# THE VALUE OF HEALTH A HISTORY OF THE PAN AMERICAN HEALTH ORGANIZATION

MARCOS CUETO



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### **Foreword**

To accomplish great things, we must not only act, but also dream; not only plan, but also believe.

Anatole France (1844–1924)

n late 2002, the Pan American Health Organization asked Dr. Marcos Cueto to write a history of PAHO. This book is the result of that assignment. Its pages tell of more than a century of uninterrupted work in the field of public health aimed at preventing, controlling, and eradicating disease and promoting health.

The history of PAHO is the work of men and women who proved their idealism, knowledge, dedication, and resolve. That work, across generations, has made it possible for millions of people in the Americas to enjoy a healthier life. The achievements are, in large part, the result of the technical cooperation of PAHO with its Member Governments.

The past century saw impressive advances in health that are worthy of being told here. We are proud of having made and maintained, in the majority of the countries, noteworthy progress in the field of public health, and of having helped to reduce mortality rates and to extend life expectancy. All of this has been accomplished despite successive and protracted economic and political crises and the unacceptable social exclusion of major population groups that have affected our countries throughout their history.

This work recreates the voices of the Organization's members and all the public health workers of the Americas who devoted themselves, generously and enthusiastically, to promoting health and protecting life. The eight Directors who have preceded me paved the way for excellence in service and transparency in administration. They were building an austere, careful institution, protective of its human resources and the collective capital of knowledge accumulated in collaboration with the countries.

By reading this history we can again affirm, without fear of error, that our Organization has a solid foundation. Health workers everywhere have devoted themselves to achieving the established goals and demonstrating the value of health in its contribution to reducing poverty and achieving a more equitable, sustainable human development. Its leaders have

geared the collective actions to ensure success, and our partners and allies have supported us and entrusted us with financial and technological resources to help us to accomplish our objectives.

I hope this book will help us remember the past, respond to the present, and, above all, continue to plan for the future. As Director Emeritus Dr. George A. O. Alleyne once noted, "the past is always prologue." In other words, the history we are building today is always the most important.

Dr. Marcos Cueto has done an excellent job. His meticulous thoroughness in choosing the countless sources consulted and the resulting extensive bibliography are complemented with a lively and entertaining narrative that together make this book a lasting contribution to the history of our beloved Pan American Health Organization.

Mirta Roses Periago Director

## Acknowledgments

owards the end of 2002, Drs. George A. O. Alleyne and David Brandling-Bennett, then Director and Deputy Director of the Pan American Sanitary Bureau, the Secretariat of the Pan American Health Organization, gave me the opportunity to do some research, which turned into this book and became a true joy for me. So I should start by thanking them. I am also indebted to the 2001–2002 Fulbright New Century Scholars Program, Challenges of Health in a Borderless World, directed by Dr. Ilona Kickbusch, in which I participated during 2002. Many of the ideas that helped me to organize my research were developed during the course of this program. I am also eternally grateful to Dr. Mirta Roses Periago, the current Director of the Bureau, who supported the project of writing a history of the Organization.

Special recognition goes to Dr. Judith Navarro, Manager of PAHO's Publications Area, and the members of her team, for their support throughout the process of researching and editing the manuscript.

During the first five months of 2004, thanks to a resident research fellowship at the Woodrow Wilson International Center for Scholars in Washington, D.C., I was able to devote time to correcting and polishing the manuscript. Many thanks to Dr. Joseph S. Tulchin, Director of the Center's Latin American Program, and Mrs. Rosemary Lyon, Director of the Scholar Selection and Services Office.

I also wish to thank Dr. José Romero Teruel for his invitation to a meeting of former Bureau staff members in late 2002 in Washington, D.C., which was filled with anecdotes and affection for the institution. Dr. Pedro E. Brito, a Headquarters staffer, provided support during various stages of the project.

Thanks also go to the directors and staff of the archives and libraries that I consulted and which are listed in the bibliography. Dr. Elizabeth Fee, Chief of the National Library of Medicine's History of Medicine Division, located in Bethesda, Maryland, U.S.A.; Dr. Ineke Deserno, Head of Records and Archives at WHO in Geneva, Switzerland; Irma Betanzos, Director of the Historical Archives of Mexico's Ministry of Health; and Dr. Darwin Stapleton, Director of the Rockefeller Archive Center in Sleepy Hollow, New York, deserve special mention.

My thanks to the PAHO/WHO Representatives and employees in the countries I visited, and to the managers of the Organization's centers, institutes, and programs who answered my questions and sent me essential information. I especially want to mention Drs. Joaquín Molina, PAHO/WHO Representative in Mexico, and José Moya, a staff member in that Country Office, who made it possible for me to interview Dr. Héctor R. Acuña, former Director of the Sanitary Bureau from 1975 to 1983. In Havana I enjoyed the support of Dr. Eduardo Patricio Yépez and had the honor of talking several times with Dr. Gregorio Delgado García, the noted Cuban medical historian. I was fortunate to have the collaboration of Dr. Manuel Peña, former PAHO/WHO Representative in Jamaica, who taught me about the rich public health tradition of the English-speaking Caribbean. Special recognition goes to Drs. Henri Jouval, PAHO/WHO Representative in Chile, Juan Manuel Sotelo, PAHO/WHO Representative in Argentina, and Patricio Hevia, a prominent former staff member of the Organization. A series of interviews with officials at the PAHO/WHO Country Office in Brazil, as well as the opportunity to consult invaluable texts to which I had access in the Latin American and Caribbean Center on Health Sciences Information, better known as BIREME, in São Paulo, were also very productive.

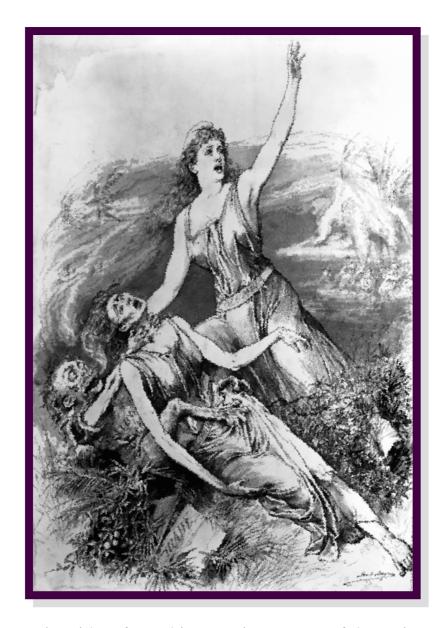
In Brazil I also received support at an extraordinary center for the history of medicine: the Oswaldo Cruz House of FIOCRUZ, located in Rio de Janeiro and directed by Dr. Nisia Trinidade Lima. Thanks, also, to Dr. Emilio Quevedo of the History of Medicine Center, National University of Colombia. At these two centers, whose activities are part of a new and dynamic history of public health that has emerged in various countries of the Region in recent years, and which are partly reflected in the HISPALC (History of Public Health in Latin America and the Caribbean Network), I was able to review important research material.

In Lima, to which I returned after each research trip, I had the invaluable assistance of a talented young historian to whom I am indebted: José Carlos de la Puente. Also, the PAHO/WHO Country Office in Peru, and Dr. Marie Andrée Diouf-Romisch (who shared with me her valuable prior experience in Haiti), supported my work. I want to express my gratitude for the continuous support of Gaby Caro and the staff of the "Carlos Enrique Paz Soldán" Information and Documentation Center, which operates in that Country Office.

Finally, I am indebted to the officials, teachers, and students of the School of Public Health and Administration, Universidad Peruana Cayetano Heredia in Lima. I am a professor of health history at this university, and I have heard and discussed many of the ideas about what public health has been, is, and can be, in this institution.

Last but certainly not least, and most especially, I must thank my family (Cecilia, Vicente, Alejandra, and Rodrigo) for their encouragement, generosity, and understanding.

Marcos Cueto



As is evident from this 1873 image, one of the major concerns of the late nineteenth and early twentieth centuries was the control of yellow fever, which reached epidemic proportions in many port cities of the Americas, hampering trade and the free movement of people and merchandise.

## Introduction

story was going around the southern United States in the late nineteenth century. Yellow fever had just broken out in Savannah, Georgia. One man knew what he had to do: he sent his wife and three daughters to the countryside, far from the epidemic. He remained in the city because he could not leave his business. A few days later, he fell victim to the disease. The person who cared for him in his suffering wrote a heartfelt letter of condolence to the widow and, before closing the envelope, tucked in a lock of his hair. The mother and her daughters wept when they read the letter. One of the daughters kissed her father's hair. Her mother immediately scolded her, telling her she could catch the fever. As if in indisputable confirmation of the poisonous power attributed to the mysterious fomites—a deceased person's belongings, such as clothing and personal effects, and hair—the girl came down with yellow fever the next night. The other two girls survived. A tragedy and a mystery.<sup>1</sup>

This story of vulnerability and impotence serves as an example of the convictions, fears, and practices that had to be confronted and changed by the founders of the health institution for the Americas: the Pan American Health Organization, the oldest entity of its kind still in operation, and the subject of this book. (Although its name changed during the twentieth century, we will, by and large, use the name by which it has been known since 1958: Pan American Health Organization, and its acronym, PAHO). The Organization's creation was a product of the expansion of international commerce, medical advances, and a new political and diplomatic relationship among the countries of the Americas. From this confluence, a new concept of health, not just as an individual aspiration, but also as a right and a duty—a right of the people and a duty and responsibility of the State—was forged.

To ensure that the institution's concept of health would endure despite vicissitudes of all kinds, its leaders had to recast ideas, practices, and perceptions of health to demonstrate its value, by responding not only to physical pain but the emotions it awakened, as well, and by tooling a response that would transcend all borders: in essence, a response capable of rendering extinct the fear and myths that pervaded stories such as that of the Savannah episode.

As is often true of history's best stories, that of the Pan American Health Organization includes critical moments when adversity had to be vanquished before progress was feasible. It is a story

in which the tools of negotiation had to be mastered by the most powerful and the weakest countries of the Americas. In fact, this negotiation expanded over time and was more intense than it might seem at first blush. It is not a linear story of uninterrupted progress, but rather it reflects the difficult balance between the extremes to which all international organizations born in the twentieth century are subject: the inclination to limit itself to an advisory role or attempt to intervene more actively in the problems of a given region. There were times when a certain scientific reductionism was apparent; moments of a search for "magic bullets" considered to be quick technological fixes for the major communicable diseases. At other times, however, attempts were made to promote a comprehensive development incorporating science, solidarity, and the right to health. It was not just a question of promoting international responsibility with respect to the epidemics that sprang up anywhere in the Americas. There also existed the conviction that across-the-board social cohesion (that is, leaving no social group or country behind) was essential for development.

One objective of this work is to respond to the need of all persons, professions, institutions, and countries to have a picture of their own past. A picture which, for its most accurate depiction and best understanding, does not require the triumphant trumpets of military parades nor the pompous unveiling of monuments, but compilation, reflection, and analysis, which are the historian's tools.2 As we know, there is a resonance between the past and the present. The problems, options, and solutions of the past and present are often similar, or they might inspire us to do something different. Moreover, any historical work entails a perception of contemporary problems. But it is important to make it clear that the advantages of historical analysis do not lie in the search for simplistic and nonexistent "lessons of history" or in prophetic predictions.

The richness of history must be sought through the attainment of a long-term perspective that helps us better understand the substance of basic problems, support worthy initiatives, ensure the longevity of hard-earned achievements, and be proud of our genuine heroes. A historical perspective can also help us reject the recurring shortcomings of health policy in many countries of the Americas, such as the temporary and inadequate responses to health emergencies, the blaming of socially excluded groups, and the artificiality of the separation between preventive and curative work, and provide us with tools to overcome the difficult meshing between international and grassroots organizations and the uncoordinated participation by patients, family members, and the community in health care issues.

A good historical work has additional qualities important to any health professional: a chronological narrative; the search for interactions between processes and life stories; the contrast between discourse and practice; the selection of facts that are most relevant over the long term; and the judicious use of various sources of information. Finally, the history is enjoyable, perhaps the most enjoyable of all the social and human sciencesa characteristic which is appreciated by any reader. Hence, that history can be a rich source of inspiration for the members of an institution, a means of justifiably claiming an identity, and a method of socializing the new members of a group. A historical work can coexist with the most intimate fibers of the memory, in that same place where there resides a poem, a song, or an important figure who at some point made us say to ourselves: "that is I." And in the same way that former PAHO Director Dr. George A.O. Alleyne was fond of noting that history is prologue, Dr. Mirta Roses reminds us that the history we are about to make is always the most important.

Using unpublished and published sources—incidentally, insufficient for an undertaking of this nature—this book aims to present a general overview which, although covering almost a century, highlights the events of the first half of that period. Thus, the chapters of this book are in chronological order. They concentrate on the political and economic context in which PAHO developed, and also on the health policies, actors,

and activities tied to the institution and to that context. They examine the most noteworthy events and undertakings, as well as PAHO's legacy in later periods. Some subjects span more than one period.

This work, written during the course of 2003, is based on a review of a series of publications, historic archives, and interviews. Other studies in connection with the recent celebration of the Organization's 100th anniversary have given us very valuable information on PAHO's specific role in certain countries.3 The histories of international health efforts in the twentieth century and the social histories of Latin American and Caribbean medicine have also been perused in order to adequately highlight the issues that were pivotal to understanding economic and political motives, the level of development of health interventions and technologies, and the processes that led to general acceptance of these policies and interventions.4 The chapters of this book also emphasize the activities of the Organization and of the Pan American Sanitary Bureau's first Directors: Walter Wyman, Rupert Blue, Hugh S. Cumming, and Fred L. Soper of the United States of America, and Abraham Horwitz of Chile. Not only are there clear and ordered—albeit sometimes incomplete—historical sources and testimony, but there has emerged, over time, a sharper perspective on the personalities of these men and the challenges they faced. While details of the libraries and archives consulted are found at the beginning of this book's bibliography, the principal archives consulted are discussed below to give the reader an idea of the richness and diversity of this work, as well as its possible limitations.

For example, in the United States, the New York Public Library, the Library of Congress in Washington, D.C., and the National Archives in Maryland hold the correspondence and many of the official publications developed when Wyman and Blue were the Directors of the Bureau. A valuable collection of Cumming's documents—including the manuscript of an unpublished autobiography—is held by the University of Virginia Library. Also, documents belonging to the U.S. Am-

bassador to Venezuela, Francis P. Corrigan, held at the Franklin D. Roosevelt Presidential Library in Hyde Park, New York, were vital to an understanding of the Organization's life during the 1940s. The National Library of Medicine in Maryland holds material on Cumming as well as an impressive collection of works by Soper. With respect to Horwitz, I relied mainly on material from libraries in Santiago, Chile, and interviews with his relatives, friends, and students carried out in that city. There is valuable information on Soper and Horwitz, and on the relationship between PAHO and the Organization of American States, in the OAS Columbus Memorial Library in Washington, D.C.

All this was supplemented by literary searches in specific archives that were fundamental to following the trail of international health efforts, such as those at the Rockefeller Center in Sleepy Hollow, New York, which holds correspondence and reports sent by Cumming and Soper to Rockefeller Foundation officials; the libraries of the New York Academy of Medicine and Columbia University, which contain books, pamphlets, and journals which are often difficult to find elsewhere; and the University of Pittsburgh archives, which hold a fascinating and littleexplored collection of works by Thomas Parran, who directed U.S. health efforts between the mid-1930s and the late 1940s and had a close relationship with Cumming and Soper. Of special importance to telling the story of PAHO with respect to European health organizations were the World Health Organization archives and library in Geneva, Switzerland. A special perspective on health from the countries' standpoint was provided by archives and libraries in Bogotá, Caracas, Havana, Kingston, Lima, Mexico City, Rio de Janeiro, and São Paulo. Also significant were the materials held by the library and archives of the Oswaldo Cruz House (FIOCRUZ), in Rio de Janeiro, and by the Historical Archives of the Ministry of Health in Mexico City. Finally, the support of the PAHO Headquarters library and the libraries and Documentation Centers of the various countries, especially in Lima, was fundamental. Essential electronic documents,

recently prepared by PAHO, included the complete collection of the *Boletín de la Oficina Sanitaria Panamericana* (PAHO's flagship publication dating back to 1922, whose function in recent years has been assumed by the *Revista Panamericana de Salud Pública/Pan American Journal of Public Health*) and the Summary Records of official Governing Body meetings.

The first chapter, entitled "The Origins of International Public Health in the Americas," tells the history, from a global perspective, of the quarantine system, the exchange of epidemiological information, and the rise of the United States as a power, particularly in the late nineteenth and early twentieth centuries. Two of the concerns at that time were controlling yellow fever, which was found in many ports of the Americas, and preventing the arrival of cholera from Europe and bubonic plague from Asia. The search for a uniform, efficient maritime public health policy, based on scientific and humanitarian principles, yet able to complement international trade activities, was one of the motivations behind the creation of PAHO.

The second chapter, "The Birth of a New Organi~ zation," covers the period from the early twentieth century to the end of the First World War. It analyzes the coming together of maritime public health, the rise of export economies, and the advances in science and medicine made possible by the establishment of the International Sanitary Bureau (which would later become the Pan American Sanitary Bureau, the Secretariat of the Pan American Health Organization) in 1902. Similar cultural and political traditions; a unique, poleto-pole geographic location; and a distinctive framework of diversity sustained an idea which seemed far-fetched at the outset but would withstand the test of time: an inter-American health organization. During this period, the Pan American institution placed great importance on improving hygiene in the ports, the point of departure for valuable merchandise intended for international commerce.

The third chapter, "The Consolidation of an Identity," describes the difficult years between the

two World Wars, the period of World War II, and the start of the post-war era (approximately 1919– 1948), when the International Sanitary Bureau was renamed the Pan American Sanitary Bureau. This was a chaotic period, marked by the Great Depression and subsequent recovery, by the emergence of a greater international social consciousness—born mainly of the devastation that accompanied the armed conflict—and by increased concerns about health. One of these was that hygiene could not exist in the ports of shipment unless sanitation in the cities was addressed and unless permanent, autonomous, public institutions were established for that purpose. One noteworthy event during this stage was the development and approval of the Pan American Sanitary Code, signed in Havana in 1924, a treaty which held that health was a right of citizens and nations. During this time, an important tradition was consolidated by Latin American thinkers and practitioners in the health field, some of whom identified with what became known as "social medicine."5

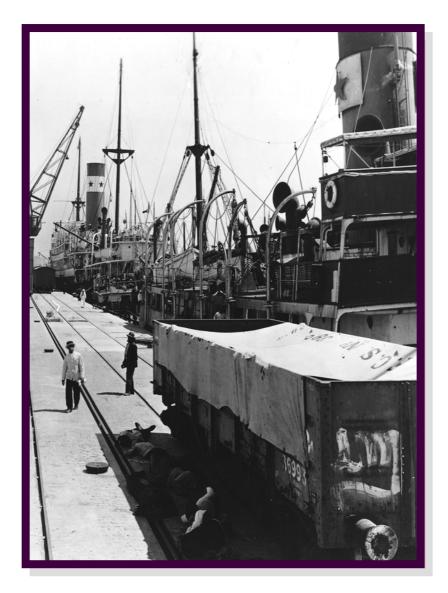
Social medicine was a trend that originally developed in Europe, its first international proponent being René Sand of Belgium, who criticized the existence of a reductionist medical perspective and pointed to educational and environmental solutions. Between the wars, in several Latin American countries, social medicine was adapted and relaunched as part of the social changes necessary to improve the population's standard of living.<sup>6</sup> In the years after World War II, during the Cold War period, PAHO saw the need to discuss and define its role on the world health scene.

The next chapter, "For a Continent Free of Disease," traces the interaction between international public health and the Cold War during its most intense period; i.e., a time spanning from the late 1940s until the early 1960s. It was a period of profound social and political change in Latin America that fueled the hope of achieving significant development through modernization of traditional structures. This modernization was inspired by an industrial and capitalist paradigm which was an alternative to the totalitarian regimes.

The illusion that the principal communicable diseases would be wiped out was part of that paradigm. "Vertical" health programs were created to fight some of those diseases; these programs were characterized by their focus on objectives, time periods, and specialized techniques and personnel, and by their disinterest in community participation; i.e., the participation of the different groups that comprise society.

The penultimate chapter, "Health, Development, and Community Participation," looks at how ties were established between progress in public health and socioeconomic development during the 1960s, as well as the origins of the concept and practice of health as a public space; i.e., as a sphere marked by the indispensable participation of the community in health programs. This movement reached its peak intensity worldwide in the 1970s, a time of Cold War crisis. The crisis manifested itself in the emergence of popular, progressive, and nationalist movements that questioned the domination and international dependence to which the developing countries were subject. Part of this process was the emergence of community medicine and primary health care as holistic perspectives, in contrast to the vertical campaigns that prevailed during the previous period. Some interpretations of the "health sector reform" that permeated international health efforts during the 1980s and 1990s seemed to be pointing public health in another direction. But for many health officials of the Region, the content and the slogans inspired by the original primary health care movement are still valid. The Organization was then under the direction of Dr. Abraham Horwitz, who was succeeded by another Latin American, Dr. Héctor Acuña of Mexico.

The final chapter, "Validity and Renewal," deals briefly with the changes and continuities at PAHO in the late twentieth century. It highlights the new challenges faced beginning in the 1980s and lasting through the early twenty-first century by the Sanitary Bureau Directors who succeeded Dr. Acuña: Drs. Carlyle Guerra de Macedo of Brazil and George A.O. Alleyne of Barbados. Both men, as well as the officials who supported them in Washington, D.C., the field personnel of the Country Offices and centers of excellence, and the current Director, Dr. Mirta Roses Periago of Argentina, have maintained a valuable tradition of international solidarity, the story of which will told on the following pages.



The search for a uniform, efficient maritime public health policy, based on scientific and humanitarian principles, yet able to complement trade, was one of the motivations behind the creation of the Pan American Health Organization.

# The Origins of International Public Health in the Americas

he concept of international public health goes back to the establishment of local, national, and international cordon sanitaires and maritime quarantines, used in Europe since the Middle Ages. This occurred predominantly in the ports of Italy that were engaged in heavy commercial traffic with Asia, where it was suspected, in the West, that many of the epidemics of the time, such as bubonic plague, originated. Despite these controls, Europe could not prevent being devastated, in the fourteenth century, by an epidemic of the dreaded plague, the so-called "Black Death." A board of health was established in Venice. It ordered that the victims from suspicious ships be confined to a lazaretto (quarantine station) located on an island, and imposed *quaranta* days of isolation (it was assumed that after forty days, the most seriously ill individual would no longer be contagious).

The model was imitated in other European cities, such as Genoa and Marseilles. When, in the early eighteenth century, two ships from Cyprus, loaded with cotton and suspected of carrying the dreaded fomites of bubonic plague, reached London, the British authorities chose a radical solution: they burned the ships to ashes. But these methods were not consistent, and even England relaxed its maritime public health measures during much of the nineteenth century in the belief that this would encourage trade. Only starting in the mid-nineteenth century did the activities related to what is now known as international health become systematic and result in agreements aimed at universal implementation. Also, as we will see later on, only starting then did the measures that were taken become somewhat more effective.<sup>7</sup>

#### MARITIME PUBLIC HEALTH IN THE OLD AND NEW WORLDS

One of the most memorable meetings on health was the First International Sanitary Conference, held in Paris from 23 June 1851 to 19 January 1852, at which no country of the Americas was represented. Many of these meetings were responding to what were considered factors that increased the threat of cholera. For example, the third of these meetings, held in Constantinople in 1866, was organized because of fear of the arrival of cholera via the Muslim pilgrims to

Mecca (the previous year, the disease had attacked Egypt and Europe with a vengeance). Similarly, the fourth meeting, held in Vienna in 1874, was in response to the opening of the Suez Canal five years earlier, since it was feared that the Canal would become a means of spreading the epidemic from the East to the West.<sup>8</sup> At the seventh meeting, this one held in Venice, in 1892, measures to prevent the spread of cholera would be standardized.<sup>9</sup>

One of the crucial international meetings was held in 1893 in Dresden, where the importance of international epidemiological surveillance activities was first recognized. This meant that the countries had to establish a worldwide information system and be attentive to the outbreak of epidemics anywhere in the world. A new threat, bubonic plague, was the main item on the agenda of the tenth meeting, held in Venice in 1897. The disease had broken out in Hong Kong in 1894 and had spread to various parts of the world. Another international accord of special importance, which went beyond and replaced the former, was the one signed at the Eleventh International Sanitary Conference held in Paris in 1903. This agreement, known as the "Paris Convention," was subsequently revised and expanded in 1912, 1926, and 1938, and was directed specifically at regulating maritime traffic.

The Paris Conference brought together 21 countries, including the until-then reluctant Great Britain, which held that quarantines generally worked against trade. The treaty systematized measures against cholera and bubonic plague. Cholera had existed in the Americas during the nineteenth century, and fears were renewed in 1893, when an epidemic broke out in Europe, and again in 1905, when the disease appeared in Hamburg, whose port saw heavy commercial traffic with Rio de Janeiro and other Latin American cities.

The Paris Sanitary Conference recommended implementation of John Snow's discovery about cholera. Around the middle of the nineteenth century, Snow had demonstrated, in London, that cholera could be prevented by avoiding the contamination of water for human consumption with

wastewater. That resulted in attention being paid to the hygiene of vessels and ports, as well as the surveillance of travelers and sailors from regions affected by the disease. By the early twentieth century it was known that the plague, a scourge that spread throughout the world from Asia, could be combated by eliminating rats from the ports and ships. The rodents were hosts for fleas, whose bite transmitted the microorganism that caused the disease. Also, since the late nineteenth century, relatively effective remedies for the plague were available, such as the Yersin serum and the Haffkine vaccine, named for Alexander Yersin and Waldemar Haffkine, who had, independently of each other, discovered the microorganism that causes plague.

Thanks to a 1907 Conference that included representatives of Belgium, Brazil, Egypt, England, France, Italy, the Low Countries, Portugal, Russia, Spain, Switzerland, and the United States, the International Office of Public Hygiene was established. This was the first more or less stable European international health organization. It was known as the "Paris Office" because it was first headquartered there. The Office was administered by a permanent committee that met once or twice a year and published a monthly bulletin. Its members were health authorities of the 55 states that belonged to this Office or diplomatic personnel from the embassies accredited in Paris. Its main functions were to provide information and address consultations on epidemiological matters and quarantines, and to disseminate this information in a bulletin. Its goal was to be speedier and more effective in these tasks than the diplomatic channels which had traditionally borne this responsibility. It approved important health measures in 1912 and 1926, improving these taken in 1903. The Office would be one of the two European international health organizations that remained in existence until the Second World War.10

The other organization, established at the end of World War I within the framework of the League of Nations, was the Hygiene Section. Fear of the spread of a typhus epidemic that broke out in Europe at the end of the War<sup>11</sup> precipitated a meeting to set up the Hygiene Section in London

in 1920. This organization, which sought to be more dynamic than the Paris Office, conducted weekly reporting on epidemiological events, created specialized committees on the most feared diseases, offered study and exchange grants with European universities, attempted (albeit unsuccessfully) to control the trading in and consumption of opium, and promoted new ideas such as industrial hygiene, social medicine, and nutrition. Its main office was in Geneva, as was the League's headquarters. The Hygiene Section was more international in its orientation than the Paris Office.

