someone will read but it is rotten to feel that no-one may be reading them at all. [Other RF staff reports] make me feel sick as they tell of nice clean-cut work while mine seems dull hack work besides theirs."\(^33\)

While Heiser was reassuring about the quality of Lambert's work, he was more vague about his future position in the Pacific. The IHD's found from experience elsewhere "that if things drag on indefinitely, governments are slow to make suggested changes whereas if they know that our representatives will leave at a certain date prompt action is usually forthcoming." Soon there were clearer guidelines: the IHD anticipated withdrawing from the Pacific at the end of 1931 when its current co-operative agreement expired, and Heiser saw "little prospect of our continuing there much longer unless you can present a very convincing program showing that further aid is required."\(^34\)

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\(^{31}\) Heiser earlier commented on Lambert's diminished enthusiasm for field work away from Fiji. (6 July 1928, Diary 1928, AFS/VHP). 1930 was a year of change for Lambert—as well as the climax of the school project, he lost two key supporters of his work, with Montague's retirement and the resignation of RF President George Vincent Russell (Vincent to Lambert, 9 December 1939, RFA RG.2, Series 419H, Box 25, Fldr.210; Lambert to Heiser, 6 February 1930, RFA RG. 2, Series 419H, Box 43, Fldr. 353).

\(^{32}\) Lambert to Heiser, 25 July 1930, RFA RG.2, Series 419H, Box 43, Fldr.353. Lambert produced a long account of his trip to Rennell and nearby Bellona, Polynesian outliers in the Solomon Islands that he later tried to establish as an "ethnographic reserve".

\(^{33}\) Lambert to Heiser, 25 September 1930, 28 August 1930, RFA RG. 2, Series 419H, Box 43, Fldr. 353.

\(^{34}\) Heiser to Lambert, 17 September 1930 and 14 October 1930, RFA RG. 2, Series 419H, Box 43, Fldr. 353.
Lambert had a list of project proposals for Heiser, including the latrine campaign, which encompassed his rationale for the IHD’s continued presence in the Pacific. But he concluded gloomily:

These are things I’d like to do for the Pacific. Without personal interest for I’m fed up with it and the life here ... I’ve been thirteen years with the Board next July in the Pacific and eighteen years in the Tropics ... I’ll never miss a leave period again, five years are too long to stay in the tropics or in another man’s country without a break. I’m getting a little old and crotchety [sic] probably and they wear on my nerves and I on theirs probably. I’ve expected a big break before now of some kind ...

... But they haven’t got the money to do all the things that want doing though they can be induced to put many of them on a permanent footing if one could get them started. ³⁵

With Fiji’s revenue for 1931 anticipated to be down more than £90,000, Lambert believed that only “the bait” of a Rockefeller subsidy could induce the Government to take up the work he proposed. Lambert was pushing the boundaries of both Fijian and IHD willingness. Sir Harry Scott, member of the Executive and Legislative Councils, persuaded the Governor and Colonial Secretary McOwan “to promise [Lambert] any sum within reason” to proceed with the Suva sanitation project, but Lambert wanted the Colony-wide project, which required a fresh budget and an extension of his term beyond the expiry of both in 1931. By juggling funds he could afford a year’s work in Suva, but complained, “I cant [sic] do a colony wide program of latrines and yaws work and hookworm work here and elsewhere without more money.”³⁶

Lambert requested leave in the States early in 1931, to discuss his new proposals. Reminding Heiser that he had had only two leave periods in thirteen years’ service, he wrote frankly:

I reckon this is too few for good results. I am getting fidgety and need a change. My health is not run down but I’m nervous and frightened of having a nerve explosion on an unfortunate occasion, meaning by the above remark a mean temper that I haven’t learned to control after all these years. I cant and dont [sic] plead ill-health in general or overwork, more probably could plead too little work as a contributory cause. Sitting at a center and thinking up something to fill in between reports from distant fields is wearing. ... Let me come home and get some new ideas before I peter out completely.

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³⁵ As well as the Fiji latrine campaign, these included yaws and ringworm work there; a Tongan water system; beginning hookworm and yaws co-operation with Western Samoa and continuing such work in the Western Pacific High Commission territories; bolstering up the CMS and extending it; a Pacific leprosy survey; and maintaining the WPHS as a purchasing agent for essential drugs. Lambert to Heiser, 14 October 1930, RFA RG. 1.1, Series 417, Box 1, Flldr. 1.
³⁶ Lambert to Heiser, 14 October 1930, RFA RG. 1.1, Series 417, Box 1, Flldr. 1.
³⁷ Lambert to Heiser, 15 October 1930 and 16 October 1930, RFA RG. 1.1, Series 417, Box 1, Flldr. 1.
... I have planned several papers that may be worthwhile but how I despise a man who writes and writes unless he has something worthwhile to say. The results of yaws and hookworm after three years, a survey of hookworm in Fiji during early 1930, depopulation of the Pacific from a medical standpoint, tuberculosis [sic] in the Pacific, a trial of hexylresorcin contra chenopodium, some trial and test worm counts with tetrachlorehylene and close clinical observation. But who wants to hear about that? Just to fill in time.\footnote{Lambert to Heiser, 1 December 1930, RFA RG. 2, Series 419H, Box 43, Fldr. 353.}

In the months prior to his departure, several developments restored Lambert’s optimism about his Pacific plans. In Tonga Salote and Tungi affirmed their interest in his proposals to create a Unified Pacific Medical Service, and Fletcher and Western Samoa’s administrator actively encouraged him to pursue the scheme. Allen also asked him to visit New Zealand to discuss a co-operative hookworm treatment and yaws eradication programme in the aftermath of the Mau movement.\footnote{Lambert to Heiser, 22 December 1930: RFA RG. 2, Series 419H, Box 43, Fldr. 353.} Lambert was further encouraged by the arrival of the Fiji’s new CMO, Dr A. H. B. Pearce, who was apparently a capable organiser and administrator, and Lambert anticipated a constructive working relationship with him. Furthermore, despite an increasing deficit, Fiji wished to continue the latrine campaign as planned.\footnote{Lambert to Heiser, 7 January 1931, RFA RG. 2, Series 419, Box 59, Fldr. 486.}

Further evidence of continued high regard for his work was forthcoming when Lambert met with representatives in Wellington to discuss projects for the New Zealand territories. Sir Apirana Ngata, with assurances of the Government’s “deep appreciation” for past Foundation assistance to Cook Islanders, officially invited the Rockefeller Foundation to undertake a joint soil sanitation system throughout the Cook Islands, whose own resources were completely inadequate. New Zealand itself was suffering severe financial depression but with assistance from the Rockefeller Foundation would seriously consider beginning work the next financial year.\footnote{Ngata to Lambert, 29 January 1931, and., RFA RG. 1.1, Series 417, Box 1, Fldr. 2. Ngata later praised Lambert for “the permanent benefits” accruing from his work. Ngata to Lambert 1 April 1932, RFA RG. 1.1, Series 417, Box 1, Fldr. 2} After discussions on the yaws and hookworm situation in Western Samoa, Berendsen responded similarly: the Prime Minister, impressed by what Lambert and the Rockefeller Foundation had accomplished in the Pacific, would welcome the Foundation’s assistance to implement treatment schemes for these diseases.\footnote{Berendsen to Lambert, 3 February 1931: IT 1 8/31:1.}
administrations seized on the possibility of external funding to counteract their dire financial predicaments. Heiser’s eventual reply to Lambert’s earlier letters gave little reassurance that the IHB contemplated continuing its representation in the region, or that the Board of Scientific Directors would consider Lambert’s proposals. He restated IHD priorities:

In making recommendations, we must keep in mind the policies that guide the destinies of the International Health Division of the Rockefeller Foundation. Health work is not undertaken because a country is too poor to pay for the cost of it. The policy is to make a demonstration on a small scale, usually in one section of a country, that a given health measure is desirable and feasible and capable of application, and then to expect the Health Service to introduce the health measure throughout its territory in so far as its resources permit. In the South Pacific, in the last fifteen years according to your reports we have made ample demonstrations to show the practicability of certain health procedures, and it is felt at the Home Office that the matter of application now rests entirely with the government. The Board of Scientific Directors has also shown preference for our participation in health measures which involve research into field methods for applying existing knowledge rather than to assist one community after another to apply measures after their applicability has once been demonstrated.  

Heiser considered aid to a latrine campaign fell outside these principles, but suggested reorienting Lambert’s proposal to improve its chances. If Lambert waited on forthcoming data from other research into bored-hole latrines and their application, he could use this to develop a detailed proposal for a three-year experimental project in installing bored-hole latrines. The project was to cost less than £1000, and include a “definite written assurance” from the Government that it would complete the scheme. Heiser doubted that the IHD would consider Lambert’s other plans (a new Central Medical School dormitory and laboratory, and financing a Pacific leprosy survey) given present circumstances.

Buoyed by recent local support, Lambert left Fiji in April 1931 for six months leave in the US, taking with him elaborate plans for the Pacific and a letter for Heiser in which Governor Fletcher praised Lambert’s past indefatigable contributions to Islanders’ health, and expressed hopes that the Foundation would return Lambert to the Pacific as his expertise was essential if proposed measures were to have best possible results for a population at a critical stage of

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43 Heiser to Lambert, 13 January 1931; see also G. Carpenter to Sawyer, 27 January 1931, and Sawyer to Lambert, 5 February 1931, all RFA RG. 1.1, Series 417, Box 1, Fldr. 2.
44 Heiser to Lambert, 13 January 1931, RFA RG. 1.1, Series 417, Box 1, Fldr. 2.
45 As well as those appreciations already mentioned, the Council of Chiefs (Resolution XVII, 1930) had also recorded its gratitude to the Rockefeller Foundation and more specifically to Lambert for his “most useful work”: Armstrong to Lambert, 25 March 1931: RFA RG. 2, Series 419, Box 59, Fldr. 486. Heiser also commented on Lambert’s growing reputation. Heiser to Lambert, 13 January 1931, RFA RG. 1.1, Series 417, Box 1, Fldr. 2.
development. As this work was “of the greatest importance” but wholly dependent on available funding, Fletcher also hoped for a continuation of the Foundation’s financial support. Lambert had built high hopes in Fiji for Foundation assistance. His aspirations exceeded Heiser’s circumscribed budget of £1000 a year; with such a paltry sum to spend in the South Pacific, Lambert declared “I would die in a period of years of mental inanition.” However, he appreciated that “influence is cumulative, and one is able to get more done with a weight of years and experience in the same area.”

Progress in his absence bore this out. Presenting a latrine campaign as irresistible to the Rockefeller Foundation had persuaded the Fiji authorities to begin a full sanitary campaign in suburban Suva. In the first quarter of 1931 inspectors condemned 90 percent of latrines surveyed, had 652 new latrines built, 162 premises re-drained, and 122 wells upgraded. As well, the New Zealand Government accepted all Lambert’s suggestions for a Cook Islands campaign, including the decreasing Rockefeller Foundation contribution not yet even presented to the Board.

Lambert’s tenacity also paid off back in New York, bolstered by Fletcher’s advocacy of the proposals. With recovered health and enthusiasm, Lambert was now keen to return to Fiji as soon as possible and advised the importance of continuing work in the Pacific until the Depression lifted, “to keep the ship steered in the right direction”. His version of circumstances was somewhat skewed: Fiji had “asked for” a latrine campaign to consolidate Rockefeller Foundation work in Fiji, and agreed to contribute half the £1600 annual budget for four years; while the Cook Islands administration (that is, in New Zealand) had pursued a five-year campaign, needing the Foundation’s “name and moral backing” to get the plans accepted. The budget there was a suggested £2200 per annum, with the Rockefeller Foundation’s share 33 percent.

Lambert argued for a Fiji campaign by underlining that poor local sanitation had serious consequences for the wider Pacific. As the region’s economic centre, Fiji also functioned as a focus for disease, subject to the inflow of new pathogens.

46 Fletcher to Heiser, 31 March 1931, RFA RG. 1.1, Series 419L, Box 1, Fldr. 9. Fletcher had previously met Heiser during postings in Hong Kong and Ceylon. Pearee’s memo to Fletcher, 27 March 1931, WPHC 929/1931, has the health proposals.
47 Lambert to Heiser, 23 February 1931: RFA RG. 2, Series 419, Box 59, Fldr. 486.
48 CMO Pearee memo to Fletcher, 27 March 1931, WPHC 929/1931; Western Pacific Health Service, Narrative Report, Fourth year, First Quarter, 1931, WPHC 1447/1931.
49 Ngata to Lambert, 4 June 1931, RFA RG. 1.1, Series 417, Box 1, Fldr. 2.
50 Fletcher to Heiser, 31 March 1931 and Russell to Fletcher, 19 May 1931, both WPHC 929/1931; Lambert to Fletcher, 9 May 1931, WPHC 1612/1931.
51 Heiser to Lambert, 20 July 1931; Lambert to Heiser, 21 July 1931 and 23 July 1931, all RFA RG. 1.1, Series 417, Box 1, Fldr 2.
as shipping arrived from the Pacific rim, and then disseminating infections to other island groups. Its importance was disproportionate to its size:

If Fiji is unprotected, then Samoa, Tonga, and the Gilberts and Ellices are unprotected; also, the great port of Sydney is threatened by diseases which might be imported first into Suva. ...none of the Groups can protect itself adequately.  

Diseases, mortality and morbidity rates in other groups followed those occurring in Fiji. Recent diseases to which Fiji had been exposed were dengue, Shiga dysentery, smallpox, and cholera, the last three brought on boats from India. He reiterated the pattern of health work, with its primary concern for Indian health and indifference to unsatisfactory Fijian sanitation (now so obvious in Suva) contributing to the renewed incidence of dysentery epidemics and the spread of typhoid into the Fijian population. Bored hole latrines offered an economic - therefore feasible - solution to the multifaceted problem of soil pollution, but a properly organised campaign to cover Fiji was needed. Lambert maintained that as a latrine campaign was the corollary to hookworm work, part of the sequence the IHD always advocated, it had an obligation to contribute. “While our work has been valuable ... it is not complete without sanitation.”

After discussing Lambert’s package of projects, Heiser selected only three items to present for the Board of Scientific Directors to consider. His choice demonstrated that the IHD still confined itself to its original pre-occupations. The leprosy survey and extensions to the CMS were rejected, even though Lambert now argued that a bacteriological laboratory was Pacific medicine’s greatest and most fundamental need. The favoured proposals - 3-year soil sanitation programmes in Fiji and Cook Islands, and a 2-year hookworm and yaws programme for Western Samoa - all conformed to the essential IHD brief. Heiser’s conservatism, backed by reference to protecting existing investment in health, paid off. At their Annual meeting just days before Lambert returned to the Pacific, the Scientific Directors approved estimates of $12,055 (£2475) for a three- year soil pollution control project in Fiji, and agreed to recommend $9,031 (£1,875) for similar work in the Cook Islands and $7,889.40 (£1620) for hookworm disease treatment and yaws research in Western Samoa, conditional on surplus IHD funds. All were subject to final approval of the Foundation’s Board of Trustees in December, and assurances from the governments concerned.

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52 Lambert to Heiser, 23 July 1931, RFA RG. 1.1, Series 417, Box 1, Fldr. 2.
53 Ibid.
54 Heiser to Lambert, 11 August 1931, RFA RG. 1.1, Series 417, Box 1, Fldr. 2; Heiser, Memo 27 July 1931, RFA RG.2, Series 419, Box 59, Fldr. 486.
that they would assume full funding for permanent control measures at the end of the co-operative period. 55 Fiji accepted the IHD’s terms for a modified three-year project rather than the original five-year plan. 56 Soon after, the Scientific Directors gave final approval to all three projects. The Board’s minutes reveal the influence of Lambert’s discourse on the value of restoring Pacific populations:

... the value of health work in the South Pacific should not be measured by the number of latrines or the number of yaws or hookworm treatments, or their cost. Rather, the problem is one of helping the Polynesian and Melanesian races which had been believed to be doomed to extinction until within the last thirty years when more humanitarian principles of government of native races came into practice, to adjust their culture to modern civilization. 57

The Board accepted co-operative schemes in the Pacific as “a logical sequence” to previous Rockefeller Foundation work, and was just as taken as Lambert by the notion of a grand plan “to install latrines everywhere, even in the mountains and remote islands.” 58

The new agreement consolidated the Rockefeller Foundation and Lambert as prime agents within the health framework of the South Pacific. Their contribution was included in a report on Fiji’s vital statistics, as one of the major events, which had affected demographic trends. 59 Missions sent letters of praise for the marvellous changes wrought following Lambert’s direction, as did visitors to the CMS. 60 The Fiji Council of Chiefs resolved to “record its gratitude to the Rockefeller Institute and to Dr S.M. Lambert ... for the useful and ungrudging work performed in connection with the sanitary and health campaigns [and] its appreciation of the valuable financial contribution given by the Foundation, and fully appreciates that the great improvement in the health of the people is in a large measure the result of the activities in Fiji of Dr Lambert.” 61 Both Lambert

55 Heiser, “Docket Material for SD meeting October 1931”, Memos 1930-31, APS/VHP Heiser, “Final Conference with Dr S.M. Lambert preparatory to his returning to the South Pacific”, 27 October 1931, RFA RG. 1.1, Series 417, Box 1, Fldr. 2.
56 Heiser, Memos 1930-31, APS/VHP; Lambert to Rockefeller Foundation, 29 November 1931: RFA RG. 1.1, Series 417, Box 1, Fldr. 2; Lambert to Heiser, 3 December 1931: RFA RG. 1.1, Series 417, Box 1, Fldr. 2; RFA RG. 2, Series 419, Box 59, Fldr. 486; various permutations of the budget are in RFA RG. 1.1, Series 417, Box 1, Fldr. 1.
57 SD Minutes, 18 December 1931, RFA RG. 1.1, Series 417, Box 1, Fldr. 1. See also Heiser to Fletcher, 22 December 1931: RFA RG. 1.1, Series 417, Box 1, Fldr. 2; Heiser to Lambert, 24 December 1931, RFA RG. 1.1, Series 417, Box 1, Fldr. 2; Heiser, “Program for 1932, Local Health Departments”; n.d., RFA RG. 1.1, Series 417, Box 1, Fldr. 1
58 SD Minutes, RFA RG. 1.1, Series 417, Box 1, Fldr. 1; Lambert to Heiser, 11 February 1931, RFA RG.1.1, Series 417, Box 1, Fldr. 3.
60 Grosswalden to RF, 24 March 1932, RFA RG. 1.1, Series 417, Box 1, Fldr. 3; Heiser to Russell, 12 April 1932, RFA RG. 1.1, Series 419L, Box 1, Fldr. 9.
and Heiser delighted in a sense of achievement, with the latter evaluating the IHD’s role and influence:

Governments ... have come to have implicit faith in programs proposed by the I.H.D., and we enjoy a confidence and prestige which is almost wholly unknown in governmental relationships with foreigners.

... many principles have been established that are receiving world-wide application. It has become the general practice of governments of the East not to undertake any major health procedures before availing themselves of the advice of I.H.D. representatives. Vast improvements have been brought about in public health administration that affect the health and lives of millions of people, at scarcely any cost to the I.H.D. beyond supervision of the work by a few of its representatives.

... Dr. Lambert has done an exceptionally good piece of work and has much influence with the island administrations.

The ubiquitous latrine

Lambert was pleased at the approbation for his work, but even the Foundation’s powerful influence could not override circumstances in the colonies. It was now uncertain if the Cook Island and Western Samoa administrations could accept the proposals, as New Zealand’s economic position had deteriorated further. Smith was reluctant to lose the opportunity but considered it “committing official suicide” to press for the Cook Islands sanitation scheme. The situation looked even grimmer as the New Zealand Government cut a further 10 percent from Public Service salaries.

In Fiji, the Executive and Legislative Councils readily approved the campaign, with formal confirmation from the Secretary of State following soon after. Lambert finalised the year’s budget and an April start looked probable, requiring only Government’s formal assurance that it would continue work after

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62 Lambert to Heiser, 17 May 1932, RFA RG.2, Series 419, Box 72, Flrd. 590
63 Heiser, n.d. “Memos 1932-34”, APS/VHP.
64 Lambert to Heiser, 21/1932, RFA RG. 2, Series 419, Box 72, Flrd. 590; S.G. Smith to Lambert, 1 February 1932, RFA RG. 1.1, Series 417, Box 1, Flrd. 3. With the sliding scale of Foundation contribution, the New Zealand faced an expenditure of nearly £1,000 by the third year.
65 Lambert to Heiser, 1 February 1932, 11 February 1932, 17 February 1932, 15 April 1932, 26 April 1932; and Heiser to Lambert, 21 March 1932, all RFA RG. 1.1, Series 417, Box 1, Flrd. 3
66 Lambert to Heiser, 21 January 1932, RFA RG. 2, Series 419, Box 72, Flrd. 590; Lambert to Heiser, 11 February 1932, RFA RG. 1.1, Series 417, Box 1, Flrd. 3.
the IHD withdrew.67 There were also concerns that impoverished Fijians could not afford latrines.58

Lambert began work anyway and soon reported favourable progress. In the heavily populated sugar cane areas of the Northwest, co-operation from the Colonial Sugar Refining Company's ensured rapid and efficient advance; district managers insisted that their Fijian and Indian tenants installed the latrines, with "the better class of latrine with the ventilating pipe, concrete riser and wooden seat installed on all estates for Europeans."69 Lambert found radical modifications necessary to adapt the BHL model for Fijians, building larger diameter pits, a minimum of 12' deep, covered with a framework of native timber to support the concrete slab. Heiser disapproved, citing experimental evidence which showed that latrines with 18” holes, 12-15' deep were more likely to pollute water supplies than 14" holes bored 30-40' deep; larger holes also needed supporting timbers, and as in old-style pit latrines these were likely to rot and collapse, a disincentive to use. Lambert defended his reasons for the changes. One was simply geological: away from the delta sugar regions, a soapstone substratum made deep bores difficult. Others were cultural. "The size of Fijian motions are incredible," he informed Heiser, attributing this to the high-fibre Fijian diet; besides, they used reeds, bamboo, and coconut husks for cleanliness, and as a result, standard pits filled in a few months, and enthusiasm changed to frustration.

Consequently, Fijians had developed their own workable designs and these were in constant use. Their response gave scope for sociological interpretations. "The Fijian is very much in love with the slab idea and the individual family latrine," Lambert reported, defining this transition from the old communal village latrines as "very significant ethnologically of the change that has taken place in the communalist Fiji."70 There was also the Fijian preference for the sitting model, a 15’ bored hole with combination concrete base, pedestal and lacquered seat which cost 35s., rather than the 6s. basic squatting latrine acceptable to Indians. This change from squatting to seat was "apparently ... becoming a

67 Heiser to Lambert, 22 January 1932, RFA RG 1.1, Series 417, Box 1, Fldr. 3; Lambert to Heiser, 11 February 1932, 17 February 1932, and 24 February 1932, all RFA RG: 1.1, Series 417, Box 1, Fldr. 3; Heiser to Lambert, 21 March 1932, RFA RG. 1.1, Series 417, Box 1, Fldr. 3; Lambert to Heiser, 26 April 1932, RFA RG. 1.1, Series 417, Box 1, Fldr. 3; Heiser to Lambert, 16 May 1932, RFA RG. 1.1, Series 417, Box 1, Fldr. 3; Lambert to Heiser, 17 May 1932, 18 May 1932, RFA RG. 1.1, Series 417, Box 1, Fldr. 3; Dean to Lambert, 9 June 1932, RFA RG. 1.1, Series 417, Box 1, Fldr. 3.
68 Lambert to Heiser, 15 April 1932, RFA RG. 1.1, Series 417, Box 1, Fldr. 3.
69 "Western Pacific Health Service, Annual Report, 1933", IT 1 8/31/1.
70 Lambert to Heiser, 17 May 1932, RFA RG. 1.1, Series 417, Box 1, Fldr. 3; Heiser to Lambert, 7 June 1932, RFA RG. 1.1, Series 417, Box 1, Fldr. 3; Lambert to Heiser, 17 May 1932, RFA RG. 1.1, Series 417, Box 1, Fldr. 3.
considerable factor in social stratification.” Furthermore, the “special pride” Fijians apparently took in their latrines and the varied designs households employed for the finished ‘superstructure’ indicated to Heiser that “latrine houses are an outlet for the suppressed artistic sense of a people.”

