APPENDIX I⁶

Important Dates and Events in the Scientific Program of the Leonard Wood Memorial

1928: Leonard Wood Memorial for the Eradication of Leprosy incorporated in New York State as nonprofit organization.

—: Mr. Perry Burgess appointed Director of Leonard Wood Memorial.

1930: Mr. Burgess appointed first President of Leonard Wood Memorial.

1928-31: Period of construction in the Philippines: Pathology Laboratory at Culion, Eversley Childs Sanitarium, with capacity for 1,250 patients, and the Skin Dispensary at Cebu. Pathologic research commenced at Culion, which has continued to date, an important phase of which related

to clarification of the basic differences between the major types of leprosy and contributed to recognition of the "borderline" form.

1931: Dr. H. W. Wade appointed Medical Director of the Leonard Wood Memorial.

——: Leonard Wood Memorial Conference convened at Manila, Philippines, with 22 scientists from 14 countries participating. Recommendations included revision of classification of forms of leprosy, establishment of the International Leprosy Association, and International Journal of Leprosy.

1932: First meeting of Advisory Medical Board, Metropolitan Tower, New York.

⁶Appendix I was prepared by Miss D. Derrom.

——: First meeting of Advisory Committee on Research, Metropolitan Tower, New York.

1933: Dr. James A. Doull, Consultant in Epidemiology, initiated the Leonard Wood Memorial epidemiologic field studies on Mactan Island, Cebu, Philippines. These are still a major activity under guidance of Dr. Ricardo S. Guinto, Epidemiologist of the Leonard Wood Memorial. Valuable data obtained on incidence of the disease and relative contagiousness of its principal types.

——: First volume of the International Journal of Leprosy, under the editorship of Dr. H. W. Wade, was published.

1933-40: Grants made to university scientists to aid them in research in leprosy.

1934: Advisory Medical Board and Advisory Committee on Research combined as one board under name of Medical Advisory Board.

1935: Reorganization of Medical Advisory Board of the LWM, limiting it to 8 elected members.

——: Dr. Guinto appointed Assistant Epidemiologist, Leonard Wood Memorial, Cebu, Philippines.

1937: Dr. George M. Saunders appointed Epidemiologist of the Leonard Wood Memorial, U.S.A.

1938: Members of the LWM staff participated in IVth International Congress on Leprosy, Cairo, Egypt. More than 150 leprologists attended from 49 countries.

1939: Dr. John H. Hanks appointed Bacteriologist of the LWM and began microbiologic research at Culion, Philippines.

1940: Publication of "Who Walk Alone," by Perry Burgess, President, LWM.

1941: Addition of "The American Leprosy Foundation" to name of Leonard Wood Memorial for the Eradication of Leprosy.

1941-44: Fellowships granted to South American leprosy workers for study at universities in United States.

1942-45: Epidemiology work in the Philippines stopped during the war, but staff retained and records preserved. Drs. Wade and Hanks and their families remained at Culion. Laboratory work proceeded at reduced efficiency. During this period Dr. Doull, as Acting Editor, kept Internation-

AL JOURNAL OF LEPROSY alive by publishing one issue per year.

1946: Mr. Burgess, Drs. Karsner, Soule and Rodriguez participated in the Second Pan American Conference on Leprosy, Rio de Janeiro, Brazil.

1947: The Bacteriology section established by Dr. Hanks at Harvard Medical School, Boston, Massachusetts, where tissue culture and biochemical studies were pursued for 13 years on rat and human leprosy bacilli.

1948: Dr. Guinto appointed Epidemiologist of the Memorial.

—: Staff participated in Vth International Congress on Leprosy, Havana, Cuba; 226 leprologists attended from 40 countries.

—: Dr. Doull appointed Medical Director; Dr. Wade became Associate Medical Director, LWM.

1949: Headquarters for the Scientific Research Program (Office of the Medical Director), established by Dr. Doull at 1832 M Street, N. W., Washington, D. C.