In fact, the Section promoted the first attempt to decentralize international public health in 1925, when it established the Eastern Bureau in Singapore—a city considered to be the crossroads for many epidemics—to cover the region of east Africa, Asia, and Australasia. Between 1921 and 1939 the Section's medical director was Ludwik Rajchman of Poland (1881–1965), a leader in European and world health during the two World Wars who traveled widely, including to China and Japan, and drew attention to new concerns on the public health agenda, such as nutrition. 13

But neither of these two organizations—the Paris Office and the League of Nations' Hygiene Section—won the unanimous or sustained support of the countries of the Americas. The United States, for example, did not become a member of the League initially, although it later sent representatives to the Hygiene Section because, during one of its isolationist periods, the U.S. Congress rejected President Wilson's proposal to join the new international organization. There was little or nothing Wilson, who left office in early 1921, could do. For its part, the French Government wanted to keep the Paris Office and ignored requests from Geneva that it merge with the Hygiene Section. Both the United States and France maintained and encouraged others to maintain—their affiliation with the Paris Office.

Many Latin American countries were ambivalent toward both organizations. Cuba, for example, which kept its affiliation with both, organized meetings with members of the Hygiene Section and received its representatives.14 Likewise, noted Brazilian scientist Carlos Chagas was appointed to and performed executive duties in the Section. Gregorio Aráos Flórez of Argentina, a member of the Pan American Sanitary Bureau, was also a delegate to the Paris Office and the League's Hygiene Section (where he eventually became Vice President). For its part, the League organized some activities in Latin America, such as visits of European doctors, a project to reform the health system in Bolivia, and joint actions for the protection of child health. However, starting in the 1930s, the influence, prestige, personnel, and resources of the League of Nations—including its Hygiene Section—began to decline, in large measure as a result of the social and political upheaval in Europe. During the difficult years of World War II, both organizations languished.

In the Americas, the perception that an international health organization was needed emerged in the late nineteenth century. The meeting that marks the beginning of interest in an institution of this kind was the Fifth International Sanitary Conference held in Washington, D.C., in 1881 (it was called the Fifth because it was considered to be associated with the meetings that had been organized in Europe). 15 Delegates from Brazil, Haiti, Mexico, Spain, Venezuela, and other countries attended. One of the most prominent delegates was Cuban physician Carlos Finlay, who described his studies of the Aedes aegypti mosquito, which transmits yellow fever. Unfortunately, the scientific value of the discovery was undervalued, and this knowledge was not applied for approximately 20 years.

Events were also organized in Latin America during this period, generally by agreement of two, three, and even four countries. Noteworthy among these is a series of meetings on health in which Argentina, Brazil, and Uruguay participated. At the first of these meetings, held in Montevideo in 1873, an attempt was made to standardize the regulations for quarantines and disinfections of the ships coming from ports where cholera, yellow fever, and bubonic plague were spreading. The first agreement among these countries dates

back to 1887; others were signed in 1904 and 1914, with the participation of Paraguay.<sup>17</sup> The first article of the 1904 agreement summarized the intent of many agreements of the time: "Each of the contracting governments agrees to immediately notify the others of the appearance of the first cases of oriental plague [bubonic plague], yellow fever, or Asiatic cholera in its respective territories."<sup>18</sup>

The American Sanitary Congress held in Lima in 1888 with the participation of some Pacific South American countries (Bolivia, Chile, Ecuador, and Peru), included recommendations relative to reciprocal notification of diseases and a draft international agreement. This established general rules for prophylaxis against cholera and yellow fever, as well as for the organization and attributes of lazarettos, quarantines, and disinfections, and the types of questions passengers should be asked. It was also deemed necessary that each country have a central office of health information and that it share its epidemiological information with the other countries.<sup>19</sup>

All these meetings pointed to the limitations of traditional international public health, which was generally fragmented, considered an obstacle to trade, and thus, oftentimes ineffective. Up until the late nineteenth century, with certain noteworthy exceptions, the majority of the ports and cities of the United States, Latin America, and the Caribbean had boards of health whose scope was city~ or province-wide rather than national, and whose nature was ad hoc; i.e., they were active only when an epidemic was anticipated or present. These boards had few economic resources, and the majority of their officials (political and ecclesiastical authorities and physicians) worked in the health field on a part-time basis.20 Another important characteristic was that they established heterogeneous, inconsistent, and counterproductive quarantine measures and cordon sanitaires, which worked to the detriment of the shipping industry and commerce. In the general population, speculation on the origin of epidemics involved everything from the movement of heavenly bodies to earthquakes and, of course, divine retribution imposed on those who had committed moral or

ethical crimes against society. Accordingly, it was believed that the most effective measures were prayer, processions, and even self-flagellation.

Some ports in the southern United States observed a "quarantine season" starting in April of every year, before the summer began. Bursts of gunpowder were fired off to purify the air, and steaming pots of sulfur were lit in the belief that something in the air had become corrupted. A mercury derivative was also used to fumigate and disinfect, indiscriminately, both merchandise and passengers' personal belongings. In other instances, ships arriving from ports marked by the stigma of epidemics were held for several days, the cargo was kept in the holds, and the passengers were isolated. These measures were generally annoying, useless, and even harmful.<sup>21</sup>

The measures failed to prevent the outbreak of epidemics, seriously affected trade, and led to shortages of supplies and higher prices for basic necessities. On several occasions, the announcement of a quarantine was considered more economically harmful than the epidemic itself. Especially sensitive were cities such as New Orleans (which received merchandise and temporary workers from different regions of Mexico), Veracruz (associated with Havana through heavy maritime traffic), towns along the banks of the Mississippi River, and U.S. ports such as Mobile, Pensacola, and Savannah.<sup>22</sup> In the United States, the yellow fever epidemic of 1878 was remembered with bitterness: the suspension of traffic and trade was almost total, the death rate was high, and the suffering was vast. The disease affected 132 localities, the death toll was estimated to be more than 15,000, and the economic losses came to approximately US\$ 100 million.<sup>23</sup> During those years, in the southern part of the Americas, specifically in Rio de Janeiro and Buenos Aires, yel~ low fever caused disastrous experiences that created panic and led to drastic, albeit poorly coordinated, decisions and restrictions with respect to maritime commerce.24

Despite its quarantines, New Orleans was ravaged several times by yellow fever, which was thought to have come from the Caribbean or Mexico. The antepenultimate epidemic, in 1897 (the last occurred in 1905) left 298 dead and 1,900 ill. These were alarming numbers for a city with a population of 285,000. Equally or more serious was the panic generated in the rest of a country that had suffered severe epidemics of yellow fever in cities as far north as Pennsylvania and New York. The epidemic of 1897, not necessarily one of the most serious of the second half of the nineteenth century, extended to nine states and 42 localities. Similar epidemic outbreaks hit other parts of Louisiana and Mississippi in 1898 and, a year later, these two states, as well as Florida, would join the ranks of those ravaged by yellow fever.<sup>25</sup>

Fear of the arrival of epidemics from abroad went hand in hand with fear of immigration. In the Americas, the number of immigrants from Europe and Asia increased dramatically in the late nineteenth and early twentieth centuries. In the 10 years between 1882 and 1891, five million immigrants entered the United States, a significant number for a nation with a population of slightly more than 60 million. In 1891 alone, a half million people arrived in that country,26 and the fear that foreigners would bring unknown diseases was particularly strong. That was reflected in the declarations of the U.S. Commissioner General of Immigration, who said, a few years after the 1897 yellow fever epidemic that devastated New Orleans, that he should not have allowed the country to become the "hospital . . . of all the nations of the world."27

Fear, often baseless, led to doctors playing a prominent role in the ports where immigrants arrived, physically examining them, as on Ellis Island, just off Manhattan in New York. But, while in the United States the fear of contagion was probably greater than anywhere else, other countries of the Americas—such as Argentina, Brazil, Chile, Cuba, and Peru—also feared that foreigners would bring disease. So these nations, too, established medical posts in the ports to examine immigrants who arrived by ship,<sup>28</sup> and those on whom the most suspicion fell were the third-class passengers. Argentina received more immigrants than any other Latin American country. Two indicators were that, between 1881 and 1935, almost three-and-a-half

million immigrants reached its shores, and that, in 1914, half of the residents of Buenos Aires had been born outside Argentina.<sup>29</sup>

There was fear that the poor immigrants would introduce or exacerbate disease outbreaks such as smallpox, syphilis, tuberculosis, leprosy, and "idiocy" or other "mental illnesses." Trachoma (an eye condition) was especially feared because it was endemic in Italy, from where many of the immigrants came. The racist and social connotations of the medical examination—which did not stop an astonishing number of immigrants from all parts of the world from coming to the Americas—were manifested, in some cases, by attempts to prohibit or restrict the entry of Asian immigrants.<sup>31</sup>

The fear of epidemics and diseases the immigrants might bring contributed to doubts about traditional maritime public health, which began to be perceived as a set of arbitrary, disordered, authoritarian measures, and as the source of mutual recrimination and rancor among states and nations. These doubts were not limited to officialdom. The perception that maritime public health was irrational led to a common outcome in the face of every authoritarian regulation: the sharpening of the public's ability to circumvent it. Unauthorized voyages, ship captains who denied having ill passengers on board, the creation of hiding places for merchandise and travelers in train cars and all types of vessels, and local authorities and merchants who tried to conceal the first signs of epi~ demic outbreaks and to issue the regulations that best served their own interests, were, in and of themselves, an epidemic.

As a result of the foregoing, maritime public health was inconsistent. For example, during the summer, the state of Florida would admit only passengers who were "immune" to yellow fever. This was proven with some document attesting to the person's having survived the fever, since at the time this measure was believed to be sufficient. New Orleans authorities, on the other hand, required nothing from incoming passengers. However, during epidemics, "miniature armies" sprang up around that city and imposed "shotgun quarantines," so called because of the self-appointed

impromptu guards, armed to the teeth with old carbines and Winchester rifles.<sup>32</sup> An article in *The New York Times* described the situation and bemoaned all of the above:

At no time has the yellow fever been one-tenth as disastrous as the quarantines.... Near Jackson, Missouri, the natives burned a bridge because the railroad was reluctant to obey the demands of the shotgun quarantine officials. Near Lake Charles [Louisiana], a railroad bridge on the Southern Pacific line was destroyed for a similar reason.... One town refused to receive a shipment of bar iron [from New Orleans], fearing that germs were hidden between the molecules of iron.<sup>33</sup>

The erosion of traditional maritime public health was accompanied by a feeling that, thanks to the speed of transportation, the distance between the major ports and cities of the Americas had decreased. Havana, just a three-day voyage from New Orleans, and Rio de Janeiro, which was a little farther away but not too distant, suffered from the stigma of being considered two of the surest hotbeds of yellow fever, which periodically lashed the southern United States. The U.S. Surgeon General (the highest-ranking national public health official) told the Secretary of State that, between 1800 and 1894, there had been just seven years in which yellow fever, mainly from Cuba, had not occurred in that country. Based on that information, the Secretary sent a letter to the Ambassador of the Spanish Empire (Cuba was still a colony) notifying him that, sooner or later, Spain or other nations would have to do something about the situation.34 The chairman of the Board of Health of New Orleans had his own concerns about the fever; a letter he wrote in the late nineteenth century revealed this fear: "We are surrounded by yellow fever. Every vessel leaving Veracruz, Havana, or Rio de Janeiro is more or less infected."35 Veracruz was also feared, since, in the 1890s, serious yellow fever epidemics left many dead: 259 in 1892, 209 in 1894, and 670 in 1899.36

Spanish maritime public health, in force in Cuba at the end of the nineteenth century, was an example of inefficiency, contradiction, and archaic scientific assumptions. If there were yellow fever victims on board, the ships had to fly a yellow

flag on the main mast—a measure which was not strictly complied with. Port routine included a request that the crews lean over the side so the health inspector could look at their faces. The inspector's weapons included ventilating cargo decks on the assumption that the closed air of the holds contained miasmas—defined as effluvia from decomposing organic matter—that produced disease. Also, the port medical officer used stigmatizing terms such as "lazarettos" (isolation hospitals) and "dirty" for the suspicious ships.37 The Mariel lazaretto, near Havana, and many others in Latin America, became a symbol feared by the population due to the arbitrary measures employed and the segregation with which they were managed.

Irrational measures for quarantining and isolating passengers, crews, and merchandise affected land and maritime commerce. In the opinion of one Mexican official, the absurd and humiliating measures imposed by the U.S. state of Texas against the merchandise and passengers arriving on Mexican trains ended up "nullifying the traffic;" in other words, they stopped it.<sup>38</sup> This caused Mexico to call attention to a terrible injustice: local health provisions were taking precedence over those of the larger governments and could paralyze an entire nation's trade.

# THE RISE OF EXPORT ECONOMIES AND THE INSTITUTIONALIZATION OF PAN AMERICANISM

One of the principal triggers for the demise of conventional maritime public health was the fact that it was out of sync with new and growing economic interests. A fundamental ingredient of the old public health's loss of prestige—and of the context in which new organizations such as PAHO emerged—was the extraordinary growth of maritime commerce, traffic, immigration, and international business in the late nineteenth century. This growth was due, in part, to steamships and railroads becoming widespread. The need to protect the ports, investments, plantations, mines, and travelers participating in this commerce, as well

as the fear of reintroduction into the United States, from Latin America and the Caribbean, of diseases that were barely under control in that country, were strong motives for redesigning international public health in the Americas.

In the late nineteenth century the United States exported cotton and grains, as well as machinery, refined petroleum, and manufactured products. Although the moment of greatest U.S. economic dominance varied in each Latin American country, it was particularly visible starting in the late nineteenth century in Central America, the Caribbean, and along much of South America's Pacific Coast. The fruit trade between the United States, the Caribbean, and Central America provided the basis for a significant growth in inter-American commerce during the late nineteenth and early twentieth centuries. It was so important that documents of the time called localities such as Puerto Limón in Costa Rica and Bocas del Toro in Colombia (now in Panama) "fruit ports."

A symbol of this growth was the formation of one of the first large corporations to conduct business in the region: the United Fruit Company of Boston. The company had plantations and railroads in Cuba, Jamaica, Puerto Rico, Central America, and Colombia, and a virtual monopoly on the trade in bananas entering the United States.<sup>39</sup> Indicative of the importance of this trade was a fundamental innovation in the diet of the North American working classes: the introduction of fruit, especially the banana. What is now an everyday dessert or snack was then a flavorful, affordable novelty, so widely available it began to be called "the poor man's bread."

It is easy to imagine how traditional quarantines could ruin this trade, and to understand the antipathy toward them: ships' holds filled with rotten, mashed fruit. Repulsion, fear, and suspicion that the stench of decomposing organic material was the origin of infectious disease were encouraged by the medical ideas of the time.

The economic interests that linked the countries of the Americas and the Caribbean in the early twentieth century were also manifested in the extraordinary development of maritime transport. The ships of the Pacific Coast Steamship Company crossed the Gulf of California and arrived at Mazatlán in Mexico. They brought machinery and took on minerals, furs, coffee, vegetables, and live turtles. For their part, the ships of the American-Hawaiian Steamship Company left New York, sailed around Cape Horn, and, after a few stopovers, including San Francisco, dropped anchor in Honolulu. The vessels of the Pacific Mail Steam~ ship Company called at 14 ports in both Mexico and Central America en route to Panama, carrying more passengers than any other company. It was inconvenient for these companies to have to comply with disparate and incongruous maritime public health requirements, which could include the presentation of as many as 25 different health documents, depending on the country visited.<sup>40</sup>

In South America, the growth of maritime commerce was no less spectacular. From the port of Valparaíso, Chile's South American Steamship Company managed eight ships that traveled abroad with a total of 23,509 tons of merchandise and 90 crew members each. Of concern to some was the growing European presence in this commerce, as in the case of Kosmos, a German company with 46 steamships active in South America.<sup>41</sup> This concern was due not just to the commercial competition, but also to the fact that this and other foreign companies had their own maritime public health rules.

Another major component of maritime commerce and the reformulation of inter-American public health came from the south. In the early twentieth century, the Latin American and Caribbean countries experienced an extraordinary upsurge in their economies emanating from the export of raw materials, especially agricultural and animal products, although minerals were also in demand. Argentine meat, Brazilian coffee, Cuban sugar, Mexican henequen, Bolivian silver, and Chilean copper, just to mention a few examples, became merchandise that was valued almost everywhere in the world. This economic process had some precedents during the nineteenth century, at least for a good part of South America. But, according to some historians, it was with the growth of exports

during the late nineteenth century that the need emerged to overhaul economic structures remaining from the colonial period.<sup>42</sup>

This transformation was accompanied by the consolidation of commercial elites, big landowners, and exporters. These oligarchies, with their aristocratic lifestyles and a moderate liberal ideology, sought to modernize their countries in accordance with European patterns, while at the same time preserving their hierarchical privileges and the social order. Often supported by conservative militaries, they sought to impose their political authority, which in some cases was nearly synonymous with that of the State, and ensure the dominance of the capital cities over other regions where local power had disintegrated, was fragmented, or was disputed by caudillos. Improving maritime commerce and health was part of this process of modernization and centralization of political life.

The development of export economies, the consolidation of a ruling commercial elite class, and the emergence of Latin American nation-states meant not only that these countries had more opportunities to buy manufactured products from abroad and receive foreign investors, but also the emergence of more consistent regional foreign policies. During the first decades of the twentieth century, these policies were marked by a change: Latin America and the Caribbean passed from British economic dominance and fell under the powerful sphere of economic and political influence of the United States, which, on more than one occasion, translated into a U.S. military presence as well. 43 Starting with the First World War (1914–1918), U.S. economic investment and political influence prevailed.

There was an important difference between industrialized Europe, which held colonies well into the twentieth century, and the early twentieth century United States. The latter could not, because of its tradition and political system, call itself an empire, despite the fact that, in economic terms, that is what, in essence, it was. The United States' imperialist expansion took a different approach from that of the European powers, which gener-

ally displayed pride in owning colonies and naming viceroys in various parts of the world. In the case of the United States, imperialism entailed a geopolitical expansion marked by periodic military interventions, the persuasion of local politicians through use of the so-called "dollar diplomacy," and the achievement of lasting economic influence rather than direct political control. This influence was based on a world economic order in which the Latin American countries were perceived as producers of raw materials. At the same time, it was distinguished by an ambivalence between the dissemination and restriction of a democratic political model. This meant support for concessions to and coexistence and agreements with dictators and military regimes.

This political process was highly influential in the redefinition of inter-American relations. A response to the tensions and the imperatives resulting from the economic dominance of the late nine~ teenth century was the institutionalization of Pan Americanism. At that time, this was, above all, part of the foreign policy promulgated by the United States Government, although its remote antecedents can be traced to the postulates of Simón Bolívar and the independence of the majority of the American republics in the early nineteenth century. In 1825, Bolívar organized an inter-American meeting in Panama attended by a select group of representatives; similar gatherings took place in 1847 and 1864. At almost the same time, the ideas of U.S. President James Monroe (1758– 1831), which would be incorporated into the Monroe Doctrine (1823), served as a kind of warning to the European powers to avoid direct or indirect intervention in the Americas and inter-American affairs.

In the late 1880s, the dynamic U.S. Secretary of State, James G. Blaine (who held the office from 1889 to 1892 under President Benjamin Harrison), promoted the establishment of an entity to ensure the political and commercial stability of the Americas through regional solidarity and cooperation. Pan Americanism was then defined in terms of opposition to isolationism, which had marked U.S. foreign policy, and "Latin Americanism," which prevailed in the countries south of the Rio Grande.

To Blaine, peaceful relations among the countries, diplomatic mediation of disputes, the reduction of European influence in the Americas, and increased U.S. exportation should be a single common objective.<sup>44</sup> Subsequent U.S. administrations, especially those of Presidents William McKinley (1897–1901) and Theodore Roosevelt (1901–1909), promoted Pan Americanism, despite the fact that there were instances of direct U.S. involvement in the internal affairs of several Latin American and Caribbean countries.

During this time, criticisms of Pan Americanism also emerged. According to its detractors, the concept assumed the fiction of a community of interests among countries of unequal economic and political strength. Furthermore, to some, it was a way of disguising an imperialism more aggressive than that of the nineteenth century European powers. The Roosevelt Corollary (1904) to the Monroe Doctrine and caricatures from the period of President Roosevelt carrying a big stick to beat or frighten the governments of various Latin American and Caribbean countries into submission served to solidify this argument. Cuban writer José Martí was one of the most forthright critics of the concealment of U.S. ambitions which the institutionalization of Pan Americanism could represent. There was also criticism of Pan American~ ism because, according to several influential men of literature of the day—such as Rubén Darío and José Enrique Rodó—there were essential differences between Latin American and Anglo-Saxon culture, sensitivities, and spirituality, the Anglo-Saxon ones being marked by materialism and Puritanism.45 While this debate has not been fully resolved to this day, it was noteworthy that, despite the real or perceived differences, an attempt was made to establish a common inter-American system in the late nineteenth century.

A decisive step in the institutionalization of Pan Americanism took place during the First International Conference of American States, held in Washington, D.C., from 2 October 1889 to 19 April 1890. The meeting was attended by representatives from Mexico, Central and South America, Haiti, the Dominican Republic, and the "Empire of Brazil." (Despite the importance of

the event, Cuban representatives did not attend because that country was still part of the Spanish Empire.) In this meeting, 18 nations resolved to found the International Union of American Republics, whose permanent secretariat would be called the Commercial Bureau of the American Republics. This entity—whose Bureau would be renamed the Pan American Union at the Fourth International Conference of American States held in Buenos Aires, Argentina, in 1910—set up head~ quarters in Washington, D.C., with the diplomatic representatives from the Americas who lived in that city, acquired a small but stable bureaucracy, and was closely linked to public health in the Americas. In its early days it compiled, validated, and distributed information of commercial value. Over the years, its responsibilities and functions grew significantly.46

There was, at least on paper and in the thinking of some leaders of Pan Americanism, the reasonable hope that countries united by geography and history could respect one another's sovereignty, share the benefits of trade and technology, and cooperate through stable, legitimate political institutions. However, there was a gap in the proposals for both Pan Americanism and "Latin Americanism," a concept prevalent mainly in South America. To a certain extent, neither included the Caribbean as an autonomous participant. Some countries of that region, such as Haiti, had no direct historical ties to the Iberian Peninsula, or were colonial possessions of non-Iberian European empires, such as Jamaica or the Guianas. The role of the Caribbean in Pan American or Latin American projects would remain unresolved, despite the fact that countries such as Haiti participated actively in international organizations, including those related to health. Thus, making Pan Americanism a reality in the Caribbean or Central America was a lengthier process than in other parts of the continent.

Of special importance to the history of public health was the confrontation, lasting approximately six months, known as the Spanish-American War of 1898, which took place in Cuba and was a dispute over the liberation of the Spanish Empire's last colonial possessions.<sup>47</sup> After the war, by means

of the Treaty of Paris, the United States gained direct control over Cuba, Guam, Puerto Rico, and the Philippines. It was then that the United States began permanently stationing troops in areas that were considered tropical and were devastated by a group of feared diseases.

Drawing medical lessons from the military campaign in Cuba, General George M. Sternberg would say that public health was fundamental, because more U.S. soldiers had died from diseases caused by the inadequate sanitary conditions than from the enemy's bullets. Consequently, the Spanish-American War was the beginning of United States medical, sanitary, and scientific involvement in territories that were not its own, in connection with especially devastating diseases which were then known as tropical.<sup>48</sup> Later on in this chapter we will return to the importance of the medical work of U.S. military personnel in Cuba and Cuban physicians and scientists in controlling yellow fever.

#### THE ERA OF WALTER WYMAN

An essential player in the overhaul of international public health was the first Director of the Pan American Sanitary Bureau, Walter Wyman (1848–1911). He studied medicine in his native city of Saint Louis, Missouri, and, starting in 1876, was an official of an institution which, partly due to its military nature, had the power to intervene directly in the public health issues of all of the country's 50 states: the U.S. Marine Hospital Service. He gradually earned prestige for his painstaking attention to detail and devotion to duty, and he made his work not just an occupation but a passion. According to one historian, his strength of conviction could be summed up in one word: "persuasion."<sup>49</sup>

His meticulousness even led him to develop manuals on how to respond to correspondence and on the Service employees' uniforms, the latter being considered necessary to promote discipline and create an esprit de corps among the staff of an important national entity. He progressed in his career and performed various duties, such as di-

recting the medical examination of immigrants arriving at Ellis Island, New York, and serving at the U.S. public health stations in Cuba, Puerto Rico, and the Philippines. Wyman was promoted to Chief of the Quarantine Division with an office in Washington, D.C. A unique personal quality worth mentioning is that he was not a racist (at least not outwardly), at a time when racism was accepted and practiced by the majority of those in power. In a letter to Marine Hospital Service employees, Wyman said that quarantines should not discriminate against people who came from areas where there were infectious diseases because of the color of their skin: "special restrictions should be applied to all persons ... and should not discriminate for or against any particular race or people."50

In 1891, Wyman was appointed Supervising Surgeon General (in 1902 this title would become simply Surgeon General) of the Marine Hospital Service, the highest-ranking office of its kind at that time. In that role he contributed decisively to the reorientation of international public health. One of the most important measures he promoted was the National Quarantine Act of 1893, which entrusted his office with the authority to intervene in the maritime public health affairs of any state, especially to standardize quarantine regulations. He assumed more power in 1902, when he persuaded the U.S. Congress to approve a law to "increase the efficiency of and change the name of the Marine Hospital Service" to the Public Health and Marine-Hospital Service.51

Along with the new name came a stable bureaucracy. A pay scale considered decent for the time was established (Wyman started out earning US\$ 5,000 a year and the officials under him a little less). Likewise, the term "Supervising" which in Wyman's title served to restrict the Service's jurisdiction over state public health authorities, was formally eliminated (and, beginning in 1912, this office was called simply the U.S. Public Health Service). When Wyman took charge of this organization in 1891, there were 54 inspectors and a budget of US\$ 600,000. Twenty years later, in 1911, he had overseen the expansion to a staff of 135 inspectors and a budget of US\$ 1.75 million. <sup>52</sup>

Wyman's first contact with Latin America was in 1896, when he attended the Second Pan American Scientific Congress in Mexico City. At that meeting he presented a paper on yellow fever and "the international measures that should be adopted for its eradication."<sup>53</sup> In the years that followed, his role in U.S. organizations would grow, as witnessed by the fact that, in 1902, he was elected President of the American Public Health Association and, two years later, President of the Association of Military Surgeons.