Heiser suggested using corrugated iron sheet as a cheaper, more durable alternative to wooden platforms, to avoid damp and rot problems; and reported that Yeager, the BHL expert, had found that a hole dynamited after reaching the desired depth created seepage, which overcame the problem of quick filling. Otherwise, he suggested boring two holes for each household, with the second available while the first aged, then reboring. Heiser had other useful suggestions, such as applying silicate of soda solution during curing to waterproof the concrete, thus eliminating odour. Some areas had terrible problems with blowflies breeding in the latrines; Heiser stressed fly breeding eventually stopped in sufficiently deep holes, presumably because the heat generated (so much greater than in pit latrines, with their large exposed surface) killed larvae. Regular doses of kerosene helped, and a tight-fitting lid was essential.

Many of Heiser’s suggestions involved extra cost, and ignored the severe financial constraints that Lambert considered a far more serious problem. Poverty-stricken individuals could not afford individual latrines; the work slowed. Lambert told Heiser that asserting individual responsibility for installing privies (the Foundation’s policy) was “utterly hopeless”, and he looked to Provincial Treasury guarantees for Fijians. In the mountain provinces, villagers deprived of income after the recent collapse of the banana market to New Zealand required Government loans to buy the slabs.

The inland regions posed further challenges. With good co-operation from Fijians, the campaign progressed rapidly in the coastal areas of Viti Levu, completing three-quarters of households within a few months, and by mid-1933 Lambert was contemplating the rugged interior provinces. He spent five days walking across the Viti Levu mountains to familiarise with living and transport conditions, then reported that “the question of getting 200lb slabs over mountain peaks, on ill-defined trails, is a stupendous one” and the labour required “simply

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71 Heiser, 16 April 1934 and 1 May 1934
72 Heiser to Lambert, 18 August 1932, and 27 September 1932, RFA RG. 1.1, Series 417, Box 1, Fldr. 3. Also Heiser, 19 April 1934, “Diary - Fiji 1934”, APS/VIP.
73 Lambert to Heiser, 26 September 1933, RFA RG. 1.1, Series 417, Box 1, Fldr. 4.
74 Lambert to Heiser, 7 July 1932 and 28 July 1932, both RFA RG. 1.1, Series 417, Box 1, Fldr. 3. Despite lack of funds, Lambert managed to buy a Ford truck to use in the campaign, from the sale of BHL slabs (Lambert to Beal, 13 January 1933, RFA RG. 1.1, Series 417, Box 1, Fldr. 4.)
prodigious." In the end it was local knowledge that paved the way for the campaign into the remote interior mountain villages of Tholo West, as the District Commissioner organised transporting the heavy concrete slabs and other materials and secured provincial funds for this work, which Lambert subsidised with £300.76

Plans to complete Viti Levu by January 1935 now looked possible. Heiser, who had had good feedback on the effectiveness of the latrine campaign, arrived in Fiji in April. He initially reported Fijian acceptance and use of their latrines, which had been encouraged by "simple educational measures...followed by a mild form of legal compulsion; the respect for laws is so great that very little opposition arises"77 but soon saw villages where the riverbank was preferred although every household had a bored hole latrine. Attributing this to Fijians being exempt from the health regulations, he advised legislative standardisation or more intensive public health education to improve compliance. Overall, however, he noted a conspicuous difference between areas with and without BHTs, recording the "general belief" that where latrines had been installed, dysentery cases declined markedly. Heiser praised Colonial Sugar Refining Company for their helpful attitude to government activities and "whole-hearted support" of the latrine campaign, including funding installations in some areas.78

Heiser had ongoing concerns that sanitation work might falter when IHD assistance ended in April 1935. He extolled Fiji's soil sanitation work as "beyond his expectations and ahead of similar work in other places," before reminding Fletcher of the Government's commitment to take over and complete the work throughout the whole Colony. Fletcher asserted unequivocally that Government would meet its obligation to continue latrine work, appropriating such funds as the financial situation permitted, and would try to appoint enough Sanitary Inspectors to ensure proper compliance. Lambert had also taken steps to ensure that economics did not unseat sanitation work; Heiser had been horrified to discover, on examining Lambert's campaign accounts, that unbeknownst to either the Rockefeller Foundation or the Government he been

75 Lambert, "Western Pacific Health Service Narrative Report, 6th Year, 2nd Quarter": IT 1 Ex 8/31:1; Lambert to Heiser, 28 August 1933, RFA RG 1.1, Series 417, Box 1, Fldr. 4. The problems generated a heated exchange after Heiser criticised Lambert for building unnecessarily heavy slabs. Lambert had actually modified the original slab square to a larger, thinner, lighter hexagonal. Heiser to Lambert, 14 September 1933, Lambert to Heiser, 11 October 1933; Heiser to Lambert, 9 November 1933, all RFA RG 1.1, Series 417, Box 1, Fldr. 4; Heiser to Lambert, 22 April 1934, RFA RG 1.1, Series 417, Box 1, Fldr. 5.

76 Western Pacific Health Service, Narrative Report, Third Quarter, Sixth Year, 1933, IT 1 8/31:1.


78 Heiser, 16 April 1934, 17 April 1934, and 20 April 1934 "Diary, Fiji – 1934", APS/VHP.
selling slabs at a price sufficient to accumulate over £700 profit plus assets, intending it as a fund to pay for latrines in poor areas, and a surplus “nest egg” for the administration’s continuation of the project after 1935.\(^79\)

The Cook Islands Campaign

Despite serious opposition in New Zealand, Ngata’s determined support for the Cook Islands project prevailed. In May 1932 he sent the Heiser the signed agreement between Cook Islands Administration and the International Health Department of the Rockefeller Foundation for a co-operative latrine campaign with an annual budget of £1250, shared 75:25, 50:50, 25:75 over three years; the Rockefeller Foundation was to supply a part-time Director to work with the Chief Medical Officer; and the Cook Islands pledged to complete any work unfinished by September 1935.\(^80\) Budgets were arranged, along with a concrete worker from New Zealand to oversee construction of the reinforced slabs and concrete risers. As recommended by the New Zealand Public Works Department, these had seats fitted with pressed metal flap covers, which Lambert had long wanted to test.

Lambert’s worries about the campaign in the Cook Islands, so far from his oversight, largely evaporated when he arrived to begin the work on 1 September 1932.\(^81\) Despite the economic situation, the Government soon added an extra £1000 to the budget, the additional expense borne by New Zealand and Cook Islands equally. The Foundation’s share remained the same (£937.10.0.), its relative contribution now 40 percent rather than 75 percent, but in 1934 it approved a further grant of £700 to honour its original commitment to contribute 50 percent over three years.\(^82\)

\(^79\) Ibid. Heiser, “Notes on Interview”, 9 May 1934, RFA RG. 2, Series 419, Box 102, Fl Dr. 805; McGusty to Heiser, 28 May 1934, RFA RG. 1.1, Series 417, Box 1, Fl Dr. 5.

\(^80\) Lambert to Heiser, 23 May 1932; Ngata to Heiser, 26 May 1932, both RFA RG. 1.1, Series 417, Box 1, Fl Dr. 3; Western Pacific Health Service, Narrative Report, Third Quarter, Sixth Year, 1933: IT 1 B/31/1.

\(^81\) Lambert to Heiser, 10 June 1932; Beal to Lambert, 21 July 1932; Lambert to Heiser, 28 October 1932, all RFA RG. 1.1, Series 417, Box 1, Fl Dr. 3. While in the Cooks (from early September to November) Lambert also undertook tuberculin tests on Rarotonga and Aitutaki, as part of the new research focused programme expected by the IHD (Lambert to Heiser, 23 September 1932, RFA RG. 2, Series 418, Box 72, Fl Dr. 590), and was able to offer guidance and direction to the first NMPs working in the Group (Lambert to Heiser, 4 December 1932, RFA RG. 1.1, Series 417, Box 1, Fl Dr. 3).

\(^82\) Revision of Budget No. 66856 for Cook Islands, RFA RG. 1.1, Series 417, Box 1, Fl Dr. 1; Lambert to Beal, 31 January 1933, RFA RG. 1.1, Series 417, Box 1, Fl Dr. 4; “Scientific Directors’ Minutes, Approval of Budget”, 27 October 1934, RFA RG. 1.1, Series 417, Box 1, Fl Dr. 1; Beal to Lambert, 7 November 1934, RFA RG. 1.1, Series 417, Box 1, Fl Dr. 5.
By mid-1933, 427 of the 860 latrines required in Rarotonga had been installed, with public conveniences in use at wharves, marae, and schools and reports of a visible improvement in standards. In the Western Pacific Health Service Annual Report, Lambert complimented the “unusual ... and very refreshing” interest taken by Resident Commissioner Ayson, SMO Ellison, and other administration staff. However, he had trouble getting clear information on the campaign’s progress when the hurricane season halted all shipping. Teams of Islanders built the latrines; in many parts of the Cook Islands as in Fiji, Lambert found it impossible to bore or blast holes, and again had to modify the latrine design, to an even shallower pit 10’ deep by 3’ in diameter.

When the latrine scheme in the Lower Cook Islands finished in November 1934 almost a year ahead of schedule and considerably below estimates, the Minister for the Cook Islands recognised Lambert’s “valued co-operation” and the Foundation’s financial assistance. Apart from Mitiaro, which was waiting on shipping, every home and public facility now had a fly-proof privy of solid and permanent construction, and the whole population reportedly appreciated the benefits that “suitable and commodious sanitary conveniences” conferred on public health.

Conclusion: The Aftermath

Despite the Governor’s assurances, Fiji had no such conclusive campaign. Work, including re-surveys and inspections, continued after the co-operative period finished in May 1935, but only on Viti Levu and on a small scale. Colo North and the Rewa delta areas were not completed until 1937. As the 1938 report indicated, the campaign had not had its desired effect, despite high hopes and intensive effort. Intestinal diseases were still rife, especially among Fijians. Their infant mortality rate (commonly reflecting the prevalence of these diseases)

83 Lambert, “Western Pacific Health Service Narrative Report 6th Year, 1st Quarter”; also 2nd Quarter Narrative Report and “Annual Report 1933”, all IT 18/31:1.
84 “Local Health Departments Report”, 27 October 1934, RFA RG. 1.1, Series 417, Box 1, Fldr. 1. See also “Modern sanitation comes to mysterious Manusia: what the Rockefeller Institute is doing in the Cook Islands”, Pacific Islands Monthly 7 October 1934, p. 31 (copy in Lambert to Heiser, 10 November 1934, RFA RG. 1.1, Series 417, Box 1, Fldr. 5)
85 G. Forbes, Minister, to Heiser, 19 November 1934, RFA RG. 1.1, Series 417, Box 1, Fldr. 5.
remained high, at 107 per 1000 live births still comparing unfavourably to the Indian rate of 76.7 per 1000. Bacillary dysentery and typhoid remained the chief endemic diseases in the Colony, and Baxter observed that their incidence rates would "for years to come ... be an excellent index of the advance of sanitation". Dysentery and enteric fever reflected density of population, poor sanitation and inadequate water supplies, but were also common in rural districts. Suva itself remained a problem, with large numbers of cases occurring in unsewered and unsanitary areas. Nasinu provided "another instance of the association of flies, faulty sanitation, and lack of water supplies with dysentery." Regardless of the protracted emphasis on treatment programmes and the assertion that systematic latrine installation would ensure eradication, hookworm remained endemic, although its case incidence had dropped to 5.5 per 1000 of population. Baxter emphasised that proper latrines needed to be provided, inspected, and maintained. Considerable work was essential to improve sanitation in Fiji; progress "on the right lines" proceeded slowly, and Fiji avoided epidemics of disease only because of climatic conditions.\(^{87}\)

The Secretary of Native Affairs, while more optimistic about generally improved health conditions and a corresponding increase in population, also called for immediate action from authorities to remedy "alarming apathy" and inadequate latrines in many villages. In the worst area, Cakaudrove, 86 percent of the people tested were hookworm-infected, 45 percent had ascaris, and 33 percent had both parasites;\(^{88}\) the following year, surveys still showed a remarkably high hookworm incidence in Savu Savu, Taveuni, and Lau, especially among Fijians, though the case incidence had declined to 3.68 per 1000 of population (about equal to the dysentery rate). Little in the official discourse had changed: hookworm remained "a disease of bad sanitation, easily preventable, and its incidence indicates a lack of sufficient trained native staff for adequate regular sanitary inspection of villages, and for educating the native population in simple preventive measures."\(^{89}\)

These comments carry the implication of the failure of the co-operative latrine campaign, or at the least, its indifferent success in redressing soil pollution and relieving the disease burden it caused. However, the project had achieved other ends: it appealed both because the causal relationship between disease and


\(^{88}\) Monckton, Native Affairs Secretary, "Report on Native Affairs 1938", L.C. Paper No. 36: CO 83/228/5.

pollution was easily explicable, and because it achieved a concrete and immediately visible result, in the latrine structure itself. It was therefore acceptable, enabling public health activity to carry on through the Depression when other programmes with less determinable objectives appeared an unnecessary expense. The Foundation agreement to contribute reinforced its standing and influence, relieved Lambert of anxieties about his future, and allowed plans for future developments to mature.
Chapter 13
Evolving Medical Science

Soil sanitation in Fiji and the Cook Islands, and the hookworm and yaws treatment programme in Western Samoa, were the main extensions of Rockefeller Foundation involvement in the South Pacific during the worst Depression years. Lambert’s success in getting the Foundation and governments to support these projects made him more confident about realising his other plans. Experience had only refined the approach to achieving his goals that his energetic personality dictated: ask for plenty, appear malleable, but pester until resistance crumbled and core objectives were at least met, sometimes exceeded. The Depression threw out the natural progression of his initial plans towards centralisation and unified Pacific health services, but if he marked time on this larger scheme, he used the opportunity to extend IHD involvement and his own influence. Through his interventions the Central Medical School continued as an inter-group co-operative, with its graduates now out in the field proving the rightness of his judgement. With his position secured at least until 1936, Lambert was ready to take advantage of the post-Depression era’s new readiness to establish sound structures for a more rational world.

Central to his plans until the mid-1930s was a bacteriology laboratory. This was a relative newcomer to his agenda, partly reflective of changes within the Rockefeller Foundation under Russell’s directorship. Gates had originally conceived of the Foundation as a conduit through which existing but under-utilised scientific knowledge would be applied; now the surge in medical work that its international activities had created threatened to outstrip available knowledge, and treatment campaigns too often demonstrated the paucity of scientific understanding rather than its supremacy. In 1928 the IHB became a Division within a re-organised Foundation, re-oriented to the production of new scientific knowledge. A Board of Scientific Directors now vetted all IHD projects to ensure a primary research component; empiricism in the field was no

1 Lambert also began surveying populations to assess the extent of tuberculosis, using training he and his wife undertook while on leave in 1931 as part of Russell’s drive to establish a more research-oriented approach to IHD field operations. The Lamberts trained as a team at the Phipps Institute in Philadelphia, with Eloisa focusing on the microscope work that Lambert could no longer do due to deteriorating vision. Heiser, 30 September 1931, RFA RG. 2, Series 419, Box 59, Fldr. 486; Heiser, “Final conference with Dr. S. M. Lambert, 27 October 1931”, Memos 1930-31, VHP/APS/RFA RG. 2, Series 419, Box 59, Fldr. 486. Regarding research development, see “Staff Conference, 21 December 1931”, Memos 1930-31, APS/VHP.

2 R. Fosdick, pp. 159-160
longer sufficient, and the laboratory became the key site for scientific work, moving the Rockefeller Foundation to define its main contribution as creating a nucleus of "pure" research.\(^3\)

Lambert initially had some trouble adjusting his proposals to meet the new approach,\(^4\) but quickly appreciated its development possibilities for the Pacific. His original concept of a laboratory to redress inadequate diagnostic facilities in Fiji evolved into a grander scheme firmly integrated – in concept if not ultimately in practice – into his Unified Pacific Medical Service plans to serve the South Pacific's small and scattered communities. Lambert adapted his arguments for the laboratory to meet multiple aspirations. Like the Central Medical School, the laboratory was outside the Foundation's usual brief.

"Things bacteriological and pathological" - the laboratory proposal

As seen in the previous chapter, 1930 was a critical year for Lambert and the Pacific's health plans. By 1931, however, his own enthusiasm was returning in response to local interest and needs, and he left for six months' leave carrying Governor Fletcher's appeal that he be returned to the Pacific.\(^5\) Lambert had strongly intimated that the Foundation might be interested in assisting the next group of projects they had discussed – the latrine campaign for Fiji, a Pacific-wide leprosy survey, extensions to the medical school, and a central laboratory, as well as work in other groups which would strengthen the Central Medical Authority's role. Fletcher also hoped that Lambert would return to continue negotiations for a unified medical service, as did CMO Pearce, who considered it would be "a tragedy if [Lambert] were transferred ... and we were left alone at this critical period."\(^6\)

A long vacation in New York restored Lambert's health and spirits, and he expressed his eagerness to return to the Pacific by October if the Rockefeller Foundation agreed. From the outset of discussions with Heiser on future plans, Lambert laid most emphasis on a new, permanent, well-equipped bacteriological laboratory as part of his wider conception of the Foundation's work in the

\(^3\) Ibid., pp. 62-64, 143,146, 159-160.
\(^4\) As in proposals for both the yaws treatment campaign in Western Samoa and Fiji's latrine campaign.
\(^5\) Fletcher to Heiser, 31 March 1931, RFA RG. 1.1, Series 419L, Box 1, Fldr. 9. [Dated 1930 in WPHC 929/1931]. Fletcher had previously met Heiser during postings in Hong Kong and Ceylon. See Pearce's memo to Fletcher, 27 March 1931, WPHC 929/1931, for the health proposals.
\(^6\) Pearce to WPHC Secretary, 8 June 1931, WPHC 2652/1930.
Pacific. His suggestion that the Foundation invest capital in a laboratory was radical and therefore needed to be argued more strongly than a latrine campaign, already privileged in the existing IHD context.

Lambert set the scene for Heiser. The current Suva laboratory now comprised a tiny room at the hospital, after a recent fire destroyed its earlier quarters, and was run by a bacteriologist who had only sixteen months specialised training in the field. The facility was inadequate for doctors’ routine investigations, let alone the research into problems of disease causation and prevention that needed to be done in the Pacific, ideally from Fiji’s central position. “One can imagine the hopeless groping of these medical men without good bacteriological guidance and their gradual discouragement,” he wrote, with no improvement in the situation possible unless the Board assisted by giving a building and extra equipment. The current bacteriologist, J. G. C. Campbell, had prepared a plan, but Lambert suggested something less elaborate. The Foundation’s role was crucial:

... probably we could do nothing which would accomplish more for medicine in Fiji and the South Pacific than to give them a bacteriological laboratory. ... It would tone up the whole standard of medicine [there] to have a place where a doctor could really find out about things bacteriological and pathological and depend on his results. The stimulus to scientific medicine would be great.”

I am through begging; but I wish the Foundation if they can manage the funds would not overlook the laboratory. It is a fundamental need.

Heiser, as usual, was unmoved. The Board of Scientific Directors would only consider such a proposal if there was written evidence that the Fijian Government was adequately prepared to contribute to, or maintain, a new laboratory of the type Lambert proposed; even with such assurance, Heiser warned, the Board and Rockefeller Foundation would not necessarily approve it. This at least pointed Lambert towards his required course of action, and he returned to Fiji late in 1931.

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7 Lambert to Heiser, 23 July 1931, RFA RG. 1.1, Series 417, Box 1, Flkd. 2.
8 Lambert to Heiser, 21 July 1931, 23 July 1931; 4 August 1931, RFA RG. 1.1, Series 419L, Box 1, Flkd. 9. J.G.C. Campbell, “Fiji Annual Medical and Health Report, 1931”, p. 23, WPJC 3783/1932. The laboratory was transferred from “very trying conditions in a small room ...with very little equipment” to an old isolation building in the hospital grounds, with new equipment arriving from December, and hopefully complete by late 1932. Problems were the lack of proper facilities for experimental animals, and of relevant professional journals to keep up to date with developments in the field.
9 Lambert to Heiser, 4 August 1931, RFA RG. 2, Series 419, Box 59, Flkd. 486.
10 Heiser to Lambert, 11 August 1931, RFA RG. 1.1, Series 419L, Box 1, Flkd. 9; also same RFA RG. 1.1, Series 417, Box 1, Flkd. 2; Heiser “Final conference with Dr S.M. Lambert preparatory to his returning to the South Pacific”, 27 October 1931: APS/VHP, Memos, 1930-31; Heiser to Lambert, 28 October 1931, RFA RG. 1.1, Series 419L, Box 1, Flkd. 9.
with renewed enthusiasm and Rockefeller support for the sanitation and treatment projects that assured his employment and the chance to pursue his other goals.

Once he had the latrine campaigns underway, he began serious lobbying for the laboratory, assuring Heiser that Fiji would donate a site. His arguments developed around two main themes: one, the improvement of medical education; the other, that such a lab provided a centre for valuable routine and research work for all the Pacific groups. A laboratory could also help achieve a centralised health service, now back on the agenda. With Fletcher currently completing a proposal for unification to send the Secretary of State, Lambert suggested:

If we were able to dangle before the eyes of the Colonial Office such a laboratory it might contribute to the assurance of a unified Medical Service and add a last incentive to such a scheme.

The idea was irresistible. The Foundation could not consider requests for capital expenditure in 1933, but Heiser now suggested that Lambert prepare a more definite detailed proposal – including a firm assurance from the Fijian Government that it was committed to maintaining the laboratory – in anticipation of more favourable economic conditions by 1934. However, Heiser gave no assurances, and Lambert was not to raise the slightest expectation of assistance. He impressed on Lambert, “we must feel perfectly free about this, and future events only can determine whether we should be in a position to extend assistance.”

Lambert barely heeded this warning; confident of eventual Rockefeller Foundation aid, he assured Fijian officials that prospects for a laboratory were favourable, and began to build wider support. On a visit to New Zealand, he suggested that its dependencies share the laboratory for research purposes; the official response was enthusiastic. Using arguments similar to those earlier advanced for extending Makogai, Lambert assured Pearce that including other territories, would benefit rather than interfere with Fiji’s routine bacteriological work, “without a penny of additional expense.” To Heiser he also expanded on the laboratory’s potential: groups with negligible means could do little individually, but by combining their resources in a central laboratory and

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11 Lambert to Heiser, 17 May 1932, RFA RG. 2, Series 419, Box 72, Fldr. 590. His own experience proved the need: pressed by Heiser to develop experimental work which would exemplify the Rockefeller Foundation’s new research focus, he had difficulties following through the suggested programme of Wasserman tests in yaws patients because of the primitive state of laboratory facilities.
12 Lambert to Heiser, 1 June 1932 and 24 June 1932, RFA RG. 1.1, Series 419L, Box 1, Fldr. 9.
13 Heiser to Lambert, 30 June 1932, RFA RG. 1.1, Series 419L, Box 1, Fldr. 9.
14 Heiser to Lambert, 21 July 1932, RFA RG. 1.1, Series 419L, Box 1, Fldr. 9.
15 Fletcher to Cunliffe-Lister, 23 July 1932; Lambert to Pearce, 8 August 1932, both IT 1 8/34:1.
16 Lambert to Pearce, 20 August 1932, IT 1 8/34:1.
administration, could undertake substantial research into the whole South Pacific’s disease problems.

... This is so good a scheme and rounds things out so that it seems almost as if it must come. ... it’s good stuff anyway [sic] you want to consider it and hasn’t a weak point... It has infinite possibilities. We could get high class men for periods to study any health problem or disease problem that presented. Then we could get other men to put the findings into effect. It could be a flexible position not tied to Government rigidity.17

Having convinced other administrations, Lambert abandoned the idea of a new independent public health laboratory in favour of adding laboratory facilities to the school, explaining, “I like the idea of building it above the medical school which is a co-operative affair, to emphasise that it is co-operative and belongs to the whole health forces of the South Pacific.”18 This was a cheaper alternative. Plans drawn in 1933 provided for a post-mortem room and pathology and bacteriological laboratories (combining routine public health and teaching functions), and with office and lecture space included, extended the school’s facilities, relieved the severe overcrowding that had developed with the four-year course, and provided for visiting researchers. The budget was £2200 for construction and £1300 for equipment. Heiser remained pessimistic about the chances of assistance, as the IHD faced still further cuts in its budget, but agreed to discuss the plan during his forthcoming visit in 1934.19

Heiser in Fiji, 1934

Although Lambert provided the driving force for Rockefeller Foundation activities in the South Pacific, Heiser’s rare visits always spurred a surge in developments there. His previous trip to Fiji in the buoyant pre-Depression days of 1928 had provided the final boost for pushing through the CMS plans; his 1934 trip, effectively marking the transition from Depression to a more optimistic economic outlook, had an equally satisfactory outcome.