——: Dr. Fred C. Kluth appointed Assistant Epidemiologist of the Memorial, and began epidemiology research in Texas. This was continued until 1956. These studies renewed interest in leprosy on the part of health officers. In one large city of Texas clinic established for examination and treatment.

—: Dr. Clarke T. Gray appointed Biochemist, Leonard Wood Memorial Research Laboratory, Harvard Medical School, Boston, Massachusetts.

1950: Leonard Wood Memorial sponsored establishment of a Registry of Leprosy in the American Registry of Pathology, Armed Forces Institute of Pathology (AFIP), Washington, D. C., in cooperation with National Research Council, to supply teaching materials on leprosy to physicians and medical schools at home and abroad. A subsidy was made and has been continued annually.

—: Dr. Yao Teh Chang appointed Leonard Wood Memorial Fellow in Pharmacology and given facilities at Institute of Experimental Biology and Medicine, National Institutes of Health. Principal work, screening of drugs for trial in leprosy and efforts to cultivate Mycobacterium leprae in mouse monocytes.

- ——: First issue of Memorial's monthly publication, *Leprosy Briefs*. During 1950-1962 this carried information on scientific progress in leprosy to 2,500 medical and lay workers in leprosy throughout the world.
- —: Dr. Doull convened meeting in New York of leading pharmacologists from United States universities and pharmaceutical manufacturing companies to discuss ways and means of undertaking large scale studies of drugs for treatment of leprosy.

1951: Publication of "Born of Those Years," by Perry Burgess, President, Leonard Wood Memorial.

1951-56: Veterans Administration contract for clinical evaluation studies in leprosy. Investigator: J. A. Doull.

1952: Dr. Wade participated in first meeting of Expert Committee on Leprosy of World Health Organization, Rio de Janeiro, Brazil.

- ——: Memorial held a Working Clinical Conference in Japan. Agreement reached on terms and descriptions, uniform for international studies, with special reference to the Clinical Evaluation Studies to be carried on by the Memorial in Japan, the Philippines and the Union of South Africa.
- ——: First large scale studies of drugs in clinical evaluation studies commenced in leprosaria in Japan, the Philippines and Union of South Africa, with aid from U. S. Public Health Service and United States pharmaceutical manufacturers. Large number of drugs tested. Value of the sulfones, first used by the U. S. Public Health Service Hospital (National Leprosarium), Carville, Louisiana, confirmed (NIH grant E-199) Principal Investigator: J. A. Doull.

1952-53: Dr. Jack W. Millar, MC, USN, assigned to Office of Medical Director, Leonard Wood Memorial, for training and assisting in clinical evaluation studies.

1953: Staff participated in VIth International Congress on Leprosy, Madrid, Spain; 337 leprologists attended from 50 countries.

1954-55: Effect of BCG on lepromin reaction in young children. (NIH grant E-778) Principal Investigator: R. S. Guinto.

1954-59: Respiratory limitations of pathogenic mycobacteria. (NIH grant E-827) Principal Investigator: J. H. Hanks.

- 1954: Drs. Doull and Kluth made epidemiologic survey of leprosy in the Ryukyu Islands for the Department of Defense, U. S. Army. Sample of general population examined and estimates made of total existing cases and of proportions with various types and degrees of disablement.
- ——: Dr. Arnold F. Brodie, appointed Associate Biochemist, Leonard Wood Memorial Research Laboratory, Harvard Medical School, Boston Massachusetts.
- ——: "The Eye in Leprosy." Abstracts from the literature 1933-1953, mimeographed.
- —: Leprosy, by J. A. Doull, published by Veterans Administration, Technical Bulletin TB 10-98, 15 March.

1955: Dr. John H. Wallace appointed Assistant Bacteriologist, Leonard Wood Memorial Research Laboratory, Harvard Medical School, Boston, Massachusetts.