The lives of U.S. civil servants were sometimes filled with sacrifice: some lived in cities far from the United States, such as El Callao in Peru, or on islands in the Gulf of Mexico, in relative isolation, as described in the following late-nineteenth century excerpt. With a humorous twist at the end, it speaks of the solitary work of an official at the Ship Island public health station, eight miles from Biloxi, Mississippi, responsible for surveillance of the entire Gulf of Mexico. During times of quarantine, mail came just once a month to Ship Island:

Insects were a terrific pest, heat was oppressive at times . . . no ice was available, water was obtained from rain collected at cisterns. . . . The Supervising Surgeon General's Office [wrote] that it was possible to supply the station with a typewriter to facilitate and expedite reports and correspondence and requested information as to the kind of typewriter desired. In those days a typewriter meant either a machine with which to do typing or the operator of the machine. [The officer] is said to have replied in due formality "If by typewriter is meant the machine, I do not know; I am not familiar with them. If the operator of the machine is meant, then I would prefer a blonde." 54

It is interesting to note that the Service Wyman directed was part of the U.S. Department of the Treasury, since its activities were considered to be closely linked to commerce. Thanks to that, he was able to discourage uncoordinated state health regulations and ensure Federal regulation and intervention with the states, which often sought to evade the national public health regulations that were considered inappropriate to their commercial interests.<sup>55</sup> This process took longer than

Wyman had expected. For example, it was only in 1921 that the U.S. Federal Government bought the last local quarantine stations operated by the urban authorities of New York City and Baltimore.<sup>56</sup>

Wyman was part of a generation of intellectuals, politicians, and other public officials who lived during the so-called "Progressive Era," marked by the spectacular expansion of industry and the development of science, technology, and administrative methods, and by unflagging efforts to apply these innovations to business and society.<sup>57</sup> The political, financial, and scientific leaders of the period were convinced that human ability and knowledge could dominate nature, rationally direct commerce, and improve public health. It was believed that progressively applied reforms were the best solution to the abuses of big business and the extremes of anarchist and socialist agendas. Everything seemed to depend upon a painstaking study of the challenges at hand and upon the energy and rationality applied to solving them. International public health was not alien to this process.

Wyman consolidated two ideas that were starting to become widespread in some health and commercial institutions: first, the idea that it was possible to combine the protection of public health interests with minimal negative impact on commercial interests; and second, that the best quarantine was the one that began in the ports of shipment. In other words, the problem of maritime public health was not a lack of strictness, but the need for clear, consistent reform, integrated with the gamut of other port activities. In 1898 he gave a speech at a meeting of business representatives at which he explained the urgent need to rebuild relations between trade and quarantines on the basis of science, the common good, and solidarity with the patients.<sup>58</sup> Wyman was aware that a country's public health could not be reduced to what happened on the ships, in the ports, or in the big cities. But he thought it was more practical to limit international public health work to these locations, since they were the points of contact among countries, and because they could become an example for other cities.<sup>59</sup>

The ports' problems included not just the sanitary conditions in the warehouses, but also the difficult living situations of the sailors, port workers, and fishermen. The sailors and fishermen lived in poor conditions, their work was unsteady, and during off-season, they needed to find other sources of income. The port workers had to load hazardous merchandise such as coal, which gave off asphyxiating gases; petroleum, which could trigger a fire; fertilizers such as guano, which damaged the skin; and agricultural products, which decayed easily. There was also the stereotypical notion that when the crews spent a few days in a Latin American port they would return to the ship with some venereal disease.

In the late nineteenth century, the Service Wyman directed had employees living in five localities in Cuba, two in Puerto Rico, two in Mexico, six in Central America, one in Colombia, and two in Brazil, as well as U.S. medical inspectors located in other parts of the world, such as Calcutta and Naples.60 It was the employees' job to report on the sanitary conditions of the vessels, individuals, and merchandise departing for the United States. In addition, they used launches to disinfect the largest ships, carefully examined passengers and crews, and issued them health certificates. They also signed the health documents for the ships' captains. In this way they avoided the detention and imposition of heavy fines in the U.S. ports fines that could reach US\$ 5,000 for ships that failed to present the requisite documents. 61 In 1907, the U.S. Public Health and Marine Hospital Service had medical personnel in 10 of the principal Central and South American fruitshipping ports.62

It is important to point out that, despite the progressive spread of these measures, U.S. maritime public health was not standardized. It was not just the Federal authorities who were involved in disinfection in the ports of shipment. This activity was sometimes engaged in by the states, which wanted as much autonomy as possible from the central government to set down their own commercial regulations. For example, beginning in 1890, the New Orleans Board of Health posted medical inspectors in eight Central American ports during the fruit-exporting season.

In a parallel process, several Latin American countries modernized their maritime public health regulations and installations and aspired to have control over what crossed or could cross their borders. Cuba, for example, to ensure the sanitary condition of ports of shipment and fearing the introduction of yellow fever, stationed doctors in Tampa, Florida, and in Veracruz and Tampico, Mexico, where they supervised disinfections and issued health documents. In the early nineteenth century, Mexico even had health representatives in Hong Kong to keep an eye on the Chinese and Japanese immigrants headed for Mexico and to cable reports of any danger. In this instance, the fear was bubonic plague.<sup>63</sup>

These measures were supplemented by the effort to establish a regular and frank exchange of health information among the countries. This meant reporting immediately to neighboring countries any epidemic outbreak—in other words, preventing any concealment of the seriousness of a situation, a practice to which the local political authorities had traditionally resorted. The initiative came from many directions. For example, the noted Mexican public health leader Eduardo Licéaga (1839–1920), who was, for many years, President of his country's Consejo Superior de Salubridad (Superior Council of Health), reported annually to U.S. specialists on the yellow fever situation in Mexico and on the control measures taken. His mechanism for accomplishing this was the publication of annual reports in the journal of the American Public Health Association, whose meetings he had been attending since 1895.64

The scientific, economic, and political changes were fueled by the increase in the number, authority, functions, and diversity of health professionals in Latin America. They were influenced by the vestiges of positivist ideology that prevailed among the Latin American intellectual and political elite in the second half of the nineteenth century. According to this ideology, while it was true that the challenges of nature in the Region of the Americas were formidable, science could conquer them and start the countries down the road to prosperity and well-being. That meant studying the autochthonous diseases, controlling the major

epidemics, and exploiting the existing natural wealth, especially in the countries' interior regions. Public health measures and medicine were considered essential tools for strengthening national populations. At a time when fertility was high, it was thought that population growth would occur through the prevention of mortality, especially infant mortality, from preventable infectious diseases. These efforts were also part of an ideology of political modernization, which assumed that the social changes would be progressive and controlled by an educated elite consisting of politicians, engineers, and physicians. For some countries that embraced this ideology, such as Brazil, which incorporated the positivist slogan "order and progress" into its flag, the social changes would be supported by the mass arrival of European immigrants who would bring with them a superior culture and "race."

The medical changes in Latin American were closely linked to the growing importance of the cities, especially the capital cities. These were not only the centers of commerce, finance, and policy decisions; they were also becoming the locus of a significant portion of the national population. The growth of the Latin American cities generated public health needs which were often met by a new municipal and state bureaucracy, almost always recruited from among physicians. In some capitals, the urban growth was spectacular and much more marked than that of the population of the country as a whole. The population of Buenos Aires, for example, grew from 663,854 in 1895 to one and a half million in 1914, and that of Rio de Janeiro grew from 274,910 in 1872 to 650,000 in 1895. In other cities, the population increase was smaller, but no less significant. Lima, which had slightly more than 100,000 residents in 1876, had 143,000 in 1908. This growth was often disorderly; slums and makeshift housing multiplied, and the sanitary infrastructure was deficient or nonexistent.65

One example of urban renewal that stemmed from this population growth and was partly justified by medical arguments was promoted by the prefect of Rio de Janeiro, Francisco Pereira Passos, inspired by the work of his Parisian counterpart, George Eugene Haussmann (who governed the City of Light during the reign of Napoleon III). In the early twentieth century, Pereira Passos initiated a series of urban reforms known as *bota-abaixo*, consisting of the demolition of colonial buildings and narrow streets in order to decontaminate the atmosphere, prevent overcrowding, and open up gardens and wide avenues.<sup>66</sup>

Some health officials of the Americas, such as Emilio Coni of Argentina (1855–1928), were convinced that they could make significant contributions to the cities. <sup>67</sup> Coni's achievements in Buenos Aires suggest the range of solutions, more complex than the reorganization of maritime public health, tested out by the hygienists of the era. They included the collection and disposal of garbage, the cleaning of sewers, the paving of streets, the ventilation of homes, the creation of a municipal health service, the establishment of school medical examinations, mandatory smallpox vaccination and reporting of infectious diseases, and the publication of a monthly demographic bulletin.

In addition to the above, there were initiatives to order the construction of parks and gardens, oversee the markets and slaughterhouses where animals were killed for human consumption, build new hospitals with spacious interiors, monitor the milk supply, control purity in the manufacture of soaps, conduct vital records collection and population censuses, and even require that barbers wear impeccable white long-sleeved shirts to prevent infections of their clients' scalps. 68 Another important change in the medical practices of countries such as Argentina and Chile was the emergence of a series of services targeted toward immigrant groups, who themselves organized mutual insurance societies, clinics, and hospitals in order to be able to respond with solidarity to their members' health problems.<sup>69</sup>

These innovations enabled the establishment of the first national public health organizations, intended to be permanent and not merely ad hoc, as in the past. Small offices known as "assistant secretariats," "boards," or "health" or "hygiene departments," generally under the control of the Minister of the Interior, appeared in most Latin American countries. While some countries, such as Argentina, Brazil, and Mexico, had had these types of institutions since the second half of the nineteenth century, in many others they were established in tandem with the emergence of inter-American public health. Moreover, in the early twentieth century the first bacteriology laboratories were established. Their responsibilities included scientifically certifying the presence of certain infectious diseases. In addition, the cleanup of the cities was systematized; health statistics and vital records collection and population censuses were regularized; and efforts to make smallpox vaccination mandatory were intensified. And the first steps were taken toward a crucial measure that had been considered intermittently during the nineteenth century: the education and participation of urban communities in health care issues.

Thus, urban life became medicalized or, to use the term employed by many, "hygienic." As Michel Foucault said with respect to European history, many health-related activities, traditionally the responsibility of families—such as childbirth, illness, and death, in addition to nutrition, the disposal of bodies, and even requirements for marriage—began to be regulated by physicians with support from the State.<sup>70</sup>

Many of these physicians were the first to hold positions in the incipient national health organizations that were established in most of the countries. They were not without strong competition from folk doctors, shamans, charlatans, herbalists, spiritualists, midwives, and bonesetters, often of indigenous or foreign descent. The universitytrained professionals projected an image of authority, power, and above all, dominance among the health practitioners, at least in the cities and among the middle and upper classes. These professionals participated actively in urban hygienic renewal, setting up systems to supply drinking water, implementing or expanding sewer systems, and organizing systems for hosing, sweeping, and paving streets.<sup>71</sup>

Many of the young Latin American physicians—who were, in turn, part of the fully emerging ur-

ban middle classes—supported the changes in public health practices. Also, they saw, in science and in becoming part of the state machinery through public office, an opportunity to prove their talent, gain prestige, and develop their careers on the basis of academic and professional merit. That was especially important in a setting which, during much of the nineteenth century, had been dominated by clinics principally catering to the needs of the aristocratic classes, in a closed circle with few opportunities for social advancement. The clinics were characterized, moreover, by the belief that work in the hospital, as opposed to laboratory work, was what was important. The young health professionals became militants of maritime and urban public health, bacteriology, and laboratory medicine.

This new scientific discipline and type of medicine were offshoots of the discoveries of European researchers such as Louis Pasteur of France and Robert Koch of Germany, who identified the microscopic origins of certain infectious diseases, such as cholera and tuberculosis, and developed methods to control them. An important feature of this late nineteenth century scientific development is that it established an institutional and theoretical paradigm for its own replication. Pasteur established, in 1880, an organizational model—the Institute which bears his name—where the development of biological products was combined with research and teaching, which was emulated in various parts of the world, including several Latin American cities.72 Koch, for his part, developed a reliable method, known as the "Koch cycle," for confirming the causality and effect of microorganisms. Around the same time, French military doctor Alphonse Laveran discovered the etiology of malaria, Plasmodium, while Ronald Ross of England and Italian researchers studied the role of the Anopheles mosquito in this disease's transmission.

These scientific discoveries made more effective control of some of the major infectious diseases possible. They also made bacteriology and laboratory medicine fashionable specialties. The promise of bacteriology was that every microorganism that produced an infectious disease could be weakened or killed with the new and wonderful

biological products coming out of the laboratory: serums and vaccines. Later, the study of tropical medicine, another professional discipline that emerged strongly in England, extended Ross's discoveries and explained that several diseases were transmitted by the bites of insects such as fleas and mosquitoes, and that those diseases could be controlled by breaking the chain of transmission; in other words, eliminating the vectors.

The United States and the intellectual, professional, and political elites of other countries of the Americas joined the scientific movement that shook up the teaching and health intervention systems of the time. Not just the universities, but also municipalities and health stations in the ports, installed modern microscopes and bacteriology laboratories and hired European experts, certain that they would be essential to the control of major epidemics.<sup>73</sup> Their mission was to determine if the germs that caused the disease were hidden in the blood or sputum of patients, whether or not they were manifesting clinical symptoms, and to produce biological products (such as the smallpox vaccine) and control the quality of medicinal, biological, and even food products.<sup>74</sup>

In the population at large and in the urban populations, the new disciplines produced what one Nicaraguan physician called "microphobia;" i.e., a fear of or repulsion toward the invisible biological enemies that could only be made vulnerable with the help of a medical expert.75 All this helped to discredit the "miasmatic" explanations of epidemics, which attributed them to decomposing organic matter, and the erroneous ideas with respect to the famous fomites (the term that summarized the ideas about contagion held by the sixteenth century Italian physician, Fracastoro). The change was described succinctly in the words of Mexican public health leader Eduardo Licéaga: "fear as a health advisor begins to be replaced by reason."76 The first major testing ground for many of the ideas just discussed was the control of an ancient disease that was present in many cities of the Americas.

#### THE CONTROL OF URBAN YELLOW FEVER

Of the many scientific studies conducted in the early twentieth century, one of the most influential in the Americas looked at the transmission of yellow fever. Despite the fact that Cuban physician Carlos Finlay had identified the mosquito that transmitted the fever (Aedes aegypti, then known as Stegomyia) in the 1880s, this discovery was not applied until after the confirmatory work done in Havana by the Fourth American Commission (so called because on three prior occasions, U.S. mili~ tary personnel had tried unsuccessfully to solve the puzzle of yellow fever's origin). The Commission, chaired by military physician Walter Reed, also included Jesse Lazear of the United States (who died of yellow fever in Havana while research was being conducted) and Aristides Agramonte of Cuba, among others, and concern over the rapid transmission of tropical diseases led, in part, to the U.S. military participation in the Spanish-American War.77

Reed's work was based on the tiny eggs of the Aedes mosquito provided to him by Finlay. Also instrumental in his study was the previous work by Ross, who had shown how the malaria parasite developed in a specific type of mosquito whose bite transmitted the disease. The results of this experiment were first presented at a session of the annual meeting of the American Public Health Association, held in October 1900 in Indianapolis, Indiana.78 One of Reed's conclusions, extremely important at that time, was that the fever could not be transmitted by fomites; that is, by a patient's personal belongings, clothing, or hair.<sup>79</sup> To prove it, the Commission shut seven people who were not immune in an unventilated room, through which no mosquitoes or sunlight could enter, in Havana's Las Ánimas Hospital for 21 days, along with clothing and bedclothes stained with the bloody vomit, urine, and feces of yellow fever patients; filthy garments that they were asked to then place on their bodies. At the conclusion of the experiment, no one had fallen ill. And so it was that stories such as the one told at the beginning of this book gradually disappeared: doctors

succeeded in convincing people that yellow fever could not be transmitted through a patient's personal belongings or a dead person's hair. Rather, the generalized belief emerged that something effective could be done to counteract the true causes of the disease: mosquitoes and microorganisms.

An essential piece of information about the life of the Aedes mosquito was its close proximity to human beings. It was an insect that did not fly very far, avoided pools and wells with cloudy water, and bred in domestic water containers such as barrels, cans, jars, flowerpots, and even baptismal fonts. The female mosquitoes arrived at these after collecting the human blood they needed to raise their offspring. By the final decade of the nineteenth century, Henry Rose Carter (1852–1925) had determined that the incubation period of yellow fever was just seven days. In other words, after the seventh day an asymptomatic carrier could not develop the fever and, therefore, detention at the stations should not be for more than that amount of time.80 This was a basic change, because up until then, many health authorities believed that the incubation period could be up to 14 days and that the safest approach was to detain ships and passengers for 40 (quaranta) days, or, literally, a quarantine. These findings also discredited a whole series of "miracle" remedies and cures that had been tested in different parts of the Americas and which, in general, had little or no effect against the fever.

These methods included those tried by Domingo Freire in Rio de Janeiro in the late nineteenth century, targeting *Cryptococcus xanthogenicus* as the causative agent and recommending injections of what turned out to be aspirin. Also, in 1885 in Mexico, Manuel Carmona y Valle found a microorganism in the urine of patients in Veracruz, another discovery that, in the end, turned out to be an erroneous. George Sternberg of the United States isolated "Bacillus X" during autopsies of some 50 individuals who had died of the fever, another action which in time was added to the list of failures. Another spectacular error was committed by Italian bacteriologist Giuseppe Sanarelli who, working in Montevideo in 1897, isolated the

Bacillus icteroides bacterium, which was thought for several years to be the cause of yellow fever. The errors continued until the 1950s, when Max Theiler of the United States identified the virus that caused the disease.<sup>81</sup>

The discovery of the natural transmission of yellow fever, made by Reed thanks to Finley's prior work, made it possible to develop simpler and less costly ways to fight the disease. The major change was that the work came to be directed toward one clear objective: elimination of urban mosquitoes. Health officials devoted themselves to destroying the adult mosquitoes by fumigation, protecting domestic water containers such as barrels and large earthenware jars to which the insects were drawn, and covering the surface of any pool of water where the larvae might breed with a thin layer of oil.

The first campaign of this type was carried out in Havana in 1901 under the command of William C. Gorgas of the United States (1854–1920), who enjoyed the valuable cooperation of Cuban doctors, including Finlay. Thanks to this work, the 1,300 cases and 322 deaths from yellow fever recorded in 1900 (prior to implementation of the campaign), dropped to 18 cases the first year and zero in 1902. Havana, which had not had a summer without yellow fever in the past 100 years, was free of the disease, at least for a time.

A decisive factor in the control of yellow fever in Havana was the training and prestige enjoyed by physicians, researchers, and local officials. Since the nineteenth century, several Cuban doctors had studied medicine in the best schools of the United States and Europe. These included Carlos Finlay (1833–1915), Juan B. Guiteras (1852–1925), and Arístides Agramonte (1868–1931). Finlay, trained in Europe and at Jefferson Medical College in Philadelphia (where he earned his doctorate in medicine in 1855), was Cuba's national director of public health from 1902 to 1907 and encouraged the establishment of a professional group that set up the first Secretariat of Health in any Latin American country. This Secretariat was a national service whose director did not report to any other ministry. In 1909, the continuity of this professional group was reaffirmed when Guiteras became the director of his country's public health services, a position he held for the next 11 years.<sup>83</sup>

Guiteras earned his medical degree at the University of Pennsylvania in 1873, worked at Philadelphia Hospital, and was an official with the uniformed services component of the U.S. Marine Hospital Service from 1879 to 1889. In that position he was responsible for medical services during several yellow fever epidemics. He was also a professor of pathology at the Medical University of South Carolina in Charleston, and at the University of Pennsylvania. Like many Cuban patriots, encouraged by the promise of his country's independence from Spanish control, Guiteras returned to Cuba for good around 1900. There he held prestigious positions such as Professor of Intertropical Pathology at the University of Havana. In taking responsibility for Cuban public health, both Finlay and Guiteras oversaw an honorable service, governed by technical, not political, criteria.

One example of the achievements of Cuban public health is the printing, in 1905, of 3,000 copies of the encyclopedic Manual de práctica sanitaria (Manual of Health Practices), a compendium of more than 1,000 pages on which 33 authors collaborated and which was aimed at directors of public health, physicians, and government officials. One of its chapters was devoted to maritime public health, an official department directed for years by Hugo Roberts, who applied methods of disinfection, fumigation, and isolation of patients at the Mariel lazaretto with energy, stringency, and insight. At an international meeting held in San Francisco, California, he received an award for his device that trapped rats on ships. Equally important were the 1906 Ordenanzas sanitarias y la organización de juntas locales de salud (Sanitary Ordinances and the Organization of Local Boards of Health), which led to the first Cuban law of this type and to more efficient and centralized public health coordination. The Cuban health organizations also emphasized public relations. By 1905, 38 popular brochures had been published and distributed, in some cases with as many as 50,000 copies. The titles included: Fiebre

amarilla: instrucciones populares para evitar su contagio y propagación (Yellow Fever: Everyman's Instructions for Preventing Its Contagion and Spread) and Higiene de la primera infancia, instrucciones populares, sobre la manera de cuidar a los niños (Early Childhood Hygiene, Everyman's Child Care Instructions).

Similar works, focusing on eliminating the Aedes mosquito and protecting patients from the bite of this vector, were developed a short time later in Rio de Janeiro and São Paulo (Brazil) and Veracruz (Mexico), which were the most important commercial ports in their respective countries.84 One of the best-known battles against yellow fever, which adapted the model used in Havana, was that directed by Dr. Oswaldo Cruz in Rio de Janeiro.85 After doing postgraduate work at the Pasteur Institute in Paris, he returned to his native city, Rio de Janeiro, to engage in the fashionable discipline of bacteriology. In 1900 he founded the Instituto Soroterápico Federal (an institute which would later bear his name) at Manguinhos, a cityowned farm outside Rio, to make anti-plague serum for the Diretoria Geral de Saúde Pública, or federal department of public health. Cruz became Director of this organization, committed to undertaking campaigns against yellow fever, bubonic plague, and smallpox.

In just a few years, using the methods employed by Reed, Gorgas, and the Cubans, Cruz freed Rio de Janeiro from yellow fever—at least temporarily—an achievement for which he would be recognized in his own country and in the world's research centers. According to Cruz, his work had been based on the theory of transmission by the mosquito, "disregarding" ideas about the fever being contracted through objects "contaminated" by a patient. Cruz did not limit himself to imitating the measures used elsewhere, but instead adapted them to a geographical setting that presented complications for public health work, being home to slightly more than 800,000 inhabitants who lived alongside gorges and on mountaintops covered with thick vegetation. Cruz organized a special service, independent of the Diretoria Geral, with 10 assistant medical inspectors, 75 medical students, and approximately 1,000 public health officers. The officers worked on isolating patients, fumigating the houses in which they lived, maintaining surveillance of those without immunity who lived near these homes, and especially, "systematically and continuously" destroying the mosquitoes. This meant not just fumigation to eliminate the adult mosquitoes, the principal method used by Gorgas in Havana, but combining fumigation with the battle against the larvae that bred in domestic water containers.

Cruz was also known because the opposition to his 1904 project, under which smallpox vaccination would be mandatory, coincided with the uprising at the *Praia Vermelha* Military School, which paralyzed the city for more than a week. The government put down the insurrection, called the "vaccine revolt" because the participants were opposed to mandatory smallpox vaccination and an authoritarian regime. The following year, the outbreak of a nationwide smallpox epidemic served to vindicate Cruz's efforts and discredit his critics.

In 1906, when Oswaldo Cruz was named his country's Director of Public Health, the Instituto de Manguinhos was consolidated, and it began to manufacture biological products such as tetanus and diphtheria serums. Cruz also innovatively combined training activities with basic and applied research, a mix inspired by his own experience at the Pasteur Institute. Recognition came in 1907 at the International Congress of Hygiene and Demography in Berlin, where Cruz received a gold medal. Two years later, another member of the Institute, Carlos Chagas, discovered tripanosomiasis americana, a disease which now bears his name (Chagas' disease), identifying the vector responsible for its transmission (Triatoma infestans) and the protozoan parasite that causes it (*Trypanosoma cruzi*).<sup>87</sup>

As the control of yellow fever in Brazil suggests, several public health activities were linked together in practice. Often the public health interventions against mosquitoes were accompanied by the systematic collection of garbage, the provision of drinking water systems, the paving of streets, and general urban cleanup measures. In

Mexico, for example, in 1907, a vigorous campaign reduced the number of yellow fever cases that year to four. That was the first year in which the city of Veracruz, founded in the colonial era, passed a summer without the fever's scourge.<sup>88</sup>

Some years later, the Rockefeller Foundation organized campaigns to fight yellow fever in Brazil; Mexico; Central America; Guayaquil, Ecuador; and on the northern coast of Peru. The campaigns were designed by veterans of the war against this disease, such as Gorgas, Carter, and Guiteras, who traveled the region with the goal of total elimination of the disease. This U.S. foundation, based on the philanthropy of John D. Rockefeller-who had accumulated a considerable fortune in the oil industry—was established in 1913, and one of its main areas of interest was the struggle against certain diseases that humankind had the knowledge to control, such as hookworm, or that were considered a worldwide threat, such as yellow fever. Later, the Foundation helped organize the first health services and educational institutions for the training of doctors and health officials.89 In fact, during the first half of the twentieth century, the Rockefeller Foundation and its powerful International Health Division were practically the only—and highly influential—philanthropic institution targeting international health issues.

New technologies came out of the various studies and activities with respect to yellow fever. The fumigation of houses required special care. It was necessary to seal all the cracks in the doors, windows, and ceilings of the houses where victims or mosquitoes had been found in order to then fumigate the interior. Later, fumigators began covering the terrace roofs and courtyards of the houses near the infected home with canvas to keep mosquitoes from escaping during preparation for fumigation. Finally, control activities came to focus on the river fish that ate mosquito larvae. With this latter system, in the 1920s, it became possible to eliminate coastal urban yellow fever from the Americas. But the disease retained a natural reservoir in Amazonia and rural areas, and would only manifest its ferocity years later.

The scientific discoveries and public health activities against mosquitoes resulted in yellow fever no longer being considered an erratic, unpredictable, and terrifying disease. A 1901 circular sent by Walter Wyman to the medical inspectors of the Marine Hospital Service Wyman directed noted: "Your attention is directed to the importance of insects in the conveyance of disease," in reference to not just yellow fever but also to malaria and bubonic plague.90 The conviction and simplicity of this scientific and public health event can be seen in the subtitle of a 1905 pamphlet written by Wyman: No Mosquitoes, No Yellow Fever. 91 At the same time, health organizations in various other countries began to distribute popular booklets on mosquito control.92

The shipping companies were not left behind. In Chile, the South American Steamship Company installed brass screens on the windows and doors of its ships' cabins to discourage mosquitoes and other insects, and placed a notice inside the cabins recommending that passengers "remove" them because they were thought to carry "many infectious germs."93 No less important was the decision of various commercial vessels to change procedures for the protection of passengers' drinking water. Previously, water had been distributed all over the deck in barrels and tanks. However, following the discovery of water's role in the preservation of mosquito larvae, more rigorous measures were adopted to prevent these types of receptacles from becoming mosquito breeding grounds.