Heiser thought the greatest value of his visits was to update the knowledge of Foundation staff like Lambert who worked in isolation, unaware of

17 Lambert to Heiser, 20 August 1932, RFA RG. 1.1, Series 4119L, Box 1, Fldr. 9.
18 Ibid.
19 Lambert to Heiser, 31 July 1933, and Heiser to Lambert, 21 August 1933, both RFA RG. 2, Series 419, Box 87, Fldr. 690. Budget given in Lambert to Heiser, 1 June 1932, RFA RG. 1.1, Series 419L, Box 1, Fldr. 9.
developments in their fields and of solutions already developed; but he in turn gained a more immediate perspective on the environment and influences that framed their possibilities and problems. Cumpston, whom he visited in Australia beforehand, stressed the need for action on Pacific health, and recommended that the Rockefeller Foundation organise an extensive survey of nutrition, depopulation, entomology, cancer, and leprosy in Polynesia, similar to one he was preparing for the Australian tropical dependencies. "Cumpston feels that the world's pressure of population will soon force extended use of the islands of the [South Pacific], and they should be got ready by controlling disease," Heiser noted. The two men still disagreed on how best to achieve this, but Cumpston's views nevertheless reinforced Lambert's proposals.

In Fiji, where revenue had dropped from £700,000 to £550,000, the administration's success in still balancing the budget and maintaining essential services without cutting salaries impressed Heiser:

... it is amazing how an organization comparable to a country of millions can maintain so much with so small a population ... the Governor states that many Fijians could replace Europeans, thus further reducing the cost of Government; the result here is a fine illustration of what can be done by honest efficient administration.

Such conclusions augured well for his approval to Rockefeller Foundation funding of further developments.

Heiser's main interest was in advancing health education in the colony. He was generally pleased with the CMS, though concluded that the teaching of bacteriology, pathology, and hygiene needed serious improvement. After discussions with Lambert on the school's future, and McGusty's claim that scientific work lagged behind other branches of medical work, Heiser conceded that integrating the public health laboratory with the medical school's department of bacteriology and pathology, under a medically-qualified director, was the best solution. This compromise would relieve overcrowding at the school and provide the proper professional facilities needed by both.

Lambert suggested that if the IHD agreed to fund the required £2200 addition, it would put pressure on the Government to equip it and provide a

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20 Heiser, 10 March 1934, "Diary of World Trip 1933-34: Australia", pp. 3-6, APS/VHP.
21 Heiser, "Diary of World Trip 1933-34: Australia", p. 8; Heiser to Sawyer and Russell, 11 April 1934, APS/VHP.
22 Copra had declined from £30 to £3 per ton (Heiser, 11 April 1934, 13 April 1934, "Diary of World Trip 1933-34, Fiji", APS/VHP.) This praise contrasted with Heiser's comment after first meeting with Suva's business and government notables: "As one might expect in so small a colony, the officials are not of high calibre." 11 April 1934.
23 McGusty to Heiser, 28 May 1934, RFA RG. 2, Series 419, Box 102, Fldr. 805.
24 Heiser, 3 May 1934, "Diary of World Trip 1933-34: Fiji", APS/VHP.
specialist teacher. However, in all his discussions in Fiji, Heiser reiterated that he would make no promise of Rockefeller Foundation aid. Instead, he offered tout the proposal to any other wealthy philanthropists he encountered, in hopes of a donor. Even this support was conditional – the Government must guarantee a full-time head, provide all necessary equipment (an estimated £1000), and pledge to continue proper staffing and maintenance. Fletcher saw the laboratory as an invaluable asset to medical research, a Unified Pacific Medical Service, and NMP training, and after McGusty’s assurances (staff reorganisation would avoid any extra cost and equipment was “unlikely” to exceed £500), he agreed to Heiser’s terms and in anticipation of outside funding applied immediately to the Colonial Office for approval of the budget.

Concerned at the school’s emphasis on medicine and surgery and its teaching methods, Heiser advised other changes to bolster hygiene, bacteriology and pathology. He recommended establishing a health centre where NMPs and Native Obstetric Nurses (NONs) could have practical teaching in hygiene and preventive medicine that was more realistically attuned to their “academic limitations” and the minimal resources and field conditions they would experience after graduating. Fletcher and McGusty agreed, but until finances improved settled for providing students with essential practical experience through work with the MOH and in the child welfare clinics.

Heiser discussed other aspects for health work and Rockefeller Foundation co-operation. He suggested a Foundation fellowship for a suitably qualified person to train as “Health Educator” for Fiji’s 20,000 schoolchildren and 300 teachers. Fletcher was very interested in this proposal for more modern health propaganda and education, agreeing to investigate creating a permanent position if such training eventuated.

Heiser and Lambert travelled together to Tonga and Western Samoa, inspecting the work of the NMPs and sanitary conditions. Administrator Hart

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25 Heiser, 1 May 1934, "Diary of World Trip 1933-34: Fiji", APS/VHP.
26 McGusty, Notes on Interview, 9 May 1934, RFA RG. 2, Series 419, Box 102, Fldr. 805; Heiser, 3 May 1934 and 9 May 1934, "Diary of World Trip 1933-34: Fiji", APS/VHP. Heiser had already lined up Robert Johnson, founder of Johnson and Johnson and fortuitously a fellow passenger on the voyage to Fiji, as a promising sponsor of the CMS, he, Lambert and Fletcher had taken pains to host the Johnsons, who departed with favourable impressions of the School and "a warm spot in their hearts" for Fiji, Heiser, Diary, 10 April 1934 and 3 May 1934.
27 Notes on Interview, 9 May 1934; McGusty to Heiser, 28 May 1934, both RFA RG. 2, Series 419, Box 102, Fldr. 805.
28 Heiser, 2 May 1934, 3 May 1934, 9 May 1934, "Diary of World Trip 1933-34: Fiji": APS/VHP.
29 Heiser, 28 April 1934, 8 May 1934, 9 May 1934, "Diary of World Trip 1933-34: Fiji": APS/VHP. Again, there was no assurance from Heiser that the Rockefeller Foundation would agree, especially as Director of Education Homeless' nominee, A.H. Phillips, was "somewhat over age."
forwarded to the New Zealand Government Heiser’s full recommendations on reorganising Western Samoa’s Medical Service there and strengthening public health. On Heiser’s suggestion Lambert later returned with Dr M. H. Watt, New Zealand’s Director-General of Health, to make a comparative study of medical conditions and services in Fiji and Western Samoa. This survey confirmed Watt’s support for the NMP system and Rockefeller Foundation work. Heiser also greatly impressed Berendsen, Ngata, Prime Minister G. W. Forbes, and Lambie while in New Zealand, so the combined effect was that government’s renewed interest in the Central Medical School and Lambert’s idea of a Unified Medical Service.

Heiser left with a better indication of the region’s commitment and capacity to develop medical services. He acknowledged Lambert’s “major diplomatic success” in getting co-operation for the School, which was a model and catalyst for improved Pacific health services. McGusty and Fletcher were unequivocal about Lambert’s value:

...they pled earnestly for his continuance here; they regard the success of the medical school largely due to him, as well as the improvement in the medical service of the Western Pacific area; ...it was entirely due to Lambert that the various island administrations agreed to make Makogai a central leprosy station and joined in the plan to send students to the Central Medical School; ...they were relying upon Lambert to help them bring about a Western Pacific medical service on a unified basis and the affiliation with the New Zealand doctors in the High Commissioner’s jurisdiction; they feel that the successful continuance of the Central Medical School depends largely on Lambert; they find him most helpful as an unofficial negotiator with other countries; they say he is regarded everywhere as a friend and that he lubricates many friction points.

Along with these assurances, Heiser recorded that the IHD’s presence in Fiji was credited with transforming responses to health work since 1917, with the Rockefeller Foundation enjoying “extraordinary confidence and esteem”. The combined effect of these endorsements and the administration’s willingness to implement his suggestions was powerfully persuasive; McGusty’s assessment that Heiser’s visit had been “fruitful of results” proved correct. Lambert stayed

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30 Lambert to Heiser, 5 November 1934, RFA RG. 1,1, Series 417, Box 1, Fldr. 5.
31 Heiser was in New Zealand from 19 March to 7 April 1934. His itinerary included Wellington, Christchurch, Dunedin, Queenstown, Mt Cook, Napier, Rotorua, and Auckland, and numerous discussions with health officials, educators and practitioners about both New Zealand and Pacific matters: “Dr. Heiser’s Diary, New Zealand - 1934”, APS/VHP.
32 Heiser, 9 May 1934, “Diary, Fiji, 1934”, APS/VHP
33 Heiser, 9 May 1934, “Diary, Fiji, 1934”, pp. 25-26, APS/VHP; McGusty, Notes on Final Interview, 9 May 1934, RFA RG. 2, Series 419, Box 102, Fldr. 805.
34 McGusty to Heiser, 28 May 1934, RFA RG. 2, Series 419, Box 102, Fldr. 805.
on in Fiji, with his plans refined and clearer after discussions with Heiser. The laboratory idea had become so firmly established as a priority that the Foundation soon found itself stepping into the breach when alternative funding fell through. In return, however, it was able to determine terms and conditions that perpetuated its approach to medical professionalism and research.

The problem of professionalisation

Not everyone was convinced that the laboratory was essential. Asked to contribute £75 for equipment the Solomon Islands Advisory Council demurred: their own laboratory, built in 1930, was well equipped to handle routine work, and anything else was sent to Sydney University’s Pathology Department. Members also questioned the Medical School’s involvement:

I take it that it is not intended to train our Native Medical Practitioners to the same standard as qualified medical men, and that all which is expected of them will be competence to treat common diseases and minor injuries with reasonable success and have the intelligence to know when a patient should be removed to hospital for more expert treatment.

The laboratory proposal raised the issue of medical education and professionalism even more pointedly on another level. Heiser’s stringent conditions derived from the American model, and the requirement that a one medical pathologist head the new unit had immediate consequences, terminating the career of the current bacteriologist. Ironically Campbell had been a passionate advocate for developing laboratory facilities, just as much an instigator as Lambert. Furthermore, the pathologist and the technician who replaced him failed to achieve the expected improvements in routine diagnosis, teaching, and research, though increased the cost of maintaining the laboratory. Events in Fiji document the changing face of the diagnostic and research laboratory, and the Fiji administration’s complicity in engineering his resignation showed the power of the medical hierarchy and professional privilege.

Bacteriology began in a small way in Fiji in 1910, when Dr P. Manson-Bahr undertook dysentery and filariasis research. After he left, a laboratory was built in Suva for the Medical Officer of Health, who as well as bacteriology, also

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35 Lambert to Heiser, 24 September 1934, RFA RG. 2, Series 419, Box 102, Fl dr. 805.
36 During 1931-33 this had apparently cost only £1.5.1, which indicates that even routine work was minimal. Resident Commissioner BSIP to High Commissioner, 10 November 1934, CO 83/210/6, PRO.
37 Hewitt, cited in ibid.
undertook chemical analysis until this was taken over by the Agricultural Department's Chemist. When Campbell arrived as Government Mycologist in 1924, there was no permanent Medical Officer of Health, and therefore no bacteriological work being done. Campbell began testing the water supply and hospital specimens during the typhoid epidemic of 1925, continuing even after the new Medical Officer of Health arrived. In recognition of his extra workload, he received a supplement that took his annual salary to £900 despite his lack of medical qualification. As this was more than most colonial staff and Medical Officers received, the situation aroused fierce resentment and opposition. Campbell was keen, improving the meagre laboratory with new equipment and techniques, and in 1929-30 he attended the London School of Hygiene and Tropical Medicine on Government sponsorship, gaining a Diploma in Bacteriology and an up-to-date knowledge of medical techniques and applications.38

Significantly, during his absence, the Fiji Government temporarily appointed its first properly qualified bacteriologist; more striking, the bacteriologist was a woman, New Zealander Margaret Kidston, who initially qualified as a nurse in Christchurch in 1923, then studied infant dietetics at the Mothercraft Training Centre in London, which followed Truby King's methods. Returning to Christchurch, she became the first person to study bacteriology and pathology under a scheme promoted by Dr A. B. Pearson, who wanted nurses trained as resident Bacteriology Assistants for rural hospitals. Following the year-long course, and two rather than the requisite five years of practical work, she graduated from Otago Medical School with a Certificate in Practical Bacteriology and Clinical Pathology. She was interested in gaining tropical experience, but Queensland and Samoa Governments refused to employ a woman. Then Fiji offered six months work, with return fare and a salary of £350 per annum (a princely sum compared to the £120 paid at Christchurch Hospital), to organise the War Memorial Hospital Bacteriology Department pending Campbell's return.

Kidston's observations on her work and relations with the medical profession clearly indicate that bacteriology was still in transition as a specialty, in an under-resourced, "make-do" position on the margins of medical practice, with many professionals and public sceptical about its value in clinical work. At that time, the Suva laboratory comprised two small, poorly equipped rooms in a building shared with veterinary and agricultural staff, at the back of the Suva wharves. Lambert (whom she described as "very short-sighted, fat, pleasant with

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38 Campbell to Secretary of State, 15 April 1935: CO 83/210/6. Lambert noted that Campbell virtually ignored mycology work, once he became interested in bacteriology.
a great stock of quite awful stories” as well as the author of some very good health work) also had an office there, and took an interest in her work. Kidston was critical of the standard of pathology work at the Colonial War Memorial Hospital and its implications for the teaching of NMP students, and considered that there should be a qualified medical pathologist and a proper laboratory attached to the hospital. She continued in the position after her initial contract expired, and was still there when Campbell returned, also urging her to stay. She declined a request to take up a permanent position in the Medical Department.  

The controversy over Campbell’s dual post – or more particularly, his combined salaries – intensified in the aftermath of a fire which destroyed the Suva laboratory just before his return in 1930. The problem was resolved (at least officially) when the Secretary of State approved Campbell’s appointment as full-time Bacteriologist. He temporarily re-established the laboratory using salvaged and improvised equipment. Converted at minimal expense, the laboratory was congested, with poor lighting and ventilation, old equipment, and no refrigeration or facilities for keeping experimental animals - all conditions that made work difficult and limited its scope. Campbell constantly applied to have these deficiencies remedied, but the Depression (and possibly the professional antipathy towards him) stymied any development.

Convinced of the laboratory’s value, Campbell made comprehensive plans to provide adequate services for the Medical Department and to establish foundations for research. These plans included facilities for routine testing, preparing vaccines for use in the Colony, extending services to DMOs and NMPs, research on local problems, facilities for visiting researchers, and organising a mobile lab and a proper medical library. The emphasis was on bacteriology, but chemistry and teaching medical students also featured.

Campbell justifiably took credit for building up the laboratory and training the four Fijian staff (including one NMP), whom he described as remarkably good but limited to the strictly routine, and lacking the “foresight and organisation which is so very essential for the smooth working of a laboratory.” Conditions made for mistakes, but nevertheless the work and results were easily comparable with the product of other colonial laboratories. Campbell saw the laboratory’s function as primarily to support the Medical Department’s public health work, rather than clinical pathology; pure pathology (post-mortems,

39 Margaret Kidston, “How I went to Fiji as a Government Bacteriologist”, 1971, pp. 1-14, Armstrong Papers, Auckland Museum. Kidston later married A.L. Armstrong, Fiji DO and sometime Acting Secretary of Native Affairs. She never pursued research work as she had previously intended, though remained interested in maternal and child welfare and established the Fiji branch of the St John Ambulance Brigade.
morbid anatomy, and histology) was a medical speciality which lay more in the hospital’s domain. To Campbell, the laboratory’s secondary functions were research and teaching bacteriology and pathology to medical students, which he had begun in 1927.⁴⁰

Despite creditable performance and undoubted enthusiasm for his work, Campbell had no chance of a place in the new scheme. Lambert needed to ensure the professional status of his NMPs, which meant equipping them with qualifications that would stand the scrutiny of detractors. Furthermore, he, Fletcher, and McGusty saw an enlarged laboratory offering a wider range of services as essential, if Fiji was to become the centre of a Pacific Health Service that would attract and hold higher quality MOs. Accordingly, they were willing to sacrifice Campbell, as Heiser insisted – even though in return the latter provided nothing more substantial than a promise to inquire outside the Rockefeller Foundation for funding. The Foundation’s ability to exert control over national administrative and employment matters long after it had finished direct funding (since 1933 participating administrations had carried full financial responsibility for the School) has featured in other studies of the philanthropy’s operations.⁴¹ In this case, however, Heiser’s dictate also handed the Fiji Government a carte blanche to terminate the difficult situation that had evolved through professional rivalry and personal jealousy over Campbell’s employment.

**The ripple effect**

As it transpired, it was Lambert rather than Heiser who resolved the funding situation, in an unexpected manner. The millionaire Templeton Crocker, who had taken Lambert to Rennell and Bellona Islands on his yacht Zaca, and as an amateur anthropologist maintained a keen interest in the future of Pacific populations, took matters in hand. Working through his connections,⁴² Crocker extolled the CMS, its valuable health work, Lambert, and Hoodless; noted that the school needed £6000-8000 for extensions and a laboratory to fulfil its proper function as the centre of Pacific medical research; then suggested that the Foundation send £3500. His letter reached IHD Director F. F. Russell, whose

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⁴⁰Resident Commissioner BSIP to High Commissioner, 10 November 1934, CO 83/210/6.
⁴²His friend Winthrop Aldrich, who had strong connections to the Rockefeller Foundation Board
reply indicated the distance between the IHD’s understanding of the School’s position, and the aspirations of those in Fiji. The CMS was:

... a school for native assistants. It is not planned as a research center. The British already have research centers in Australia and are not inclined to build up one in Suva. The school fulfills a very useful and proper purpose in training native assistants who of course are men of limited education. I doubt, therefore, if the British would feel inclined to expand it very much.

Nevertheless, concerned that he had been misguided about the school’s success, he requested full information from Lambert, who assured him that Foundation aid had built a school ideal for the Pacific. However, now more teaching space and laboratory facilities were needed to improve instruction. These solutions required a new building and another full-time specialist teacher, but Heiser advised postponing action until after 1934 when “business might pick up.” Admitting that he had discussed the situation and possibilities for indigenous medical education with Crocker, Lambert protested:

... I had no idea that it was going to result in such a resounding knock on the front-door of 49 West 49th Street. ... I am sorry if I have been a source of annoyance to you by appearing to bring pressure to bear ... I had no idea ... that a little ripple starting in Fiji was going to grow into such a wave in New York City.43

Those in Fiji were optimistic. The Governor proceeded with the agreed personnel rearrangements, which Lambert assured Heiser would “be handled as you desire and the path will be cleared for the full consummation of your plans if money for the building is coming forward.”44 After Johnson withdrew there was no further expectation of Heiser securing funds, but the administration nevertheless kept to his conditions, selecting a medically qualified bacteriologist and pathologist to head the planned laboratory. Dr Duncan Macpherson, a Medical Officer in the Gilbert and Ellice Islands, had been awarded a Rockefeller Foundation Fellowship on Lambert’s recommendation, taking advanced studies in Public Health at Johns Hopkins University during 1933-1934. Now, on his return to the Pacific in January 1935, he would fill in for Hoodless as tutor at the CMS before moving to his new position as Pathologist six months later.45

In New York Heiser fulfilled his commitment to find backing for the laboratory when he submitted his budget estimates for 1935 to the Scientific Directors. Alongside $1500 to run Lambert’s central office in Fiji, he recommended that the Foundation fund a new laboratory wing for the Central

43 Crocker to Aldrich, 27 May 1934, RFA RG. 1.1, Series 419L, Box 1, Fldr. 10.
44 Lambert to Heiser, 20 August 1934, RFA RG. 2, Series 419, Box 102, Fldr. 805.
45 Lambert to Heiser, 22 September 1934, RFA RG. 1.1, Series 419L, Box 1, Fldr. 10
Medical School. South Pacific administrations could not afford the building, although Fiji had arranged £500 yearly for maintenance, equipment, and staff. Heiser argued that the IHD was responsible for establishing the school, and the grant was important to “remedy inadequate teaching in bacteriology, pathology, and preventive medicine.”\(^{46}\) Undoubtedly influenced by the interest Crocker’s letter had instigated, the Foundation departed from its firm policy, with the Executive Committee approving a capital grant of $11,000/£2200 on 19 October 1934.\(^{47}\)

Although the Foundation attached no conditions to the funds, Heiser asked Lambert to confirm that the conditions agreed on his final meeting in Fiji were met: the appointment of a full-time head of pathology and bacteriology, and an initial Government grant of £500 minimum for equipment.\(^{48}\) Fletcher supported the staff changes then underway at the Hospital, but Lambert waited for him to guarantee that all conditions were accepted in principle even if not all immediately effected,\(^{49}\) before handing over the first £500 to the Government. Building of the laboratory extension began in early 1935.\(^{50}\)

Support for the laboratory was Heiser’s last official involvement with Lambert and his Pacific projects, for in December 1934 he retired from the IHD. His farewell note acknowledging Lambert’s part demonstrated the close relationship formed from rocky beginnings in 1918. It was, he wrote:

> ... a satisfaction to feel that you will be able to go forward with the work along the lines you had planned with the full support you desired. ... I shall always retain a personal interest in [your work]... I have always appreciated the hard strenuous work you have rendered for the people of the South Seas, and as their champion you have created an interest in them that is proving to be an important asset in their advancement. They are a charming people, and since you helped me to see them more intimately I can better understand your great interest in their welfare.\(^{51}\)


\(^{47}\) Russell to Lambert, 25 October 1934, RFA RG. 1.1, Series 419L, Box 1, Flrd. 10.

\(^{48}\) Heiser to Lambert, 26 October 1934, RFA RG. 1.1, Series 419L, Box 1, Flrd. 10.

\(^{49}\) Lambert to Russell, 2 November 1934; Lambert to Russell and Heiser, 13 November 1934; Lambert to Heiser, 29 November 1934, RFA RG. 1.1, Series 419L, Box 1, Flrd. 10.

\(^{50}\) Lambert to Beal, 30 November 1934, RFA RG. 1.1, Series 419L, Box 1, Flrd. 10.

\(^{51}\) Heiser to Lambert, 6 December 1934, RFA RG. 2, Series 419, Box 102, Flrd. 805. Heiser had been turned down in his application for the DME vacancy. After Lambert’s retirement to California in 1939 they maintained their interest in Pacific affairs and people through an intermittent personal correspondence until the latter’s death. From his association with the CMS, Heiser was asked to advise on the establishment of a similar medical school in Micronesia after World War II.
Steamrolling Campbell

Russell now took over Heiser’s administration of the Far East sphere. He and Lambert had mutual respect and liking, but without Heiser’s extensive field experience his approach was less pragmatic. After familiarising himself with the IHD’s programmes in the Pacific and Lambert’s views on their future, he cautioned against using the grant to force changes in Fiji:

...As to unwritten conditions of the grant, please use your best judgement in this matter and see that we are not placed in the position of dictating either policy or appointments to the Colonial administration as a result of our appropriation.

I think we know the administration sufficiently well to have faith in it and to feel in advance that [it] is to be trusted in carrying out the principles under which the grant was made.

I wish, therefore, that you would be careful not to take any position which would be embarrassing to us if it were agitated by some enemy either of the Government or of our organization. Have the record clear, straightforward, and simple.53

Lambert was not to compromise the Foundation’s position, given that there was no written agreement on the conditions of the grant. Russell’s anxiety was justified, for with the money available and building planned to begin early in 1935, the government finally clarified its intent. The result was indeed agitation, ultimately involving the Colonial Office and the Secretary of State’s ire at management of the project, and souring Lambert’s relations in Fiji.

Nearly a year after it had agreed to Heiser’s conditions regarding laboratory personnel, the Fiji Government informed Campbell that it was abolishing his position of Bacteriologist and instead appointing a qualified Government Pathologist and a technician. It offered him three options: transfer, the lower-scale technician’s post, or retirement on a pension. Recommending the latter to the Colonial Office, the Governor’s reasons clearly identified the issue of professional rivalry as the core argument against Campbell’s continued employment in Fiji. A £900 salary but no medical degree caused dissatisfaction and resentment that:

... operates against the establishment of a frank and cordial relationship between him and the medical staff. causes resentment in a man of his

52 Russell to Lambert, 21 December 1934; RFA RG. 2, Series 419, Box 102, Fldr. 805.
53 Russell to Lambert, 4 January 1935; RFA RG. 1.1, Series 419L, Box 1, Fldr. 10.
nature against his non-admission to a position of full partnership, and jealousy on the other side." McGusty had earlier recognised Campbell as "an efficient officer ... capable of carrying out the teaching and other duties of his post" but described his lack of medical qualifications as a serious "deficiency" that disadvantaged the government and failed to meet Heiser's terms. He now suggested that as an alternative strategy to "steamrolling" him out, his work could be investigated for evidence of "a disinclination on his part to co-operate with other officials to a degree that would show him to be an unsatisfactory officer for the post of Bacteriologist." Campbell became labelled as a "stumbling block", an "obstructionist" who had manoeuvred himself to a position of privilege "though only a technician."