1956: Dr. Doull participated in an international conference convened in Rome, Italy, by Order of Malta for the welfare of leprosy patients.

—: Mr. Harold L. Elias, Executive Secretary, Leonard Wood Memorial, died on 19 July.

—: Epidemiologic Unit, Corpus Christi, Texas, under direction of Dr. Kluth, discontinued.

——: Staff participated in first Conference on Progress and Potentials in Leprosy Research, held at U. S. Public Health Service Hospital, Carville, Louisiana, under sponsorship of the U. S. Public Health Service Interbureau Advisory Committee on Leprosy.

1957: Dr. Y. T. Chang appointed Associate Pharmacologist, Leonard Wood Memorial.

1958: Mr. Perry Burgess retired as President of Leonard Wood Memorial.

- —: Mr. Cyril I. Crowther appointed President of the Memorial.
- —: Dr. Doull participated in World Health Organization's Inter-Regional Leprosy Conference at Tokyo, Japan and at Belo Horizonte, Brazil. Memorial representatives at Tokyo urged study of causes and treatment of disabilities.
- —: For attendance at the VIIth International Congress of Leprosy, Tokyo,

Japan. (NIH grant E-2489) Principal Investigator: J. H. Hanks.

—: Staff participated in VIIth International Congress of Leprology, Tokyo, Japan; 181 leprologists attended from 42 countries. Preliminary work of two major committees by Memorial staff.

—: Publication and business office of International Journal of Leprosy moved from New Orleans, Louisiana, to Office of the Medical Director, Leonard Wood Memorial, 1832 M Street, N.W., Washington,

D. C.

1959: Dr. Wade retired as Associate Medical Director and Pathologist, becoming Pathologist Emeritus of the Memorial.

- --: Bacteriology Unit, under Dr. Hanks, moved from Harvard Medical School, Boston, Massachusetts, to Johns Hopkins University School of Hygiene and Public Health, Baltimore, Maryland, where much needed additional space was available.
- --: Drs. Brodie, Gray and Wallace resigned from Leonard Wood Memorial Re-Laboratory, Harvard search Medical School, Boston, Massachusetts, to take positions elsewhere.
- —: Dr. Hanks, chairman of World Health Organization's Scientific Study Group on Leprosy Research and a member of the Expert Advisory Panel on Leprosy, Geneva, Switzerland.
- --: Dr. Byron S. Tepper appointed Associate Biochemist, Johns Hopkins-Leonard Wood Memorial Leprosy Research Laboratory, School of Hygiene and Public Health, Baltimore, Maryland.

1959-60: Dr. Rudolf L. Mayer joined staff of Memorial. Screening of drugs for trial in human leprosy (NIH contract No. SA-43-PH-3022).

1959-65: Metabolism of "non-cultivable" mycobacteria. (NIH grant AI-02998) Principal Investigator: J. H. Hanks.

1960: Dr. Claude V. Reich appointed Assistant Bacteriologist, JH-LWM Leprosy Research Laboratory, Baltimore, Maryland.

- —: Dr. Norman E. Morrison, appointed Assistant Biochemist, JH-LWM Leprosy Research Laboratory, Baltimore, Maryland.
- —: Official opening of Johns Hopkins-Leonard Wood Memorial Leprosy Re-

search Laboratory, School of Hygiene and Public Health, Baltimore, Maryland.

—: WHO grant for experimental transmission of leprosy. Investigator: Y. T. Chang.

—: Under direction of Dr. Rudolf L. Mayer, a three year study commenced on detailed structure of leprosy bacillus as revealed by the electron microscope. Temporary space provided by Armed Forces Institute of Pathology, Washington, D. C. (NIH grant E-3546).

—: Memorial jointly sponsored a Scientific Meeting on Rehabilitation in Leprosy, Vellore, India, with World Health Organization and International Society for the Welfare of the Disabled. (NIH grant B-2760) Principal Investigator: J. A. Doull.