It is worth asking if so much attention to yellow fever in the Americas produced a certain reductionism in those who were fighting it. In other words, did they give short shrift to other diseases that were as, or more, important in terms of morbidity and mortality? One sentence uttered by a president of the Rockefeller Foundation, while referring to another disease, sums up the overspecialization of the time: to fight malaria effectively you have to think like a mosquito. 4 Despite the absence of definitive data, all indications are that other diseases caused more devastation. For example, in the Mexican state of Tamaulipas, with cities, such as Tampico, that were vulnerable to

yellow fever, statistics were developed on the deaths caused among its inhabitants by the major diseases between 1892 and 1901. They showed 461 deaths from yellow fever, 1,244 from small-pox, 2,588 from tuberculosis, and 3,048 from malaria.<sup>95</sup>

While the above is not a national estimate—which, moreover, would have been difficult to produce in those days—these figures suggest that there was a selection of priorities in the relationship between public health and commerce. The diseases whose effects on the normal course of commercial trade were more noticeable, such as yellow fever, simply received more attention. There were also emotional factors associated with yellow fever: since it tended to appear and disappear suddenly, the seeds of panic were permanently sown among the population. The Sanitary Bureau's third Director, Hugh S. Cumming, who had first-hand experience with the disease, would remember in the 1920s that "those of you who have not been in a community where yellow fever was epidemic cannot but faintly imagine the terror inspired by the mystery of its origin and the suddenness of its attack."96 What happened in Mexico in 1903, when 3,848 cases and 1,583 deaths were recorded nationwide, exemplifies this assertion. 97 These figures seem to indicate that yellow fever epidemics—despite the fact that, over time, they did not cause the most deaths—almost always led to important public health changes. Also, health officials of the time were of the opinion that only with diseases transmitted by insects, and to some extent with the diarrheal diseases caused by water contamination, could they achieve conclusive success; they were much less optimistic regarding respiratory diseases (with the exception of diphtheria, for which there was a vaccine).

It is also important to point out that public health campaigns sometimes yielded additional and unanticipated benefits. The fight against the *Aedes* mosquito led to the control of another disease transmitted by this same mosquito: dengue, and to the elimination of the *Anopheles* mosquito, which lived in the gardens and farms of the periurban areas and transmitted malaria. Some health officials of the time, including Gorgas, thought

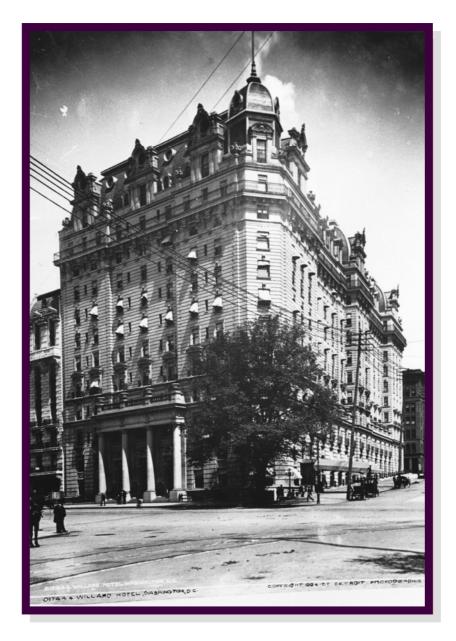
that filth itself was connected with yellow fever's persistence, so the campaigns included improvement of the system for collecting garbage and dead animals, better provision of water and sewage removal, and modernization of building construction. In some cases—and perhaps going a bit overboard—measures were adopted to prohibit spit~ ting in public.98 The public health authorities of El Salvador joined the anti-mosquito crusade, writing, in 1904, the *Instrucciones para precaverse* de la fiebre amarilla y de las fiebres intermitentes o paludismo (Instructions for Taking Precautions against Yellow Fever and Intermittent Fevers or Malaria).99 Thus, other diseases with more complex social and biological causes, such as tuberculosis, malaria, and typhoid fever, were controlled in the major cities.

As we have already noted, in addition to methods for the diagnosis, treatment, and control of yellow fever, there also existed effective measures for combating bubonic plague, cholera, and smallpox. In some cases the origin, the length of the incubation period, and the vectors responsible for transmission were known. It was already established that cholera was the result of the contamination of water with victims' feces. The defense measures consisted of safeguarding water for human consumption, disinfecting latrines, and properly disposing of patients' stools. Also, cholera had a characteristic that made it feared and, perhaps inadvertently, explained its origin: the nauseating odor of the patients' clothing. This stench, in and of itself, was thought to be contagious by those who were ignorant of scientific advances, and this belief was an additional reason to practice hygienic habits. It was these ideas, combined with medical discoveries, which the early twentieth century Latin American health officials capitalized on to instruct the population regarding the dangers of cholera through a series of public health pamphlets and booklets.

A smallpox vaccine was originally conceived in the eighteenth century by Edward Jenner of England (1749–1823), although an appropriate technology for general administration was not available until the late nineteenth century. A serum and a vaccine were available for bubonic plague. There was also Clayton's fumigation device, which was driven by a small steam engine and released a sulfur substance. Widely used to disinfect ships and buildings in the ports, it did not damage fabrics, furniture, or merchandise, it could be easily transported to wherever it was needed in a small cart, and it was considered ideal for destroying rats, mosquitoes, bedbugs, fleas "and other kinds of bugs." The fumigation device was generally used early in the morning, to be able to club the rodents that tried to escape. At the same time, other measures were developed to control rats, such as regularizing systems for garbage collection and disposal in the cities, disinfecting warehouses with sulfur oxide, washing ships down with a strong solution of mercuric chloride, and mooring ships with barbed chains.

A quote from Eduardo Licéaga shows that, despite the fascination with science and technology, public health endeavors maintained a comprehensive, holistic, unified perspective. Licéaga's observation suggests that this perspective could fully complement the most practical and utilitarian of commercial interests:

The first condition that human groups need in order to prosper is the preservation of the health and life of their members, and one of the resources with which life and health are preserved is preventing diseases from being spread by the same agents that make communication among people easy and safe.<sup>101</sup>



The First International Sanitary Convention of the American Republics, the event which established the foundation for the creation of the Pan American Health Organization—the world's oldest continuing international public health agency—was held in this building, the New Willard Hotel in Washington, D.C., United States of America, in December 1902.

# The Birth of a New Organization

he coming together of science, public health, and international commerce, along with decreased tolerance of the suffering caused by disease, precipitated the abandonment of the fatalistic attitude toward epidemics held by politicians, some health professionals, and even the residents of the large cities of the Americas. This convergence paved the way for increased national and international intervention in inter-American and urban health matters. These changes in thinking and acting led to the First International Sanitary Convention of the American Republics, held in late 1902.

### THE FIRST SANITARY MEETINGS

In his 1901 annual report of the U.S. Marine Hospital Service, Walter Wyman enthusiastically announced that, two years after the idea was first proposed, there was now a Plan that could become an agreement with the American nations to "clean up certain coastal cities to eliminate yellow fever." <sup>102</sup> In this Plan, published in his office's journal, *Public Health Reports*, Wyman explained with conviction the importance of conquering this disease which, "more than any other, ties up commerce, stops trade, and throws cities into commercial isolation and social desolation." This document argued cogently that, as far as public health goals were concerned, the Americas needed to work together to achieve common ideals.

Wyman stressed that, if the Plan he proposed were implemented, it also could show its effectiveness against other diseases, such as malaria and typhoid fever. To prove the point, he also sought to demonstrate the relationship among international public health, progress, and civilization, and to correct the erroneous impression that American climates were unhealthy: "Tropical and semitropical countries are not necessarily unhealthy. Their apparent unhealthiness is not due to climate, but to faulty sanitation, or lack of it." 103

The notion that American climates were unhealthy dated back to the work of several eighteenth century European naturalists who believed that nature in the Americas was inferior and unhealthy

and that it differed from the ideal, perfect model represented by Europe. In contrast, U.S. and Latin American physicians and scientists, such as Wyman, defended the Americas' healthiness.

Wyman's Plan was put forth by the U.S. delegation to the Second International Conference of American States, held in Mexico City from 22 October 1901 to 22 January 1902.104 This meet~ ing, which could well be considered the point of departure for the institutionalization of public health in the Americas, was attended by 15 countries of the Americas: Bolivia, Colombia, Costa Rica, Chile, the Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Peru, the United States, and Uruguay. 105 The U.S. delegation included the noted scientist Milton J. Rosenau, director of the Marine Hospital Service's public health laboratory, who served under Wyman's direction. Rosenau was responsible for distributing copies of the Plan in English and Spanish. In his report on the meeting, Rosenau described the proposal for the original Plan—to improve quarantine regulations and concentrate on one disease—which, in the course of discussion, was taken further, to include other health issues; this led to the recommendation to plan a meeting or "assembling of a convention of representatives from the health authorities of the various republics, as well as an international sanitary bureau, with permanent headquarters at Washington." 106

The same Mexico City Conference approved eight resolutions with an eloquently phrased preamble suggesting that the individuals who had framed these resolutions were convinced that they were witnessing an important change that was expanding the scope of international public health to the cities:

The progress of medical science in the Americas has made it necessary for asepsis or sanitation to take the place of antisepsis or quarantine. In other words, it is more important to establish sanitary conditions in the cities so that diseases can not spread than to be in a position of having to prevent infection through quarantines, which are an obstacle to traffic and commerce. <sup>107</sup>

The resolutions approved at the International Conference of American States were grouped under the title of "Police Rules Relating to Health." The term was not foreign to public health. In eighteenth century Germany, Johann Peter Frank had championed the use of "police rules relating to health" as a legitimate state intervention in the daily lives of families and patients for the protection of the healthy as well as the sick. The resolutions adopted in Mexico City dealt with reform of the quarantine system, public health in the ports, and prompt notification of outbreaks of cholera, yellow fever, bubonic plague, and "any other serious epidemic." Thus the need to redefine international public health with scientific and utilitarian reasoning was reinforced. It was better for commerce to invest in public health than to withstand the protracted, and sometimes unwarranted, quarantines to which its products were subject. The same was true for travelers. 108

In addition to Rosenau, Eduardo Licéaga played a prominent role in the Mexico City Conference. Licéaga began his career while still a medical student and, upon graduation, received a gold medal from Maximilian of Austria, who was briefly Emperor of Mexico—an honor which, regardless of the Emperor's tragic end, must have been emblazoned in Licéaga's memory. He visited the major European capitals to study the construction of public drinking water and waste disposal works, and eventually came to chair Mexico's prestigious National Academy of Medicine. In addition, he was President of the American Public Health Association (a position which had also been held by Carlos Finlay) and organized two meetings of this professional institution in Mexico City (1892 and 1906).109 One indication of his influence is the fact that, for 30 years (1884–1914), as the head of the Superior Council of Health, Licéaga was his country's highest public health authority. For most of that time he was a trusted aide to Porfirio Díaz, the Mexican President who spearheaded an authoritarian modernization process that preceded, and was partly responsible for, the Revolution of 1910.110

As President of the Superior Council of Health, Licéaga ensured, in a process similar to that followed

by Wyman, that Mexican participation in international events such as the International Conferences of American States and the consolidation of the Federal health organizations supported one another's goals. For this, he relied on a law that had been in existence since 1891, the Sanitary Code of the United Mexican States, which authorized the Council to appoint delegates in the state capitals, ports, and border towns; post public health agents throughout the Republic; maintain a committee on maritime public health in all the states; and impose fines on those who violated its provisions. 111 In this way, he tried to resolve jurisdictional problems between the Federal Government and the states in favor of the central government.

One of the most noteworthy resolutions of the Second International Conference of American States held in Mexico City was the design of the structure and operation of an International Sanitary Bureau to draw up agreements and regulations for the benefit of all countries. Thereafter, votes cast at the "Convention" would be "counted by republics, with each having one vote." Moreover, it was agreed that "other sanitary conventions" would be held and that a five-member Executive Board would be appointed with "a President chosen via secret ballot by the selfsame Convention." 112

Consequently, the meeting in Mexico City can be considered the call for the First International Sani~ tary Convention of the American Republics, the event that saw the establishment of what we now know as the Pan American Health Organization. This Convention was held at the New Willard Hotel in Washington, D.C., in early December 1902. The Willard was a famous establishment where U.S. presidents spent the night prior to their inauguration; it was a modern building with more than 10 stories. The meeting was attended by 27 representatives from 12 countries: Chile, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Paraguay, the United States, and Uruguay. 113 Three of the delegates held the rank of minister, and noteworthy among the physicians and medical researchers were Milton

J. Rosenau, Juan B. Guiteras, and, especially, Carlos Finlay.

A clear indication of the relationship between the Mexico City and Washington meetings was the long title of the program: "International Sanitary Convention of the American Republics held in Washington, D.C., in response to the invitation . . . of the International Union of American Republics, issued by order of the Second International Conference held in Mexico City from 1901 to 1902."<sup>114</sup>

The first session was opened at 10:00 a.m. on 2 December with a welcoming speech by Wyman to all the delegates seated in the hotel's vast ballroom. An interesting detail about this first session is that time was provided for questions from the delegates. At 11:30 discussions were suspended in order for the participants to visit the Capitol and attend the opening session of the U.S. Congress. Two hours later, the delegates returned to the hotel to enjoy lunch together. The afternoon session began at 3:00 p.m. with the election of a provisional chairperson and the establishment of a committee in charge of organizing the discussions.115 President Roosevelt made time in his schedule to receive the delegates. Over the next three days national reports were presented. It had been suggested to the delegates responsible for presenting these that they address the topics listed in the official announcement and that they answer—surely with a desire to gauge consensus certain vital questions such as: "Is the mosquito the only agent through which yellow fever is transmitted?" It was Finlay himself who answered this question in the affirmative, attempting to dispel baseless fears—such as the one narrated in this book's Introduction—by stating that neither the victims' clothing nor their belongings played any role in spreading the disease. 116

The Latin American governments that sent delegates to this meeting were asked for copies of their public health laws, lists of all quarantine stations then in operation, and a report on the major diseases (especially those that were epidemic) and the cleanup projects they had undertaken.<sup>117</sup> It is

important to point out that several countries, such as Mexico, made praiseworthy efforts to collect this information in their provinces. The meeting's program indicated that two of the most important decisions would be the establishment of an "executive body, which would be called the 'International Sanitary Bureau,'" and the selection of the place and date of the next Convention. 119

The resolutions adopted at this meeting reaffirmed the relationship between maritime public health and trade: "the time of detention and disinfection at maritime quarantine stations shall be the least practicable time consistent with public safety, and in accord with scientific precepts."

Other resolutions involved the decision to adapt quarantine measures to the new knowledge about the role of mosquitoes in spreading disease. The importance of waste disposal and of the extermination of rats in preventing bubonic plague, and of controlling the purity of water in preventing typhoid fever, was also stressed. No less important was the decision to recommend translation into Spanish of the *United States Pharmacopeia*. The words of one delegate are an indication of the debate generated at this meeting: "the discussions . . . were very broad."<sup>120</sup>

Other important results of this meeting were the creation of a fund—which might seem small now, but was significant then—of US\$ 5,000, collected by the International Union of American Republics (today the Organization of American States), and the election of the first members of the International Sanitary Bureau. The most important responsibility, that of Chairman (the title was changed to "Director" in 1920), fell to Wyman. At his side were prominent Latin American health officials such as Mexico's Eduardo Licéaga and Eduardo Moore of Chile. Moore wrote a book on combat surgery, developed a list of physicians from his country since the colonial period, and taught urology for the first time in Santiago. 121

With them on this first Executive Board were Juan B. Guiteras of Cuba and Juan J. Ulloa of Costa Rica, who was appointed Secretary of the Bureau.

Ulloa, who had studied medicine at the University of Santo Tomás in Costa Rica and New York University, had organized his country's first medical services for poor people and eventually rose to the position of Minister of the Interior.<sup>122</sup>

Also serving on the Board was Rhett Goode, a U.S. Public Health and Marine Hospital Service official in the port of Mobile, Alabama, who had taken measures to eradicate mosquito breeding grounds, and Alvah H. Doty, the Director of the Quarantine Office of the Port of New York. Doty had conducted experiments with the mosquitoes that transmitted yellow fever and directed an autonomous establishment that reported to city authorities; i.e., it was not part of the U.S. Federal Government. The members of the new Executive Board and their career paths reflected the transition from a local, fragmented concept of international health to one that was more centralized.

The actions Licéaga undertook on his return to Mexico suggest that the decisions taken at the New Willard Hotel were made known to national and local authorities at home: he drew up and distributed 50 copies of the report of the Mexican delegates to the First Sanitary Convention. Similarly, Guiteras published the Convention's resolutions in the prestigious Cuban journal—the first of its kind in Spanish—*Medicina Tropical*.<sup>123</sup>

Interestingly, the date of the First Convention, held in Washington, D.C., was deliberately set to be close to the date of the American Public Health Association meeting in New Orleans, making it possible for some of the delegates to attend both gatherings. One anecdote that shows the close relationships among the health officials of different countries, as well as the relationships among their institutions, revolves around an incident that took place at this Convention. During one of the coffee breaks between sessions, Licéaga told Wyman that he had just learned that the dreaded bubonic plague had broken out simultaneously in Mazatlán, Sinaloa, and the small port of Ensenada de Todos los Santos in Baja California. This was the first time in its history that the disease had reached Mexico. The plague battered Mazatlán (a port involved in heavy traffic with San Francisco), with a population of 25,000, of whom 8,000 fled the epidemic.<sup>124</sup> Wyman called a physician who worked in his Service's laboratory, Samuel B. Grubbs, and asked him to leave immediately for the affected areas in Mexico to help fight the plague. The campaign was also instrumental in consolidating the power of the country's Federal Government with respect to health matters, which was one of Licéaga's goals. Two years later, U.S. and Mexican citizens joined forces to control yellow fever in Veracruz.<sup>125</sup>

The Second International Sanitary Convention was initially planned for Santiago in 1904, but was actually held in October 1905 in Washington, D.C., the same place as the previous Convention. At that time, yellow fever programs were working successfully in Cuba, Mexico, Panama, and New Orleans (which had survived the most recent major yellow fever epidemic in the summer of 1904). In his opening speech, Wyman described the 1904 U.S.-Mexican collaboration to control yellow fever as an example of what could and should be done in the rest of the Americas.

As was the case for the previous meeting, the official announcement asked that each country present reports on the prevalence of diseases, with special reference to yellow fever and malaria; provide an overview of public health laws and the quarantines ordered since the First Convention; and describe special public health activities currently being carried out. 126 In other words, there was a broadening of the initial intent, which had been to establish an organization limited to compiling epidemiological information and providing advisory assistance on quarantine-related matters. At this event, which seemed more formal in nature than the previous Convention, 12 republics were represented. Some, such as Peru and Venezuela, were participating for the first time. At the opening ceremony, Elihu Root, U.S. Secretary of State under President Theodore Roosevelt, gave a speech which recognized the importance of inter-American public health in Pan American policy. At this meeting, what became known at the Washington Sanitary Convention of 1905 was drawn up. It partly adapted the 46 articles of the

1903 Paris Convention, but added subjects not found in that text, such as measures for the control of yellow fever. 127 In its codification of international health procedures, the document became the forerunner of the Pan American Sanitary Code, adopted in Havana nearly two decades later at the Seventh Pan American Sanitary Conference.

The first article of this Convention revealed the close connection between maritime public health and the fear of epidemics: "Each government shall immediately notify the others of the first appearance in its territory of confirmed cases of plague, cholera, or yellow fever." Another article allowed for the disinfection of certain merchandise under special conditions, but warned those who still believed in fomites that there was no merchandise that could, in and of itself, transmit plague, cholera, or yellow fever. And it added that "Letters . . . printed material, books, newspapers, business papers, etc. . . . will not be subject to any restriction or disinfection." Finally, it was agreed that a request would be made to the effect that the detention of merchandise, travelers, and crews in quarantine stations always be brief and compatible with scientific postulates. 128

According to Licéaga, he himself translated the Paris Convention in order to help put together the 1905 Washington Convention. Moreover, he printed it in Washington just days before the start of the event, and then convinced the other delegates to adopt it as a Convention. This is indicative of the initiative, in terms of formulating proposals, and of the capacity to negotiate that the Latin American representatives displayed from the earliest days of the Pan American Health Organization. <sup>129</sup> It is interesting to quote part of a heartfelt speech given by Licéaga, in which he emphasized the characteristics—scientific, political, and professional—of these meetings:

We do not come just in our official capacities of technical advisors on matters of hygiene . . . we come now, on behalf of our government, armed with upto-date health science information, supported by the experience that each of us has acquired in his respective country, and authorized to sign a sanitary convention among the Republics represented here. <sup>130</sup>

Another decision made in Washington, D.C., was to confirm the authority of the national health organizations to order quarantines and measures to control epidemics. Also, this Second Convention decided that meetings would be held every two years, and the members of the Bureau's Executive Board who had been appointed at the previous meeting should be reelected.

Some countries, such as Mexico, were anxious to point out the need to ratify the Washington Convention, especially because they feared that its validity as an inter-American treaty superseding the decisions of local and border health authorities would be questioned. Mexico's Secretary of State wrote to Licéaga in 1906, advising him to try to persuade countries such as Argentina, Brazil, and Uruguay to adhere to the Convention. 131 In fact, the country's role in helping to organize and prepare the resolutions of the International Conference of American States of 1902 and the Washington Convention of 1905 was considered a major triumph of Mexican foreign policy. 132 Licéaga himself saw in these decisions an indirect way of forcing the southern U.S. border states to sign a health treaty with Mexico. Up until the First World War, the governments of some South American countries (Argentina is an example) were ambivalent toward the concept of Pan American public health, choosing instead to maintain their own health treaties with neighboring countries and independent official medical ties with European allies. 133

Shortly after it was promulgated there was a struggle to keep the Washington Convention in effect. It was questioned early on by the U.S. Congress, which deemed that the style of the recommendations was not appropriate for a diplomatic document and suggested that it be rewritten. According to Licéaga, the critics were politicians from the southern United States who feared that their commercial interests would be affected and who sought to maintain their sovereignty in health matters over any national or international regulation. At a particularly tense point in the discussions, a worried Licéaga wrote to Wyman:

My most distinguished and esteemed colleague: They are saying that the [U.S.] Senate will not ratify the treaty [the Washington Convention] because it contains phraseology that is not used in international treaties. This objection is so trivial I cannot believe it, and I beg you to compare the English text of our Convention with the French text of the 1903 Paris Convention. . . . The other thing I wanted to hear from you about is that the Washington Convention has been nullified and the matter will be discussed again in Rio de Janeiro [at the next International Conference of American States] as if for the first time, and perhaps there is an idea of accepting, in its place, the treaty entered into by Brazil, Argentina, and Uruguay.

If that is so, we will have strayed from the path we have been following since the Pan American Conference in Mexico City in 1901–1902 and the Washington Convention of December 1902, and we will have lost the total uniformity we established in the 1905 Convention.

I hope that, with the frankness you have always shown me, you will tell me how much truth there is to all this.

Although we have been unable to find Wyman's response, he probably replied with the tact and clarity that characterized all of his correspondence and speeches. Fortunately, one of Licéaga's worst fears—that a health movement of the Americas would be frustrated—was not realized. The Third International Conference of American States, held in Rio de Janeiro in August 1906 and attended by the ministers of foreign affairs, supported the inter-American public health efforts that had been undertaken up to that point. The resolutions adopted by that meeting include ratification of the Washington Convention and the issuance of a request that "all the countries of the Americas attend the next International Sani~ tary Convention," to be held in Mexico City. Another resolution sought to promote hygiene and impose "a cleanup of the cities and, especially, the ports."134 The Convention also hoped to lay the groundwork for a health information center somewhere in South America. (It was later agreed that this would be in Montevideo.) One additional

request was the establishment of more formal relations with the International Office of Public Hygiene in Paris. <sup>135</sup> Political support for these decisions was secured at the inter-American meeting of ministers of foreign affairs held in Buenos Aires in 1910.

The Third International Sanitary Convention was held in Mexico City in December 1907.136 The official announcement was more detailed about the reports the delegates should bring: an account of the communicable diseases existing in their countries, especially cases of "bubonic plague, yellow fever, cholera, beriberi, and trachoma." Also, the representatives were to draw up a report on the health conditions in the ports and on the provision of "adequate water and sewage disposal [systems]." Finally, they were asked to give an account of "the assistance provided by the governments to their respective states or municipalities for execution of sanitary works in the cities and ports," and a report on "legislation on police rules relating to health."137

The opening ceremony was held in Mexico City's National Palace. Discussions alternated with visits to the colonial Penitentiary building and Chapultepec Castle and a reception attended by Porfirio Díaz, President of the Republic, among other activities. The delegates had the opportunity to see firsthand the huge sanitary engineering works designed to provide Mexico City with water and waste disposal, another project headed by Licéaga. One indicator of the prestige Licéaga—who also presided over the Convention—enjoyed at that time was the fact that several delegates preceded his name with *sabio* ("learned"). <sup>138</sup>

The photos we have of this meeting show that all the participants were men. They were distinguished, self-assured, almost solemn in their personal appearance and in their posture. In an account of the social activities, which subtly suggests the prevalent stereotype at the time about the role of women at meetings of this nature, the delegate from Costa Rica observes: "After the visit to this magnificent building and a stroll through

the picturesque park, we went to the Chapultepec Café, where we were guests at an exquisite tea, brilliantly embellished by a well-chosen cluster of living flowers from Mexico's social garden." <sup>139</sup>

One noteworthy occurrence was Brazil's participation. It was headed by none other than Oswaldo Cruz, arriving fresh from a meeting with President Roosevelt in Washington, D.C. Cruz had assured Roosevelt that the U.S. squadron that was to sail around Cape Horn to reach the Pacific could debark in Rio, at the height of summer, without fear of falling victim to yellow fever. Events unfolded as Cruz had predicted. According to one of his biographers, the example was quickly imitated by other European vessels, which preferred, during the summer, to avoid other South American ports out of fear of yellow fever. 141

In his report to the meeting, Cruz highlighted the activities of the local boards of health in the various Brazilian states and described the measures taken to combat bubonic plague, malaria, and other diseases, as well as the public works for supplying homes with water and sanitation. Much of his report dealt with yellow fever. Cruz explained how his country had conquered the disease in Rio de Janeiro, and declared that "every nation, if it so desires, can, by destroying the Stegomyia, totally protect itself from the yellow fever epidemic."142 One of the resolutions in which Cruz participated gave notice of Brazil's adherence to the 1905 Washington Convention, as well as that of other countries that had not previously honored it, such as Uruguay and Colombia. 143

In a letter to his wife, Cruz shares news of the meeting and the Brazilian health official's (temporarily frustrated) hopes of arranging a subsequent Convention in his own country:

Hotel Iturbide, Mexico City, 3 December 1907

My dear Miloquinha...