Campbell reacted strongly, and appealed directly to the Secretary of State with a lucid and impressive memo that detailed the development of bacteriology in the Colony, and his past efforts to maintain and develop laboratory facilities despite earlier official indifference. He opposed integrating the public health laboratory and medical school, and was sceptical about the sudden emphasis on the School's need for extended laboratory facilities, until recently considered unimportant. Concerned that there was no practical component to the bacteriology taught by medicine, surgery and public health lecturers, Campbell had offered to train each student for a month in routine bacteriological and clinical pathological examinations that would give basic understanding of how to apply the science in relation to medical work. He claimed the idea had not been taken up, nor did many students make use of the open lab in their spare time. Whenever asked, he lectured in biology and chemistry, with no remuneration.

The Medical Superintendent supported his view that the laboratory, as a Colonial institute, should retain its present independence in the Medical Department, separate from the School. The Bacteriologist's duties and responsibilities required a full-time officer with both theoretical knowledge and practical experience in laboratory techniques and administration. He pointed out that the difficulty was not with the quality of his work and methods; on the contrary, the Government had selected him for the Commonwealth Fund Fellowship in 1931, he had been awarded one of four Carnegie Scholarships in 1934 to 1935. More recently, the Commonwealth Fund had awarded him a Fellowship, the first in the history of the Commonwealth Fund to a medical officer. The Board of Governors had appointed him to the position of Bacteriologist, and the Secretary of State had appointed him to the position of Bacteriologist.

McGusty, in Governor to Secretary of State, 7 March 1935, CO 83/210/6.
56 McGusty to Secretary of State, "Memo by Acting CMO on the subject of the establishment of a Pathology laboratory at the Central Medical School", in McGusty to Heiser, 28 May 1934, RFA RG 2, Series 419, Box 102, Fldr. 805.
57 Lambert to Russell and Heiser, 13 November 1934; Lambert to Russell, 9 February 1935, both RFA RG 1.1, Series 419L, Box 1, Fldr. 10.
1932, and recognised in the Colony’s *Annual Report* of 1931 as a “highly qualified bacteriologist”. Together with his B.Sc. (Western Australia), and a Diploma of Bacteriology from London University, his professional credibility should stand.

Most important for his work, he asserted, was:

...a sound knowledge of bacteriology, not possession of a licence to study medicine...the detailed medical training which is essential for the practitioner is not necessary for the bacteriologist. ...In practice, I have never experienced any embarrassment from lack of medical knowledge. ...until the present position arose out of the Rockefeller gift, my qualifications were apparently considered adequate and my service satisfactory.

I do not know for what reason or on whose recommendation the Rockefeller Foundation insisted that the Pathology Department should be in charge of a medically qualified officer, and I believe that the Government would have made satisfactory arrangements for the performance of the work of this new branch of the Medical School without any such injunction. I have no reason to suppose that the Rockefeller Foundation has any special interest in the present bacteriological lab, but the proposed reorganisation in the Medical Department which has resulted from its gift will have a profound effect on it and it appears that the conclusion imposed with that gift is, in an indirect way, partly responsible for the recommendation to dispense with my services.  

Lambert and the administration had indeed been discreet about their agreement. Campbell’s own plan had included research facilities for epidemiological work on Pacific diseases but could only conclude that with its plan the Rockefeller Foundation prioritised pathology teaching at the Central Medical School, rather than general diagnostic work for the Colony. Therefore he suggested maintaining the current laboratory, with the new one for teaching and pathology work. Not surprisingly, he was unhappy with all his options although the administration insisted that an integrated laboratory and his retirement were necessary to improve medical services at Suva Hospital. Campbell demonstrated that the only gain to the hospital was improved facilities for autopsies, which was provided whether or not he stayed.

With more foresight and sense than Lambert or the authorities demonstrated, he also argued that if the Pathologist had clinical duties at the hospital, as well as post-mortems, pathology and teaching, he would not have time for Fiji’s bacteriological work, let alone serious research. “In fact,” he stated, “such a position would justify the retention of the post of Bacteriologist rather than its abolition.” He remained unconvinced by arguments otherwise, that there was no justification for the employment of two highly paid Bacteriologists. The only

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58 Campbell to Secretary of State, 15 April 1935, CO 83/210/6.
possible reason would be lack of work - but there was enough for both pathologist and bacteriologist; or expense - an interpretation supported by the proposal to employ a low paid technician. In conclusion he quoted from a Rockefeller Foundation Annual Report:

Without public health laboratory services no official health agency can function satisfactorily. It is obvious to everyone that the laboratory service plays an important role when an emergency arises requiring rapid and accurate diagnostic work, as in an epidemic... But one of the chief functions of the public health laboratory is the non-spectacular but essential routine control of water, milk and food supplies, thus serving as an advance sentinel to warn of approaching or potential danger to the health of society. 59

The Colonial Office considered that Campbell’s arguments had validity and the Fijian administration was remiss. However, it was hardly going to take a stand against what appeared to be Rockefeller Foundation wishes and, accepting that retrenching his position was justifiable, it settled on a conciliatory letter to the ousted bacteriologist, assuring him that the reorganisation was no reflection on his professional abilities or standard of work, but “dictated by consideration of public policy.” 60 Adding insult to injury, his early mycology qualifications were now considered inadequate for “a modern plant pathologist in an Agricultural Department”; retirement became Campbell’s only dignified option.

The new order

If the administration hoped that Campbell’s departure would end professional rivalry and dissatisfaction among medical staff, it was disappointed. Less than a week after Campbell wrote his appeal, his successor-to-be, Dr Macpherson, also petitioned the Colonial Office. His complaints revealed the resentment that arose when developing professional expectations encountered the exigencies of colonial employment, and gave support to arguments for an integrated Colonial Medical Service that would provide a clear and progressive career pathway. Macpherson was highly dissatisfied that he had been summarily assigned the Acting Tutorship in Suva and told that he was earmarked to head the new laboratory, rather than resuming his post in the Gilbert and Ellice Islands after his Fellowship at Johns Hopkins. The terms of his transfer and his status in Fiji were

59 Campbell to Secretary of State, 15 April 1935, CO 83/210/6. Even Heiser considered that Campbell, though “of the technician grade”, had “excellent training” to run the existing public health laboratory (Heiser, Diary, Fiji, 1934).
60 Minutes, Jeffries, 13 July 1935 and Jones, 15 July 1935, CO 83/210/6.
unclear, and more galling, his salary remained at DMO level (£650 + 100 allowance), which neither took account of extra expenses in Fiji nor matched the current Tutor salary.

Macpherson's complaints about his future appointment as Government Pathologist/Bacteriologist vindicated Campbell's high salary and assessment of his responsibilities. His maximum possible salary was £825 p.a., less than "unqualified" Campbell's £900. The position and its research potential interested him, but like Campbell, study overseas heightened his expectation that achievements and specialist knowledge would be rewarded, and he wanted appropriate remuneration and status, especially as "Considerable ill-feeling exists among a number of persons concerned with the new laboratory scheme, and altogether my position is not a very happy one."\(^{61}\)

Beyond the staffing issue, other problems loomed. By April 1935, work on the school and laboratory extension was underway,\(^{62}\) but other Western Pacific administrations complained about contributing to a development they regarded as of limited value to them. Lambert, concerned to avert developing factionalism that might undermine the laboratory and, worse, have consequences for his regional plans, advised Russell:

> I would like any reference to the gift by the Foundation of a pathology laboratory to be stated the gift of the Foundation to the South Pacific Groups that co-operate in the Central Medical School, and not stated as a gift to the Colony of Fiji only. The correct statement of the gift might have a future value in the maintenance of a co-operative spirit between the groups.\(^{63}\)

The Colonial Office questioned the High Commissioner's handling of the project, especially his failure to consult with Western Pacific Resident Commissioners before committing them to new capital and ongoing expenses. Fiji's contribution was unclear, but it was now obvious that Fletcher had negotiated with the Rockefeller Foundation on its terms without reference to the Legislative Council, as the item did not feature in Fiji's 1935 estimates and debates.\(^{64}\) Colonial Office queries confirmed Campbell's view that confusion existed over the laboratory's primary role (training ground for NMP students, centre for routine pathology work, or research institute?) and responsibility (to Fiji or the wider Pacific?). With these functions merged, it was difficult to determine the principle on which

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61 Macpherson to Stanton, 20 April 1935; CO 83/210/6.
62 Lambert to Russell, 9 February 1935 and 4 March 1935; Beal to Lambert, 8 April 1935; Lambert to Beal, 11 May 1935; Armstrong, Acting Colonial Secretary, to Lambert, 20 May 1935, all RFA RG. 1.1, Series 419L, Box 1, Flldr. 10.
63 Lambert to Russell, 25 April 1935, RFA RG. 1.1, Series 419L, Box 1, Flldr. 10.
64 Jones to Harford, 24 May 1935, Harford to Jones, 3 June 1935, Jones, 11 June 1935 "Minutes to Fiji correspondence re lab – Sols": CO 83/210/6.
costs should be equitably apportioned. To the Colonial Office, the logical but partial solution was that all participants in the Central Medical School should contribute to costs according to the school’s use of the laboratory.\footnote{Secretary of State to Governor, 11 June 1935; Governor to Secretary of State, 25 June 1935; Harford to Jones, 1 July 1935, all CO 83/210/6.}

**Under-capitalisation and other problems**

Even before this problem was resolved, the project faced a major crisis. The Foundation’s development projects in the Pacific demonstrated a recurring pattern: they were always undercapitalised, and consequently compromised in their ability to fulfil their original function. In part, the organisation’s own approach was to blame. Its seeding grants were designed to capture government interest and participation in programmes otherwise unaffordable. The cost, which the government was expected to assume fully within a short period, therefore had to appear manageable, especially for colonial economies attuned to financial stringency, so that they could give the commitment that the Foundation demanded. Budgets were pared to the bare minimum, often unrealistically. The Foundation intended that the state assume responsibility for expanding health services, and it proceeded on the principle that once set in motion, such developments were difficult to reverse. There was, therefore, a readiness to accept, as Lambert did with the CMS, that “half a loaf”\footnote{Lambert to Sawyer, 29 October 1935, RFA RG. 1.1, Series 419L, Box 1, Fldr. 10.} was initially better than none.

For similar reasons, the laboratory budget of £2200 soon proved completely inadequate. When Macpherson returned from his overseas studies (including an extra six months at the Liverpool School of Tropical Medicine), he made it clear that the facility being built and equipment accumulated so far met neither “the standard for which he had been trained [nor] the standard which we want established in the South Pacific.”\footnote{This was the title he gave his chapter on the school in Doctor in Paradise.} Construction came to a halt while the project was re-evaluated and new plans prepared. Eminent visitors to Fiji now advised that a laboratory adequate for Fiji’s routine, teaching, and research needs was impossible for less than £10,000; however in the final revision, Fiji settled on a scheme costing £5184. This more than doubled the original allocation, though it
still provided only a simple standard public health and general medical laboratory. 68

The Foundation’s grant stipulated that the laboratory be completed by the end of 1935, so a panicked government appropriated £3000 from £5000 recently donated by local gold mine company director, E. G. Theodore, to build a children’s ward at the hospital. When Theodore objected, Pearce appealed urgently to Lambert for extra funds from the Foundation. Lambert presented three reasons for support: the laboratory was important to the philanthropy’s general program in the Pacific; improving preventive public health teaching for medical students was vital for the future of Pacific races; and finally, as the IHD had invested in Macpherson’s training to head the laboratory, it would be “a considerable mistake” not to complete the project satisfactorily. 69 Fortuitously, the IHD’s Scientific Directors’ met a few days later. It agreed to a £500 grant to complete the building, £1000 for equipment, and completion by the end of 1936. 70 The Fiji Government immediately returned Theodore’s money and voted the remaining £1500 required for the laboratory from the Colony’s Surplus Balances. 71

By securing the necessary funds, Lambert seemed finally to have resolved the laboratory problem, clearing the way to pursue other projects that were linked to the improved laboratory-CMS-hospital complex. Immediately, however, a situation arose that set back these plans irrevocably, and marked a definite turning point in Lambert’s position in Fiji. For the first time, the Governor and Administration rejected his expressed wishes, and did so in a publicly humiliating way.

The incident arose from his plans to improve and expand indigenous nurse training, in the context of general reform of Pacific nursing. Although analogous and complementary to the development of NMPs and unified medical services, impetus for such change developed more slowly. From 1926, Fijians concerned at the level of services provided in the provinces asked for more nurses and better training, 72 while the maternal and child welfare schemes that developed in the late

68 High Commissioner to Secretary of State 3 July 1935, CO 83/210/6, Governor to Secretary of State, (including Acting CMO Ramsey to Colonial Secretary, 9 September 1935) 30 November 1935: CO 83/212/11. The visitors included Professor Sydney Smith, Regius Professor of Medical Jurisprudence and Toxicology, Dean of the Faculty of Medicine at the University of Edinburgh; and Sir William Wilcox, Medical Advisor and Pathologist at the Home Office.
69 Note, 26 October 1935, with Lambert to Sawyer, 29 October 1935, RFA RG. 1.1, Series 419L, Box 1, Fldr. 10 (two letters).
70 Sawyer to Pearce, 4 November 1935 and 6 November 1935, RFA RG. 1.1, Series 419L, Box 1, Fldr. 10.
71 Governor to Secretary of State, 30 November 193, CO 83/212/11; A.H.B. Pearce to Sawyer, 5 December 1935, RFA RG. 1.1, Series 419L, Box 1, Fldr. 10.
72 Council of Chiefs, ‘Reply to Governor’s Address’, 10 September, 1926, pp. 6-7.
1920s\(^7\) further increased demand for Native Obstetric Nurses. The Government raised the number of trainees on the NON course at Suva Hospital from nineteen to twenty-four\(^7\) but in 1930, dissatisfied at the poor quality of training and treatment of Fijian trainees compared to that of their European counterparts (who undertook a professional two-year course under the auspices of New Zealand and Australian Nursing Councils), the Fijian Council of Chiefs requested parity in pay and conditions.\(^7\)

A major obstacle to better training was the low standard of education available to Fijian girls;\(^7\) one more easily addressed was the attitude of Matrons and nurses who conceived of Fijian women largely as "nursing navvies" during their two year course and subsequent employment at the hospital. During Heiser's visit in 1934, McGusty and Lambert importuned his help. A new Matron was then being recruited from New Zealand, with the Assistant Matron, Miss Hughes, possibly trained to teach nursing. Heiser suggested she apply for a Rockefeller Foundation fellowship, to allow six months training in New Zealand under Mary Lambie, Director of Nursing and practical work in Maori districts. Such training, costing around £235/US$1000, could benefit nursing education in Fiji and ultimately provide public health nurses throughout the South Pacific.\(^7\)

The idea was subsequently dropped as Hughes failed to meet Rockefeller Foundation educational requirements. Nevertheless, the Foundation was now aware of the need for more comprehensive support for nursing training in the Pacific, as a crucial part of an integrated, economic health service,\(^7\) and encouraged Lambert to pursue reform.

While a unified Pacific Medical Service was an incentive to develop facilities like the laboratory in Suva, rising expectations among the European community for sophisticated medical care was also a pressure for expansion, especially of the hospital. This highlighted inadequate nurse staffing levels, with heavy workloads undermining standards of care and training.\(^7\) Faced with

\(^7\) For analysis of these see V. Lukere, “Mothers of the Taukei” (PhD thesis, ANU, Canberra) and “Fiji Annual Medical and Health Reports” after 1928.
\(^7\) Hutson to Amery, 6 July 1928, CO 83/182/4.
\(^7\) Eroni Buresova, Council of Chiefs, 26 November 1930, CO 83/191/7.
\(^7\) The Young Fijian Party lobbied to improve women’s education, as crucial to the welfare of the race, but the Government deferred through the Depression.
\(^7\) Heiser, 8 May 1934, "Diary of World Trip 1933-34: Fiji": APS/VHP
\(^7\) Lambert to Heiser, 20 August 1934 and 22 September 1934; Heiser to Lambert, 15 October 1934, RPA RG. 2, Series 419, Box 102, File 805. Heiser discussed the Pacific nursing situation with Lambie and Watt while in New Zealand.
\(^7\) Daily patient numbers averaged 105 during 1933, with 6 trained nurses to cover patient care and the training of 13 probationers and 18 NONs. The New Zealand equivalent hospital averaged 93.5 patients with 23 trained nurses and 26 probationers. L.C. Debate re levy and expenditure, Suva Hospital, 18 October 1934, CO 83/208/7.
demands to increase expenditure at the hospital, at the expense of other health activities and district services, the Government re-evaluated the economics of using white nursing sisters.\textsuperscript{80} Western Samoa had already done so, on Mary Lambie's advice reducing European staff and introducing a proper three-year training for Island nurses.\textsuperscript{81} Lambert was keen to follow suit in Fiji, and earmarked space in the laboratory extension for a nurses' training school.\textsuperscript{82}

Lambert had every expectation that his advice would be followed. Improving nursing training was logical within the context of expanded medical services, had the Governor's attention and the Foundation's backing. However, his designs for the nurses' school ran counter to other interests. Late in 1935, when Lambert was in London discussing the Unified Pacific Medical Service with Colonial Office officials, he heard that the Fiji Government had allocated two rooms in the laboratory extension to the Department of Agriculture, with Governor Fletcher then seeking the Secretary of State's approval for the extra £500 expenditure. After Lambert presented the Colonial Office with his arguments for reserving the space for a nurses' school, officials assumed that, given the Rockefeller Foundation's hefty contributions to the laboratory, Fiji would be prepared to consider Lambert's wishes sympathetically. They quickly found otherwise. The Colonial Office was in a delicate position: favouring Lambert's wishes might cause resentment in Fiji, as one official warned, and "give the impression that we regard Dr. Lambert as the big noise in the matter or that he has been manoeuvring behind the local backs which I gather is not the case."\textsuperscript{83} The recommended strategy was to claim concern about the Foundation's possible reaction, rather than Lambert's.

Consequently the Secretary of State deferred a decision on the extra rooms, citing the Rockefeller Foundation's past generosity and the possibility of its future assistance for a Nurses' School.\textsuperscript{84} The Governor's reply was to the point and intractable: the Director of Medical Services and the Legislative Council strongly supported the Agriculture Department proposal; he and the Pearce considered Lambert's nurses school scheme impracticable for the foreseeable future, and the School an especially inappropriate site for such a development; and the Governor had already authorised the project. This response and the Governor's unilateral

\textsuperscript{80} Governor address to L.C., "Medical Policy", 12 October 1934, CO 83/206/9. L.C. Debate re levy and expenditure, Suva Hospital, 18 October 1934, CO 83/208/7; Governor to Secretary of State, 20 October 1934 (confidential), CO 83/208/7; Governor, 25 October 1934


\textsuperscript{82} Lambert, A Doctor in Paradise, p. 287.

\textsuperscript{83} Stanton, 31 January 1936; Jones, 14 February 1936; Allen, 15 February 1936 and 17 February 1936: Minutes in CO 83/212/11.

\textsuperscript{84} Secretary of State to Governor, 18 February 1936, CO 83/212/11.
decision angered the Colonial Office, which although put in an embarrassing situation now had no option but to concur. It saw such dismissal of Lambert's nursing scheme as "a surprising lack of consideration for the wishes of the representative of the Rockefeller Foundation, which is providing most of the money."  

The Laboratory - evaluation

Despite these difficulties, the laboratory was completed by April 1936. With its opening, the Bacteriologist post was abolished, Campbell retired, Macpherson appointed as Pathologist, and a technician employed. The new building was described as modern and roomy, with work areas carefully planned to guarantee excellent results. The complete facility comprised office and library, lobby, main laboratory with refrigerator and incubator room, vaccine room, biochemistry laboratory, fly-proof post-mortem theatre with coffining room, a dark room, sterilising and prep room, parasitology lab, storerooms, cleaning room, gas plant and workshop, veterinary labs, and animal houses.

Colonial Office concerns notwithstanding, the Foundation gave further support to the laboratory, beyond its 1935 equipment grant of £1500. When the Colonial Office instructed colonial administrations to assess the chemical composition and nutritional content of native foods, so that they could counter nutritional deficiencies with new crops, Lambert requested £500 for the

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85 Governor to Secretary of State, 21 February 1936; Minutes - Smith, 26 February 1936, and Jones, 2 March 1936; Secretary of State to Governor, 10 March 1936, all CO 83/212/11.
86 Fiji Annual Medical and Health Report, I.C. No. 27, p. 1, WPHC 4135/1937. MacPherson's appointment was unnotified for several months, and despite his earlier complaints, his employment conditions remained unchanged pending a general revision of Fiji terms. OAG to Secretary of State, 1 July 1936; Secretary of State to OAG, 24 July 1936, CO 83/212/11.
88 Lambert from the outset advised Sawyer that the Rockefeller Foundation might be asked for extra. Lambert to Sawyer, 1 April 1936, RFA RG. 1.1, Series 419L, Box 1, Fldr. 11. It also sent second hand American and German scientific publications for the library. Pearce to Lambert, 26 May 1936; Lambert to Sawyer, 17 July 1936 and 20 July 1936; Beal to Lambert, 4 September 1936; Lambert to Beal, attu. Sawyer, 22 September 1936, all RFA RG. 1.1, Series 419L, Box 1, Fldr. 11.
89 Lambert to Sawyer, 21 September 1936, RFA RG. 1.1, Series 419L, Box 1, Fldr. 11. The despatch (18 April 1936) from the Secretary of State for the Colonies, J.H. Thomas, derived from recent League of Nations debates on "nutrition in relation to public health and the effects of improved agriculture on the consumption of agricultural products"—a special interest of the League's Australian delegate—and "urged the Governments to examine the practical means of securing better nutrition." Thomas requested comprehensive analysis of the nutrition situation in each dependency and its economic consequences, with a view to making necessary improvements: S.R. Ashton and S.E. Stockwell (eds.), British Documents on the End of Empire: Imperial Policy and Colonial Practice 1925-1945: Part II, London, 1996, pp. 333-334. Nutrition had become a
necessary biochemistry apparatus. On Sawyer’s recommendation, the Scientific Directors agreed.90 The Fiji Administration acknowledged the gift as “yet another token of the interest taken by the Foundation in medical research in the South Pacific.”91

In fact, the Foundation’s participation was more than token. Altogether it gifted £4200; Fiji contributed only £2000. Its funding provided the impetus for the project, from the original capital grant to consecutive injections of funds to cover budget shortfalls. Despite Fiji’s promise to take full responsibility for equipping and maintaining the laboratory, the Foundation put an extra £1750 into equipment to ensure a good standard.92 These repeat grants were unusual for the Foundation, whose firm policy was to avoid capital funding. It could be argued that the Foundation failed to assess the project adequately, but once committed could only proceed to completion. Post-Depression optimism, Lambert’s argument that the laboratory would help effect a Unified Pacific Medical Service and improve medical education, and Russell’s insistence on a strong research focus in IHD activities, and his more direct involvement with Lambert after 1934, undoubtedly influenced the Foundation’s approach to the laboratory development.

How much benefit accrued from Fiji’s fine new laboratory? Clinical examinations for the hospital and Fijian MOs increased; good facilities allowed plenty of animals for testing and experiments; more space improved the teaching programme for CMS students and European trainee nurses, as well as NMPs’ post-graduate opportunities for further scientific study.93 However, as Campbell predicted in his protests against the merger of public health, hospital, and teaching functions, the expanded workload proved too much for a single Bacteriologist/Pathologist. Macpherson soon complained that teaching and the

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90 Sawyer to Lambert, 24 September 1936 and 2 November 1936, RFA RG. 1.1, Series 419L, Box 1, Fldr. 11.
91 Barton, Colonial Secretary to Lambert, 26 January 1937, RFA RG. 1.1, Series 419L, Box 1, Fldr. 11.
92 Colonial Treasurer, “Certified expenditure to date from Rockefeller Foundation grants to Central Medical School laboratory”, 19 December 1936, RFA RG. 1.1, Series 419L, Box 1, Fldr. 11; “Fiji Annual Medical and Health Report, 1937”, p. 29, WPHC 4577/1938.
increase in the routine duties left little time for anticipated research into Pacific health issues. Even the analysis of local nutrition - a priority after the Secretary of State’s directive and ostensibly the reason for the last Rockefeller Foundation grant - had received only cursory attention by 1939, although a Nutrition Committee had been established three years earlier. Frustrated, the Fiji Government began advertising overseas, hoping to entice competent researchers with Suva’s excellent facilities and the Western Pacific potential as a “fruitful field” for important research into tropical diseases. The outbreak of World War II temporarily stymied further development, until the opening of the Pacific front gave conditions and health in the tropics a new relevance to Western interests.