--: Dr. Chapman H. Binford appointed as Research Pathologist of the Memorial to pursue experimental studies on leprosy and examine specimens sent to the Leprosy Registry, AFIP, for diagnosis by American and foreign physicians.

--: Dr. Doull prepared, for the World Health Organization, comprehensive manual on clinical trials of drugs for treatment of leprosy and assisted the Organization in preparing a plan for research on leprosy.

--: A second edition of "The Eye in Leprosy." Abstracts from the literature

1933-1960, mimeographed.

—: Leprosy. Neuritis and Its Sequelae; Disfiguring Infiltration; Rehabilitation. Abstracts from the literature 1933-1960, mimeographed.

—: Office of the President moved from Metropolitan Tower, 1 Madison Avenue to 79 Madison Avenue, New York, N. Y.

1960-62: Dr. Michel F. Lechat appointed Assistant Bacteriologist, JH-LWM Leprosy Research Laboratory, Baltimore, Md.

1960-63: WHO grant for study of lepromin and cytology. Investigator: J. H. Hanks.

1961: Studies in animal inoculation with M. leprae. Work being done at AFIP, Washington, D. C. (NIH grant E-4005) Principal Investigator: C. H. Binford.

--: Trustees of the Leonard Wood Memorial made appropriation for construction of new LWM Research Laboratory, Cebu, Philippines.

——: Symposium on Research in Leprosy. Held at Johns Hopkins School of Hygiene and Public Health, Baltimore, Maryland, 8-10 May. Attended by 95 participants. *Transactions* of this meeting published (out of print). (NIH grant E-2905) Principal Investigator: J. A. Doull.

—: Dr. Y. T. Chang appointed Pharmacologist, Leonard Wood Memorial.

1962: Drs. Doull and Hanks assisted Pan American Health Organization as consultants in investigating resources and personnel for research on leprosy in Central and South America.

—: Dr. Doull prepared, for Pan American Health Organization, abstracts of all articles on leprosy by leprosy workers in central and South America which had appeared in abstract or original form in the International Journal of Leprosy, January 1958 through October 1961, 204 articles in all.

—: Dr. Doull attended Second Pan-Pacific Rehabilitation Conference, Manila,

Philippines.

- ——: Grant for research in etiology, treatment and prevention of leprosy became effective, providing for personnel, equipment, etc., for new research laboratory, Cebu, Philippines. (NIH grant AI-04809) Principal Investigator: R. S. Guinto, later C. H. Binford.
- —: Dr. C. V. Reich appointed Director of LWM-ECS Leprosy Research Laboratory, Cebu, Philippines, and Microbiologist, Leonard Wood Memorial.
- ——: Construction started on Leonard Wood Memorial-Eversley Childs Sanitarium Leprosy Research Laboratory, Cebu, Philippines.
- —: Dr. R. L. Mayer, Leonard Wood Memorial Microbiologist, died 23 June.

—: Mr. and Mrs. Perry Burgess died 15 September and 10 June, respectively.

——: Leonard Wood Memorial-National Institutes of Health training program became effective. During 1962, 6 trainees appointed: 1 from Philippines, 2 from India, 3 from United States. Locations of training: JH-LWM Leprosy Research Laboratory, Baltimore; Department of Epidemiology, University of Michigan, Ann Arbor, Michigan; and Department of Pathology, Medical College of Virginia, Rich-

mond, Virginia. (NIH grant 5 TI AI 220) Principal Investigator: J. A. Doull, later C. H. Binford.

——: Dr. Sing Chen Chang appointed Leonard Wood Memorial Microbiologist to carry on program in electron microscopy originally undertaken by the late Dr. Mayer, at the Armed Forces Institute of Pathology, Washington, D. C. (NIH grant AI-03546).

1962-63: Respiration of mycobacteria from different environments. (NIH grant AI-05372) Principal Investigator: E. W. Rypka, later J. H. Hanks.