I'm writing on the fly because I'm in the midst of the Convention. It opened yesterday. I had to give a short talk, which didn't go badly. After telling about the public health results obtained in Rio, I was applauded

and congratulated enthusiastically by the other members of the Convention.... Now we have to see if I can arrange to hold the next Convention in Rio, which would be a great event for Brazil....

Your most affectionate Oswaldo<sup>144</sup>

The valuable participation of the noted Brazilian scientist at the International Sanitary Convention has been underplayed by historians, probably because his stay in Mexico was part of a famous trip to Berlin, where he attended the International Congress on Hygiene and Demography. Cruz brought anatomical specimens, entomological collections, examples of serums and vaccines prepared by his Institute, models of the facilities at Manguinhos, and photographs captioned in English, French, German, and Portuguese. All of his exhibits were displayed in beautiful wooden cases. 145 Thanks partly to this presentation, he was awarded a gold medal—the event's highest honor—an uncommon recognition for a Latin American. Upon returning to his country he received a hero's welcome and a myth developed which, over time, synthesized that trip. According to one of his biographers, a lasting legend was born: Cruz was "the Pasteur of Brazil." 146

The discussions held at the meeting in Mexico City were organized into committees according to the diseases listed in the official announcement. This allowed special importance to be accorded to such diseases as malaria and tuberculosis. Preferential attention was paid to the diseases subject to quarantine for which reporting was obligatory (yellow fever, bubonic plague, cholera, and smallpox), and mandatory smallpox vaccination was recommended. Also, a call was made to include in the Washington Convention those Latin American republics which had not yet agreed to adhere to it. Another important decision was the request that the Bureau work out an arrangement with the International Union of American Republics to be able to utilize its facilities when needed. A year later, the Union was to begin construction on an elegant building with a marble façade and bronze doors—officially opened in 1910—in Washing~ ton, D.C., where the Bureau's Executive Board members were offered facilities for conducting

official business during their visits to Washington. 147

The inter-American agreements notwithstanding, tension persisted over health matters. Health authorities in some countries continued to take certain restrictive and unilateral measures, some conflicting with others, because they distrusted the cleanliness of their neighbors' ports and felt the need to retain control over the movement of passengers and trade merchandise. The Cuban health authorities, for example, could declare their ports closed to ships coming from Florida, Mexico, or Colombia. On another occasion, Costa Rica temporarily closed its ports to vessels coming from Cuba because of yellow fever and to those coming from San Francisco because of bubonic plague.148 These measures, which were not consistent with the Pan American sanitary agreements then in force, are highlighted in a report presented by Dr. Juan J. Ulloa, the delegate of Costa Rica, to the First Sanitary Convention in 1902. There were complaints about the arbitrariness of New Orleans' sanitary regulations against Puerto Limón on his country's eastern coast. Ulloa observed he had been in New Orleans several times and when he compared sanitary conditions there with those of Puerto Limón, he could "not understand why they are so exacting in their quarantine laws as applied against all vessels proceeding from our port, even at times when there is not a single case of any contagious disease. . . ." He concluded by criticizing the foregoing as an inequitable procedure that "interferes very much with our commerce."149

In some cases, national regulations in the Americas were stricter and thus considered more effective than in Europe. In Cuba, when it was suspected that an incoming ship bore cases of cholera, the passengers were detained for five days and subjected to a bacteriological examination using "the disagreeable procedure of rectal probing," which was not done in the European ports. <sup>150</sup> One interpretation of the difference between the quarantine regulations on the two continents is that it was thought that in America the climatic conditions were ripe for the rapid spread of epidemics,

while the commercially powerful European countries, such as England and Germany, had neither unhealthy climates nor sanitary conditions conducive to the proliferation of communicable diseases.<sup>151</sup>

Another example of the tensions among the countries of the Americas with respect to international public health dates back to 1904, and its protagonist was Carlos Finlay, then Cuba's director of public health. That year, the U.S. newspapers created a scandal over the possible introduction of yellow fever from Cuba. The scientist reproached a *New York Times* correspondent:

"We challenge the United States [Public Health and] Marine Hospital Service to point out the several cases of yellow fever said to have appeared in various parts of Cuba."

A short time later, the selfsame Finlay responded to a U.S. official who asked him why Cuba had declared the quarantine "against" Florida that, "not having Cuban stations in Florida, as you have in Cuba, suspects could not be notified quickly enough for quarantine purposes and especially during prevalence of dengue epidemic."<sup>152</sup>

Another example is an editorial published in Havana in a 1909 issue of the journal of the Cuban Secretariat of Health. In response to an article in a U.S. medical journal entitled "The Cuban Threat," the Havana editorial asserted that Cuba was not concealing cases of yellow fever "in the guise of malaria"—as the U.S. journal had said—because "we are in pursuit of health, not because of U.S. interests, but for our own country's benefit." <sup>153</sup>

It is important to stress the heightened official interest in sanitary matters beyond the quarantine and health regulations in effect in the port areas. These regulations started to place more importance on health in the surrounding environs as well, which meant extending collaboration to include local, municipal, and provincial authorities. In this same way, health concerns and interventions, which had initially concentrated on yellow fever, were extended to other diseases that had been around for many years, such as small-

pox, or that were just making their appearance, such as bubonic plague.

The plague attacked San Francisco's Chinatown with a vengeance between 1900 and 1907. Around the same time, the disease appeared in New Orleans. Some South American cities also suffered: Asunción (Paraguay), Rosario (Argentina), and Santos (Brazil) in 1899; Montevideo (Uruguay) in 1901; Iquique (Chile) in 1903; and Lima (Peru) in 1904. The epidemic outbreaks continued until 1912, when plague appeared in Cuba and Puerto Rico. These epidemics originated on ships coming from Asia, where the disease was endemic. <sup>154</sup> International cooperation was indispensable to the battle against this disease as well.

While it is true that the plague never had a significant impact on mortality in the majority of the countries of the Americas, with the exception of Ecuador and Peru, it was always feared as an extremely dangerous latent threat that required the attention of health officials. This is, in large part, the explanation for the indefatigable—and ultimately decisive—work against this disease in the early twentieth century: by early 1930, the plague was already controlled in the Americas, although it could not be eradicated because it had a natural reservoir in wild rodents. It was an achievement in which the Pan American Sanitary Bureau certainly played a part. 155

The notion that the best way to protect the public's health would come not from quarantines but from hygiene in the ports and cities, the departure points for merchandise and passengers, led to an expansion of activities by public health authorities to other parts of the cities and to their starting to take more consistent action with regard to other diseases that were not subject to quarantine. Another interesting dimension of this process is that public health began to assume intrinsic value; i.e., it did not have to be justified by its economic benefits. Some public health leaders realized that the relationship between health and economics had not always been an uncomplicated one. A quote from Cuba's Juan B. Guiteras illustrates this point:

We should emphasize most strongly protecting commerce and industry from any unnecessary obstacle, but I do not believe we should declare that that is one of the objectives of sanitary science, because it would be like saying, in a definition of medicine, that the purpose of this science is to treat the patient at the least possible expense. . . . It is a good thing that we consider these aspects of the problem . . . but disease prevention should be our only objective. . . . How have commerce and industry . . . repaid our efforts to safeguard their interests? I have not received word that any writer on economic problems has [said] that the two objectives of commerce are to . . . make money and ensure that the interests of sanitary science are not unnecessarily compromised. 156

Cuba, Mexico, and the Central American countries demonstrated a dynamic presence at the Fourth International Sanitary Conference of the American Republics, held in San José, Costa Rica, in 1910.157 Just three South American countries attended: Chile, Colombia, and Venezuela (one of Venezuela's two delegates was the noted researcher, Luis Razetti). One important agreement was reflected in the fact that the meetings began to be called "Conferences" instead of "Conventions."158 A distinction also began to be made between these meetings and others of a more strictly scientific or medical nature held in the Region, such as the First Latin American Scientific Congress, held in Buenos Aires in 1889 and which, beginning in 1908, would be called "Pan American" because of the inclusion of the United States, and the five Pan American Medical Congresses held in the late nineteenth and early twentieth centuries in various cities of the Americas. The difference between the two kinds of gatherings was that the Sanitary Conventions, or Conferences, were official in nature, had political and commercial components, and involved more definitive legal decisions.

Starting around 1915, the Region's public health activities and meetings became more infrequent and experienced difficulties. Just one meeting was held during that entire decade: the Fifth International Sanitary Conference of Santiago, Chile, in November 1911. Especially noteworthy was the presence of delegates from Argentina, Bolivia, Colombia, Paraguay, Uruguay, and Venezuela,

some of which had not participated in any of the previous Conventions or the San José Conference. <sup>159</sup> It was requested that the delegates to this meeting "[should] be, whenever possible, delegates who are trained hygienists... and that at least one delegate should be a high sanitary officer or a person who had been a delegate to a former conference," and that, among the national reports presented, there be included one on the means employed to enforce the resolutions approved at the prior Conference and another on health progress achieved in the major cities. <sup>160</sup>

In the letter confirming Mexico's participation at the Santiago meeting, Licéaga validated the previous Conferences, saying that relations "with the chiefs of public health services in the Republics of the Americas" had been "cordial" and that they were the best way to prevent difficulties, "principally with our country's neighbors, which could have serious consequences for trade and unrestricted communication among men."<sup>161</sup>

In addition to the discussions, visits to hospitals, attendance at concerts, and a garden party at the aristocratic Quinta Villa María, the organizers of the Santiago meeting planned a magnificent Chilean public health exhibition for the general public. It proudly presented mineral waters, photographs, and plans for sanitation projects. 162 Sub~ sequent conferences included similar events involving increasingly large numbers of participants—a mechanism clearly intended to "validate" local public health undertakings. In time, they would include a medium which participants found particularly fascinating: moving pictures on health issues. A number of the resolutions adopted in Santiago addressed the fine-tuning of maritime health measures. But the discussions were no longer limited to this topic alone.

The diversity of the resolutions—drinking water supply, medical certification of deaths, standing committees on tuberculosis, leprosy statistics, control of prostitution, and sanitary control over food products, just to name a few—clearly confirms the convergence of turn-of-the-century urban health movements with the emerging interests of international public health. The concurrence

of these phenomena also provided momentum for the strategy of professionalization of physicians holding public offices.

Of singular importance at the Santiago meeting was the request that countries take the necessary steps to offer "practical and complete" training courses for those working in public hygiene and sanitation activities and to establish requirements for employment in this area; e.g., holding a diploma. Another of the Santiago resolutions contained a request to strengthen what might well be considered the Bureau's first branch office, in Montevideo, to serve as the regional center for a series of Sanitary Information Committees of five South American countries (the center had been created at the 1907 Mexico City Convention, but was forced to close some years later due to insufficient funding). With respect to the 1905 Washington Convention, a flexible agreement was adopted: the countries that had been parties to it had to comply with its provisions. At the same time, the Bureau's headquarters in Washington, D.C., would study the best way to incorporate the proposed amendments to this Convention. Thus, the countries that were parties to other treaties could honor them and, eventually, embrace a single Pan American agreement. 164

Pan American health activities suffered the loss of a leader and founder, Walter Wyman, in 1911. He fell seriously ill shortly before the Santiago meeting and was thus unable to attend. He was succeeded by Dr. Rupert Blue (1868–1948), who also replaced Wyman as Surgeon General of the U.S. Public Health Service.

## THE SECOND DIRECTOR OF THE PAN AMERICAN SANITARY BUREAU: RUPERT BLUE

Dr. Rupert Blue, a physician from the southern United States, was appointed Chairman (the title became "Director" in 1920) of the Bureau in 1912, at the age of 46. He graduated from the University of Maryland, held positions in U.S. maritime health in Hawaii, Panama, and Europe, and played a major role in the battle against yel-

low fever that battered New Orleans in 1905, but especially in the fight against bubonic plague in San Francisco a short time later. Those who knew him observed that he was reserved, strong, and unusually tall. A Presbyterian by faith, his political leanings were Democratic. Eventually he was elected to the prestigious position of President of the American Medical Association, a rare honor for a U.S. Surgeon General (he was also, like Wyman, President of the Association of Military Surgeons).

Blue directed the sanitary teams that defeated the plague in San Francisco in 1907. This experience enhanced his power to persuade municipal authorities, businessmen, and the general public alike. Thanks to his acute powers of observation, he pointed out the danger of the disease being transmitted by squirrels and published several pamphlets on the subject that became mandatory references for field experts. <sup>166</sup> Upon completion of his work against the plague in California, he received a medal acknowledging his contribution. It was said that the city of San Francisco was so clean that "you could eat off the streets." <sup>167</sup>

His contact with Latin America began in 1910, when he represented his country at an International Congress on Hygiene and Medicine held in Buenos Aires. In January 1912 the United States Senate confirmed his appointment by President William Howard Taft, and Blue officially became Wyman's successor. 168 During his term in office, techniques and administrative methods were standardized and systematized, as were the duties of health workers, especially those of the U.S. Public Health Service, who were deployed during epidemics. In accomplishing that, he received a great deal of assistance from a talented and dedicated subordinate, W. C. Rucker, who had been his righthand man in San Francisco. A pamphlet published in 1914, promoted by Blue and authored by Rucker, summarized all existing knowledge about how to carry out a yellow fever campaign, including how to manage financial transactions, maintain isolation hospitals, set up fumigation systems, and educate the populace. In another pamphlet, Rucker discussed the advantages to young U.S. doctors of choosing a career in the country's Public Health Service. 169 In a speech to the American Medical Association, Blue demonstrated the need for discipline and persistence as he presented his long-term vision for public health endeavors: "Real progress has followed the plan of building from a basic nucleus, of carefully erecting the superstructure on a foundation which has stood the stress and strain of time and service." 170

Another of Blue's major achievements was support for the studies of Charles Stiles, a U.S. Public Health Service researcher. They brought to light the ravages caused by hookworm disease, which was widespread in the United States' rural south and would be the object of the Rockefeller Foundation's first public health program in the Caribbean and Central and South America. No less important during Blue's term of office was the establishment, in 1916 and 1917, of quarantine stations for exanthematic typhus in several locations along the United States-Mexican border.<sup>171</sup>

In 1913, Blue wrote Eduardo Licéaga that, in view of the "unanimous opinion of the members," he had accepted the "temporary chairmanship" of the International Sanitary Bureau until the next Conference named a permanent chairman. The 1911 Santiago Conference planned a Sixth International Sanitary Conference to be held within the next two or three years. Blue sent a letter to Ernesto Fernández of Uruguay, asking him to call the following conference, which was almost held in 1914.172 An official announcement for the Montevideo meeting, signed by Blue, was even printed, sent to the sanitary authorities and diplomatic representations, and published in the Bulletin of the Pan American Union. It called for the usual types of reports, but also included new topics, such as a discussion on the ways to fight cerebrospinal meningitis and poliomyelitis—suggest~ ing an early interest in children's health. 173

But the Montevideo Conference was postponed until 1920, in large part due to the outbreak of World War I in 1914. The War caused all the countries of the Americas, and particularly the United States, to focus their concern on the mili-

tary and diplomatic conflicts underway in Europe and on protecting the health of combatants to the largest extent possible. For the same reasons, meetings of the International Office of Public Hygiene, headquartered in Paris, were also suspended during this period.

As a result of this situation, Pan American public health activities were temporarily weakened. In late October of the War's first year, Blue informed the Director of the Pan American Union that "... on account of the unsettled conditions resulting everywhere from the European war, the Government of Uruguay has decided to postpone the Sixth International Sanitary Conference... which was to be held in the city of Montevideo, 13–24 December 1914."<sup>174</sup>

So Blue never had the opportunity to preside over an International Sanitary Conference. But, as we will see later, one of his proposals was approved at the next Conference (in Montevideo in 1920). For its part, the Pan American Union does not seem to have been very active during this time. It did not hold a single meeting with representatives from all of the Americas between 1910 and 1923. 175

Inter-American conflicts also help explain the interruption in sanitary meetings. Between 1912 and the early 1920s, the U.S. Marines intervened in or occupied Cuba, the Dominican Republic, Haiti, Mexico, and Nicaragua, in addition to Panama.<sup>176</sup> These measures were justified by various arguments, but mainly by the United States' stated need for an "area of influence" in much of the Americas.<sup>177</sup>

With an eye toward repeating the triumph by the U.S. military and Cuban scientists over yellow fever in Havana a few years earlier, William C. Gorgas's leadership achieved another heroic feat during these years: the control of yellow fever and malaria in the zone where the Panama Canal was being built. The great passageway between two oceans was the result of an intervention that carved out part of Colombia's territory to support the creation of a new country: Panama. The longterm (1904–1914) U.S. effort to finish the Canal

followed the failure of a French company, headed by Ferdinand de Lesseps, which had built the Suez Canal and then went bankrupt in 1889. Gorgas received recognition in 1915, a year after the Canal was opened, when he was promoted to the rank of general. The Canal's effect in terms of increased trade and, complementarily, interest in international health, was almost immediate. When the Panama Canal was opened, there was fear that yellow fever originating in the Caribbean would follow that route to Asia, where the disease did not exist, and that spurred the organization of new yellow fever campaigns in the Americas.

Meanwhile, the Public Health Service directed by Blue was incorporated into the military in 1917, the year that the United States formally entered World War I, and many Service employees were posted to various branches and missions. The Service's functions multiplied dramatically, but without an increase in its funding or staff. Operating out of Washington, D.C., the Service's laboratory produced tetanus, diphtheria, typhoid fever, and smallpox vaccines. Between 1919 and 1922, the Service cared for almost a million U.S. World War combatants in more than 50 hospitals that were often new and had been built over the structures of hotels and other buildings.<sup>178</sup>

Shortly after the end of the War, and for reasons that are unclear, President Woodrow Wilson decided not to extend Blue's appointment. But he remained with the Public Health Service for several more years, working in Europe until 1936, when he retired to Charleston, South Carolina, where he died in 1948. Blue was succeeded as Surgeon General by Hugh Smith Cumming (1869–1948), a Service physician who had seen duty in various corners of the world.<sup>179</sup>

Cumming was appointed as Director of the International Sanitary Bureau at the Sixth International Sanitary Conference of the American Republics, held in Montevideo on 12–20 December 1920. Montevideo was an excellent choice, since the Bureau's only branch office was located here, and the meeting provided the opportunity to reinforce to delegates the importance of transmitting to

Washington headquarters and the Montevideo field office full reports, including vital statistics, on the health conditions of their respective countries.

Mexico, a major player in the early days of inter-American public health, but just emerging from a period complicated by the Revolution, which began in 1910, was not able to participate in the meeting. But it did later adhere to the agreements reached at the Conference and, in subsequent years, played a prominent role in regional health. The country had already made important advances in the recognition of the right to health. The Constitution of 1917 recognized that all citizens had the right to physical and mental health, and remodeled the former Superior Council of Health into a new body with greater authority and scope.

At the opening ceremony of the Montevideo meeting, Uruguay's Minister of Industry gave a speech in which he talked about the lack of meetings since the one in Chile in 1911, summarizing the experiences and feelings of many of those who attended:

The interruption, while indeed unfortunate, since it delayed sharing the benefits of science with our peoples for almost a decade...does not mean that, within their respective national jurisdictions, scholars and administrative authorities have failed to make their first priority the essential problems that are the reason for these meetings.<sup>181</sup>

The resolutions approved at the meeting recommended that the governments educate the general public and require the teaching of hygiene in schools. It also adopted a resolution proposed by Blue—despite the fact that he was no longer in charge of the U.S. Public Health Service—asking health authorities to standardize sanitary regulations on imports. <sup>182</sup> The Uruguay meeting also decided to increase the total amount needed to operate the Bureau, to be collected from the countries on a scale ranging from US\$ 5,000 to US\$ 20,000, depending on the size of the population.

Following a decision taken at the Fifth International Conference of American States—held in Santiago, Chile, three years later, in 1923—two new names came into regular use: that of the International Sanitary Conference was changed to "Pan American Sanitary Conference," to denominate the meeting, held every four years, of delegations from each country; and the International Sanitary Bureau was renamed the Pan American Sanitary Bureau (PASB, or *Oficina Sanitaria Panamericana*—OPS—in Spanish), consisting of the group of officials who implemented the Organization's policies from the headquarters office in Washington, D.C. The name *Repartição Sanitaria Panamericana* was commonly used in Brazil. 183

Also, from the 1920s on, there was increased participation by noted Latin American scientists at the meetings organized by the Bureau. Many of these scientists had made their careers in the laboratory, but found in this international organization a sounding board for their ideas and a means for facilitating the legitimization of their activities. They would continue the tradition of building a bridge between scientific advancement and regional solidarity and reaffirm the value of health that was begun during the first phase by Carlos Finlay, Milton J. Rosenau, and Oswaldo Cruz, among other noted researchers. Hugh S. Cumming would be the Bureau's Director for the next 27 years (1920–1947). The next chapter profiles his personality and work.



In a period marked by major change and upheaval, Pan American public health made one of its first and most lasting affirmations of the value of health to the socioeconomic development and well-being of all countries and peoples. The Pan American Sanitary Code was signed by these delegates at the Seventh Pan American Sanitary Conference held in Havana, Cuba, in 1924, and it remains in force today.

## The Consolidation of an Identity

tarting in the 1920s, there were fundamental modifications in the structure, functions, and leadership role of the institution responsible for public health in the Americas. These transformations had to do with the political context during what historians call the "period between the Wars" (approximately 1919 to 1939), characterized by profound social change and financial crises and recoveries. During this period, the Director of the International (then "Pan American," beginning in 1923) Sanitary Bureau was another U.S. military physician, Dr. Hugh S. Cumming.

### THE HUGH S. CUMMING YEARS

During the 27 years he was Director of the Bureau (1920–1947), Dr. Cumming earned the confidence of diplomats, politicians, and public health leaders of numerous nationalities, thanks to his professional experience and his public demeanor, which conveyed self-confidence, composure, moderation, and distinction. In all his portraits and photographs, his presence suggests one word: refinement.<sup>184</sup> Although he was a conservative, he was a member of the Democratic Party. According to one historian, another of his personal traits was a distinct sense of humor.<sup>185</sup>

Cumming was born in Hampton, Virginia, in 1869, and obtained medical degrees from the University of Virginia and the University College of Medicine in Richmond, Virginia. Recruited by the U.S. Public Health Service, Cumming served in various quarantine stations in New York, San Francisco, and Yokohama, Japan. Between 1913 and 1919, from the Service's public health laboratory in Washington, D.C., he directed an investigation into the pollution of the Potomac River in Maryland and Virginia and of the waters in the states of New Jersey and Delaware. One of his concerns was the shellfish industry and the potential threat to human health of consuming oysters harvested in tidal waters contaminated by sewage. During the First World War, he went ahead of the U.S. troops to study the sanitary conditions of the ports where they would disembark, and he later organized health care services for the combatants. His international experience was broadened when he represented the United States at a conference held in Cannes, France, in 1919, at

which the League of Red Cross Societies was established, and when he chaired the medical commission of the Allies sent to Poland, where exanthematic typhus had broken out.<sup>186</sup>

In 1920 Cumming replaced Rupert Blue as Surgeon General of the United States. In that same year, the Sixth International Sanitary Conference, held in Montevideo, Uruguay, elected him Direc~ tor of the International Sanitary Bureau. When he took over that position, he was already familiar with a good part of the world. In the early years, Cumming alternated between using the U.S. Public Health Service and International Bureau letterhead in his correspondence. The Bureau letterhead was a reproduction of a medallion struck to commemorate the Montevideo Conference. It consisted of a woman kneeling and dipping water from the Fountain of Life while another woman stands over her illuminating her actions. The image captured the early twentieth century's understanding of the requisites of good health: water, light, clean air, exercise.

The Director of the Bureau had a small staff of assistants and a driver, although he sometimes liked to recall that he received no salary from the Pan American organization and lived only on what he received from the U.S. Public Health Service. Cumming's speeches show that he was the embodiment of diplomacy: he never forced a point of view and was instead unfailingly considerate of others. At the same time, he was fastidious about protocol and consistently displayed sound judgment during Bureau meeting discussions, a quality for which he received much praise from colleagues. 187 Common sense and tact were then golden threads with which to weave an official, friendly network of contacts, information, and activities between the United States and Latin America. Cumming knew how to maintain the Bureau's relevance without risking it in enterprises for which it had insufficient funds and staff, and he believed that the institution's main task was to advise and persuade.

Later on he received honors similar to those that had been received by his predecessors: the presi-

dency of the United States Association of Military Surgeons, United States Public Health Association, and the Southern Medical Association. He was also appointed to membership in various scientific academies and received numerous awards and honorary doctoral degrees. In Latin America, he was widely revered, receiving the highest honors attainable by a foreigner from Colombia, Chile, Cuba, the Dominican Republic, Ecuador, Haiti, Mexico, and Peru. 188

At many of the conferences in which Cumming participated, the delegates enjoyed—or perhaps endured—an abundance of speeches, receptions, and banquets. One important event was the visit to the president of the host country, an encounter highly publicized in the local newspapers. Also, there were nearly always visits to the hospitals, maternity wards, and smallpox vaccination centers, as well as field trips to selected public works projects. Journalists and the sponsoring entities took advantage of the presence of the visiting dignitaries as a way to publicize their work and secure validation for public health activities and the national government as a whole. A delegate from the United States uttered, at the opening of the meeting in Uruguay, an obligatory phrase that could be adapted to a number of settings: "they have told me, and my observations have confirmed, that Montevideo is distinguished by the intelligence of its men, the beauty of its women, and the healthfulness of its climate."189

But behind the oratory there was a genuine effort to lay the groundwork for public health exchange and cooperation in the Region. Many of the delegates came to the Pan American meetings after having completed, or as they were in the process of undertaking, difficult and urgently needed field work. The gatherings were also an opportunity to disseminate news of research and other activities that were not yet well known internationally; compare the public health situations of different countries; study the possibility of joint action in areas of common interest; foster the belief that science, hygiene, and American solidarity were vital; and forge personal bonds among colleagues and neighbors. Although they lasted just a few days—

or sometimes weeks—the discussions and meetings were invariably intense and memorable.

The political and public health objective of Pan Americanism was confirmed in the 1920s with the inclusion of that name in the official title of the meetings, the Pan American Sanitary Conferences, and in the name of the entity, the Pan American Sanitary Bureau. This decision, as we saw in the previous chapter, was made at the Fifth International Conference of American States held in 1923 in Santiago, Chile. The previous year, in May 1922, the first issue of the Boletín Panamericana de Sanidad had appeared. In 1923, the journal's name was changed to Boletín de la Oficina Sanitaria Panamericana to reflect the Santiago meeting's decision. The Boletín was one of the first periodicals devoted to international health and has played an influential role in public health discourse throughout its nearly 100 years of continuous publication. 190

The Boletín's first print run consisted of 6,630 copies in Spanish and 2,000 in Portuguese, quite laudable numbers then—and even now—for a sci~ entific publication. In the years that followed, the pressrun stabilized at around 3,000 copies (still a respectable number), and it was published monthly. 191 Receipt and circulation of the offprints was a form of local and international legitimization for the Boletín's authors, many of whom were Latin American. One example was an article by Clementino Fraga of Brazil on a 1928 outbreak of yellow fever in Rio de Janeiro. The subject was of such timely interest that the author received 450 copies for his contribution. 192 Around this time, the Bureau had an annual budget of around US\$ 50,000, obtained on a pro rata basis similar to that used by the Pan American Union. This proration was calculated at the rate of 21.5 gold US cents per 1,000 inhabitants. The Pan American Union collected the funds and maintained the corresponding accounting books. 193

Cumming directed the Bureau at a time when Pan Americanism was relaunched as an essential component of the relationship between the United States and Latin America in the postwar context. One of the significant policy changes in this

relationship began at the end of the First World War, an event which, in the opinion of the historian Eric Hobsbawm, marked the end of nineteenth-century civilization and the beginning of the twentieth century. The foreign policy of U.S. presidents after World War I projected an increased readiness to assume global responsibilities in order to protect the United States and the Americas from the vicissitudes and potential ambitions of the European nations. President Woodrow Wilson, who governed the United States from 1913 until 1921, and others who followed him, sought, not without some contradictions, to abandon the protectionism and isolation that had earlier characterized U.S. foreign policy.