Ultimately the laboratory achieved few of the objectives that Lambert had used to advance it. While it provided services for the hospital in Suva and other medical activities in Fiji, and extended medical education for NMPs, hopes that it would develop as a Pacific centre for research were hardly fulfilled. Nor did it secure agreement on a Unified Pacific Medical Service, as Lambert had suggested to Heiser. However, there is little to indicate that the outcome disappointed him; after all, the Fiji Government was now more deeply committed to organising its medical services on a scientific basis. The project had been contentious, provoking factional interests and professional rivalry, so possibly, having strengthened the Central Medical School and indigenous medical education, Lambert was content to move on to his next plans for development.

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56 Lambert to Sawyer, 2 October 1937, RFA RG. 1.1, Series 419L, Box 1, Fldr. 11. Disappointed with Macpherson, and effect on lab, for overstepping Lambert with Rockefeller Foundation re Smythe’s fellowship application. Also Lambert to Sawyer, 19 October 37 and Sawyer to Lambert, 1 November 1937.
Chapter 14
Reforming Medical Chaos - A Unified Pacific Medical Service

In Lambert's final phase in the Pacific, from his return from leave in 1936 until his departure in 1939, he operated in an environment of general expansion. Heiser's discussions with Lambert and officials in the colonies and New Zealand during his 1934 visit had inspired a new coherence and focus, and even without the certainty of funding, planning continued for more ambitious medical developments. The year 1936 marked more than the laboratory's opening; it was a real turning point, for with the stringencies of the Depression behind them, both government and the Foundation were now ready to invest more liberally in Pacific health and medical services, especially in Fiji. Past efforts had secured public interest, so there was general support for further expansion. Administrations conceded the success of Native Medical Practitioner training and applied for more student places; this meant considering further additions for the cramped Central Medical School, including better accommodation and the Health Centre suggested by Heiser. Suva's Colonial War Memorial Hospital needed major renovations to make it into "an institution of the first rank" befitting both local aspirations and Suva's projected role as the South Pacific's medical centre. Tied to this was overhaul of the nursing services, which highlighted the need for re-organisation and improved training and facilities to develop a comprehensive indigenous nursing service.

Obviously, these aspirations, a blend of preventive and curative measures, concentrated on Suva, but they developed in association with ongoing negotiations for a Unified Pacific Medical Service in the Western Pacific High Commission and New Zealand territories. At times assertive local players subverted this wider objective, using it to rationalise and reinforce local development. Lambert also conflated local and regional development. Strengthening medical facilities in Suva was integral to improving education for NMPs and native nurses, and would also attract quality Medical Officers to the

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1 As will be seen in the following chapter, this was a complex issue in which misrepresentation and miscommunication, parochialism, and professional and personal insecurity and self-interest all played a part.
region. As New Zealand’s territories were seen as an important part of the scheme, he continued developing his connections with New Zealand interests.²

These years were Lambert’s last opportunity to institute the combined health services model, which had been his ideal since 1921. The general trend had been in his favour, with Makogai, the CMS, and the laboratory all demonstrating the possibilities for co-operation and joint administration. Similarly, agreement on the Western Pacific Health Service in 1927 established the principle and framework for gathering scattered, under-resourced medical services together under a Central Medical Authority. This structure proved useful for running various IHD-assisted public health campaigns in participant groups, but otherwise had little practical effect in rationalising medical services or, crucially, improving the quality of Medical Officers. However Lambert believed that the next stage would inevitably follow, creating an over-arching Medical Service with conditions and opportunities that would draw well-qualified doctors to lifetime careers in the Pacific. Others agreed; the idea had precedents elsewhere in the Empire, and fitted within current colonial policy that had standardising services firmly on the agenda. Centralisation also became a fixed objective in the Foundation’s Pacific programme, although it originally entered the Pacific without any comprehensive scheme for the region.

In his optimism that support would carry the plan into full effect, as on other occasions, Lambert underestimated the complexities and conflicts of interest inherent in a full Unified Pacific Medical Service. Administrative and professional territorality, entrenched financial interests, and practical difficulties proved intractable, and misunderstanding prevailed. Lambert’s position in the Pacific was also changing, his influence less certain. Just as the original impetus for a unified medical scheme arose from the interactions - and reactions - of various regional and local concerns, including but not exclusively Lambert’s, so too did its demise.

² He secured Rockefeller Fellowships for New Zealand health workers; produced a 54-page report on Maori public health services in 1937; undertook a health survey of Niue in 1938 and convinced its administration to participate in the Central Medical School; and was only thwarted in his efforts to make a survey of tuberculosis in the Northern Cook Islands by that perennial obstacle to Pacific health work, transport difficulties.
Development and Success

In 1921, Lambert concluded that the Rockefeller Foundation, — "a vast scientific machine tuned up to deal out mercy in a practical, businesslike way" — could resolve the major disease problems of "sick Oceania" but was thwarted in its task by colonial administrations that lacked vision, a co-operative spirit, and competent medical services. Only unified efforts co-ordinated by a central authority could overcome the region’s "medical chaos" and produce improved health. Lambert decided to pursue a central medical administration, overseeing combined health services and logically sited at Suva, headquarters of the Western Pacific High Commission and economic hub of British Pacific colonies.³

Lambert’s ideas generated interest from others in Fiji concerned about indigenous health, and in 1923, working closely with CMO Dr Aubrey Montague, he produced his first proposal for co-ordinating health services in the Western Pacific (see Chapter 6, above). As already discussed, the Rockefeller Foundation gave his ideas minimal encouragement, until Cumpston in Australia pursued parallel though more grandiose schemes for unified medical efforts in the Pacific.⁴ He stimulated the Great Powers’ interests in the vital strategic value of rejuvenated indigenous populations, raising the profile of Islanders’ health as both an object for scientific study and a matter of consequence for colonial administrations. However, he failed to inveigle the Rockefeller Foundation into leading a systematic, multinational assault on Pacific health problems. Instead it reconsidered Lambert’s proposal, now giving him a mandate to stimulate demand for health work and assess the potential for a Pacific-wide service.⁵

Regional initiatives demonstrated growing responsiveness to unifying efforts. At the Pacific Islands Health Conference in Melbourne in 1925, delegates from Australia, Papua, New Guinea and the Solomon Islands moved to co-ordinate and standardise their quarantine and disease notification procedures.⁶ At an International Pacific Health Conference the following year, medical representatives from all the colonial powers in the Pacific, the Pacific territories themselves, and the League of Nations developed this work further. For the first

³ Lambert, A Doctor in Paradise, p. 115.
⁴ The 1923 Pan Pacific Conference in Melbourne, and the Imperial Conference in London the same year.
⁵ Heiser to Lambert, 21 April 1923, RFA Biographical files, Box 1, Fldr. S. M. Lambert. See also Chapter 5, above.
time, there was full exchange of information on the medical problems of the
Pacific, and resolutions on co-operating in epidemiological intelligence and
medical action, quarantine, and research in the Austral-Pacific zone. The
Rockefeller Foundation was invited but sent no delegate; but in his opening
address Australia’s Acting Prime Minister identified the organisation as one of
the “three great international health agencies”, expressed appreciation for its
activities in the Pacific so far, and hoped further work would be considered.

With such intensifying interest, action was inevitable. By 1927, two of
Lambert’s proposals for co-operative ventures had been accepted, at least in
principle and in part. Colonial administrations realised the benefits of pooling
resources, with several already co-operating in the leprosarium on Makogai now
willing to contribute to another common venture, the Central Medical School.
This got underway after the IHB reviewed its adamant stance on medical
education, beginning the supply of NMPs Pacific-wide. Simultaneously, the
IHB’s part funding of disease control in Solomon Islands and Gilbert and Ellice
Islands Colony secured the Western Pacific Health Service. Intended as a
fledgling organisation until the practicalities of a full South Pacific service could
be worked out, this established the CMO Fiji as Central Medical Authority to
oversee the progress of medical work in the Western Pacific High Commission
territories. From its headquarters in Suva, Lambert hoped for gradual co-
ordination of effort, biennial health conferences, and the evolution of a British
Pacific Medical Service to complete the reorganisation. Over the next twelve
years, he had to be satisfied with much less.

Campaigning in the 1930s

By 1930, the Central Medical School and the hookworm and yaws campaigns in
Fiji, Gilbert and Ellice Islands Colony, Solomon Islands and New Hebrides, all
part-funded by the IHD, were underway as the core activities of the Western
Pacific Health Service. With Depression then underway the Foundation, rather
than encouraging further expansion, now talked of withdrawing from the Pacific after 1931.\(^\text{11}\) Lambert faced a premature end to his plans, and was also anxious about his prize scheme, with retrenchment eroding support for the School and the Native Medical Practitioner service, and the administration dodging its agreement to provide an advisory Travelling Medical Officer. Without this important support in the field, the NMP scheme – vital to the integrated service Lambert envisaged – was vulnerable, its success dependent on the quality and active interest of District Medical Officers.\(^\text{12}\)

Late in 1930, a trip to Tonga and Samoa gave him the inspiration and encouragement he needed and a clear framework for future work. These were virgin territories ripe and eager for Foundation assistance, but had difficulties in attracting capable medical staff. Problem and potential again came into sharp relief: to Lambert, the obstructionist CMO, Dr Dawson, epitomised the fault at the heart of Pacific medical organisations, and Queen Salote and Premier Tungi, the conscious intelligence that would bring relief to Island populations. They were eager to know of any progress towards a Unified Pacific Medical Service, recognising that a larger regional service offering better career prospects would be to Tonga’s advantage. Their interest renewed Lambert’s own enthusiasm.\(^\text{13}\) With fresh conviction that the way to improve the overall delivery of health care in the Island territories was to combine the many small services, he picked up the campaign for unification. Hand-in-hand with this went a package of co-operative preventive health projects, further development of the CMS, and a central Pacific laboratory.

Western Samoa’s administration and New Zealand officials were immediately interested.\(^\text{14}\) Facing similar staffing problems to Tonga,\(^\text{15}\) New Zealand had already explored alternatives. It considered attaching the Samoan Medical Service to the New Zealand Health Department, or recruiting through the Colonial Medical Service, but in both proposals found it difficult to reconcile different administrative and employment systems. Parochialism featured strongly: “Samoa is part of New Zealand,” claimed one official, and “New Zealand for the New Zealanders”, so foreign doctors should be considered only if

\(^{11}\) Heiser to Lambert, 14 October 1930, RFA RG. 2, Series 419H, Box 43, Fl dr. 353.
\(^{13}\) Lambert to Heiser, 22 December 1930, RFA RG. 2, Series 419H, Box 43, Fl dr. 353.
\(^{14}\) Lambert to Vaskessa, 22 December 1930, WPHC 3801/1930; Lambert to Heiser, 22 December 1930, RFA RG. 2, Series 419H, Box 43, Fl dr. 353; Berendsen to Lambert, 3 February 1931, IT 1 8/31:1.
\(^{15}\) Berendsen to Lambert, 3 February 1931, IT 1 8/31:1.
suitable domestic applicants was absolutely unavailable. The stance presaged future obstacles. However, interest in unification arose from a definite growing concern at the standard of health care available to Islanders. The focus of colonial medical services was changing, away from colonial officials whose well being was the original rationale of tropical medicine, to the health of the colonised themselves.

Lambert used his 1930 WPHS Annual Report as a vehicle to advance his views. As their pursuit of preventive and curative measures demonstrated, the British had "a sense of responsibility for the well-being of the native races ... which is difficult to credit if one has not experienced it." However, the High Commission's loose organisation was a disadvantage. Only Fiji with its staff of twenty was able to provide systematic training in tropical medicine. Other groups were disadvantaged because their small medical services (no more than four doctors) offered little incentive for the enthusiastic and ambitious. Isolation, few amenities, and lack of European fellowship were other drawbacks, as were the individual shortcomings of lay officials and medical men.

Medical Services in New Zealand dependencies suffered identical handicaps. The Cook Islands had perennial problems finding good doctors, which undermined what the Departmental Secretary described as an otherwise adequate organisation. Without a pool of trained Medical Officers to draw from, vacancies were advertised in the New Zealand press, and tended to attract a "less desirable class of officer." With isolation, discomfort and limited prospects many suitable staff left early, often just when they had gained valuable skills, while those that stayed tended to become indifferent after a few years. Recruits were usually young, recently qualified doctors from New Zealand, so had little general medical experience, none in working among Maori people, no training in tropical medicine, and were basically ill equipped for island medical practice. The main incentive for these new doctors was the possibility of saving up for a practice in New Zealand, rather than a commitment to "the cause of native medical work." At the other end of the spectrum, but no more desirable, was the applicant who for reasons often dubious sought the security of a salaried position in the remote Pacific.

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16 Frengley to EA Secretary, 30 April 1923, IT 1 8/12:2
17 All citations in this paragraph are from: Lambert, "3rd Annual Report, Western Pacific Health Service 1930", WPHC 2652/1930.
18 All citations in this paragraph are from: Extract, Cook Islands Secretary to Minister, n.d, encl. in Lambert to Vaskess, 23 February 1931, WPHC634/1931.
For Lambert, the solution was to bring all British Pacific medical services together under the extended executive power of the Central Medical Authority. Knowledge, experience and facilities could be shared, and needless duplication avoided. A larger combined service would allow better training, steady promotion, and more flexible postings, attract "a high type of officer" and ensure more constant development. Smith of the Cook Islands Department similarly concluded that a system of transfer among Pacific groups might encourage able young medical officers to make tropical medicine their life's work. With inter-governmental co-operation there appeared no obstacles to a satisfactory collective scheme. Legislating to standardise salaries and conditions need not imply any revolutionary change or interference in individual territorial control. Lambert, citing the "harmonious" working relationship among all participants in Makogai and the CMS, agreed that the adjustments required would be minor, inexpensive, and unproblematic.

As it turned out, such assumptions were naive, perhaps in Lambert's case even disingenuous. Problems in 1927 when the CMA position was created for the Western Pacific Health Service made him well aware that such a centralised executive position could engender issues around autonomy and territoriality. Now his new recommendations conferred substantial authority to the CMA, requiring that Administrators and Medical Departments consult him on medical programmes, estimates, and appointments. He admitted that as the new changes went deep, they possibly would be accepted and go into effect slowly.

Fiji and the UPMS

Thinking that Fiji and the Western Pacific might reject the proposal as they recruited from the Colonial Medical Service, Smith recommended an alternative amalgamated service for the Cook Islands, Western Samoa and Tonga. However, the High Commission saw value in Lambert's proposals, especially for the smaller administrations. Fiji itself probably had little to lose or gain, but attitudes

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20 Extract, Cook Islands Secretary to Minister, n.d; enc. in Lambert to Vaskess, 23 February 1931, WPHC634/1931.
22 Lambert to Heiser, 28 August 1930, RFA RG. 2-1930, Series 419H, Box 43, Fldr. 353.
there were pivotal to any action. Officials recognised the scheme’s advantages in aclimatising new, inexperienced Medical Officers and improving retention. Dr A. H. B. Pearce, recently appointed CMA, gave his support and, citing the success of a similar scheme in the West Indies, was certain the Colonial Office would also approve. Pearce later lost interest in unification, and became one of the obstacles to its progress.

Other administrations were canvassed. Macpherson, SMO in the Gilbert and Ellice Islands, saw advantages. With an amalgamated service providing more diverse opportunities, the Pacific could compete with larger, more favourably situated British colonies. Suva’s hospital was a logical place to begin tropical training, while a gradual transition to the districts and Makogai before proceeding to more strenuous remote posts would pick out the “temperamentally unsuited”. He saw possible problems with reorganising employment conditions and emoluments and loss of private practice fees, and potential loss of seniority through transfer could be “discouraging”; but transfer would also maintain interest in medical work, widen experience, and ultimately shape Medical Officers more suited for senior posts in a larger colony. A Unified Pacific Medical Service would give security of promotion, ensuring that useful men stayed. As the service matured, it would also provide opportunities for medical specialisation and special research into the Pacific’s many interesting and important health problems. These benefits notwithstanding, Macpherson and Resident Commissioner Arthur Grimble objected to the scheme. A unified service would disadvantage locals, as doctors frequently transferred would not gain the fluency in local languages essential for rapport with islanders, “especially in connection with women’s complaints.”

With these discussions underway, both Pearce and Fletcher were concerned that the Foundation might soon withdraw from the region, and stressed that Lambert’s return after leave in 1931 was critical for negotiations. In New York as we have seen, Lambert lobbied hard for further Rockefeller Foundation cooperation in his “elaborate plans” for the South Pacific. However, except for a Pacific-wide leprosy survey, his proposals were all for discrete projects in individual territories; even the laboratory was at this point presented largely as a

23 Vaskess to CMA, 13 June 1931, WPHC 634/31.
24 Vaskess, 5 March 1931, WPHC 634/1931.
25 CMA (A. H. B. Pearce) to WPHC Secretary, 8 June 1931, WPHC 2652/1930.
26 Macpherson to High Commissioner, 20 August 1931, WPHC 634/31.
27 Minute, 10 August 1931, WPHC 2652/1930; also, WPHC 634/31.
project for Fiji. Apart from proclaiming Suva’s role as a centre of both commerce and disease, he appears to have done little direct promotion of the idea of the Pacific as a unit needing integrated services and centralised control. The IHD stayed with soil sanitation and hookworm and yaws treatment programmes as the means to extending health services. This ensured Lambert’s tenure as Rockefeller Foundation representative, and at least as advisor and director of the new projects in Western Samoa and the Cook Islands he had more opportunity to liaise with the New Zealand administrations and co-ordinate their interests with those of the Western Pacific Health Service.

Poor neighbours - the New Zealand dependencies and the Western Pacific High Commission

When Lambert returned to Fiji, his priority was to negotiate firm contracts for the work that the IHD had approved, and he did not actively pursue a Unified Pacific Medical Service. In 1932, Western Samoa’s need for suitable Medical Officers prompted the New Zealand Minister Government to raise the matter with Fiji.28 According to Lambert, the plan stalled when Governor Fletcher appropriated it, “trying to work it into a plan for a South Pacific Confederacy for which idea the medical scheme had been the inspiration.”29 Fletcher abandoned such a complex project, but now wanted to use the combined medical service proposal as an opportunity for thorough medical reorganisation in Fiji. Lambert considered Fiji’s internal arrangements peripheral to the broad unification issue, and in confidential discussions urged Fletcher to proceed with the scheme initially proposed. The High Commissioner soon sent his proposal for a British Medical Service in the South Pacific for Colonial Office comment, and Lambert reported everyone hopeful that the scheme would begin “in due course of time”, and himself, confident.30 However, he had a strategy to ensure the deal. A good central laboratory in Suva would be an asset, providing a research focus in the Pacific, he told Heiser, and the offer of a grant from the

28 Hart to Fletcher, 2 February 1932; Hart to EA Minister, 2 April 1932; G. Forbes to Hart, 20 April 1932; Forbes to NZ Governor-General, 28 April 1932; Bledisloe to High Commissioner, 3 May 1932; Fletcher to Hart, 20 June 1932, all IT 1 8/34:1.
29 Lambert to Heiser, 15 April 1932, RFA RG. 1.1, Series 419L, Box 1, Fldr. 9.
30 All citations are from: Lambert to Heiser, 17 May 1932, RFA RG. 2, Series 419, Box 72, Fldr. 590.
Foundation, "to dangle before the eyes of the Colonial Office" (and the Pacific administrations) would be an added incentive for a unified Medical Service. In return, the Foundation would secure a "valuable piece of reorganization and centralization of health administration". From this point on, the laboratory became another factor impelling the wider concept of a unified health service.

Lambert, however, was over-confident, only later finding that Governor Fletcher had dealt extensively with reorganising Fiji's medical services in his submission to the Colonial Office. Lambert thought the issue minor, but in fact it complicated the matter of an inter-group medical service, fomenting opposition by challenging the status quo and entrenched interests.

Fletcher's fundamental problem regarding the Fiji service was Government Medical Officers undertaking private practice to supplement their standard salaries, in some cases by as much as £600. Fletcher opposed the practice on the principle that "a man cannot serve two masters to the satisfaction of both", and specifically because supplementary income was largely grants from the Colonial Sugar Refining Company (CSR CO), which compromised Medical Officers' primary allegiance to the Government. Private practice meant that the interests of the European minority (including the Medical Officers themselves) overrode those of Fijians and Indians, who were now the government's primary focus. As doctors gained seniority they expected to be posted to the districts with increasingly lucrative private practice; the pinnacle was Lautoka, where the DMO commanded £600 more per annum than the Chief Medical Officer. Neither Montague nor Pearce had been able to assert public interest. When pressed to undertake regular circuits through all Fijian and Indian settlements, Medical Officers objected because of their obligations to European patients. Long tours were especially problematic, as Medical Officers lost their company grant if absent more than seven days. As Fletcher acknowledged, "It is hardly fair, however desirable...to detail a senior officer for special work among the Fijians, if he thereby loses a third or more of his income."

Not surprisingly, given that it was receiving state-subsidised health care for its employees, the Colonial Sugar Refining Company rejected his suggestion that

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31 Lambert to Heiser, 1 June 1932, and 24 June 1932, RFA RG. 1.1, Series 419L, Box 1, Fldr. 9.
32 Heiser to Lambert, 30 June 1932, RFA RG. 1.1, Series 419L, Box 1, Fldr. 9/IT 1 8/34:1; Heiser to Lambert, 21 July 1932, RFA RG. 1.1, Series 419L, Box 1, Fldr. 9.
33 Lambert to Heiser, 19 December 1932, RFA RG. 1.1, Series 419L, Box 1, Fldr. 9.
34 Fletcher to Secretary of State Cunliffe-Lister, 23 July 1932, IT 1 8/34 pt. 1.
35 Ibid. Fletcher also observed that loyalties were further compromised as the Company granted Medical Officers concessions at its stores.
the Government bar private practice and instead encourage General Practitioners, claiming that there was insufficient business to attract suitable people. Fletcher retorted that the Company’s income left it “well able to offer a suitable inducement without assistance from the Government.”

A viable solution demanded that all existing rights and privileges be preserved in order to attract current Medical Officers to the new scheme, and suggested they have the choice between current and proposed conditions. He recommended a standard salary of £600, rising to a maximum £900, and free part-furnished quarters. In a move that was to raise debate over professional boundaries, and the state’s responsibilities to the populace, he proposed that in remote areas without other medical services, Medical Officers charge private patients set fees, which would be paid to the Government, not the doctor.36

The Governor also explained the Unified Pacific Medical Service proposal, emphasising “enthusiastic support” for it. He added a few new details that presaged potential problems. His suggestion that new appointees undertake preparatory tropical medicine training before leaving England assumed that staff would inevitably come through the Colonial (that is, British) Medical Service. After familiarising with central administration and the medical facilities in Suva and Makogai, Medical Officers would be posted at the CMA’s discretion, with only volunteers in remote posts for long periods. There were other details to consider, but meanwhile Fletcher wanted approval in principle, as the scheme would allow central co-ordination of investigations into health conditions, rather than the current “haphazard” arrangement, and had obvious advantages for health services, especially outside Fiji.

Fletcher outlined support for the plan: both Fiji’s CMO and Lambert supported it, with the latter certain that it elicit Rockefeller Foundation assistance for a central laboratory. Fiji’s Executive Council considered the scheme sound “from an Imperial perspective”, but noted some practical difficulties, mainly regarding language and postings for married men. Significantly, the general opinion was that the main advantages would accrue to other Groups, with little gain for Fiji. Finance was a critical aspect. Lining up for another of the “turf wars” that would thwart attempts at unification, Colonial Secretary Juxon Barton refused to support the Medical Service being elevated over other branches of the Administration, through revision of its employment conditions and salary scale.