1962-63: Macrophages as hosts for noncultivable mycobacteria. (NIH grant AI-04575) Principal Investigator: Y. T. Chang.

1963: Dr. Doull, Medical Director of the Leonard Wood Memorial, died 6 April.

—: Dr. Chapman H. Binford appointed Medical Director, 1 July.

——: LWM-ECS Leprosy Research Laboratory, Cebu, Philippines, in operation in

June.

——: Electron Microscope Unit, under Dr. S. C. Chang, transferred from Armed Forces Institute of Pathology to JH-LWM Leprosy Research Laboratory, Baltimore, Maryland.

——: Electron microscope (Siemens, Elmiskop I) purchased and installed at JH-LWM Leprosy Research Laboratory, Baltimore, Maryland (NIH grant AI-03546) Principal Investigator: S. C. Chang.

—: Additional space made available to JH-LWM Leprosy Research Laboratory in Department of Pathobiology, School of Hygiene and Public Health, Baltimore, Maryland. Total: approximately 3,300 square feet. Renovations completed during year.

—. Dr. Hanks assisted Pan American Health Organization in formulating plans for leprosy research in Latin America, participated in seminar in Cuernavaca, Mexico, and organized work conference on the serology of leprosy, Rio de Janeiro, Brazil.

——: Eleven members of the Leonard Wood Memorial staff participated in VIIIth International Congress of Leprology, Rio de Janeiro, Brazil, which was attended by 374 leprologists from 53 countries.

—: Dr. Y. T. Chang, Leonard Wood Memorial Pharmacologist since 1950, appointed to staff of National Institute of Arthritis and Metabolic Diseases, National Institutes of Health, Bethesda, Maryland. Close cooperative leprosy research program continued between the Leonard Wood Memorial and National Institutes of Health.

—: Publication of Leprosy Briefs discontinued with Volume 13, 1962.

——: LWM-NIH training grant (AI-220) continued for a second year: 4 trainees were continued for a second year and 1 from India and 1 from Surinam (Dutch Guiana) started in 1963.

——: Dr. Wade retired as President, International Leprosy Association, and as Editor, International Journal of Leprosy.

--: Dr. Hanks appointed to the WHO

Expert Committee on Leprosy.

1964: Dr. Esmond R. Long, appointed Consultant to Office of the Medical Director, Leonard Wood Memorial, and by International Leprosy Association as Editor of International Journal of Leprosy. Dr. Wade appointed Editor Emeritus.

—: Formal dedication ceremony on 15 February officially opened Leonard Wood Memorial-Eversley Childs Sanitarium Leprosy Research Laboratory, Cebu, Philippines.

- —: The Philippine Division, LWM, comprising three branches—Epidemiology, Clinical Research, and Laboratory Research, formally established by President Crowther.
- —: Cooperative research program (genetics in leprosy) headed by Dr. M. F. Lechat, LWM-NIH Post-doctoral, Johns Hopkins School of Hygiene and Public Health, Baltimore, started.
- —: Drug trial on Ethambutol started by Clinical Research Branch, LWM-ECS Leprosy Research Laboratory, Cebu, Philippines.
- ——: WHO grant for study of lepromin and *M. leprae*. Principal Investigator: J. H. Hanks.
- —: LWM-NIH training grant (AI-220) continued for a third year: 5 trainees were continued for a third year, and 1 from Thailand was added.

1965: Leonard Wood Memorial-Armed Forces Institute of Pathology Conference on Research Problems in Leprosy, held in Washington, D. C., 10-14 May. Attended by 136 persons.

——: Proceedings of LWM-AFIP Conference on Research Problems in Leprosy published as supplement to International Journal of Leprosy, Vol. 33, No. 3.

——: Dr. S. C. Chang and electron microscope moved from JH-LWM Leprosy Research Laboratory, Baltimore, to Special Mycobacterial Diseases Branch, AFIP, Washington, D. C.