The need was not just political and diplomatic, but also economic. As long as the United States alone consumed all that it produced, isolation from world markets would not present a problem. But, starting in the early twentieth century—as "big business" recognized that the domestic market would soon become insufficient for its investments, production capacity, and ambitions—it prepared to expand its presence abroad. After the First World War, the U.S. economy grew like none other in the world, especially in comparison with that of Europe. In the 1920s, the United States was the world's largest exporter and biggest importer after Great Britain: it absorbed almost 40% of the imports of the 15 countries with the most active trading. 194

In a complementary process, the U.S. presence in the economy, politics, and culture of Latin America and the Caribbean became more accentuated as the European influence began to wane. <sup>195</sup> The First World War debilitated Europe's preeminence in many areas; but above all, it undermined the cultural supremacy the continent had long enjoyed in universities and medical schools throughout the Americas. Through scholarships and grants, learning institutions in the United States began to attract promising young students of science and medicine from the Region.

Following Herbert Hoover's election in 1928, U.S. foreign policy in the Western Hemisphere began to consolidate into what became the Good

Neighbor Policy. Officially, this policy nurtured Pan Americanism by promoting cooperation among the countries, recognizing each others' sovereignty and legal equality, and identifying commonalities. The Good Neighbor Policy, which would characterize U.S. diplomacy until the start of the Second World War, supported the principle of nonintervention at the same time that it sought to strengthen U.S. economic influence; discourage the extension of European influence on American soil; and demonstrate, through a variety of exchange programs set up for teachers and technical experts in the fields of business, agriculture, education, and public health, that the United States was not an "empire." 196

This policy gained increasing momentum following the election of President Franklin Delano Roosevelt in 1933. He served four consecutive terms, almost through the Second World War (he died shortly before it ended in April 1945 and was succeeded by Harry S. Truman). During those years, U.S. hegemony in the Region's economic and political spheres was secured, although it never stopped being questioned. During his presidency, Roosevelt led the U.S. out of the Depression into economic recovery, promoted greater government participation in social issues—one example is the Social Security Act (1935), creating a social insurance program for the elderly, disabled, and dependent children, among others—and stood on the forefront of the Allied powers' thrust to defeat Nazi Germany, Fascist Italy, and the Imperial Japanese Government during World War II.

In Latin America, the years between the two World Wars represented a difficult economic and political test, and were sometimes marked by crisis, confusion, and social instability. In the words of historical scholar Rosemary Thorp, it was an era of "disruption." Some products of the export economies, such as minerals, were favored, while agricultural products, such as cacao, which depended on European consumption, collapsed. The vicissitudes of the market ended the growth cycle of international sales of fruit, including the banana, which had been so important at the century's beginning.<sup>197</sup>

It was also a time of demographic change. In the late 1930s, the 20 republics participating in the Pan American Sanitary Bureau had 264 million inhabitants, and the countries with more than 10 million each were the United States, followed by Brazil, Mexico, and Argentina. 198 The population growth rate in the Region of the Americas was among the highest in the world. The capitals of most of the South American countries had more than a million inhabitants each. At the same time, Latin American society as a whole—up until that time overwhelmingly rural—was becoming increasingly urban. The steady increase in literacy rates and number of years of formal schooling at least in the larger cities—and women's right to vote and participate in the political process, were other significant changes that took place during the century's first decades. 199

### THE PERMANENCE OF A CODE

In the midst of this period of major change and uncertainty, Pan American public health made one of its first and most noteworthy contributions to the recognition of health as a right of all countries and all people: the Pan American Sanitary Code, drawn up at the Seventh Pan American Sanitary Conference, held in Havana, Cuba, in 1924, and still in force today.

Acknowledgement of the need for a political and scientific instrument that would improve upon the Washington Convention of 1905 and would obligate the American nations to carry out a series of specific and uniform sanitary actions came about as a result of the growing commercial exchange and, thus, interdependence, between the countries. At the same time, as we have seen in earlier chapters, while the hygiene of vessels and ports had been of historical concern, the regulations of each nation oftentimes were at odds with those of their neighbors.200 One of the strengths of the Pan American Sanitary Code was that it offered precise definitions of terms which previously had been ambiguous, such as "disinfection," "fumigation," "isolation," "period of incubation," and even "aircraft," (still somewhat of a novelty during this era, which the Code defines as "any vehicle that is capable of transporting persons or things through the air, including aeroplanes, seaplanes, gliders, helicopters, airships, balloons, and captive balloons"). The text also contains guidelines for the standardization of ships' bills of health and the requirement that all vessels have a medical officer on board who would maintain a daily sanitary log on the condition of the vessel, its passengers and crew. In comparison with the Paris Sanitary Convention of 1903 and the Washington Convention of 1905 (upon which it was based), the Pan American Sanitary Code not only defined what constituted the presence or absence of infectious disease, but also specified in detail the sanitary facilities and resources that should exist in the Region's ports.

The Code also presented clearer fumigation standards for vessels, specifying the use of sulfur dioxide, hydrocyanic acid, or a cyanogen chloride gas mixture, "periodically and preferably at sixmonth intervals" on the entire ship and its lifeboats, free of cargo and passengers. Article 37 warned harshly that "any person violating any provisions of this Code . . . shall be punished in accordance with the provisions of such laws, rules, and regulations, as may be or may have been enacted, or promulgated, in accordance with the provisions of this Code, by the Government of the country within whose jurisdiction the offense is committed." In deference to the countries' interests in maintaining a smooth and efficient flow of commercial goods, the Code sought to ease anxiety by declaring that the amount of time ships would be detained for inspection or treatment "shall be the least consistent with public safety and scientific knowledge." At the same time, it reinforced solidarity among the signatory governments, since the emergence of a communicable disease in any country of the Region represented a potential danger to all the others.

The Code adopted in Havana also urged the creation of efficient systems for the collection and tabulation of vital statistics; that is to say, for the reporting of births, deaths, and communicable diseases. This task had been performed only erratically since the Colonial period, since it

traditionally had been the Church, and not the State, which had overseen record-keeping of the national population through certificates of baptism, marriage, and death.

The Code also established duties and functions for the Pan American Sanitary Bureau, including the provision to public health authorities of the current status of communicable diseases, all information available regarding new outbreaks and the measures taken to control them, as well as reports on the progress made in controlling or eradicating such diseases and new methods used to combat disease. The Bureau was also responsible for promoting "public health organization and administration" and disseminating updates on "progress in any of the branches of preventive medicine."201 Finally, Article 55 states that "the Pan American Sanitary Bureau shall be the central coordinating sanitary agency of the various member Republics of the Pan American Union...". This clause provides the first indication of what would become the Pan American Health Organization's role as a specialized public health agency within the inter-American system, and of the nature of its work with its sister organization, the OAS, a relationship that will be explored in more detail in the next chapter.

Frederick Norman White, a British official representing the Hygiene Section of the League of Nations as an observer, attended all of the Havana discussions. Upon his return to London, he wrote a confidential report analyzing the meeting's major players and events. According to White, a considerable portion of the Conference's deliberations were devoted to the Sanitary Code. He compared the discussions to analogous deliberations in Europe and found that they had many similarities and could be considered "very favorably." He also furnished his impressions of some of the Conference's participants. About Alfonso Pruneda, who was then in charge of public health in Mexico, he minced no words: "Professionally perhaps the best man at the Conference. Obviously a capable administrator...a clear thinker; concise." Regarding John D. Long, who later became the Bureau's first field official or traveling representative, he could not have been more emphatic: "The moving force

in Pan Americanism health work is Dr. J. D. Long . . . As long as Long is in Washington . . . the Pan American [Sanitary] Bureau will be a real if not a very influential organization."<sup>202</sup>

White thoroughly disliked Cumming. One of his milder comments was that the Director of the Bureau was "distracted." His popularity among Latin Americans was a mystery, because "his mentality is anything but Latin."

The comments about Cumming do not seem to stem only from some personal animosity. In general, the opinions of the Hygiene Section executives were expressed politely, as one notes in a presentation given at a meeting of the American Public Health Association by a Hygiene Section executive, who ended by thanking Cumming for his ongoing friendship, support, and cooperation.<sup>203</sup>

One thing that is certain is that relations between Cumming and the International Office of Public Hygiene (Paris Office) were closer, even though Cumming attended both organizations' meetings. For example, while attending the International Sanitary Conference held in Paris in 1926, Cumming received a request that the Bureau serve as a "regional organization" of the Paris Office in the collection of health statistics and epidemiological information from the Americas. Representatives to the Eight Pan American Sanitary Conference, held in Lima, Peru, the following year, readily assented to this request.<sup>204</sup>

According to Cumming, the Hygiene Section was trying to replace other international organizations, including the one representing the Americas.<sup>205</sup> Cumming's closeness to the Paris Office was clearly demonstrated in October 1939 when, just weeks after France's declaration of war on Germany, Robert Pierret, the Director General of the French organization—fearing for the safety of his staff and himself—moved the Office to Royat, on the outskirts of Vichy. Cumming wrote Pierret a warm letter, offering his help, and even suggested a possible move of Pierret's group to the United States.<sup>206</sup>

The Frederick Norman White document on the Havana Conference reveals, on the other hand, a certain rivalry between the Hygiene Section and Cumming's organization. In it, White expresses a desire for the League to rapidly gain influence in Latin American public health affairs. He notes that the Section's officials had been "helpful, even sympathetic," regarding any matter for which their advice had been sought. But in his institution's official dealings with the countries, they had had to behave "as if the Bureau did not exist, informing them however of what we do."<sup>207</sup>

Among the projects the Hygiene Section attempted to carry out in the Americas was a reorganization of Bolivia's public health system in the late 1920s. It also held at least one meeting with Latin American health officials in Havana in 1924, provided support to various centers and research projects, such as the study of Hansen's disease (leprosy) in Brazil, and awarded scholarships to Latin Americans to study public hygiene at European universities.<sup>208</sup>

Not surprisingly, these activities never enjoyed the high profile nor access to sizeable funding as did such U.S. institutions as the Rockefeller Foundation, which organized dynamic public health campaigns in the Americas and attracted a growing number of Latin Americans to study and teach medicine and science at U.S. universities. Between 1917 and 1951, the Foundation's International Health Division awarded 473 scholarships to Latin Americans working in the health sciences.<sup>209</sup> Two principles that governed this activity were, first, that the sponsor should submit an appropriate plan of studies for the candidate, taking into account his or her interests and goals, and second, that the development of medical and public health services in the Americas should strive to replicate models and programs that had proven successful in the United States.

The 1920s were marked by a series of meetings and intense activity for the Bureau. In September 1926, the first Pan American Conference of National Directors of Health of the American

Republics was called to order in the Hall of the Americas of the Pan American Union in Washington, D.C. Among those present was Leo S. Rowe, the Director General of the Union.<sup>210</sup> The Bureau had been asked to assume responsibility for this new activity through a resolution adopted at the Fifth International Conference of American States held in 1923 in Santiago, Chile. These gatherings were to be held every two years in the interim between Pan American Sanitary Conferences as a forum for the exchange of news on public health activities and progress between Bureau officials in Washington and national health authorities. Four more would be held in Washington (1931, 1936, 1940, and 1944), and the sixth and final one was held in Mexico City (1948).

Another of the Bureau's governing bodies started operating during this period: the Directing Council, which held its first meeting in May 1929, also in Washington, D.C.<sup>211</sup> Important decisions, for example, that the Bureau's official languages would be English, French, Portuguese, and Spanish, were made at that meeting. It was also here that the Director presented his first Annual Report. Also, the budget for "the Bureau's approximate [annual] expenses," which had to be submitted two months before the start of the fiscal year, was approved.<sup>212</sup>

At the Eighth Pan American Sanitary Conference, held in Lima, Peru, in 1927, it was agreed that institutionalization of the proposed modifications to the Pan American Sanitary Code should be led by each country's governmental entity charged with overseeing public health and hygiene matters.<sup>213</sup> While some countries, such as Chile and Cuba, already had organizations of this type, in many others it was merely a vague aspiration. Chile had had a Ministry of Hygiene Workers' and Social Welfare and a Mandatory Workers Insurance Fund, which covered the costs related to illness, disability, old age, and death, since 1924.214 Other similar institutions established later included Peru's Ministry of Public Health, Labor, and Social Welfare (1935) and Venezuela's Ministry of Health and Social Welfare (1936).

At the same time, the first schools of public health, independent of those dealing with medicine, were established.<sup>215</sup> These formalized the teaching of public hygiene, which had previously taken place in the final years of medical school. (One of the first university chairs in hygiene in the Americas was established by Argentine physician and statesman Guillermo Rawson in 1872 at the University of Buenos Aires.) In Brazil, the Government of the State of São Paulo established, in 1919, an Institute of Hygiene, independent of the School of Medicine, which later became part of the University of São Paulo and, in the 1940s, served as a basis for the establishment of a School of Public Health. In Mexico, the School of Public Health was established in March 1922. This entity dates from the same era as the first schools of public health in the United States (Johns Hopkins University's School of Hygiene and Public Health, built and endowed by the Rockefeller Foundation, which preceded the Mexican counterpart and, in part, inspired it, dates from 1916) and offered the degree of public health physician.<sup>216</sup> In Brazil and Mexico, the Rockefeller Foundation likewise played a pivotal role by subsidizing part of the expenses, providing visiting professors from the United States, and awarding scholarships to students.

The Lima Sanitary Conference of 1927 created a special link between health and history. Every institution seeks to identify heroes and standardbearers who embody its highest ideals and traditions, and the Pan American Health Organization is certainly no exception. The principal organizer of the Lima Conference, physician and medical historian Carlos Enrique Paz Soldán, played an important role in this process. (He was himself an impressive symbol, as we will soon see.) Thanks to Paz Soldán, the meeting "beatified" Hipólito Unanue as one of the pioneers of Pan American public health. To Unanue, a Peruvian scientist, educator, writer, and statesman of the late Colonial and Independence era, deciphering the mysteries of the natural world for the benefit of humankind was a fundamental concern. Despite his contribution to the history of medicine and public health in the Americas, he died a relative unknown in 1833. Paz Soldán succeeded in correcting this oversight: one of the highlights of the Lima Conference was a moving ceremony in which Unanue's remains were transferred from Lima's public cemetery to a downtown mausoleum park devoted to national historical heroes, mostly military, known as the *Panteón de los Próceres.*<sup>217</sup>

Another decision taken at the Lima meeting was to create the Bureau's first field positions, known as "traveling representatives." These individuals were to be appointed from the national health departments, with the Bureau defraying travel costs, while the respective governments would continue to pay their salaries. One of the most noteworthy examples was the selfsame John D. Long who had been so praised in Frederick Norman White's report on the 1924 Havana meeting. Long cut his teeth on public health campaigns in the early years of the century, gaining recognition in the struggle against plague in California, where he designed an effective trap for squirrels, the animal which harbored fleas infected with the bacterium causing the disease.<sup>218</sup> He later worked in the Philippines and in the Panama Canal Zone, and rose to become Assistant Surgeon General of the U.S. Public Health Service.

In 1923, that Service detailed him to the Pan American Sanitary Bureau, where he was appointed Assistant to the Director. One of his first tasks was to visit health authorities in Bolivia, Chile, Cuba, Ecuador, Panama, and Peru. In February 1924, he represented the Bureau at a conference held in Panama of quarantine authorities of the western coast of South America. He is said to have been one of the principal drafters of the 1924 Pan American Sanitary Code;<sup>219</sup> his expertise was later requested by Chile, Panama, and Uruguay as these governments drew up their own national counterparts for the Code.<sup>220</sup>

His work, often focused on anti-plague campaigns, took him to all of Latin America, where he lived for a time in Ecuador, Peru, and Uruguay and often collaborated with U.S. epidemiologist Clifford R.

Eskey.<sup>221</sup> In Quito and Panama City, Long persuaded the archbishops to send a letter containing public health recommendations to their respective religious and political authorities.<sup>222</sup> In Guayaquil in 1929, Long set up guidelines for combating plague. Arsenic, cheap and easy to mix with flour and other foods, needed to be slow acting in order to give the rodent time to seek safety in its burrow and die with its fleas far from areas of potential contact with the human population. Long discovered that rats preferred rice and corn to cheese. The importance of his work in Ecuador was reflected in the title of an article published in a U.S. newspaper: "Guayaquil Has Lost Place as 'Pest Hole'." His work was also noteworthy because it took place during a juncture in time when other international organizations were not overly concerned with this disease. 223

In 1931, Long concluded his successful work against the plague in South America, ending a 30year period during which this disease was endemic in Lima and other cities along the Peruvian coast. Evaluating his weapons, the Bureau's traveling representative counted 10,000 traps, 70 tons of arsenic, a flamethrower for incinerating rodents, and a group of assistants he liked to call the Poison Boys, with whom he caught 24,000 rats. In only a brief span, Long oversaw a decrease in the annual case numbers from 1,800 to a quantity so small it could be counted on the fingers of one hand. The New York Times celebrated his achievement: "It was an unfortunate day for the rat population of South America, and particularly Ecuador and Peru, when the Pan American Sanitary Bureau declared war on them."224

Another person who was noteworthy in inter-American health during the period between the Wars, for both his personality and his writing talent, was Aristides Alcibíades Moll. He was, without a doubt, an indispensable assistant to Cumming. Moll was born in Puerto Rico and studied medicine in Spain. He began his public health career in the United States as head of Reports and Statistics for the U.S. Public Health Service. In 1928 he joined the Bureau as chief translator and scientific editor of the *Boletín de la Oficina Sanitaria Panamericana*. 225 His first task was similar to the

one he performed in Chicago where he had served as editor-in-chief for the Spanish-language version of the Journal of the American Medical Association, which ceased publication in the late 1930s. Thanks to Moll, many works that appeared in the Boletín were translations or summaries of articles that had appeared in English in U.S. journals. His humanitarian interests led him to write poems, historical articles, and the first general history of medicine in the Americas, and to translate the speeches of Canadian medical pioneer William Osler into Spanish.<sup>226</sup> His publications include one of the first English-Spanish medical dictionaries. In it, he advised: "to speak in English, one must think in English."<sup>227</sup>

During the 1920s and 1930s, Moll was also instrumental in the Pan American Child Congresses. Their principal goal was to analyze issues affecting children in the Americas, particularly those were poor and indigenous, and increase opportunities for better nutrition and schooling, as well as promulgate laws to protect them from abusive labor practices. The Pan American movement contrasted sharply with a social policy emerging in 1930s Nazi Germany—the use of eugenics to justify the forced sterilization of ethnic groups that were considered "inferior."<sup>228</sup>

Photographs show Moll with his tie askew, without the classic mustache worn by almost all men of that era, with unruly gray hair parted in the middle, and a smile that seemed on the point of exploding into laughter.<sup>229</sup> There was something of the eccentric in his second name—which referred to an Athenian general and politician—that meshed well with his erudite intensity, his lively facial expression, and his many skills. An anecdote he shared at a conference of hygiene professors reveals his extraordinary ability to laugh at himself:

Some days ago I was going into a restaurant in Washington with my little daughter. When we came out, a girl came running up to me and said, "I want your autograph." I asked why, and she explained, "Oh, you are the Governor of Massachusetts." Under

the circumstances I gave her my autograph—I tried to make it so she could not read it and then I inquired, "How did you recognize me?" She answered, "As soon as I saw you coming into the restaurant, I knew you were somebody very important on account of all your hair."<sup>230</sup>

In contrast, photographs show Cumming to be neatly dressed with his hair trimmed and properly groomed. The two men complemented one another. Moll recognized Cumming's leadership, and Cumming appreciated Moll's unique and valuable contribution to the Bureau's work.

In 1939, Moll was named the Bureau's Secretary ex officio. Cumming felt that it would be a good idea for Moll to travel more frequently on official business and allowed him to be out of the office whenever he was writing at home. Moll also offered his services as a guide for Latin American scholarship students visiting the United States for the first time. His fluency in English, French, Portuguese, and Spanish most likely ensured that he derived maximum enjoyment from the variety of cultural and diplomatic experiences Washington offered him. His devotion to pedagogy is evident from an article he published in the Boletín entitled "Decálogo sanitario" (The Ten Commandments of Health). In one succinct page, he advocates respect and moderation for the body; individual responsibility for environmental cleanliness; attention to personal hygiene; the importance of clean air, water, and food; protecting family health; prevention of communicable diseases; regular visits to the doctor and dentist; and avoidance of mental stress.231 According to Cumming, Moll was the most educated person he had ever known and certainly a most popular and sought-after personality among all his colleagues.

The rather unfortunate and overcrowded conditions under which the Bureau labored, at least during the late 1930s, could have been another factor that indirectly contributed to the workplace cordiality and camaraderie, forcing everyone to overlook insignificant inconveniences. One of the Bureau's secretaries later recalled the close quarters she shared with coworkers:

At the end of the hall on the second floor of the Pan American Union building there was a large mahogany double door leading to a 375-square-foot room occupied by 11 employees—the entire staff—and their respective desks and chairs. The first problem was how to talk to one person without disturbing the others; sometimes the secretary could put her elbow on the Director's desk.

In 1942, the Bureau was assigned another office, which was small and located on the first floor, and the Director and his secretary moved down there. In 27 years of service, Cumming never had his own office. At that point, the staff were being increased in order to handle the expanding activities, and these new employees set up shop on both sides of the room at the end of the corridor . . . . Once tours started in the Pan American Union building, the tourists would sometimes set off the parrots squawking in the Aztec patio downstairs and the employees had trouble concentrating on their work. But they never lost their great esprit de corps. 232

The work of Cumming, Long, and Moll was complemented by the activities of a generation of Latin American public health leaders who ensured, from their own countries, that international health was on the national policy agenda. Many of them were professors of hygiene at medical schools in their respective countries and delegates to the public health and medical meetings of the era. In the early 1940s, looking back on his work, Cumming would say that, over the years, these professors had been the most cohesive, permanent, and pervasive influence on the Pan American sanitary conferences. 233 One of the most noteworthy was Carlos Enrique Paz Soldán of Peru, who once called himself a "laborer for health." He came from a family of intellectuals and politicians that traced its origins to the Colonial period. He was a professor of hygiene at the School of Medicine of the Universidad Nacional Mayor de San Marcos, Director of that University's Institute of Social Medicine, a prolific and tireless writer, and an eloquent orator. At a time when international health was beginning to have a place on the local political agenda, it was crucial to have a charismatic speaker like Paz Soldán, who could excel on any podium. According to Moll, he was the poet and philosopher of Latin American health.234

Other officials were also moving the Bureau forward during the difficult period between the Wars. One of them was Bolívar J. Lloyd of the United States, whom Cumming knew well, and who had started working at the Bureau in 1922, assigned by the U.S. Public Health Service. 235 Between 1928 and the late 1930s, some 12 doctors and health officials, including the Argentine microbiologist and health official Alfredo Sordelli; Mario G. Lebredo of Cuba, who organized the 1924 Havana meeting; Atilio Macchiavello of Chile, who authored seminal works on the plague in South America; and Henry Hanson of the United States, a yellow fever expert, had been traveling representatives.<sup>236</sup> One of the most noteworthy was Edward C. Ernst, also of the United States, who had provided valuable support to Latin American nursing schools and served—as had Lloyd—as Assistant Director of the Bureau. Ernst died suddenly of a heart attack in November 1944 while working at his desk.<sup>237</sup>

Cumming remained at the forefront of Pan American health during a period that saw the growth of the U.S. economy and influence; even after 1936, when he retired as Surgeon General (he had been appointed to the position by President Calvin Coolidge in 1924 and 1928, and by President Hoover in 1932).<sup>238</sup> In 1936, President Franklin D. Roosevelt chose Thomas Parran (1892-1968), whom he had known since his days as Governor of New York, for the position of Surgeon General. Parran had distinguished himself as that state's health commissioner, setting up programs to control tuberculosis and cancer. He became perhaps best known for his work to sway public opinion away from moral condemnation of venereal diseases and toward consideration of them as a medical condition and threat to public health. 239 He was reappointed twice and remained at the forefront of health in the United States until 1948, when President Harry S. Truman replaced him with Leonard A. Scheele.<sup>240</sup>

A series of letters from the Department of the Treasury (to which the Surgeon General's office was subordinate) attests to the fact that Hugh S. Cumming and the service he had provided to the U.S. Government were held in special esteem. One

of these missives contains an evocative summary of his achievements, which included raising pay for the staff of the U.S. Public Health Service and rebuilding its installations:

When, in the pinching years of the Depression, towering walls are built on the sites of the dilapidated Marine Hospitals, beautiful marble replaces wooden shacks on Constitution Avenue, and an Athenian library and perfect laboratory replace the dog kennels and monkey houses, also on Constitution Avenue, then I am here to state that these things cannot be attributed to any combination of circumstances but are the shadow of a man, and that man is Hugh S. Cumming.<sup>241</sup>

The tribute ended by noting that the best reward for a Surgeon General was "the high personal esteem in which he is held on Capitol Hill through all shades of political color"—a distinction which Cumming achieved.

### THE CONFERENCES OF THE 1930s AND THE SECOND WORLD WAR

Two important sanitary meetings—one in Argentina and the other in Colombia—were held during the 1930s. All 21 American republics were represented at the Argentina conference, and 20 were in attendance at the Colombia meeting. The Ninth Pan American Sanitary Conference, held in Buenos Aires in November 1934, was opened at the Palacio del Consejo, and the event was presided over by Gregorio Aráoz Alfaro, former President of the National Department of Hygiene.242 The delegates included prominent scientists of the Region, such as Argentine physiologist Bernardo Alberto Houssay, who acted as one of the secretaries. Houssay directed the prestigious Institute of Physiology, established in 1919 at the School of Medical Sciences of the University of Buenos Aires. This Institute promoted basic research, produced academic publications, and supported full-time researchers. Houssay was the first Latin American researcher to receive the Nobel Prize in Physiology or Medicine (1947), for his discovery of the role played by the anterior

pituitary lobe in carbohydrate metabolism and the onset of diabetes.<sup>243</sup>

Another distinguished researcher in attendance at the Buenos Aires meeting was Peruvian physiologist Carlos Monge Medrano who had, a short time earlier, established the Andean Institute of Physiology and Pathology at the Universidad Nacional Mayor de San Marcos, to study the effects of altitude, especially lack of oxygen, on human beings.<sup>244</sup> As did other researchers, Monge Medrano curried the Bureau's support for the consolidation and promotion of scientific strategies that could be applied to local and subregional public health challenges. He was instrumental in the Conference's recommending that countries which had populations living in remote, high altitude geographical areas consider the desirability of carrying out physiological and physiopathological studies to identify effective interventions to improve and preserve the health of these groups.