36 ibid.
Nevertheless, Fletcher remained convinced that unification had great advantages.37

With Fletcher's proposal for removing private practice, there were now several fronts on which the overall Pacific-wide Health Service scheme could be opposed. He intended to reverse what had been a cumulative, pragmatic development rooted in the Colonial Sugar Refining Company's domination of Fiji's economy, to remove the inequitable privileges it conferred on European medical professionals and white patients, and to redirect the full efforts of state medical provisions to Fijians and Indians. Fletcher agreed with Stanton, Medical Advisor at the Colonial Office, that the Fiji system was "distinctly peculiar, and conflicted with the spirit of the Colonial Regulations", but to suddenly stop Colonial Sugar Refining Company grants and privileges would prejudice individual Medical Officers and create an uproar; it was better resolved by introducing the scheme, and freeing up the government's medical services by opening up Fiji to private practitioners from outside.38

With the need for reform in Fiji embedded in the UPMS proposal, the New Zealand territories now faced a major problem. New Zealand's hopes had climbed after Lambert visited in 1932 and suggested it also share in the proposed central laboratory,39 and later came rumours that the Colonial Office agreed to the scheme.40 In the event it was approval in principle, and on a limited basis that excluded New Zealand. The Colonial Office was sympathetic to the plan and its objectives, for similar needs had recently brought a unified medical scheme into effect in British Africa.41 The proposal also fitted within the Imperial Government's own moves towards a comprehensive unified Colonial Service, but herein lay a dilemma: the New Zealand territories were not under the Colonial Office but staff selection would be its prerogative. Nevertheless Fletcher remained confident that given New Zealand's enthusiasm for the scheme there would be no practical difficulties.

The Colonial Office, however, was attuned to the wider implications. In the

37 Ibid.
38 Minutes, 27 February 1933, CO 83/199/7. Stanton later argued that a large private practice reflected a doctor's professional competency and this should not be exploited "for purposes of public revenue." Notes on meeting between Fletcher and CO officials, 25 June 1935, CO 83/211/2. See also J. Eyler, Sir Arthur Newsholme and State Medicine for interwar debates over public/private medicine
39 Lambert to Heiser, n.d., RFA RG. 1.1, Series 419L., Box 1, Fldr. 9; Lambert to Pearce, 20 August 1932, IT 1 8/34.1.
40 Lambert to Smith, 12 December 1932, IT 1 110/6.1.
forthcoming Colonial Medical Service, Medical Officers would be liable for transfer anywhere in the Colonial Empire, and exceptions could not be made for a particular region. This would conflict with the terms of a Pacific service, which would need to be constituted as a complete unit rather than an affiliation of independent Medical Departments. Again, this would be difficult for New Zealand.42 Besides these problems, there were signs of disagreement within Fiji.43 Subsequently Secretary of State Cunliffe-Lister acknowledged New Zealand’s interest and approved the scheme in principle. However, too many details still needed to be negotiated, a time-consuming process across the whole region, but as an interim measure, an amalgamated service could begin immediately for Fiji, Gilbert and Ellice Islands, and Solomon Islands, with provision for seconding officers or their transfer to senior posts in the other colonies.44

This Colonial Office move, whatever its logic, drove a wedge in Pacific unification. In New Zealand, Berendsen’s disappointment was clear: it was commonness that the British arrange things to suit themselves, he informed Western Samoa, but the decision “indicates clearly that the Service will be set up on terms and conditions which though satisfactory to the Administrations concerned may not be equally satisfactory ... to us.”45 When the Territory reaffirmed its intention to join as soon as the economy improved, Berendsen responded morosely at this misunderstanding, “We are not invited to participate ... indeed we are specifically excluded. ...I think that our exclusion in the preliminary stages ... will render it immensely more difficult for us ever to be included.”46 Lambert assured him otherwise; Fletcher’s departure was imminent, and the Secretary of State merely wanted the scheme operating at least in the Western Pacific Groups before left. Fletcher intended to invite New Zealand to join “within a few months” so that the CMO Fiji (as Central Medical Authority) could then co-ordinate Medical Officers “of the same quality as those of the Fiji Service” for Samoa and the Cook Islands, and New Zealand doctors could train in Suva for the wider service. To allay any misapprehension on Berendsen’s part,

42 There were precedents, e.g. the Federated Malay States Medical Service. Minutes, 27 February 1933, including C. J. Jeffries, 15 October 1932, CO 83/199/7.
44 Cunliffe-Lister to Fiji Governor, 3 May 1933, IT 1 8/34:1.
45 Berendsen to Secretary, Western Samoa Administration, 18 August 1933, IT 1 8/34:1.
46 Turnbull to External Affairs, 18 September 1933; Berendsen to Turnbull, 5 October 1933, IT 1 8/34:1.
Lambert reiterated that the CMA would never interfere in an administration’s medical service; his role was simply “as a medium of exchange of medical officers” and as medical advisor when required. The whole scheme was straightforward, he concluded, and “ought to be simple for you to put into practice to your immediate advantage.”

Berendsen would not be jollied; Lambert’s reassurances ignored the real difficulties of several different administrative systems trying to settle details. Using Fiji and the Western Pacific Medical Services’ conditions as a baseline, when this differed from New Zealand’s scale of remuneration, made it more difficult for New Zealand to join in later. The best approach would be to agree at the outset to the “highest common factor” acceptable to all administrations. In a move that effectively drew attention to New Zealand’s predicament, Berendsen announced Western Samoa’s withdrawal from the Central Medical School, citing economic pressure. Lambert, horrified at this threat to the success of the school, urged savings through full reorganisation of Samoa’s Medical Department, which Berendsen agreed might be possible – if the Territory joined in the Pacific Service. Others voiced concern about the quality of appointments in Western Samoa and Tonga in the absence of an overall scheme. Responding to these pressures, Fletcher arranged to visit New Zealand late in 1933.

At this time, then, it was clear that everyone concerned still intended that the New Zealand territories and Tonga be part of a Unified Pacific Medical Service with Fiji as the logical entry point and administrative centre. The memo prepared as a basis for Fletcher’s discussions in New Zealand certainly had a Western Pacific focus, but with appended comments acknowledged the advantages - both to and from - New Zealand’s participation. Fletcher’s conference with Berendsen, the Prime Minister, the Minister of Health, the Director of Medical Services, and the Public Service Commissioner, left the New

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47 Lambert to Berendsen, 2 October 1933, IT 1 8/34:1.
48 Berendsen to Lambert, 13 October 1933, IT 1 8/34:1.
49 Lambert to Berendsen, 18 January 1934; Berendsen to Secretary, Samoan Administration, 7 February 1934, IT 1 8/24:1. Lambert’s later suggestion that Berendsen had been engaging in political manoeuvres with the NMF quota met with a frosty denial: Lambert to Berendsen, 20 February 1934 (Personal); Berendsen to Lambert, 1 March 1934, both IT 1 8/34:1.
50 Western Samoa CMO to Colonial Secretary, 5 December 1933; High Commissioner, minute, 15 December 1933, WPHC 32/1934.
52 R.H. Garvey, Acting Secretary WPEHC; “Memo on proposed South Pacific medical service”, 3 January 1934, H.I. 12651 170/436 (also CO 83/207/5); CMO Pearce, “Commentary on memo”, 30 January 1934, CO 83/207/5; MeGusty, “Note on Proposal”, n.d.: CO 83/207/5.
Zealanders convinced that joining would improve its medical services. However financial and administrative matters remained unresolved, and Berendsen concerned at potential loss of New Zealand autonomy and control over its Medical Officers. The concept of the “Central Authority” in Fiji also raised the territorial hackles of the Cook Islands Department, which asserted that control of the Group’s medical service was “one of the most important functions of the New Zealand Government in the Cook Islands.” Despite these and other concerns at the increased cost entailed in the Pacific Service, New Zealand and Western Samoa demonstrated their commitment by resuming NMP training and postponing any further European medical appointments in the territory pending further developments. As Berendsen rather caustically commented to Lambert, “obviously, even an enthusiast such as yourself could scarcely suggest that we can arrive at a definite decision to join a scheme ... until we know just what is involved.”

Losing ground to parochial interests

The problems for New Zealand were evident, but as attempts to clarify details continued through 1934 the scheme became increasingly controversial even within the Western Pacific. Territoriality, autonomy and cost were the stumbling blocks. After the Secretary of State sanctioned a scheme for the WPHC alone, Secretary to the High Commission Ronald Garvey, drafted the basic plan. Its aims were clearly stated: merging “separate but geographically contiguous Medical Services” would offer the benefits of unified control and central organisation for administrations and a wider field for experience and practice for Medical Officers, and eliminate “undesirable features” - namely isolation and private practice (the latter “repugnant to the accepted conception of a public officer”). There was now an added complication, with the new Colonial Medical Service effective from 1 January 1934. Any Pacific scheme now needed to
embody the regulations regarding Medical Officers' professional qualifications and conditions of appointment.

Outlining the new structure and conditions revealed several potential pitfalls, not all acknowledged. For example, paying the new higher salary scale set to offset loss of private practice relied on fees from private visits being "annexed" to General Revenue, but obviously if "real" private practitioners were encouraged to take over from Medical Officers this income would be lost to the government. Private practice was mainly a Fiji issue, but other administrations would nevertheless have to find the revenue to "compensate" their Medical Officers when employment conditions were standardised.

There was also the increased cost of central administration, with the Director of Medical Services (DSM) alone on a proposed £1400 per annum, and how to proportion this fairly among participating Administrations. Leave posed a further problem; current conditions varied in all Groups, with Solomon Islands most liberal. Rules could either be applied according to those of the administration of residence, completely standardised, or computed on Fiji conditions, with an agreed scale expressed in terms of Fiji service. In attempting such coherence, however, the last two options intruded on territorial autonomy, putting Medical Officers outside the approved Leave Rules of different Administrations and differentiating them from other government employees.

A unified service required other radical changes in territorial perspectives. Theoretically an MO could be transferred anywhere within the region, as Vaskess explained:

... the Pacific Medical Service is an integral whole. The fact that three separate Administrations are concerned makes this conception difficult to officers who are already in the medical services for it is not easy to get away from the preconceived idea that to be posted to a Western Pacific High Commission Territory is tantamount to official exile.\(^5\)

The liability to transfer caused opposition to the scheme within Fiji, with the fear that it would counter Fiji’s advantages in attracting a “good type” of Medical Officer. Dr McGusty explained the local perspective, “It is natural that the articulate European community should be opposed to frequent changes of its medical attendants ... and that the protagonists of the native Fijian should fear a lessening of interest through the shortening of the period of contact.”\(^6\)

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\(^5\) Acting Secretary WPHC, “Memo on proposed South Pacific medical service”, 3 January 1934, H.1. 12651 170/436.
The response from the Solomon Islands to the draft indicates clearly that perceptions of problems in the region varied greatly; the concerns felt by those promoting amalgamation were clearly not the same concerns felt by the outlying administrations. Resident Commissioner Ashley considered the proposed system of transfers would be a deleterious. Experience gained with one group's medical problems was not always transferable; a year in Fiji, where there was no malaria, would not prepare Medical Officers later posted to the Solomon Islands, where the disease was endemic. Then there was the risk that doctors would no sooner gain knowledge and experience than have to move, with their particular expertise lost to the Protectorate. Repeated transfers could also diminish interest and pride in work. Some might regard a two-year term in the Solomon Islands as exile, whereas a Medical Officer expected to stay long-term and make a home in the Group would adopt a more positive approach as "the responsibility for the general health of the country is entirely his. He will be there to see the fruit of his labours; he will also have to bear the consequences of any negligence in his bygone years."^61

In the Protectorate, private practice caused no conflict of interest, was an incentive rather than a problem, and certainly not one that had any connection to a Unified Medical Service.^62 SMO Hetherington did not subscribe to the representation of "the lonely doctor deprived by his isolation of access to knowledge of modern medical advances, falling further and further behind and more and more out of date." Professional isolation, he claimed, did not exist in the Solomon Islands, where there was access to a wide range of medical journals, up-to-date library, and leave provisions adequate for study periods, so an interested Medical Officer had no difficulty keeping abreast of medical developments.

As both pointed out, if isolation was the stimulus for a self-sufficient medical service in the Solomon Islands', it mitigated against any real participation in a unified service with administration centralised in Fiji. The territories might be geographically contiguous but the link was ephemeral. When return mail took ten weeks between Tulagi and Suva, via Australia, a Director in Fiji could hardly control medical services in the Protectorate. Further, given the CMA's prescribed duties in Fiji, visits to Gilbert and Ellice Islands and Solomon

^61 Ashley, Resident Commissioner BSIP, to High Commissioner, 5 April 1934, CO 83/2075
^62 SMO Hetherington to Resident Commissioner, BSIP, 8 March 1934, CO 83/2075; Ashley, Resident Commissioner BSIP to High Commissioner, 5 April 1934, CO 83/2075; also WPHC 634/1931.
Islands would necessarily be infrequent, brief and expensive; as Hetherington noted, no CMA had ever visited in the eight years since the post was established. Given this situation, the Solomon Islands’ obligation to contribute to a central office and staff was debatable, as was the High Commissioner’s claim that unification would be cheaper for the group. Instead of projected savings of exactly £964.11.10 1/2 over the first seven years, Hetherington and Ashley calculated the scheme would increase their costs between £1052 - £1180 in the first year alone. Worse, the SMO had already been asked to prune £1200 from present medical estimates (which were 20.4 percent of total revenue), a feat probably only achievable by removing the Medical Department’s vessel *Hygeia* from service, thus reducing the delivery of medical care in the Group. That their calculations were upheld over the High Commissioner’s only increased doubts about the scheme’s viability and intentions.

Like the New Zealanders, Hetherington queried the channels of communication and the relative authority of the DMS, Resident Commissioners, and Medical Officers. Despite all these criticisms and his preference to retain existing conditions, Hetherington concluded:

> ... actually I should very much like to see the scheme go through. The new service would inherit the prestige of the present Fiji service, and enlarged service and opportunities of varied experience will attract a large number of candidates.  

However, amalgamation should be postponed until the economic situation improved.

In comparison, the response from Fiji was parochial and self-interested. Colonial Sugar Refining Company resistance and European fears at the effect of transfers have already been noted. The Executive Council accepted the general principle of unification, opposed the scheme because it increased Medical Officers’ salaries without a general rise across the public service. Just as Medical Officers had seen Campbell’s salary as Bacteriologist as an affront to the proper hierarchy of remuneration, other branches of the Colonial Service now argued, not that the proposed new medical scale was too high, but that their pay rise

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63 SMO Hetherington to Resident Commissioner, BSIP, 8 March 1934, CO 83/207/5.
64 Acting Treasurer to Government Secretary, n.d., CO 83/207/5. Garvey (“Memo on financial aspect of Unified Medical Service”, 30 May 1934, WPHC 634/1931, and Memo, 31 May 1934, CO 83/207/5) noted that pay scales had since been revised (the maximum lowered from £950 to £920), providing a cheaper service, though still counted on private fees - minimal in the Protectorate - going to the Government. However other costs, such as the £675 salary of a third MO, (which was allowed under the Solomon Islands’ schedule but remained a “theoretical appointment” in 1934) had not been included in the High Commission calculations.
should precede rather than follow the Medical Officer. Fletcher revised salary scales down to bring them in line with maximum Medical Officer salaries elsewhere in the empire and reduce the costs to administrations, but the total cost of Fiji emoluments was still higher under the new scheme. Herein, of course, lay one of the rationales for developing a subsidiary service of Native Medical Practitioners, who would replace European Medical Officers in general medical duties for a fraction of the salary, eventually leaving a reduced European staff for specialist and consulting work.66

McGusty (who had a professional interest in the matter, and was in line for the new position of Director of Medical Services) was the only member of the Council to support the scheme, arguing that a co-ordinated approach to the common health problems of the Pacific was “not only desirable, but...inevitable” because it would be economic and effective. Higher salaries attracted more productive men of “superior type”; besides, medical staff were professionals who had expended time and money in their training so deserved a higher rate, regardless of their relative status.67 In general Fiji’s European community considered that other territories would benefit most from unification, with Fiji losing its current advantage. Most senior officials disagreed, or saw a slight disadvantage to Fiji counterbalanced by the potential for improvement in the wider Pacific.68

Although the Colonial Office had approved the whole scheme in principle and authorised an actual start in the Western Pacific, this process of canvassing opinions stalled any progress for a year. Meanwhile Lambert was also trying to reassure New Zealand officials that when centralisation went ahead, it would not abrogate their authority in the islands, but mutual trust and confidence were essential for a co-operative project to succeed. He hoped for a further three years in the Pacific after 1935, so promised to remain “the unofficial voice of New Zealand in the Central Medical School, in the Makogai Leper Asylum and in a

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65 SMO Hetherington to Resident Commissioner, BSIP, 8 March 1934, CO 83/207/5, Ashley, Resident Commissioner BSIP to High Commissioner, 5 April 1934, CO 83/207/5.
66 Fletcher to Secretary of State, 7 May 1934: CO 83/211/2; Fletcher to Secretary of State, 7 May 1934, CO 83/207/5. Present Fiji emoluments (including some £3,255 from private practice) were £17,315; under the new scheme they would be £14,972. Fletcher also discussed Solomon Islands financial concerns with Hetherington during a visit there later in 1934: Fletcher, 28 August 1934, original MP 2770/34; extract, WPHC 634/31.
68 Ibid; Fletcher to Secretary of State, 7 May 1934, CO 83/207/5.
Unified Medical Service." The Tongan Government was also anxious about its autonomy.

Heiser’s visit to the Pacific in 1934 brought a new impetus to developments. Cumpston reiterated the need for Pacific health improvement and pushed again for Rockefeller Foundation involvement. In New Zealand, Heiser and the Director-General of Health, Dr M. H. Watt, discussed various aspects of inter-group co-operation. In Fiji he was primed by Lambert and McGusty, who as Acting CMO took advantage of Pearce’s absence to lobby actively for the unified service, and also for Lambert’s continued presence as essential to gaining co-operation among the Western Pacific and New Zealand administrations. Heiser had frequent discussions with McGusty on the re-organisation of the Medical Department, including the possibility of recruiting staff from New Zealand, which would strengthen regional links, and affiliating the Suva nursing school with New Zealand rather than Australia. Backed by the prestige of the Foundation and offering further material inducements (the laboratory and Fellowships) and moral support, Heiser added weight to the Unified Pacific Medical Service campaign. At McGusty’s request, he wrote a memorial damning current medical services:

> Based on personal experience with administrations in the South Seas since 1916, I regret to record that no where [sic] in the world have I found so large a percentage of doctors who discredited the medical profession and the various governments that employed them. Poor organization is another important factor in obtaining more effective medical service. For these reasons I have been greatly interested in the efforts of Sir Murchison Fletcher to bring about more effective medical aid. The plan to amalgamate the medical services of Tonga, the Solomons, Gilbert and Ellices, Samoa and other islands with Fiji is an important step to make the service more attractive and draw to it the type of men and women who may be counted upon to bring about a vast improvement in the situation.

Heiser’s subsequent visit to Western Samoa strengthened the association between Lambert and New Zealand, while his input reinvigorated hopes that

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60 Lambert to Berendsen, 9 April 1934, IT 1 8/34:1.  
70 Dr. Heiser's Diary - New Zealand – 19 March 1934 and 29 March 1934, APS/VHP.  
71 Dr. Heiser's Diary - Fiji – 1934, 23 April 1934, 6 May 1934, p. 20, 9 May 1934, p. 23, APS/VHP. Most British colonies recruited through the Colonial Nurses Association; Fiji’s reliance on Australia for nurses and nursing registration had evolved through the Colonial Sugar Refining Company’s business ties, but the affiliation had become unsatisfactory: M. Lambie, My Story, pp. 86-87.  
72 Heiser to McGusty, 7 May 1934, RFA RG 2, Series 419, Box 102, Fldr 805. Years later Lambert observed to Heiser that his criticism had been “Very injudicious on your part though a true statement”, and how, in “a moment packed with dynamite” when Fletcher asked Heiser to elucidate, their plans “could have been torn irreparably”. Lambert to Heiser, 16 October 1943, APS/VHP.  
73 Berendsen to Lambert, 25 May 1934, IT 1 8/34:1.
Rockefeller Foundation influence might expedite the formation of a Unified Medical Service and end medical staffing problems.

With Heiser’s visit, Fletcher reopened the matter with the Colonial Office. Despite opposition, the High Commissioner remained convinced the plan would promote health and therefore prosperity in the Pacific. Fletcher placed the scheme strongly within the wider context of Lambert’s vision for a Pacific Medical Service:

[It] is the corollary of and complement to the Central Medical School, which is sending to all parts of the Southern Pacific a constantly increasing stream of natives trained in medicine, and is already achieving a success beyond the most sanguine hopes of its founders.

... The intention is that in all matters relating to the health of the races of the Southern Pacific the primary responsibility shall ultimately rest with men and women chosen from among themselves under the supervision and guidance of a central European administration.74

McGusty also pushed ahead optimistically. Like Fletcher, he still anticipated that eventually New Zealand dependencies would be in the scheme, and sent Lambert to Wellington to discuss future developments. These included recruiting Medical Officers from New Zealand for the Fijian service, which had several advantages over British doctors: personnel more suited to the Pacific situation, and probably less homesick; refresher courses more easily undertaken; and savings on passages. Even without formal unification, he was keen to negotiate an exchange between Fiji and Samoa, to give Medical Officers valuable opportunities to experience the Native Medical Practitioner System in Fiji, and see how it was integrated “from its beginning in the native schools, through the Central Medical School, the Colonial Hospital and into the field where these officers are successfully working.”75

Lambert found both Berendsen and the Prime Minister enthusiastic about a Unified Pacific Medical Service, but still unable to give full commitment until the High Commission and the Colonial Office clarified certain financial and administrative details. Lambert demonstrated his confidence that such delays were of minor significance by promising a New Zealand Medical Officer that if he resumed his contract in Samoa, “and Samoa at the end of the year had not joined the United Medical Service, that I would place him with the High Commission service.” Lambert also arranged for Dr Watt to return with him to Fiji and Western Samoa. A comparative review of both colonies’ medical

74 Fletcher to Secretary of State, 7 May 1934, CO 83/2075.
75 McGusty to Lambert, RFA RG. 1.1, Series 419F, Box 1, Fldr. 10.
situations would "complete [Watt’s] conversion to the Central Medical School and the United Medical Service to which he already inclines strongly."76

New Zealand’s interest in co-operative services was not limited to Medical Officers. Hearing of the proposed Unified Pacific Medical Service, a nursing sister at the Government Hospital in Nuku’alofa had suggested rotating nurses in tropical groups, arguing similar reasons: professional development and fresh stimulation, career prospects and more varied experience would all improve Pacific health organisation and results.77 This reinforced plans already underway, with proposals to integrate New Zealand’s tropical nursing staff in Samoa, Niue, Norfolk and the Cook Islands, and possibly Tonga.78 Lambie had just reorganised Western Samoa’s nursing service and hospitals, and like Lambert, concluded that the Pacific needed better quality European staff and improved training for indigenous health workers.79

The Colonial Office and unification

While supporters in the South Pacific were happily anticipating that the unified service would soon go ahead, still fully expecting that it would include the New Zealand territories,80 across the other side of the world the idea was being unravelled, leading to further confusion and procrastination.

Lambert had been certain that the Unified Medical Service would proceed, after the recent Rockefeller Foundation’s £2200 grant for a laboratory in Suva was made conditional, in part, on arrangements being finalised. When there was no progress, a perplexed Lambert reported to Berendzen:

Several months ago, I am sure I was told definitely that the Governor had received instructions from the Secretary of State for the Colonies to put

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76 All citations in this paragraph are from Lambert to Heiser, 24 September 1934, RFA RG. 2, Series 419, Box 102, Fldr. 805. Fletcher (8 May 1934) had deferred the Governor General’s request (6 April 1934) pending the Secretary of State’s response to details, both TT 1 8/34:1.
77 Buxton to Willis, 15 April 1934, H.1.12651 170/436.
78 Lambie to Buxton, 4 May 1934, H.1.12651 170/436.
79 Lambie, My Story, 1956, pp. 83-87. Lambie recommended reducing European nursing staff and providing a proper three-year training for Island nurses; she wrote the new programme while in Apia and organised for students from a mission girls’ school. Lambie herself says she first went to Samoa in late 1934; Heiser, in New Zealand in March 1934, recorded in his diary that Lambie was “A wide-awake well trained woman who...has lately been on a special mission to Samoa and made economies in the hospital”, indicating, as do official communications and developments during 1934, that her visit had been in 1933.
80 Heiser to Lambert, 15 October 1934, RFA RG. 2, Series 419, Box 102, Fldr. 805; Lambert to Heiser, 5 November 1934, RFA RG. 1.1, Series 417, Box 1, Fldr. 5.
this into immediate effect in the High Commission Groups. ...The question is now being hung up in London, he tells me, and he says he did not receive these instructions. You know what these political fellows are.