—: Dr. C. V. Reich, Director, LWM-ECS Leprosy Research Laboratory, Cebu, Philippines, opened a supporting office and laboratory at Johns Hopkins School of Hygiene and Public Health, Baltimore, Maryland.

——: House for breeding animals constructed as addition to LWM-ECS Leprosy Research Laboratory, Cebu, Philippines.

Research Laboratory, Cebu, Philippines.

——: Revision of "Leprosy," originally published in 1954 (Doull, above), by R. S. Guinto and C. H. Binford, Veterans Administration Medical Bulletin MB-10, 25 May.

—: Long range program for transmission of leprosy to chimpanzees started at Delta Primate Center of Tulane University, Covington, Louisiana, under guidance of Dr. Binford.

——: Drs. Binford and Hanks appointed to U. S. Leprosy Panel of U. S.-Japan Cooperative Medical Science Program.

——: Dr. David A. Power appointed Associate Microbiologist, LWM-ECS Leprosy Research Laboratory, Cebu, Philippines.

——: LWM-NIH training grant (AI-220) continued for fourth year: 1 continued for a third year and 1 for a second; 4 trainees added. (2 Filipinos; 2 United States).

1965-70: Cultivation of *M. leprae*. Search for a rational approach. (NIH grant AI-06944) Principal Investigator: J. H. Hanks.

1965-66: WHO and Order of Malta grant for genetics study.

- —: Dr. Hanks, Chairman, and Dr. Guinto as member, participated in meeting of WHO Expert Committee on Leprosy at Geneva, Switzerland.
- ——: Dr. Jose N. Rodriguez appointed Consultant to Philippine Division of Leon-

ard Wood Memorial. Under guidance of Subcommittee on Epidemiology, Advisory Medical Board, he initiated a retroactive study based on epidemiologic records at Cebu, designed to learn natural history of leprosy in presulfone period.

——: Dr. Tolentino, Chief, Clinical Research Branch, Philippine Division of Leonard Wood Memorial, and Dr. Charles C. Shepard, Communicable Disease Center, Atlanta, Georgia, began pilot study on use of DDS, and a slowly released sulfone, in lepromatous leprosy.

——: Dr. Guinto, Chief, Epidemiology Branch, and Dr. Tolentino, Chief, Clinical Research Branch, Philippine Division, Leonard Wood Memorial, began long-term study to learn effect of DDS treatment in tuberculoid leprosy.

—: Dr. Tolentino represented Leonard Wood Memorial at Madras Leprosy Conferences, Madras, India.

——: Research program of JH-LWM Leprosy Research Laboratory, Baltimore, Maryland reoriented toward intensive effort to cultivate *M. leprae*.

1966: Dr. Jan P. Wiersema, after a 3 year LWM-NIH traineeship in the pathology and experimental pathology of leprosy at

the AFIP, was appointed Research Pathologist, LWM.

——: LWM-NIH training grant continued for fifth and final years: 3 trainees continued for a second year and 1 from England added.

——: Formal opening of Ultrastructure Laboratory, Special Mycobacterial Diseases Branch, Armed Forces Institute of Pathology Annex, Washington, D. C. 3 May. (NIH grant AI-03546) Principal Investigator: S. C. Chang.

——: Office of the Medical Director moved from 1832 M Street, N.W. to 1200 -18th Street, N.W., Washington, D. C. 3 June.

——: Facilities for long-term maintenance of hogs and dogs provided at the LWM-ECS Leprosy Research Laboratory, Cebu, Philippines, and transmission experiments started on these animals.

—: Leprosy, cultivation, transmission, pathology, therapy. (NIH grant AI-07266) Principal Investigator: C. H. Binford.

—: Reception at Cosmos Club, Washington, D. C., honoring Mr. C. I. Crowther on end-of-year retirement as President, LWM, and presenting his successor, Donald V. Wilson, 15 December.