It is interesting to note that this meeting was held at the same time as the Second Pan American Conference on Eugenics and Homiculture, and many of the same delegates attended both meetings. The Conference's name reflects a controversy that continues until today: the ethical boundaries for positive vs. negative manipulation of the gene pool. The first of these Conferences had been held in Havana in 1927, and the third and last was held in Bogotá in 1938.<sup>245</sup>

The resolutions of the Ninth Conference covered a wide gamut of public health activities, and many of the discussions embodied an important scientific dimension. It was at this meeting that Fred L. Soper, a Rockefeller Foundation official stationed in Brazil (and future Bureau Director), explained to the participants the new epidemiology of yellow fever—the presence of rural yellow fever without *Aedes aegypti*—and how several species of the *Haemagogus* mosquito breeding in tree trunks and common to tropical areas had found a natural reservoir in primates. (This new research would later lead to the discovery of sylvatic, or jungle, yellow fever and its differentiation

from urban yellow fever.) Also noteworthy was the recommendation that viscerotomy services be organized for diagnosing yellow fever and distinguishing these cases from malaria or hepatitis. All individuals who died after a short-term febrile illness were subjected to a liver punch specimen taken by health officials and then sent to specially trained pathologists. While the method generated protests, viscerotomy programs were nonetheless instituted in rural communities in several South American countries. Also, it was known that people could be protected from the virus that causes yellow fever with a vaccine (17D), but a widespread immunization campaign was as yet inconceivable.

At the Buenos Aires meeting, Cumming was reelected Director of the Pan American Sanitary Bureau. In his report to the Conference, Cumming described the organization's development since the end of the First World War: "fourteen years ago . . . the Pan American Sanitary Bureau existed in name only . . . . [But] today . . . its influence is felt not only throughout the Americas, but in the Eastern Hemisphere as well." He added a cautionary note, however, that "our resources are . . . limited, and we should not, in my judgment, be tempted to dissipate our efforts by engaging in enterprises for which we do not have adequate funds or which are not germane to the purposes for which the Pan American Sanitary Conferences and the Pan American Sanitary Bureau were created."248

Cumming also told how, on various occasions, the Bureau's advisory assistance had reconciled interests among countries, thus emphasizing its intergovernmental role, and he gave several examples. One of them focused on the alarm that was raised among Cuban authorities when smallpox broke out in one of the southern U.S. states. Thanks to the Bureau's support, Cuba's Director of Health was able to send two experts to that state to study the sanitary conditions, which were shown to be improving in accordance with the measures that had been adopted.<sup>249</sup>

The X Pan American Sanitary Conference was held in Bogotá, Colombia, in September 1938.<sup>250</sup> The opening ceremony was held in the splendid Colón Theater, adorned with all the flags of the Americas. Here, in addition to the exchange of greetings, the participants heard, for the first time, an "Inter-American Anthem" composed by E. Soro of Chile and performed by the Bogotá Orchestra (unfortunately, the particulars of the complete title, words, and musical score, were not recorded in any of the Conference documents). <sup>251</sup> A journalist with *El Tiempo* interviewed Jorge Bejarano, Professor of Hygiene at the National University and chairman of the local organizing committee, just before the Conference opened. The reporter captures the headiness of the moments leading up to the inauguration of an international event:

He had just returned from the airfield . . . and had already made four trips [on that day]. Up until now there is no delegation that has not received a welcome from Dr. Bejarano, multiplied many times over. But that's not all. His house is bustling. Dr. Bejarano's wife is responsible for taking care of the salons of the National Library building where . . . the delegates to the Conference will meet. 252

At the opening of the Conference, Bejarano gave a moving speech about the changes many of the Region's health professionals were experiencing: their contribution was not only recognized "in the sickroom" but, increasingly, in society as a whole. Medical studies were becoming "more intensive" and yet also more "humane." 253

The delegates who attended the Bogotá meeting included researcher Luis Patiño Camargo, Director of the Leprosy Institute of Colombia; Dr. Miguel Sussini, Director of the National Department of Hygiene of Argentina; Dr. Miguel Peña Acabaría, Secretary of the Department of Public Health and Social Welfare of Costa Rica; researcher Roberto Franco, prominent specialist in tropical medicine, who was then rector of the National University of Colombia; and Thomas Parran, who led the sevenmember U.S. delegation. Parran made reference to the globalization of epidemiological profiles when he said that all the countries represented at the Conference shared similar problems, even if they manifested themselves differently within each national context.254

Shortly after the start of the Second World War, the health organization of the Americas began celebrating Pan American Health Day every 2 December, commemorating the date on which the First International Sanitary Convention of the American Republics was opened in 1902.<sup>255</sup> In 1940, a special edition of the Boletín de la Oficina Sanitaria Panamericana described the activities carried out in various countries. In Colombia there was a pilgrimage to the gravesites of distinguished national public health leaders; in Cuba, radio messages about the importance of observing good health were broadcast; in Costa Rica, commemorative stamps were issued; and in Haiti, religious observances, sports festivals, and film showings were organized.<sup>256</sup> An editorial in the Boletín described an ideal that would reemerge in the late twentieth century: "Health, now and tomorrow, for all: for the rich and the poor, for the humble, the defenseless, those who have it and those who seek or need it, for all the groups of our democracies."257 The final word was a clear reference to and censure of the dictatorial regimes of Nazi Germany and Fascist Italy.

During the Second World War, the Boletín published a special section called "Health and War" related to issues within the context of the War and the public health challenges it was creating in the countries of the Region. Topics included securing and safeguarding emergency water and food supplies, the protection of schoolchildren in the event of aerial attacks, the adequate stockpiling of first aid supplies by the civilian population, and the danger of importing tropical diseases upon the return of U.S. soldiers fighting on the Pacific front. 258 A term that became popular during this time was "continental defense." An image that was easy to understand and widely communicated was that of the health officials of the Americas unleashing "their own war;" a just war against preventable diseases and unhealthy living conditions.

In fact, there existed during the time a very real fear—if not danger—that the armed conflict might spread to the Americas. The possibility of bombings, surprise landings, sabotage, or bacterial warfare was ever-present in the minds of many.

The author of a 1942 article on the latter subject tried to calm the many people for whom "the world of germs is a real threat" by asserting that "Certain technical difficulties, insuperable at this time, prevent the effective use [of biological agents] as weapons of war, and man still has available to him much more powerful tools with which to destroy his fellow man."<sup>259</sup>

The defense of the Americas was one of the principal themes addressed at the XI Pan American Sanitary Conference, held at the Palacio de Tiradentes, Rio de Janeiro, in September 1942.<sup>260</sup> The fact that the date coincided with the anniversary of Brazil's independence while that nation's soldiers were engaged in the Second World War was noted by several speakers. The solemn opening session was presided over by Gustavo Capanema, Brazil's Minister of Education and Health.<sup>261</sup> Under his leadership, the National Yellow Fever Service, the National Malaria Service, and the Malaria Service of the Northeast were established, and, with support from the Rockefeller Foundation, a program to "clean up Amazonia" was undertaken. All of this impressed the health authorities from the rest of the Region.262

Capanema's right-hand man was João de Barros Barreto, the meeting's organizer and a professor of hygiene at the then-University of the Federal District. Capanema was also at the forefront of a process for the centralization of health services. This effort was supported by President Getúlio Vargas, known as the leader of the so-called *Estado Novo*,<sup>263</sup> and was part of a populist and authoritarian movement, partly fed and sustained by social and union demands, aimed at expanding access to social services such as education and health, and committed to imposing the authority of the State on the regional branches of government.

At the opening ceremony of the Conference, Cumming gave a speech in which he recalled that Oswaldo Cruz had proposed, in 1907, holding a Pan American conference in Rio. He also stressed the importance of defense of the Americas, democracy, and public health. According to one newspaper report, Parran attended the meeting to give a presentation whose title said it all: "Public Health and All-out War." At one of the luncheons, the remarks of Mercedes Franco Ramírez, one of the Conference participants, reflected the strong collective emotions born of living in wartime: "I do not speak only in the name of Brazilian women, because we join efforts with all the other women and men of the Americas, [aspiring] for our greatness, for our happiness, and for our victory." 265

The meeting continued in the main hall of Rio's Escola de Belas Artes. The work of a Mexican delegate to the Conference, entitled "Defense of the Americas and Public Health," explained the significance of the relationship between war and health: "[defending] our women, our children, our elderly, and ourselves from the slavery that would be imposed upon us by the aggressors." Two years before, Parran had made a similar observation, but from another perspective, in a report he sent to the U.S. Department of State following his participation in the Fourth Pan American Conference of National Directors of Health, held in Washington, D.C., during the War's early days:

The countries concerned have become neighbors in reality, their problems are our problems, and even upon more lofty grounds than simple self-protection it has become a duty of the public health authorities of this country to familiarize themselves with the conditions of surrounding areas. Moreover, we have much to learn from them.

One of the last sentences of his report stressed continued participation in these meetings because "it becomes more a necessity than the mere exercise of an option."<sup>267</sup>

The XI Pan American Sanitary Conference was important because, despite the global conflict, delegates from the 21 American republics and observers from Canada participated. Nine directors of health departments, including Brazil's Capanema, who chaired the organizing committee, were present.<sup>268</sup> Although the spread of tropical diseases was not a major threat within

Canada, this nation nonetheless had begun sending observers to Pan American health meetings in 1936. Similarly, the British and Dutch colonies of the Caribbean, during the 1940s, began to actively exchange epidemiological information with the Bureau. Up until then, these reports had been sent only sporadically. But statistical representatives were appointed in each country between 1944 and 1947, and these officials received particular encouragement to submit information in a timely fashion to the Bureau.<sup>269</sup>

In January of the same year as the Rio de Janeiro Conference—1942—and in that same city, the Third Meeting of the Ministers of Foreign Affairs of the American Republics had been convened to develop a joint policy based on continental solidarity (besides the United States, Brazil, as well as Canada, had sent troops to various warfronts). The Sanitary Conference's resolutions built upon the accords of this earlier meeting by including a request for an inventory of the human and material resources essential to preserving the health of the Region's population. The Conference also recommended promoting effective, ongoing communication among the military health services; studying the wartime geographic distribution of communicable diseases; and assessing the danger of spreading disease through air travel (including not only routine and scheduled flights but also taking into account that espionage and smuggling activities had increased the number of clandestine air routes and volume of unauthorized travel). All of these considerations created the need to substantially increase civil, sanitary, and military cooperation among the American countries.<sup>270</sup>

The danger of a military threat from Europe or Japan heightened the feeling that there was a community of Pan American interests stretching from Alaska to Patagonia and including all the Caribbean islands, which, for the most part, had been overlooked in early twentieth century castings of regional solidarity. Such a vast territory seemed vulnerable. Fear of an invasion and sabotage was linked to opposition against the Axis countries, not only because of their authoritarianism but also because their racist ideology

called for the mass elimination of "undesirable" ethnic groups. While discrimination had not ceased to exist, most of the countries of the Americas had large mestizo populations, and the Region's miscenigenation and cultural diversity increased its vulnerability to concerns regarding the protection of all its social groups.

Feelings of solidarity throughout the Americas were evident at the Rio de Janeiro Conference. There was great appreciation and applause for the intervention of the head of the Peruvian delegation, who observed: "Today we stand proud to note a specific American science of pathology has been achieved, thanks to the tireless efforts of our researchers, whose original techniques and methods bring spiritual hegemony and a scientific personality to the universal order of knowledge."271 For his part, a Nicaraguan physician, quoting another Latin American in championing medical Pan Americanism, said: "If medicine demands the study of the economy and physiology of the human body, the study of hygiene and public health demands an understanding of the anatomy and physiology of the continents."272 Another perspective on the relationship between Pan Americanism and medicine is found in the closing speech of the delegate from Brazil, who said that the Conference's ultimate goal was to "turn" public health into the basic resource for the "strength," "power," and "progress" of the Americas.273

An important agreement reached at the XI Pan American Sanitary Conference was to establish a sanitary engineering committee at the Bureau.<sup>274</sup> That committee held two meetings in 1946, the first in Rio de Janeiro and the second in Caracas, Venezuela. At the Caracas meeting it was decided to establish a professional association of sanitary engineers, and the Bureau supported the creation of national entities. These meetings provided a forum for the discussion of different measures for the protection of public sanitation facilities, as well as for the promotion of chlorine use to disinfect drinking water supplies and of mosquito control through drainage of standing water and/or filling in of low-lying areas with soil or cement. Other initiatives that were approved included the

organization of intensive courses on malaria prevention and control and the design of interventions to minimize the risks to human health from wastewater crop irrigation systems.

While most of the proposals put forth at the Pan American meetings were developed by experts who belonged to a scientific elite, there were, from time to time, also discussions on the need for farreaching sociocultural changes—and how these could contribute to improved public health. One example was the participation of the delegate from Peru at the Rio Conference. Hugo Pesce shared the experience of a doctor who helped residents confront exanthematic typhus in Puno, one of the poorest departments in his country, and one of the highest above sea level:

[Nuñez] Butrón had learned that carrying out delousing campaigns among indigenous groups had produced only short-term results due to the failure to introduce any changes in the set of physical factors that encourage the persistence of lice. Given the impossibility, from a purely sanitary standpoint, of raising the economic level and transforming their homes, he decided to address the problem by changing the indigenous people's attitude toward hygiene and health. He deserves credit for having discovered, from the outset, that such a radical change in ancestral beliefs could only be accomplished by the indigenous people themselves. With infinite patience he devoted himself to providing a hygiene education to a select group of indigenous people.... I bore witness, years later [to what had been achieved] when I visited that region ... a small crew of health volunteers, all indigenous people, called rijcharis (literally [in Quechua] "alarm sounders"), had gradually won over many communities to the concepts of hygiene. The doctor's visit turned into an impressive inspection of thousands of indigenous people lined up on the pampa. Countless wooden washbasins and some soap, acquired at great financial sacrifice, were the paraphernalia of a solemn ritual practiced by the entire community, consisting of publicly washing the hands and face.

In a final reflection, Pesce sought for a message bringing resonance to all his colleagues present. "It seems to me," he said, "that we can conclude that in the majority of public health campaigns, and most particularly in delousing campaigns, success will be that much greater as more of the population expecting those benefits participates."<sup>275</sup> Perhaps without realizing it, Pesce had presaged one of the cornerstones of the primary health care movement still a quarter century away: the indelible contribution of community participation to the success of all public health endeavors large and small.

Another important outcome of the Rio Conference was the decision to organize a systematic multicountry public health campaign. At the suggestion of the Bolivian delegate, a resolution calling for the coordination of transnational campaigns to eradicate the *Aedes aegypti* mosquito was approved. This resolution was an outgrowth of the success achieved in Bolivia—particularly in Santa Cruz de la Sierra—in the struggle to reduce the numbers of mosquitoes and their habitats.

At that time, it was clear that the etiology and control of yellow fever could not be reduced to the postulates of the early twentieth century, which considered the disease to be an urban one transmitted by a single mosquito and endemic only when the population was numerous. In the late 1920s epidemics broke out in Brazil, Colombia, and Venezuela that could not be explained by the traditional medical paradigm.276 That notwithstanding, efforts continued to eliminate yellow fever in the cities by eradicating the Aedes mosquito. Subsequently, in 1948, the disease reappeared with a vengeance in Panama and spread from there to other Central American countries. Outbreaks in that region continued until the mid-1950s, when cases occurred in northern Honduras and southern Guatemala.277 The objective of eliminating the Aedes aegypti mosquito would be partially, but never totally, achieved. Even today the presence of the mosquito—which transmits not just yellow fever but also dengue is one of the Region's major public health problems.

In the years before and during the Second World War, basic aerial health measures began to take root. During this period the volume of commercial aviation—in terms of passengers, freight, and

mail, on the one hand—and attention to international regulation of hygiene and sanitation measures in airports, airfields, and aircraft, on the other hand—saw tremendous growth. This was a noteworthy change. By the 1930s the U.S. airline Panagra (Pan American Grace Airways) had established regular service up and down the American continent, continuously inaugurating new routes and linking more destinations while adding new planes capable of greater speeds. A trip between Buenos Aires and New York, which took weeks by ocean liner, soon took a little less than 24 hours by air. By the 1950s, the airlines that provided service between the United States and Latin America transported five times more passengers than steamships.<sup>278</sup>

These changes, which not only reduced travel time but also the cost of transportation, had precipitated the development of regulations of a more regional scope based on the International Sanitary Convention for Aerial Navigation signed at The Hague in 1933. Thus, special measures to prevent the spread of communicable diseases by air travel were adopted at an Inter-American Technical Aviation Conference held in Lima, Peru, in 1937 and the First Pan American Conference on Sanitary Aviation, held in Montevideo, Uruguay, in 1939. John D. Long participated in the latter conference, representing the Pan American Sanitary Bureau. 279 Later, during the War, these regulations became important ingredients that facilitated the selection of the best-suited pilots and crews, based on their medical history and soundness of health; helped prevent the transport of disease-bearing animals, birds, and insects; ensured that all passengers had been issued the proper certificates attesting to general good health and up-to-date vaccination status; and provided guidelines for the construction of new airfields and airports and for the rapid evacuation by air and treatment of wounded soldiers from the battlefields.280 In December 1944, a new International Convention for Aerial Navigation, updating the 1933 convention and reflecting circumstances emerging from World War II, was signed.<sup>281</sup>

The renewal of Pan Americanism during the Second World War found a noteworthy ally in

Leo S. Rowe, Director General of the Pan American Union from 1920 to 1946. Cumming would later recall that, during the War, despite the problems caused by military embargoes delaying the exportation and delivery of critically needed medicines and medical supplies to civilian populations, the Bureau was able to help many countries curb epidemics and implement public health programs. One example of the latter was a series of onchocerciasis studies in Guatemala.<sup>282</sup> Using the power of his pen, Moll took responsibility for extolling the virtues of Pan American public health. Toward the end of the War, and full of passion, he wrote that the public health leaders of the Americas had been and remained united: "in the constant struggle against tyranny, we now come together once again in the constant war against disease, deprivation, and death." Moll also proposed an objective that would extend beyond the Region: "Health for the Americas, that blessed slogan, and Health for all of Humankind as well."283

The resurgence of Pan Americanism was the reason why, starting at the time of the War, the term "inter-American" also came to be used more frequently; in the latter case to refer to scientific events and societies. There was a feeling among some that the term "inter-American" suggested a more horizontal relationship among the countries of the Americas. In June 1945, the Bureau and the W. K. Kellogg Foundation organized an Inter-American Conference of Professors of Hygiene in Ann Arbor, Michigan, to exchange information on the Region's different teaching systems.<sup>284</sup> Before the meeting, the Latin American participants toured the major U.S. medical schools. Impressed by the possibilities he saw for future collaboration between the United States and Latin America, one Brazilian professor noted that "the differences among neighboring populations in the New World exert an attraction that awakens curiosity and creates ties of mutual admiration and respect." In thanking his hosts for their hospitality, he recalled a phrase by the Irish playwright George Bernard Shaw: "No one knows his own country unless he has been abroad."285

Thanks to the Bureau's presence, the concept of intercultural encounters and cooperation was forged in the public health arena. During the years of the Second World War, the groundwork for what would later be the Bureau's first field offices was established. The first, set up in 1942, was located in El Paso, Texas, on the U.S.-Mexico border. Initially, its mission was to control syphilis and gonorrhea, which were present on both sides of the Rio Grande. Penicillin had not yet been discovered, and treatment was protracted and complicated. The Bureau's work was complemented by the establishment, in 1943, of the United States-Mexico Border Health Association, an organization of public health professionals from both countries, which began exchanging information on a regular basis and holding annual meetings, alternating the site between the two neighboring countries. 286

The second field office worked out of Guatemala City, and its mission was to control exanthematic typhus in the indigenous communities. The hope was to vaccinate a high percentage of the population in the rural areas where the disease was endemic and then use DDT against the vectors that transmitted it. Approximately one million people had been vaccinated by 1946.<sup>287</sup> Another office, in Lima, Peru, was dedicated to eliminating bubonic plague from the western coast of South America and to overseeing nursing education programs. Finally, an office was set up in Jamaica in the late 1950s, when the process of establishing individual country offices had already begun.

When, in 1945, Cumming celebrated his 25<sup>th</sup> anniversary as head of the Bureau, he received many letters of recognition, including one from Argentine scientist Bernardo Alberto Houssay. The Pan American Union also paid tribute to Cumming by issuing a resolution signed by all the accredited ambassadors in Washington, noting that the Pan American Sanitary Bureau, created by the American republics, was the oldest international health organization and that its sustained development was due, in large measure, to Cumming's personal interest and efforts, which allowed it to advance "the

cause of health in the Republics of the Americas on the basis of reciprocal cooperation."<sup>288</sup>

The work of inter-American public health was not limited, at that time, to partnerships created at the level of field offices. One entity that became increasingly important during the Second World War was the Office of the Coordinator of Inter-American Affairs (OCIAA), established in 1941 under the U.S. Department of State and headed by Nelson A. Rockefeller, grandson of the oil magnate who established the Foundation bearing his name.<sup>289</sup> Its purpose was to counter the Nazi influence and strengthen commercial and cultural bonds among the Region's nations. The Office undertook a series of educational, public health, and economic development programs that included the construction of hospitals, organization of malaria control campaigns, establishment of water and sanitation systems, and the provision of scholarships for medical and nursing students.<sup>290</sup> These activities were carried out by organizations known as "Cooperative Public Health Services," which were generally under the formal supervision of the ministries of public health, although in reality they enjoyed a high degree of autonomy and possessed considerable resources. These services remained active for several years after the end of the Second World War.

By 1948 there were 130 U.S. public health experts and some 8,000 physicians, nurses, and other nationally contracted professionals working under the auspices of the Division of Health and Sanitation of the Office of Inter-American Affairs, the name by which the OCIAA was now known. In that year alone, approximately 600 Latin Americans received scholarships, generally to study in the United States. Between 1941 and 1951, US\$ 30,403,103 were invested in public health projects sponsored by the Office.<sup>291</sup> The overarching principle behind its initiatives was that developing countries should strive to adopt and/ or replicate public health models and strategies that had already proven their effectiveness in the United States:

The great destroyers of health in the underdeveloped areas are those very ones that have been conquered in the United States . . . . The job needing to be done is the transfer abroad, in an effective and stabilizing form, of our successful experience here in meeting and conquering basic problems in community hygiene and sanitation." <sup>292</sup>

Although the expenses of these programs were originally supposed to have been shared, and then eventually assumed, by the Latin American governments themselves, this objective was never fully achieved. By the late 1950s, the United States had developed a more flexible and bilateral approach based on individual negotiations undertaken with each country. For these reasons, the official profile of U.S. public health cooperation in the Region were less pronounced, even though many of the binational public health initiatives from earlier years continued their course.

One indicator of the extent of U.S. economic aid for international health, especially in Latin America, can be found in the figures that appear in a pamphlet drawn up in 1954 by the U.S. Public Health Service's International Health Division, which administered the programs. According to this source, in 1942 the United States' expenditures were limited to US\$ 6,000 for the International Office of Public Hygiene (Paris Office) and US\$ 60,000 for the Pan American Sanitary Bureau. By 1954 the budget earmarked for international health had increased to US\$ 40 million. The multilateral organization that received the most funding was the United Nations Children's Fund (UNICEF), at approximately US\$ 6 million. It was followed by the World Health Organization, with US\$ 3 million, and the Pan American Sanitary Bureau, with US\$ 1.33 million).<sup>293</sup>

Another U.S. organization that began to play an important role in inter-American public health during that time period was the W. K. Kellogg Foundation. In addition to its critical support for studies on nutrition in Guatemala, medical education, planning, and oral health, this philanthropic organization awarded a series of scholarships to Latin American professionals, mainly for study in the United States. Between 1947 and 1957, Foundation fellowship grants benefited 456 people, including 242 doctors, 89 dentists, 70

nurses, 26 sanitary engineers, and 29 specialists in hospital administration and public health. The interest in the expansion of public health services in the Americas was partly due to the leadership of Emory Morris, the Foundation's President and Chairman of the Board from 1943 until 1967, who became known as "a quiet but daring visionary."<sup>294</sup> In the second half of the twentieth century, the W. K. Kellogg Foundation played, in Latin American medical education and public health, a role similar to that which the Rockefeller Foundation had initiated earlier in the century, and the contributions of both organizations left a deep impression that strengthened inter-American ties.

## THE ORIGINS OF THE WORLD HEALTH ORGANIZATION

By the end of the Second World War, abundant evidence pointed to the vital role played by medicine and public health in saving lives and reducing the effects of injury, hunger, and disease, both on the civilian front and the battlefield. The value of health precipitated discussions about the need to ensure long-lasting peace and build a better world, using the health and well-being of the world's population as a principal foundation for achieving this goal.

Toward this end, the United States promoted the establishment of a single, efficient international policy organization, other than the League of Nations, which had been weak and undermined even before the War broke out. This new institution, the United Nations, planned the establishment of a set of administratively autonomous specialized technical bodies, including a "world," "international," or "universal" (all three adjectives were suggested in the early stages) organization dedicated to public health.