Having bungled the case for a full Unified Pacific Medical Service, and with the New Zealand Government anxious for a decision, Fletcher asked Lambert to get involved in negotiations with London. With access to the High Commission’s files, Lambert saw that parochialism had interfered with the wider regional interest. Fletcher, in urgency to unify medical services within his Western Pacific jurisdiction, had failed to clarify the situation regarding Tonga, Samoa, and the Cook Islands, leaving the Colonial Office with confused ideas.

Pearce had added to the misunderstanding. On leave in England, the CMA went as emissary for the High Commissioner and the New Zealand Government to explain the scheme in full and final detail to Colonial Office staff. Now a lukewarm supporter of unification, Pearce did little to dispel the Colonial Office’s misapprehension. Although fully aware of New Zealand’s continued desire to participate, he identified the scheme’s main intent as an improved medical service in Fiji, the Gilbert and Ellice Islands Colony and the British Solomon Islands Protectorate, by removing the problems of isolation and poor professional and career opportunities, and vested interests in private practice in Fiji. Colonial Office advisors still agreed to the principle of an amalgamated Western Pacific and Fiji service with a single Director of Medical Services and Medical Officers liable for posting at the Director’s discretion. However private practice, and especially the fees issue, remained the stumbling block.

Originally Medical Officers’ sole obligation had been to safeguard the health of colonial officials and imperial armed forces, with responsibility for the general population a later gradual development, but now fully accepted. Theoretically Colonial Government now only involved itself in medical services for ‘individual unofficial patients’ where communities were unable to support private practitioners. Confusion arose where there was no clearly defined “classes of persons” for which the Government medical service was responsible, and where there was no official stipulation against private practice. This was the

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81 Lambert to Berendsen, 6 November 1934, IT 1 8/34:1.
82 Cobbe to Governor General, 29 November 1934; Governor General to Fletcher, 1 December 1934; Fletcher to Governor General, 5 December 1934, all IT 1 8/34:1.
83 Lambert to Berendsen, and Watt (confidential), 22 January 1935, IT 1 8/31:1.
84 Fletcher to Secretary of State, 7 May 1934, CO 83/207/5. Cobbe (for PM) to Governor General, 29 November 1934, IT 1 8/34:1.
85 See also L. Manderson, *Sickness and the State*” pp. 15-16; M. Worboys, “The Emergence of Tropical Medicine”, p. 80; R. Macleod, (eds.), *Disease, Medicine and Empire*, 1988, pp. 2-3
case in Fiji, and led to problems of conflict of interest, with Medical Officers expecting substantial extra income from retaining fees paid by the Colonial Sugar Refining Company.

Secretary of State Cunliffe-Lister was less concerned about the effect of private practice on public interests (by diverting medical effort away from its designated public), than he was about the ramifications of Fletcher’s solution. Appropriating Colonial Sugar Refining Company medical grants to General Revenue, as the Governor proposed, would mean that the Government then assumed full medical responsibility for Company staff, and therefore unavoidably the public generally; in this lay practical difficulties and over-extension of resources. The alternative was for the CSR CO to employ its own doctors, who could also practise privately. With Medical Officers then focused solely on Government work, fewer might be needed, and savings used to attract better Medical Officers by offering higher salaries. The Secretary of State thought this unnecessary, as there was no evidence that the possibility of substantial private practice had any effect on recruiting for Fiji. 86 This rather missed the point, which was to encourage a greater pool of applicants with enthusiasm for medical work in the indigenous communities.

Cunliffe-Lister saw no alternative to continuing the status quo, but with an emphasis on Colonial Medical Service principles which prioritised Government duties over private, the public interest over private contracts, and the authority of the CMA rather than the Company to determine postings and transfers. He considered that if these principles were adhered to, there was hardly need for “any elaborate scheme” to amalgamate the medical services, although some changes to integrate and standardise the services might be appropriate. 87

Thus the Colonial Office blocked any chance of a United Pacific Medical Service. Fletcher’s efforts to redirect the focus of colonial medical staff away from the interests of private capital reflected the state’s reformulation of “the class of persons” to which it had greatest responsibility. Although the need to ensure the health of indigenous populations was recognised and ostensibly promoted in the imperial centre, the Colonial Office’s logic in the case of Fiji and the Pacific service indicated that this understanding was still in transition.

86 Cunliffe-Lister to Fletcher, 26 November 1934, WPHC 634/1931.
87 Cunliffe-Lister to Fletcher, 26 November 1934, WPHC 634/1931. Jones, (CAMSC?) (10 July 1934: CO 83/207/5) also noted that despatches indicated substantial opposition, he too disliked the scheme being dependent on fee transfers from the CSR and private practice to General Revenue.
The issue of private practice remained at the crux of Fletcher's proposal for a Pacific Service: nothing could be improved until Medical Officers were free from obligations to the Company and could concentrate on looking after the needs of Fijians and Indians. He made a last effort to argue his case when in London in mid-1935. The Colonial Office stance was unchanged – a Pacific Service offered nothing that could not be achieved by Colonial Medical Service conditions - but Fletcher argued that local problems were better resolved within a regional organisation that would encourage doctors to stay for life. Fijian conditions of service would apply, and any Medical Officer could be sent anywhere in the Pacific at any time, but if sent to the New Zealand territories, they would then be under the direct control of the Dominion Government. The Colonial Office was finally able accept the concept of a unified medical service involving different administrations by reframing it as in principle just a seconment system. However, officials remained dubious about Fletcher's assurances that most medical staff were not bothered about the loss of private practice. Throughout the years discussion the Colonial Office was pre-occupied with the colonial medical profession's right to private practice, rather than the actual proposals to improve the delivery of health care to Island populations.

While Fletcher pursued the matter in England, Lambert was back in the Pacific planning his own crusade. Frustrated at the endless obfuscation, he told Berendsen that he would visit New Zealand in June 1935, before going to London himself for discussions with the Colonial Office about the Unified Medical Service. Such a move was unprecedented, for the Rockefeller Foundation had always insisted that its field directors maintain an ostensibly apolitical stance, and work entirely within the local machinery of government; negotiations with the British government had always been the domain of high-ranking Foundation directors like Heiser. It is unclear who suggested that he personally confer to the highest colonial authority on behalf of a unified Pacific service, but nor is there evidence of opposition. Circumstances had created something of a political vacuum, and perhaps Lambert merely seized the opportunity to act. Heiser retired late in 1934, and W. A. Sawyer, a great supporter of Lambert's initiatives in the Pacific, became Director of the IHD in 1935. With Fletcher's departure there was a hiatus pending the appointment of a new Governor, with the Colonial

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88 Notes on meeting between Fletcher and CO officials, 25 June 1935, CO 83/211/2. A written appeal from a doctor against his transfer within Fiji, involving loss of private practice, was especially noted. Jones Minute, 13 July 1935, CO 83/211/2.
89 Lambert to Berendsen (personal), 15 April 1935, IT 1 8/34:1.
Secretary filling the post meanwhile. Juxon Barton was an unfortunately officious and patronising individual who lacked Fletcher’s interest in improving services for Islander populations, instead blaming the Fijians themselves for health problems; he and Lambert did not agree on the unified scheme, among other things.

Lambert’s influence with New Zealand had grown steadily through the 1930s, boosted by his part in the Central Medical School, the IHD’s assistance to work in the Cook Islands and Western Samoa, and more lately his advocacy on their behalf in the United Pacific Medical Service. He had good relations with Sir Apirana Ngata, and especially with Berendsen, to whom he freely dispensed advice on Western Samoa’s administrative as well as medical matters. On his mission to England, he took an explanation of New Zealand’s stance, and letters of reference from the Prime Minister’s Office and Berendsen that emphasised their “highest regard” for Lambert, Deputy CMA for the Western Pacific High Commission and “pre-eminent authority [who] has at all times placed his very wide knowledge at our disposal.”

Lambert visited London early in 1936 after his leave in the United States. There was no definite progress on the United Pacific Medical Service, although in discussions Stanton indicated “no possible objection” to including New Zealand dependencies in a High Commission Medical Service. Instead, Lambert had to deal with Barton’s problems with the new laboratory additions apparently dominated, as Barton manoeuvred in against Lambert’s further plans for cooperation by authorising use of part of the new facility for veterinary work, where Lambert had planned a nurses’ school. The incident was indicative not only of Barton’s hostility to Lambert’s ideas, but of the critical effect of personal relations on developments.

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90 E. Ransom to Lambert, 22 May 1935, IT 1 8/34:1; Lambert to Ramsden, 26 June 1935; IT 1 8/31:1.
91 Berendsen to Sir Edward Harding, Dominions Office, Downing St, 5 June 1935; Prime Minister’s Office to Sir James Parr, 5 June 1935; Berendsen to F. Sandford, High Commissioner’s Office, London, all IT 1 8/31:1.
92 Lambert to Berendsen, 6 January 1938, IT 1 8/31:1.
93 Correspondence and Minutes, CO 83/212/11 and CO 83/212/11.
Centralisation - the development of Suva’s medical facilities

When Lambert returned to Fiji in early 1936, the United Pacific Medical Service scheme had been set aside. The European lobby had successfully resisted the apparent threat to its own interests, and in the wake of the Depression was in fact strengthening its own access to improved medical care in Suva. The focus of new development was shifting from primary care in outer districts to building up clinical facilities in the centre. Creating a strong nucleus of medical services and administration in Suva was important for a Unified Pacific Medical Service, as Lambert recognised from the start. Potential problems lay in expansion being hijacked by interest groups at the expense of other activities.

Before he left Fiji, Fletcher advocated strengthening Fiji’s network of hospitals, with particular emphasis on developing Suva Hospital as “an institution of the first rank in the fullest sense.”

The European community was clamouring for this,

but his eye was also on providing Medical Officers with opportunity and a valid alternative to private practice, to obviate resistance to the unified scheme. A Medical Officer was:

... an expensive unit, liable to be wasted and perhaps to grow a little rusty if he is left in a remote place with but little opportunity for clinical work...

If it is agreed that clinical work should ordinarily be a Medical Officer’s principal occupation, there must be available to him either hospital practice or general practice of a sufficiently wide range.

For parallel reasons, Lambert also supported investment in hospital expansion; the Central Medical School and its less expensive students benefited as the hospital also provided their clinical training ground.

Whether or not the United Pacific Medical Service went ahead, improvements to central medical organisation were necessary. The problem was finance, for the Medical Department vote (which increased from £40,000 in 1924 to £76,000 ten years later) could not go higher; nor could funds be diverted from other essential medical activities. Fletcher considered current hospital and health services adequate for Fijians and Indians, but Europeans and half-castes, who together made up nearly 20 percent of inpatients, were the group clamouring for the War Memorial Hospital to be developed to "a modern first

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94 Governor to Legislative Council, 12 October 1934, CO 83/206/9.  
95 Governor to Secretary of State, 20 October 1934, CO 83/208/7.  
96 Governor to Legislative Council, 12 October 1934, CO 83/206/9.  
97 Fletcher, 19 October 1934, CO 83/208/7.
class standard''. He suggested a municipal levy on Suva residents, who comprised 62 per cent of the patients and would most benefit from improvements. Europeans on the Legislative Council protested vehemently while Fijian and Indian members supported the Governor. Fletcher, considering it unreasonable that European members had a predominant voice, referred the final decision to Secretary of State, observing, "The European members are ready to urge expenditure from common funds upon a purpose which is popular with the European community, but they will ban any project which that community dislikes." Eventually the Legislative Council agreed to a levy for hospital development, and local benefactors also funded specific projects.

Nursing reform was an integral part of this development. During 1936 both Mary Lambie and Elizabeth Tennant, the Rockefeller Foundation’s Director of the Division of Nursing, visited Fiji (separately) to advise on improving delivery of care. They recommended improving training for Island women, to replace the European probationer system. Native Nurses would eventually provide all nursing at the hospital, more economically, under European supervision. Tennant also proposed building a School of Public Health, where both NMPs and Native Nurses would be taught preventive medicine and hygiene. This would be extended to other Pacific administrations in the same way as the CMS.

The moves to bolster medical services in Suva overshadowed the UPMS issue, especially during Barton’s temporary but unsympathetic governorship. The appointment of Governor Sir Arthur Richards offered new hope, but the project had lost early focus and support that was hard to recover. Lambert also was losing ground. The challenge to his plans for a nursing school in the laboratory signalled a growing rift in his relationship with the Fiji Administration, which marred the last three years before his departure. This nearly derailed his plans altogether and had ramifications for the Rockefeller Foundation’s further involvement in the South Pacific.

98 Legislative Council, “Debate on levy and expenditure, Suva Hospital”, 18 October 1934, CO 83/208/7.
99 Governor to Legislative Council, 12 October 1934, CO 83/206/9; Fletcher to Secretary of State, 20 October 1934; and Fletcher, 25 October 1934, both CO 83/208/7. This group comprised about 4.3% of the total population in Fiji (calculated from Vital Statistics, “Fiji Annual Medical and Health Report, 1934”, p. 4, WPHC 3395/35), though formed a higher proportion of the Suva population.
100 Fletcher to Secretary of State, 20 October 1934, CO 83/208/7.
101 G. E. Theodore, director of a mining company working the new goldfields, donated £5000 from the proceeds to build a children’s ward.
102 “Fiji Annual Medical and Health Report.”, 1936, WPHC 4135/1937.
Lambert was a forceful personality, and although he had acquired tact along the way, some tensions remained inevitable in the colonial bureaucratic environment, on both idiosyncratic and professional grounds. He had earlier fallen out with Hoodless over management of the CMS, and engendered hostility from Medical Officers with his generalised disparagement of their professional standard. His original admiration for Maclpherson had turned by 1937: the bacteriologist was a “complete fizzle”, a “sycophant” and “one of the great disappointments in my work here.” Pearce, the Director of Medical Services, had also disappointed him. He respected the next appointee, Dr Victor McGusty, who nevertheless came to consider Lambert a liability after the American, through an error of judgement, destroyed formerly good relations with Governor Richards, thereby sideling Medical School developments that the two doctors had just achieved in the face of strong opposition. Possibly personal and health problems contributed to Lambert’s contentiousness, along with a certain despair as his unwilling but inescapable departure from the Pacific loomed. His position was changing and it was increasingly difficult to effect the work that he identified so closely as his own.

The case for unification reopened

In 1936 a Public Service Reorganisation Committee began a general revision of all government employment in Fiji, and Acting Governor Barton postponed any moves to amalgamation until details were finalised. The review introduced changes to salary scales, including those of non-Europeans, and finally, an end to private practice in the Medical Service. Along with the arrival in November 1936 of a new Governor, Sir Arthur Richards, these new conditions – including salaries much lower than Fletcher had earlier proposed – created a favourable environment for a fresh consideration of amalgamating services.

Early in 1937 Richards reopened the issue of an integrated Western Pacific Medical Service, but with a strong Fiji focus: all posts in the Western Pacific High Commission region should be supernumerary to Fiji, with Medical Officers

103 Lambert to Sawyer, 2 October 1937, RFA RG. 1.1, Series 419L, Box 1, Fldr.11.
104 McGusty to O'Brien, 2 June 1939, CO 83/227/14.
appointed to Fiji but liable to secondment to any of the High Commission territories. Nevertheless, he considered it "quite simple" to include any other British-administered territories, conditional on their allowing the Director of Medical Services regular advisory inspections, and agreed to the Fiji Government's right to determine Medical Officers’ postings and transfer at any time. However, governments would retain the right to be informed of the proposed candidate and, if for adequate reasons, object to any particular individual.\textsuperscript{106}

Whatever hopes Governor Richards' arrival had originally raised, New Zealand could not expect an equal partnership with Fiji in a Unified Service. There was to be no dialogue, as a terse memo from Barton made clear: "pending reorganisation of the medical service in Fiji and in the Western Pacific, His Excellency considers it undesirable to initiate further conversations with New Zealand on this subject."\textsuperscript{107} Barton, who had resumed his post as Colonial Secretary, asserted that as matters of government service were involved, Lambert was specifically excluded from discussions; New Zealand was directed to communicate only with the Fiji Government, and only through Barton's office and the Director of Medical Services.

Barton was now gatekeeper to the scheme, and Richards' approach consequently countered the co-operative aspect inherent in the original proposals. When Tonga needed a new CMO, Richards discussed with the Colonial Office how to go about forcing the Tonga Government to join the Unified Medical Service. He decided that coercion was not possible under the terms of their Treaty relationship, and that Tonga's "peculiar" system of Government and resistance to any hint of external control made its participation problematic. He assumed that in time local deteriorating conditions in Tonga would leave the government no option but to accept Fiji's terms.\textsuperscript{108} The High Commissioner perpetuated the rigid narrow focus, maintained by the Colonial Office, which assumed that arbitrary imperial boundaries formed a logical region for common action, and was unprepared to negotiate issues of autonomy and sovereignty. With real issues of incompatible principles, any hint of arbitrary or unilateral exercise of power could only increase the anxieties of different Groups and perpetuate the problems in attempts to establish a co-operative base within the

\textsuperscript{106} Fiji Governor, 3 February 1937, WPHC 634/31.
\textsuperscript{107} Juxton Barton to DMS, 6 February 1937, WPHC 634/31.
\textsuperscript{108} Richards to Secretary of State, 9 February 1937 (confidential, CO 83/217/4).
Western Pacific High Commission. At the same time, ignoring the interest and
enthusiasm of the New Zealand government meant that real opportunities for
integrating health services were bypassed.

Despite the stand-off, New Zealand continued to pursue a Unified Pacific
Medical Service. Berendsen, ignoring the injunction against Lambert, asked him
to intercede.\(^{109}\) Lambert hesitantly approached Pearce, suggesting that as the
New Zealand Government maintained enduring hopes that the scheme would
eventuate, some clear statement of its possibility, or otherwise, was necessary.\(^{110}\)
 Pearce remained obstructionist: the niceties of diplomatic relations made the
matter "a somewhat delicate one for a Crown Colony to approach a Dominion
on" (it had not been so during Fletcher's administration) so the New Zealand
Government needed to go through the Dominions Office in London to get the
Secretary of State's permission to negotiate with Fiji.\(^{111}\) Lambert decided to
leave any further inquiries until after Pearce left Fiji early in 1938.\(^{112}\) When a
more sympathetic McGusty, Acting CMO, agreed to recommend the Unified
Medical Service programme, Lambert had new hopes that it would be established
by the end of the year.\(^{113}\) Berendsen, phlegmatic after so many setbacks,
welcomed further discussions but had less confidence that they would be
fruitful.\(^{114}\)

Through 1938, with McGusty now Director of Medical Services for Fiji and
the Western Pacific High Commission, the unification idea steadily resurfaced
from the depths to which conflicting bureaucratic, professional and personal
interests had consigned it. New Zealand had an increasing association with Fiji's
medical affairs, as Richards was willing to employ New Zealand doctors,\(^{115}\)
and Lambie was given responsibility for re-organising the Fiji Nursing Service,\(^{116}\)
and its offshoot, a co-operative Native Nursing School in Suva along similar lines to
the CMS.\(^{117}\) Watt conferred at the Colonial Office regarding New Zealand
administrations joining in with the Western Pacific service, but found new staff

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\(^{109}\) Lambert to Watt, 10 November 1933, H.I. 12651 170/436.

\(^{110}\) Lambert to Pearce, 6 December 1937, IT 1 8/31:1. Berendsen was now Permanent Head of the
Prime Minister's Department in Wellington.

\(^{111}\) Pearce to Lambert, 13 December 1937; IT 1 8/31:1.

\(^{112}\) Lambert to Berendsen, 6 January 1938, IT 1 8/31:1.

\(^{113}\) Lambert to Berendsen, 19 January 1938 and 10 February 1938, both IT 1 8/31:1.

\(^{114}\) Berendsen to Lambert, 21 February 1938; also 1 February 1938, both IT 1 8/31:1.

\(^{115}\) Governor to Secretary of State, 18 November 1937, CO 83/2187.

\(^{116}\) Lambert to Lambie, 2 February 1938, H.I. 12651 170/436.

\(^{117}\) This idea of Lambert's was given extra impetus after the visit of Elizabeth Tennant, Director of
the Division of Nursing of the Rockefeller Foundation in 1936: "Fiji Annual Medical and Health
there ignorant of the scheme. However, a review of its history highlighted that it was reactions within Fiji that had stymied the development, rather than any difficulties arising from the introduction of the Colonial Medical Service or the inclusion of territories outside Colonial Office administration. Non co-operation from interest groups in Fiji and their failure to conciliate on internal issues had thwarted the regional development.\footnote{Sevis, Minute, 8 February 1939, CO 83/227/13. By this time, Smart had replaced Stanton as Medical Advisor to the Colonial Office.}

Despite renewed interest, there was still confusion about the way forward, especially with the embargo on extra-governmental discussion and exchange of information.\footnote{5. Barton Colonial Secretary to Director of Medical Services, 21 July 1938, WPHC 634/31 [orig. F.A. 29/113]. McGusty's advice contradicted principles agreed to earlier, which Lambert, who had "of course...kept an eye on the situation", explained as the Director of Medical Services' lesser familiarity with the issue. He also warned that the letter was "personal and not official and is not to be mentioned in official correspondence." Lambert to Berendsen, 2 August 1938, II 1 8/34:1.} Fiji still had not supplied a detailed discussion document on the scheme, and until it did so, Berendsen pointed out, New Zealand could not respond:

... generally speaking everybody here is convinced that it would be good to join in a combined scheme and that we would like to play with you, but before we can possibly decide to play with you we must know, firstly [sic], whether you will let us play with you and, secondly, what are the rules of the game. We have taken... every reasonable step to obtain an answer to those two questions, and until the people at your end are in a position to give us a reply... I do not think any indication of goodwill from you or McGusty, or anybody else, really advances the matter.\footnote{Berendsen to Lambert, 18 July 1938, II 1 8/34:1.}

If in the past Fiji had assumed the prerogative to set the rules, now with the reorganisation of its medical services within the parameters of the Unified Colonial Medical Service there was even less chance for New Zealand to be considered an equal player. If New Zealand wished the Cook Islands and Western Samoa to join, it could only do so under the conditions of service effective in Fiji and the Western Pacific; there could be no deviation, at least for European doctors. Barton made clear that even if the New Zealand Government indicated its agreement to these terms, any approach to the Secretary of State for final approval would remain at the discretion of the Fiji Government and the High Commissioner for the Western Pacific territories. With continuing concerns about possible disadvantage to Fiji, Barton also instructed McGusty to detail respective benefits to Fiji, the Western Pacific High Commission and the Unified Colonial Medical Service if Medical Services were amalgamated with those of
the New Zealand territories, and to clarify the impact of adding further scattered services to the Central Medical Authority’s already heavy workload.\footnote{121}

McGusty stressed New Zealand had always responded enthusiastically to amalgamation initiatives, but if anything had been let down by Fiji. He saw no reason why the different British territories could not form a unified service in the South Pacific, even with the Unified Colonial Medical Service established. Yet his proposals also asserted Fiji’s dominance, and gave no voice to New Zealand or its dependencies’ administrators:

In my view the keystone of the situation is New Zealand’s willingness, or otherwise, to give her medical officers exactly the same conditions of service as the medical officers of Fiji and the Western Pacific High Commission, and to recruit them, via the Fiji establishment, through the Colonial Office.

...[The Unified Pacific Medical Service] “as a whole would have to be under the general direction of the Government of Fiji through the Director of Medical Services in Suva, which in practice would guard itself against the charge of using the posts in the other administrations for the punishment or banishment of Fiji’s failures.”\footnote{122}

Medical Officers for New Zealand dependencies would be supernumerary to Fiji’s Medical Service, with all eligible to become members of the Unified Colonial Medical Service, and all subject to possible transfer anywhere within the region. McGusty advised dispensing with all current Medical Officers in Samoa, the Cook Islands and Niue and starting afresh. Although New Zealanders would appointed to the Pacific via the Colonial Office, employed on Fiji conditions, for all purposes other than medical they would regarded as part of the administration where they worked. As other objections had been dealt with, McGusty believed that unification with all its advantages was achievable. Fiji, he suggested, could reopen informal discussions with the New Zealand Government, pending a final consultation with the Secretary of State. He also urged that the Governor put his views on unification on record, as he was soon to leave Fiji.\footnote{123}

These fresh efforts recognised, Lambert confided to Berendsen, “that the Government of Fiji has been negligent in its attitude on this question due to the inertia of our previous Director of Medical Services who has been able to pigeon-
hole and side-track the scheme for many years. 124 He would be disappointed if there was no decision within a few months.

Despite this promising progress, 125 the wider rationalisation of British colonial medical services proved an obstacle to regional unification. It was problematic to cross administrative boundaries, Barton informed New Zealand, and Lambert had been naive to think otherwise. There were practical difficulties integrating Colonial Medical Service doctors with the option of working in New Zealand Administrations. Such a scheme could only apply to future entrants or volunteers (probably very few), thus creating the problem of having two sets of conditions within the one service. Discussions would, however continue. 126

Lambert's disappointment was inevitable. When failing eyesight and other problems forced his departure from the Pacific in August 1939, the matter of a Unified Pacific Medical Service was still unresolved; and the beginning of World War II took amalgamation right off the agenda. The dream he had nurtured since his early engagement with health problems in the Pacific had slipped from his grasp.

His early enthusiastic promotion had generated interest and the backing of Montague, Salote, Hutson, and Heiser, and led to achievements that modelled the principles and practice of centralised co-operative effort. The Depression stalled development, and although he, Berendsen, and Fletcher tried to keep the matter alive, the Governor left Fiji in 1935 without achieving even the original plan of a unified medical service for the High Commission. Negotiations resumed in 1937, by which time the Empire-wide Unified Colonial Medical Service with its standardised conditions had largely dissipated entrenched local interests; unfortunately it did not make the gulf between colonial and Dominion administrations any easier to negotiate, despite Lambert and McGusty's enthusiastic liaison with New Zealand. In the post-Depression years, the development of medical facilities in Fiji was promoted as essential for its supposed role at the centre of a unified service. When this failed to eventuate, the benefits accrued to Fiji. Lambert's encounters now were with an administration surer of its health directions and strategy, and more confident - indeed assertive - in its ability to implement these as it saw fit. Lambert had fulfilled the Foundation's objective of enabling government and committing it to continual

124 Lambert to Berendsen, 2 August 1938, IT 1 8/34:1. (Persl.).
125 Lambert to Berendsen, 26 September 1938, Berendsen to Lambert, 1 October 1938; Lambert to Berendsen, 11 October 1938, all IT 1 8/34:1.
126 Barton to Berendsen, 30 March 1939, IT 1 8/34:1.
development of health and medical services; as a result his own input became less consequential and increasingly challenged. In 1939, Lambert, and the possibility of a Unified Pacific Medical Service, ran out of time.
Conclusion

Postscript

Before Lambert left Fiji in 1939, ending direct Rockefeller Foundation representation in the Pacific, Heiser wrote to him:

... it is difficult to imagine the South Seas without you. You have been such an intimate part of them and it is generally conceded that you have a better knowledge of the peoples of those regions than almost anybody living. When you retire I know it is going to be a matter of profound gratification to you to feel that you have achieved your objectives and will leave behind you not a monument in cement and stone but one that is a living growing testimonial...

However, with his departure, Fiji seemed to begin rewriting his involvement in the region’s medical history. At the Central Medical School annual graduation held only four months later, Governor Sir Harry Luke omitted any mention of an American role, instead claiming the school’s development as “one of the most beneficent gifts which British rule has conferred upon the native races of the Pacific.”

Lambert’s supporters were quick to re-establish his visibility. Acting Tutor Dr Thomas Clunie used the Colony’s Annual Report as an opportunity to eulogise Lambert, “whose personality and wide influence ... did so much to bring the Central Medical School into being.” Clunie also organised photos of Lambert and J. D. Rockefeller to hang in the school library as a perpetual reminder of the Rockefeller Foundation’s contribution to the Colony and the Western Pacific. While this tit-for-tat partly reflected the personal animosity which marred Lambert’s late relationships in Fiji, it was also a fundamental reclaiming of colonial authority and ownership of medical efforts. Lambert and the Foundation had seemingly run their course as far as the Western Pacific High Commission.

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1 Heiser to Lambert, 21 November 1938, APS/VHP.
2 Extract, Fiji Times and Herald, 11 December 1939, CO 83/231/15. The omission was the more surprising as Luke (September 1938 to June 1942) had a great interest in the CMS. The Colonial Office took up the refrain, keen to appropriate the propaganda value of the school’s success, which now suggested it as a model for medical education in the African colonies. Colonial Office Minutes, WPHC MP 2932/1940.
4 Lambert to Strode, 25 January 1940, RFA R.G. 1.1, Series 419L, Box 1, Fldr. 12.
was concerned. However, a longer view is necessary for a more accurate assessment of the influence of Lambert's efforts and the Rockefeller Foundation's involvement in the South Pacific's health affairs.

From 1939 war once again compromised the region's medical resources, to both the detriment and benefit of the CMS and the NMP service. Luke was pro-active on native medical education, but with resources diverted elsewhere, planned extensions to improve the School could not proceed. Education also suffered, and declining standards in many Groups meant fewer students adequately prepared for medical training. Simultaneously these circumstances engendered a growing appreciation for the work done by Native Medical Practitioners (who now provided medical care to most Fijians), and for past assistance from the Rockefeller Foundation and Lambert. Correspondence regarding development continued, and although the Foundation declined subsequent requests for funds during the war years, it continued to identify the Central Medical School as one of its projects and feel some "moral commitment" to further support.

The war also overturned the familiar and expected; colonial administrations that had envisaged their governance continuing uninterrupted now had to reassess and plan for a different future. Britain could no longer deny the need for its substantial investment in colonial development, if it were to maintain its empire and a place in the post-war world. Regional relationships were strengthened; Fiji looked to New Zealand, in 1943 asking its senior health officials, Watt and Lambie, to advise. The result was a discussion document on possible post-war

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5 By 1944 Fiji was seriously understaffed, and with only 15 Medical Officers left from a full complement of 22 had to appeal to New Zealand for temporary MOs; likewise, the Solomons had only 2 of its prescribed 5, and GEIC one MO rather than the 3 necessary. Fiji Governor to NZ External Affairs Minister, 4/10/1944, IT 1 8/34:1. New Zealand was in no better position, desperately needing an MO to replace ailing veteran, 76 year-old Dr Ernest Hunt on Niue, where an excess of deaths over births was cause for concern. Director-General of Health 11 April 1945 and New Zealand Prime Minister's Office to Governor Fiji, April 1945, both IT 1 8/34:1.
6 Macpherson to Strode, 26 September 1940, RFA R.G. 1.1, Series 419L, Box 1, Fldr. 12.
7 In 1939 Western Samoa applied to increase its NMP student quota; for 1943 it could find only one suitable applicant. Western Samoa Secretary to Secretary, External Affairs, 16 July 1940: IT 1 Ex 8/24:1; CMO P. Monaghan to Western Samoa Secretary, 17 May 1944, and Turnbull to Secretary, Island Territories, 9 June 1944, both IT 1 Ex 8/24:1.
8 In 1945 there were 67 NMPs working in Fiji, many providing primary care in the districts, and another seven helping to rebuild medical services elsewhere in the Western Pacific High Commission. There were also 133 qualified Fijian nurses, 16 employed solely as Child Welfare nurses. J.L.V. Sukana, "Report of Secretary for Fijian Affairs for the Year 1945," L.C. Paper No. 4, NAF.
9 A. G. H. to Sawyer, 9 May 1940 and 6 June 1940, both RFA R.G. 1.1, Series 419L, Box 1, Fldr. 12.
10 Strode, 20 October 1944, and Fosdick to Sulzberger, 1 November 1944, both RFA R.G. 1.1, Series 419L, Box 1, Fldr. 13.
directions for Fiji’s Medical Department, with reference also to medical and public health problems in neighbouring Pacific Islands. This put Lambert’s final plans back on the agenda, advocating both extension of indigenous medical and nursing training and preventive work, and a combined Fiji and Pacific health service. Further stimulus came from a past associate of Lambert’s, Dr J. C. Lopdell, who suggested that New Zealand begin a Unified Medical Service, initially covering its Maori communities and Pacific territories then extending to other Polynesian Islands and Fiji, but excluding the Melanesian groups because of their very different cultural and epidemiological features (especially malaria).

Lopdell’s proposal to limit a South Pacific Medical Service to contiguous populations “in the same ethnical group” offered a fresh approach to the centralisation issue, although a Fiji- rather than New Zealand-based service remained the favoured option. With new confidence, an enthusiastic New Zealand Government invited the Fijian Administration to preliminary high-level talks to work out management details for a regional scheme. They agreed on key points: both Fiji and New Zealand would have two representatives on the Board of the Central Directorate, and would invite the Rockefeller Foundation to appoint a fifth member; a Director-General, appointed by the Secretary of State, would be under the High Commissioner in Fiji; and all medical staff (including fully-qualified indigenous doctors) would have Colonial Medical Service status. Medical and nursing schools would be extended, and with a general teaching and research hospital built in Suva, would together establish a “Public Health and Medical Group Centre”. Finance for this expensive plan (£100,000) would come through Britain’s new initiatives in the Colonial Development Fund, with New Zealand contributing.

11 “Report on Public Health and Medical Services in the Colony of Fiji”, Reconstruction Paper No. 3-A, Government Printer, Suva. Watt was highly critical of the quality of Medical Officers in Fiji, and Lambert happily claimed credit for having first “educated” him and Lambie about the Pacific’s problems, needs, and solutions. Lambert to Heiser, (includes Watt citation) 16 October 1943, and n.d. (probably early 1944), VHF/AFS, Lambert file 3.
12 J. C. Lopdell to Island Territories Department, 13 December 1943 and 14 December 1943; Island Territories Department to Director General of Health, 29 December 1943, all IT 1 8/34:1. Dr Lopdell worked in Western Samoa; his perspective is given in “Health Education in Western Samoa,” in Proceedings of the Seventh Pacific Science Congress, pp. 577-582.
14 Summary of Principles - conference in Wellington, 17 March 1944, IT 1 8/34:1; Nordmeyer to McKay, 20 March 1944, IT 1 8/34:1 has full details of the proposals and discussion. EA to Secr. IT Dept., 13 June 1944: IT 1 8/34:1. (copy of letter from NZ EA to Dr. H.V. Evatt, Min. of EA, Canberra.)
15 The 1929 Colonial Development Bill established a £1 million fund for grants of loans to Colonial Governments for aid and developments that specifically promoted “commerce with or industry in
By mid-1945 the South Pacific Medical Service was functioning in practice, although the Board was still an unofficial body without statutory powers when new appointee, Inspector-General Dr J. C.R. Buchanan, called New Zealand and Pacific medical administrators to a conference in Suva in July 1945. Here, the focus and tone confirmed the absent Lambert’s enduring influence. Discussion centred on optimising indigenous medical and nursing services; there was no longer any question that these comprised the essential core of current and future health services in the region. Many of proposed improvements were recognisably Lambert’s objectives: regular supervision and support for district NMPs; an emphasis on public health, preventive medicine, and obstetrics in the CMS curriculum, rather than surgery and curative medicine; expanded nursing training; and efforts to maintain the elusive balance between the perceived needs of Pacific communities and medical practitioners’ professional development.

New Zealand, Fiji and the Western Pacific finally signed the agreement that inaugurated a South Pacific Health Service in September 1946, just four months before Lambert died, and 23 years after he first suggested that Pacific health would benefit if colonial administrations combined their meagre resources and co-ordinated their medical efforts.

Lambert’s influence extended further. The United States Navy, planning a $1,000,000 medical centre for its new possessions in Micronesia, adopted the Central Medical School as its model for training native medical practitioners, and asked Lambert to advise on the 4-year course planned for twenty students and an annual budget of $300,000. Nearly two decades later, a health official of another post-war regional organisation, the South Pacific Commission, sounded out the Rockefeller Foundation about publishing an edited volume of Lambert’s various reports, as these frequently “still remain as the base line and in some cases, remain as the only evidence to this day. ...It therefore seems to us that this
collection would still be a mine of information which should be made more readily available."

Summary

This thesis set out to look at the process of Rockefeller Foundation involvement in extending medical services in the Pacific region during the vital period between the two World Wars. It aimed to bring into focus the influences that determined which conditions became subject to health efforts, the kinds of programmes that were given priority, and the way in which they were implemented. In all this the dimensions and intersections of bureaucratic, philanthropic, and individual agency had their role. For this reason, it does not deal only with what happened, but also to those projects, ideas and enthusiasms that failed, or that were distorted from their original form and intention. In retrospect it can seem that designated paths are taken by choice and certain decisions actively arrived at. What has become obvious is that in the complex systems established to deal with the people’s health on a scientific basis, rational choice and control in the decision-making process often yielded to contingency and chance.

From early on, some proposed goals proved unattainable, among them the primary one of complete hookworm control. Individuals appropriated projects or re-framed them to meet their own objectives, as in Australia when Cumpston exaggerated the seriousness of hookworm among the white population in order to assert the urgent need for a Commonwealth Department of Health, under his authority. In this case, the Foundation was actively complicit, as the end - government oversight and co-ordination of health services — accorded with its own aspirations. On other occasions, plans developed that took the Foundation into commitments it had not previously considered for the region, some of which (the Central Medical School most spectacularly) ran counter to its own policy, but with success were happily claimed as legitimate and prized offspring.

Concerns about depopulation (or in the case of Australia, repopulation) were a key trigger for expanding health work in the Oceanic region, although it is important to remember that this process got underway after most Pacific

19 W. Norman-Taylor, Public Health Officer, South Pacific Commission, to W. C. Cobb, Office of
populations had stabilised and begun to recover. Economic, strategic and humanitarian objectives intertwined to create a broad front of interest and effort directed towards strengthening individual and population health. With Britain’s long public health experience to draw on, such motivations could have been sufficient impetus for development of effective health and medical services for the colonised Pacific, but for three inter-related factors. New perspectives, even self-interest, could not escape the inherent parsimony, racialism, and rivalry of the colonial venture.

Against this background, the Rockefeller Foundation appeared as a crucial agent in health developments in the South Pacific in the inter-war period. The philanthropy’s financial assistance and expertise underwrote both the speed and style of health service provision in the region. The International Health Board did not initially anticipate a full Pacific public health campaign, nor involvement in subsequent centralising projects. Rather, its object was a select hookworm demonstration in Fiji, whereby the disease would first be made visible to all, then removed as a problem by the legerdemain of scientific medicine. This was planned as a cogent exposure of the relationship between pathogen, cure, and prevention for the people that, while showing government the efficacy of an organised and co-ordinated programme, would encourage it to accept greater responsibility for health. An evangelical zeal underlay the Foundation’s practice, as Heiser’s appraisal demonstrates:

...our mere presence has kept prominently before Government the desirability of better health organization and, furthermore, has advanced many health undertakings. ...it is quite apparent how great [is] the effect of our presence in dispelling the dense mists of ignorance and helping the lamp of public health to shine into dark places. 21

Fiji, one of a network of early hookworm campaign sites in the British Empire, was chosen for its particular features, among them the absence of malaria to complicate the picture of ankylostomiasis and the effect of treatment; that is, it

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20 After nineteenth-century decline, the Fijian population reached its nadir in 1905 (86,700), had recovered to 90,900 by 1917, a progression briefly if sharply knocked back by the 1918 influenza epidemic, but with steady increase thereafter. “Fiji Annual Medical and Health Report,” 1941, Graph A, ‘Decrease and Increase in the Fijian Race for the last 49 Years’, WPHC 923/40. Samoa is more difficult to determine because no accurate data is available before the census returns from the German administration; however after 1906 there was steady increase. N. MacArthur, Island Populations of the Pacific, Canberra, 1967, p. 121. Tonga apparently had a slight increase from c. 1891, and definite from 1900 (ibid, pp. 77, 82), while the Cook Islands showed increase in every 5-year enumeration after the first official census in 1906 (ibid p. 191, and Table 35, pp. 194-195). High 1918 influenza mortality rates only temporarily checked rejuvenating populations.

21 Heiser to Rose, 19 June 1922, RFA R.G. 5, Series 12, Box 145, Ptdr. 1922. He was discussing Ceylon, but the sentiment was generally applicable to the HIB enterprise.
provided a valuable control for research purposes. It also had substantial concentrations of "hookwormy" Indian labourers whose individual improved productivity was vital to government and commercial interests with the impending end of indenture. The spread of hookworm to the Fijians was also feared; there was a prevalent (though mistaken) belief in their sure decline, endangering a future alternative source of labour and development, so their health status was of renewed concern. Across government, commercial and mission sectors, there was good support for improving health, and the Colony provided an adequate administrative and medical infrastructure.

Although these features made Fiji ideal for Rockefeller Foundation purposes, they did not ensure the straightforward achievement it anticipated. Immediate human, organisational and technical factors established their own dynamics. All the indications were that Paul’s would have been an inadequate locally limited campaign, struggling against poor sanitation and continual re-infection. In the broader context international catastrophes, namely war and Depression, also interrupted development. Although the causes of these events lay outside the Pacific, they effectively diverted resources away from medical and health work. This interfered with planned programmes, but the consequences were often unanticipated. World War I caused Paul’s departure from Fiji and disappointment at the premature end of the first hookworm campaign there but it also set up conditions that encouraged later development.

Lambert’s appointment was among these. Rejected when he applied to the United States Armed Forces, appointed with some misgivings by an IHB desperate for medical men to keep its field work afloat, Lambert served a long probation on lower salary before being accorded regular staff status. Two years in Australia gave him a grounding in hookworm campaign work, but the island Pacific demanded an innovative rather than standard IHB approach. Once he determined that isolated, singular attacks against disease were useless, and that regional co-operation, an over-arching structure, and a different kind of health care delivery were necessary, Lambert spent the next nineteen years tenaciously extending Foundation involvement in the region. To do so he had to reverse the Foundation’s own view that co-operating with small Pacific populations did little to advance its global goals for scientific public health. Lambert drew on contemporary discourses of depopulation and regional security, although at times

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22 Lambert to Heiser, 12 December 1921, RFA R.G. 5, Series 1.2, Box 119, Fldr. 1591.
his persuasion lay in little more than story-telling. Lambert could tell a good yarn in the best tradition of the Pacific, and Rockefeller Foundation directors in New York were not immune when, after evoking a colourful, romantic Pacific and poignantly juxtaposing its natural beauty and rampant disease, he suggested that only their assistance could preserve valuable races and unique life-ways from extinction. Thus he led the IHB more deeply into the Pacific and into increasingly diverse projects.

Science and medicine are easily seen as forms of cultural imperialism, operating within the inherently skewed context of colonial relations to extend control over subject bodies and activities. Philanthropy generally also embodies unequal relations and therefore creates similar possibilities for regulation. Combined, as in the IHB’s operations, medicine and philanthropy engender complex, multi-dimensional interactions among participants. The relationships between Lambert, the Rockefeller Foundation, and colonial and indigenous interests in the Pacific were dynamic and open to multiple permutations. It is impossible to define Lambert merely as an agent of the Foundation, when he frequently represented regional interests and, most notably in the case of the Central Medical School, persisted against high level Foundation opposition to achieve his own objectives. The philanthropy’s financial and moral credibility gave it a critical role, especially in British territories where it could emphasise commonality. However operating within a monolithic imperial framework and dealing with distinctive colonial concerns that had their own momentum and resistance meant that it did not always fully succeed in colonising recipient governments with its own biomedical priorities.

The Central Medical School exemplifies the dilemmas and paradoxical nature of Pacific health development in the inter-war period. Assuming that scientific medicine was the answer to population health in the region, Lambert’s focus was then on ways to optimise delivery of therapeutic and preventive techniques. His solution built on a colonial initiative previously established to cope with imperial fiscal policy and the conundrum of providing some form of economical medical care to small isolated communities. However, it ran counter to the Rockefeller Foundation’s own strictly defined policy and its concept of “proper” medical education, historically embedded in American physicians’ struggle for professional recognition. If the existing colonial medical system deprived many of adequate care through general imperial parsimony and a failure to accept real responsibility for remedying low health status, the Foundation’s principles would have effectively guaranteed a similar inaccessibility for the bulk
of the population, as outcomes elsewhere demonstrated, leaving populations dependent on outside expertise and financial support. Eventually Pacific support and Lambert’s persistence persuaded the IHB to fund an experimental regional institution to train medical practitioners primarily for community-based care.

Where the NMPs were valued and integrated into the medical infrastructure, the system worked to extend medical and health care to the population. Modelling an auxiliary indigenous service, it also contributed to the subsequent expansion of nurse training, which post-war was to prove even more effective in taking public health into the community. However, the NMP service reflected inherently problematic intersecting relations of authority, both colonial and medical, that worked against the attempt to have essential preventive public health efforts as the core to Pacific Medical Services. Health services were important to counter the infectious diseases which were a factor in Pacific Islanders’ lower health status, but these efforts were always subject to financial constraints. In the process of instituting scientific medicine in the Pacific, the emphasis inevitably remained with the priorities of European practitioners, and the demands of curative and increasingly technical medicine led to more centralised facilities rather than diffused and accessible medical care. Social and economic contexts, the wider determinants of health, were barely addressed.
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Timeline

1875
Fiji – Measles epidemic killed nearly one third of indigenous Fijians.
Cession.

1884
First training of NMPs (as vaccinators), Suva.

1888
Native Practitioners Ordinance, Fiji.

1896
Inquiry into Decrease of the Native Population, Fiji.

1898 – 1904
Several Provincial Hospitals built, Fiji; NMPs as residents-in-charge.

1902
First purpose-built medical school, Suva.

1915
Heiser begins tour as IHB Director of Far East.
Heiser in New Zealand and Fiji; reports on medical services, medical education, and uncinariasis. Co-operative hookworm treatment programme established in Fiji under G.P. Paul.

1917

1918
May – Fiji Hookworm programme terminated, when Paul resigns.
November – Lambert arrives in Australia; becomes temporary Director when Waite resigns through broken health.
1919
Further discussions between Rose and Colonial Office, London.
June – Sawyer leaves for Australia as new IHB Director.
Dec - Rockeller Foundation establishes new Division of Medical Education.

1920
April – Lambert organises Hookworm campaign in Papua.
August – Australian Medical Congress, Brisbane.
December – Heiser tours South Pacific colonies.

1921
Lambert’s surveys in Papua and New Guinea
Western Samoa begins hookworm education campaign.
October – Lambert surveys Solomon Islands; appointed to Fiji.

1922
Lambert re-opens hookworm campaign in Fiji; experiments with CTC.
December – Lambert returns to USA on leave.

1923
Lambert returns to South Pacific to continue IHB work.
Salote requests hookworm survey for Tonga.
Rodwell invites IHB survey of Gilbert and Ellice Islands.
Rodwell, Montague and Lambert plan to establish Central Medical School.
First 4 Indians students begin NMP training.
New Colonial War Memorial Hospital opened, Suva.

1924
Lambert Health Survey, GEIC.
New Hebrides Condominium Government invite IHB health survey, NH.
May-July –Lambert survey of Tonga; 35-66% infection; treatment. work begins.
Western Samoa survey leads to beginning of hookworm treatment and control.
November – Rockefeller Foundation declines aid to establish CMS for Pacific.
1925

February - Tongan proposal to fund CMS locally meets with support.

May-September - Lambert and Buxton survey New Hebrides. Hookworm. infection rate = 92%.

New Hebrides Condominium agrees to 1926 budget for 2 NMPs.

1926

Lambert on leave in USA

Hookworm work in Western Samoa stops because of Mau opposition.


1927

January - Lambert returns to Suva, to negotiate plans for CMS and IHB participation.

May - IHB approves Medical School scheme.

August - Building begins on CMS extensions.

1928

December - CMS opens.

1930

New CMS syllabus; course increases from 3 to 4 years.

October - SML urges IHB funds for soil sanitation campaign, Fiji, and for extensions to CMS.

November - First edition of the Native Medical Practitioner

1931

January - Lambert in New Zealand to discuss health programmes in dependencies.

Ngata invites co-operative programme in soil sanitation, Cook Islands.

New bacteriology laboratory suggested.

IHD resumes joint hookworm and yaws programme in Western Samoa.

October - Lambert in Philadelphia studying TB survey techniques.
1932
Rockefeller Foundation approves 3 year latrine campaign, Cook Islands, 2 year yaws and hookworm work, Western Samoa, 3 year soil sanitation campaign, Fiji.
October – Lambert in Rarotonga - latrine campaign.

1934
September – Rockefeller Foundation agrees to aid laboratory extension.

1935
March – work begins on new lab.

1936
March – laboratory opens.

1939
Lambert retires, returns to USA, ending Rockefeller Foundation representation in the Pacific. WWII begins.

1940
Further improvements to CMS and development of Nursing School deferred because of war. Fijian request for Rockefeller Foundation loan declined.
New Native Nurse training begins in Suva.

1943
Pacific Medical and health survey and report by Watt and Lambie, recommends United Pacific Health Service.

1947
Lambert d.