"Medicine is one of the pillars of peace," noted a memorandum prepared by the Brazilian delegation to the United Nations Conference on International Organization, held in San Francisco, California, in April 1945. Fifty nations attended this historic event that drafted the U.N. Charter

and gave birth to this organization. While the establishment of a public health organization was not on the meeting's agenda, a proposal to establish such an institution came forth in the form of a joint declaration from Geraldo Horácio de Paula Souza of Brazil, a professor at the University of São Paulo's Institute of Hygiene, and Szeming Sze of China, the head of Asian affairs in the Division of Health of the United Nations Relief and Rehabilitation Administration (UNRRA). (This organization had been founded in 1943 to respond to the myriad public health and humanitarian emergencies that presented themselves in Europe in the War's aftermath.)<sup>295</sup>

Thanks to Souza, the term "health" was used instead of the more generic "social" in the meeting's final document. A pamphlet produced by Brazil's Ministry of Foreign Affairs and penned by Souza (an indication of the proposal's importance to Brazil's foreign policy) described the role of "health" as a cornerstone in the building of strong, effective, and friendly relations: "health is a common denominator, like a powerful weapon that we should use more and more for better understanding among nations and peoples."296 Also, based on the public health experiences of his own country, Souza believed that health should not be considered merely a result of improved economic and social conditions, but a means for achieving them.297

In supporting the proposal for a new organization, Souza drew a parallel with the grave public health challenges left in the wake of World War I that led to the creation of the League of Nations Hygiene Section. In this same way, he invoked the urgent need to rebuild public health systems and services throughout war-torn Europe to justify the establishment of what would become the World Health Organization (WHO). He provided an additional justification for the existence of the new entity by referring to the worldwide (and perennial) threat of malaria, plague, cholera, and yellow fever.<sup>298</sup>

The joint declaration by Brazil and China at the San Francisco Conference proposed that "a General

Conference be convened within the next few months for the purpose of establishing an international health organization," and that "full consideration should be given to the relation of such an organization to, and methods of associating it with, other institutions, national as well as international, which already exist . . . in the field of health." In response to this request, a Technical Preparatory Committee was established by the U.N. Economic and Social Council to lay the groundwork and set the agenda for the conference. Its members consisted of 16 distinguished figures from the field of world health, including René Sand of Belgium (elected as the Committee's chair), Gregorio Berman of Argentina, Manuel Martínez Báez of Mexico, Andrija Stampar of the former Yugoslavia, Brock Chisholm of Canada (who became the first WHO Director-General), and Thomas Parran of the United States. Between 18 March and 5 April 1946, the group held more than 20 meetings in Paris, France, in which an annotated agenda and a series of draft resolutions and proposals for consideration were drawn up. These meetings were attended by observers from four existing international health organizations—the Paris~ based International Office of Public Hygiene, the League of Nation's Hygiene Section, the UNRRA, and Cumming and Moll of the Pan American Sanitary Bureau.<sup>299</sup>

The International Health Conference—the first international meeting to be held under the auspices of the newly created United Nations opened at New York City's Hudson Hotel on 19 June and concluded on 22 July 1946. Thomas Parran served as the chair of a gathering that included all parts of the world—the former Allied powers, neutral nations, and members of the Allied Control Council in representation of the defeated former Axis countries of Germany and Japan. On the Conference's crowded agenda was a range of items, including adopting a constitution for what would be called the World Health Organization (the title had been agreed upon during deliberations of the Technical Preparatory Committee); determination of the future status of preexisting intergovernmental public health entities; and the creation of an Interim

Commission to organize the First World Health Assembly (where WHO would be formally constituted) and to undertake the most pressing of the functions which would fall to WHO until the Assembly could be convened.

Comprised of delegates representing 18 countries—including Brazil, Mexico, Peru, the United States, and Venezuela—the Interim Commission met five times (once in New York and the other four times in Geneva, Switzerland). Among its other duties, the Commission was asked to recommend possible sites for the institution's permanent headquarters (Geneva, New York, and Paris were proposed, and the First World Assembly approved Geneva) and to establish the characteristics of WHO's "regionalization." The International Health Conference had approved a protocol for the termination of the International Office of Public Hygiene. It also charged the Interim Commission with assuming the surviving functions of the League of Nation's Hygiene Section, following the League's dissolution in 1945 with the creation of the United Nations. The UNRRA would soon (in June 1947) discontinue its relief and rehabilitation operations in Europe, and the rest of its functions would be transferred to other U.N. agencies. That left hanging in the balance the fate of only one truly "regional" organization—the Pan American Sanitary Bureau.

During the Technical Preparatory Committee deliberations in early 1946, Cumming had argued that regional entities needed to be preserved within a larger international structure. His line of reasoning was carried forth to the International Health Conference, where Article 54 of the WHO Constitution recognized the Pan American Sanitary Bureau.<sup>300</sup>

Although the forefathers of WHO accepted the idea of regional organizations from the beginning, they felt that the affiliation with these institutions should be determined individually by each country, which entailed, in practice, dissolution of the Pan American Sanitary Bureau. At times, these organizers used the terms "absorption" and "liquidation" of all the existing health organizations.<sup>301</sup> In Europe and some Asian countries, there

were those who said that for WHO to be truly international, not just the Paris Office, the Hygiene Section of the League of Nations, and the UNRRA, but also the Pan American Sanitary Bureau, would have to be disbanded.<sup>302</sup>

As these events unfolded—the United Nations Conference on International Organization in 1945, where the Technical Preparatory Committee was set up, and the International Health Conference in 1946, where the Interim Commission was designated to make provisions for the First WHO World Health Assembly (held in June 1948)—the staff and member countries of the Pan American Sanitary Bureau were asking themselves what they should do. Many Latin Americans felt that the Europeans were unaware of the successful tradition of inter-American public health cooperation that had been nurtured not only in partnership with the Pan American Sanitary Bureau, but also the Rockefeller Foundation and the U.S. Office of Inter-American Affairs, in projects whose scale, investment, and achievements were considered impressive for their time. One indicator of both the shared pride in these gains and fear for the potential loss of the Bureau's autonomy came in the form of a question posed by a Nicaraguan public health leader: "Will the countries of the Americas remain indifferent to the imminent danger that their rights will be undermined?"303

The uncertainty lingered until January 1947, when the decisive XII Pan American Sanitary Conference was called to order in Caracas, Venezuela. In attendance were Cumming, Parran (heading a U.S. delegation of 13, one of the largest), and the "top brass of Pan American public health." 304 The meeting attracted the participation of not only the 21 independent, self-governing member nations of the Pan American Sanitary Bureau, but also observers from Canada and the Caribbean (British Guiana, Jamaica, and Trinidad and Tobago) and representatives of other European nations maintaining territorial interests in the Region, such as France (Guadalupe, Martinique, and French Guiana) and the Netherlands (Curacao and Dutch Guiana). Also on hand was a large group of staff from the Office of Inter-American Affairs and the Rockefeller Foundation. All present were there in the full knowledge that nothing less than the Bureau's future was at stake.<sup>305</sup>

Cumming's opposition to any possible absorption of the Bureau by WHO was absolute. He considered this to be abusive interference in the public health affairs of the Americas and an affront to the autonomy and efficacy of a system that had existed since the century's beginning, ever-growing in importance as the defender of hemispheric health. Cumming's attitude also entailed criticism of WHO itself. He had written to Nelson Rockefeller and President Harry Truman (with whom he met on the matter) telling them that an organization such as WHO with "supreme authority" could potentially use its multinational clout to influence the public health decisions of sovereign governments around the world. He felt that powers of this type presented a danger to both the United States and the Americas as a whole. 306

Cumming's position was based on regional agreements and meetings, such as one he organized in Havana in October 1946 to defend the Bureau's integrity, Pan American values, and administration (two other matters addressed at this meeting were reorganization of the Bureau and the relationship between public health and social insurance).307 A meeting prior to this one, and more political in nature, was the Inter-American Conference on Problems of War and Peace, held in Mexico City from 21 February to 8 March 1945. One of the Conference resolutions noted in its preamble that for more than 40 years the Sanitary Bureau had operated as an "inter-American public health organization . . . which has rendered great and valuable service to the cause of health in the Western Hemisphere." Language in two additional resolutions echoed that point by stating:

The Pan American Sanitary Bureau should continue to act as the general public health coordinating body for the Republics of the Americas and all the other countries of the Western Hemisphere that wish to use its services, except for the cases governed by bilateral agreements between governments or between governments and an inter-American organization.

The Americas-wide nature of the Pan American Sanitary Bureau should be duly recognized by any world health organization, and it should be given full support in fulfilling all its responsibilities pursuant to the provisions of the Pan American Sanitary Code.<sup>308</sup>

At the Caracas Pan American Sanitary Conference, the position contrary to Cumming's was represented by Parran of the United States: support for the establishment of the United Nations and its specialized organizations. Parran, moreover, had played important roles at the preparatory meetings leading up to WHO's creation; in addition to presiding over the International Health Conference in 1946, his name has been proposed as a candidate to become this Organization's first Director-General (although in the end he declined). In Caracas, Parran indicated that a dual affiliation for the nations of the Americas; i.e., to WHO and the Pan American Sanitary Bureau, should be considered. But he warned that if the countries of the Americas insisted on having a special system, they would encourage other nations to form regional blocs. Perhaps Parran's words emanated from the fact that one of the fears of the U.S. Government was the possibility of the formation of a bloc of Eastern European communist countries—which, in the end, is what happened. On the other hand, Parran used the Conference as an opportunity to reiterate the interest of the United States in "continuing to be 'good neighbors' in the Americas." His offer of U.S. support was still more emphatic: "my Government is prepared, not just to continue this work [of the Pan American organization], but to give it new life . . . an expression of my country's technological power and its humanitarian zeal."309 To help explain Parran's attitude, it is important to mention his support for the centralization of public health services in his own country. For example, he wanted to expand the federal powers of the U.S. Public Health Service. He very probably felt that something similar should happen with the regional organizations: that they should

merge and be coordinated by a worldwide entity.<sup>310</sup>

A unique view of this meeting is provided by a Conference newsletter that was distributed to the delegates containing interviews and speeches such as the one summarized below. In his opening words, Cumming used polished prose to ask the delegates, or to put them on notice, about the life of their institution being "threatened by those who never looked after it or fell within its purview." Cumming, who was then completing 25 years as the Bureau's Director, sought to clear up any doubt about the sincerity of his opposition:

I have never been a candidate for the position ... and I am not today .... [but] I can say, without beating around the bush, that if the Bureau, which has for so long cared for, supported, and developed the Pan American countries, is now to be disfigured, diminished, destroyed, and converted from a shining star to a dark moon, I would not accept the position under any circumstance or recommend to anyone else that he or she accept it.

His speech was certainly aimed at the Latin American delegates, whose efforts to be *pares inter paribus*—to treat each other as equals—he praised. He believed that the relationship between the Bureau and other, similar organizations in Europe should be what it had been up until then: strictly based on cooperation. At the same time, he touched on the hypersensitivity to colonialism that was surely felt by the delegates to the Pan American meetings when he said that "imperialism has never reared its ugly head among us."<sup>311</sup>

The Latin American delegates to the Caracas Conference weighed the positions of Cumming and Parran. Some, such as the Argentines, supported Cumming; others, such as the Brazilians and Venezuelans, supported Parran. Many of the Latin American participants were convinced that the autonomy of the Pan American Sanitary Bureau should be retained. An article in the Conference's newsletter put forward another argument in favor of Parran's position, questioning the very existence of Pan Americanism: "let us not now defend an indefensible public health

autocracy . . . . Brazil is closer to Africa than Peru . . . there is no such thing as an American way and an Asian way to fight infectious disease or promote health."<sup>312</sup>

The Latin Americans who supported Cumming, such as Carlos Enrique Paz Soldán of Peru, championed the "public health sovereignty of the Americas" in opposition to "public health dependency." Paz Soldán asserted, with a degree of exaggeration, that there was a "medical-social doctrine: the Pan American Sanitary Right." Paz Soldán believed that it was possible to revert to a situation similar to the one that existed prior to the Second World War, when an organization headquartered in Washington maintained cordial relations with another organization headquartered in Europe.<sup>313</sup>

In the end, it came down to a choice between the positions of Parran and Cumming. The resolution recognized the critical importance of WHO and that the countries that had never joined should do so, since "the Pan American Sanitary Organization [the name was adopted at this meeting], represented by the Pan American Sanitary Conferences and the Pan American Sanitary Bureau, shall continue to function in its continental character in American aspects of health problems and shall act as the Regional Committee and Regional Office of WHO in the Western Hemisphere." 314

Also, it was proposed that the Pan American Sanitary Conferences and the Bureau retain their names, to which "Regional Committee of WHO" and "Regional Office of WHO," respectively, would be added. To maintain the Bureau's separate identity, it was decided that it would serve as the secretariat, or executive arm, of the Pan American Sanitary Organization. The Caracas Conference authorized the Directing Council to study and further define the relationships between the Pan American Sanitary Bureau and the World Health Organization.

Another decisive event for the establishment of this new relationship as well as the evolution of the Bureau was the unanimous election at the Caracas Conference of Dr. Fred L. Soper as the Bureau's next Director. He brought to the job solid experience in international public health, especially in Latin America. He had enjoyed a long career with the Rockefeller Foundation's International Health Division and had been named Regional Director for Africa and the Middle East the previous year. When he was elected, he said, with emotion, that of his 27 years working in public health, he had spent 23 in Latin America.<sup>315</sup>

At that time, Soper and other Rockefeller Foundation officials who were experts in international health were migrating to other international organizations because, since the late 1940s, the Foundation had changed the focus of its programs and concentrated on agricultural development and the so-called "green revolution." Initially designed for Mexico—and later exported to Colombia—to increase the production per unit area of the corn and wheat crops, its general objective was the local production of nutritious food in sufficient quantities.316 The Foundation closed its International Health Division in 1951, but it never completely lost interest in international health and in supporting medical research. This decision increased the stature and recognition of the Pan American Sanitary Bureau, as well as its ability to attract valuable human resources such as Fred L. Soper.

Soper's participation in the Pan American Sanitary Conferences went back to 1927, when he attended the Lima Conference with colleagues of the Brazilian delegation. (That same year the Rockefeller Foundation had appointed him head of its regional office in Rio de Janeiro). He was also the Foundation's delegate to the Rio Conference in 1942. Soper's election as Director of the Bureau was supported by the United States and the influential Rockefeller Foundation. Moreover, the Foundation paid Soper's salary for the first year he directed the Pan American Sanitary Bureau.<sup>317</sup>

Other important decisions that came out of the Caracas meeting were to restructure the Bureau in order to enhance its cooperation within and among the member countries, to give it technical and financial autonomy, and to pursue the inclusion as members of Canada and the islands and territories of the Americas that were not yet independent. Another agenda item, social insurance (or security), was certainly a new issue, although significant progress had already been made in some countries of the Region. The idea received major impetus in the years after the Second World War due to events underway in Great Britain, where the Labor Party set up a national health system guaranteeing all citizens the right to health care services. 318 The justification of the Final Report of the XII Conference for promoting far-reaching, mandatory social insurance systems is worth noting: "to make a reality of the right of citizens to the preservation of health, the treatment of illness, rehabilitation, and to other economic subsidies in time of major want or inability. The contribution of the insured insures that right."

Social security systems were conceived as a way to implement preventive medicine, taking into consideration the causes of disease and their related social and emotional sequelae, as opposed to being a curative program that temporarily solves a problem.<sup>319</sup> At that time, the Mexican Social Security Institute (in 1943) and several other similar entities had already been set up in various Latin American countries. Similarly, in the majority of the South American countries, the ministries or departments of health had achieved political autonomy and nationwide scope, with the consequent establishment of social security systems and urban hospitals. One important example is the Department of Public Health of Argentina, established in 1946 with the rank of a ministry and headed by Ramón Carrillo, who held the position until 1954.320

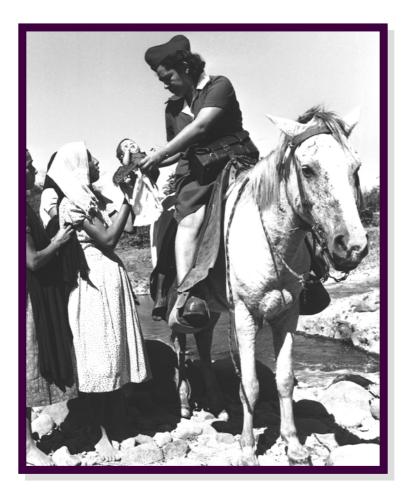
The delegates to the XII Conference in Caracas in 1947 addressed more than international public health policy. There was an incident, seemingly trivial, but meaningful, and attention-drawing. For the first time, a Latin American country included a woman in its delegation. (Marion Crane had been part of the U.S. delegation to the Bogotá Conference in 1938.) It was Dr. Mercedes Chávez Arango of Cuba. Up until then, the women who attended the Conferences were generally the delegates' wives or daughters. A photo caption in

a Lima magazine in connection with the 1927 meeting omits the maiden name and paints a stereotype of the Panamanian delegate's wife, who had come to Lima solely to accompany her husband: "This distinguished woman's beauty, warmth, and exquisite social grace immediately won our society's devotion and affection."<sup>321</sup>

According to the newspaper descriptions, photographs, and even a caricature drawn of her in Caracas, Mercedes Chávez Arango was a beautiful woman with nothing timid about her. A journalist asked her: "Do you believe that a scientific vocation in a woman leads her to ignore the cultivation of her feminine charm?" Her decisive answer, in a response that was perhaps edited by the journalist but not to the point that the truth in it was lost, was:

On the contrary . . . she should be a woman first and then a doctor. Up to now, men have not thought that women are good for anything besides the home . . . educated women . . . became a terrible sort of halfman, half-woman, in which mannish dress and a complete absence of makeup sometimes caused one to question her gender. Now a woman knows that gender does not change her aptitude for science and, therefore, she is free as a woman . . . to emphasize her femininity . . . another's pain [makes] a woman more sensitive, if that is even possible. 322

Cumming died in 1948, a few months after the Caracas meeting. Hundreds of cables and condolence letters flooded into the Bureau, in testimony to the prominent stature he had held in international public health service for so many years.<sup>323</sup> The news of his death reached one of his friends, Paz Soldán, who had shared so many Bureau moments and public health highlights with him, in an unusual way. On the same day he received a cable and a letter. He opened the cable first and learned about the death. The letter was from Cumming himself, and it said that he had seen, with great satisfaction, that Spanish had been adopted as an official language by the United Nations. In the obituary, Paz Soldán stressed that Cumming had been a citizen of the Americas, the "prince" of public health; in other words, its quintessential expression.324



This nurse, like many others, covered the vast distances between rural communities on horseback to bring the benefits of health to mothers and children in the Americas.

## For a Continent Free of Disease

e had been born in Hutchinson, a small U.S. town in southern Kansas crossed by grasslands and buffeted by tornadoes. His very personality was a force of nature. According to his close friends, he only complained about two things: that there were just 24 hours in a day and that he could not be in two places at once. It was not arrogance, but rather the frustration of knowing that there was always more to be done. His solid build seemed to explain, in part, why he was tenacious, indefatigable. There was also a magnetism in his eyes that got his orders carried out ahead of schedule. He was Dr. Fred L. Soper, the fourth Director of the Pan American Sanitary Bureau, who served from 1947 to 1959.<sup>325</sup>

#### Fred L. Soper and the Cold War

Soper studied medicine at Rush Medical College of the University of Chicago, where he graduated in 1918. Years later he earned a doctorate at the School of Public Health of Johns Hopkins University. Both schools received strong support from the Rockefeller Foundation. After graduation, he was immediately hired by the Foundation's International Health Division. He then began a long journey of living and working tirelessly in Brazil (where he was nicknamed "Commander") and Paraguay, spending more than 20 years in these two countries between 1920 and 1942. One of his best-known achievements was the elimination of the African mosquito Anopheles gambiae, the transmitter of malaria, which had invaded the state of Ceará, Brazil. Also, during the Second World War, Soper spent time in Egypt and Italy helping the Allied military health services conduct delousing operations as a consultant to the U.S. Secretary of War and member of the U.S. Typhus Commission. In the Mediterranean, the group applied an efficient, effective, and lowcost typhus control protocol that introduced the recently developed insecticide DDT. A littleknown story is that of the Egyptian leaders delaying implementation of the program proposed by Soper to combat an epidemic of malaria from Sudan, the same program that had already been used successfully in Brazil. The Egyptian Congress refused to tolerate the situation and shouted in unison: "We want Soper! We want Soper!"326

During his years outside the United States, Soper learned to develop, on his own, the qualities that were natural in military men like Wyman, Gorgas, Blue, and Cumming. Health was also a battlefield of sorts; public health campaigns involved an uphill struggle in which discipline, a sense of duty, and an esprit de corps were required to vanquish the enemy. In other words, just as in military conflict, they built character.

Interestingly, Soper was the first Director who had not been an employee of the United States Public Health Service. Yet like his predecessors, he had an abiding faith in the Bureau's mission and approached every task as if it were was the singlemost important one of his life. And he expected the same from his subordinates. Moreover, he engendered in them, regardless of the nature of their work, the conviction that they belonged to an organization whose purpose was noble and that each of their contributions was essential to the Bureau's overall success.

When he accepted the directorship, Soper was already well known and respected in the world of international health. He took the position with a full awareness that the Bureau had great challenges to overcome, perhaps greater than the ability of its resources to respond to them, but he nonetheless was optimistic that he could transform the current situation. Perhaps his decision was also influenced by the fact that his wife's mother had died that year and his wife, somewhat weary of their itinerant lifestyle, was becoming anxious to put down roots somewhere in the United States.

When Soper assumed office, he had to immediately address several delicate, though not necessarily related, issues: the expansion and reorganization of Headquarters staff in Washington, D.C.; the need to secure additional sources of funding for the Bureau's activities; and negotiating the relationship between the Pan American Sanitary Bureau and the newly formed World Health Organization. Almost simultaneously he had to redefine the relationship with the reorganized Pan American Union which, as of the Ninth International Conference of American States held in

Bogotá in 1948, was called the Organization of American States (OAS).<sup>327</sup>

Soper's term as Director coincided with an international political period that historians have called the Cold War (approximately 1947 to 1990).328 It was an era marked by the political, economic, and cultural dominance of the United States in a world that periodically stood on the brink of a declared war involving the other global superpower: the former Soviet Union. These two spheres of influence were markedly different, not just in their economic and political systems, but also in terms of the societal model they proposed for the developing countries, which included most of Latin America and the Caribbean. At that time, the organization that came to embody the political version of Pan Americanism was the OAS, built on the foundation of the Pan American Union.

For the countries of Latin America and the Caribbean, geopolitically located within the sphere of influence of the United States, the Cold War years signified the promotion of a model of development aimed at repeating the evolution of the capi~ talist countries by means of such measures as limited agrarian reform, import substitution industrialization, and paternalistic—but not necessarily democratic—political regimes. There was no lack of military interventions, such as the one in Guatemala. Its President, Jacobo Arbenz, had expropriated the property of the United Fruit Company and was forced to step down in 1954 by an invasion led by Carlos Castillo Armas and supported by the United States Central Intelligence Agency. This intervention, as well as U.S. support for military dictatorships, was justified by the argument that these measures were stopping the advance of Communism.329 The United States' period of most widespread influence during the Cold War was the two successive terms of General Dwight D. Eisenhower (1953-1957 and 1957–1961), and one of its principal champions was Secretary of State John Foster Dulles, as well known for his expertise in international relations as for his anti-communist stance.330 Despite persistent criticisms of the inter-American system as a new disguise for U.S. imperialism, most Latin American regimes followed suit. One example was part of the speech with which Mexican President Miguel Alemán—certainly more conservative than his predecessors—welcomed President Truman: "Together we will live, together we will progress." 331

The post-war era produced noteworthy demographic changes. In the late 1950s, seven countries of the Americas—no longer four, as in the 1930s—had populations of more than 10 million (the United States, 181 million; Brazil, 70 million; Mexico, 35 million; Argentina, 21 million; Canada, 18 million; Colombia, 14 million; and Peru, 11 million). Three more countries had populations of more than 5 million (Chile, Cuba, and Venezuela), and 12 had populations of between 2 and 5 million. Puerto Rico and Jamaica had more than a million inhabitants each. In some countries, the decline in the mortality rate was spectacular. In Mexico, for example, the rate dropped from 21.8 deaths per 1,000 inhabitants in the 1940-1944 period to 8.9 deaths per 1,000 in the 1965–1970 period; in Venezuela, during this same time period, the rate dropped from 18.8 to 7.8, and in Guatemala—less economically developed than the others—from 28.5 to 15.

The increased life expectancy at birth in Latin America was impressive between 1965 and 1970, reaching averages as high as that of Uruguay (69 years), Argentina (68 years), and Costa Rica (64 years), with an average of 61.2 years for Latin America as a whole.<sup>332</sup> The growth rate of the population was noteworthy between 1950 and 1960, from 1.2% in Haiti to 3% in Costa Rica.<sup>333</sup> At that time, most of the countries were undergoing a contradictory and rapid demographic change, with high fertility rates and a decline in the mortality rates from infectious disease. Also, as far back as 1951, most of the population of the Region of the Americas (almost 60%) did not live in the cities and was subject to a group of diseases typical of rural areas, such as malaria (this would change rapidly in the ensuing decades).334 The demographic and political clout the Region was acquiring, along with the growth of the Sanitary Bureau and the personality of its Director, made it possible to formalize agreements with other international organizations.

During Soper's term in office, an agreement was signed with WHO. At that juncture, many Latin Americans were convinced that it was crucial for the organization of the Americas to be autonomous. At the proceeding for establishing WHO in Geneva, the delegate from the Dominican Republic stated emphatically that: "we want the integration of the two organizations. We do not want the absorption of one by the other." The following year, a representative from Uruguay opening a Directing Council meeting in Washington chose similar words, saying that the best way to support the World Health Organization was:

to continue strengthening and invigorating our Pan American Sanitary Organization. Not out of a local or regional spirit . . . but [out of] the absolute conviction that an individual himself is best able to understand and resolve his own problems.<sup>336</sup>

This position in favor of maintaining an organization of the Americas was bolstered because little or nothing had been done to implement regionalization, even though it had been accepted in concept at the early meetings leading to the establishment of WHO. For the purposes of WHO, the world was divided into several regions besides the Region of the Americas: South-East Asia, with headquarters in New Delhi; the Eastern Mediterranean, with headquarters in Alexandria; and Europe, with headquarters in Geneva (later Copenhagen). Also created were the Regions of the Western Pacific, with headquarters in Manila (initially Hong Kong), and Africa, with headquarters in Brazzaville.337 But in practice, at the outset, just one regional body of WHO was in operation—that of the Americas. Even Soper thought that, in many parts of the world, those in which the idea of a multinational entity was something new, the health organization of the Americas could serve as an example.<sup>338</sup>

Another fundamental reason why WHO was unable to impose absolute and immediate absorption was its small budget. That resulted in its first meetings deciding to limit the Organization's activities to the most urgent health problems: malaria, venereal diseases, tuberculosis, nutrition, environmental sanitation, and maternal and child

health. Moreover, one of the main financial contributors was the United States (almost US\$ 2 million of its total budget of US\$ 5 million), whose foreign policy favored supporting not only the United Nations but also the inter-American organizations. Ratification of WHO's Constitution by the Member States was a slow process: as of 1949, just 14 countries had done so.<sup>339</sup>

Shortly after WHO was established, the former Soviet Union and other countries that were then Communist, such as Albania, Bulgaria, the former Czechoslovakia, China, Hungary, and Poland, withdrew, undermining its legitimacy.340 In fact, between 1949 and 1956, WHO functioned without the participation of the Soviet Union and several eastern European countries. Also, the People's Republic of China was excluded from the entire United Nations system up until the early 1970s. It did not join WHO until 1973. Moreover, in accordance with a request that dated back to the XII Pan American Sanitary Conference held in Caracas in 1947, it was stipulated at the initial negotiations that at least 14 Latin American countries had to ratify WHO's Constitution in order for the agreement between WHO and the Pan American Sanitary Bureau to be effective. This was also a slow process, but the Director and other Bureau officials took steps to accelerate the agreements and activities with WHO.341

Attempts to reach an agreement between the Sani~ tary Bureau and WHO began at the Caracas Conference, as discussed in the preceding chapter. A special negotiating subcommittee moved forward with discussions between the delegates of both organizations, trying to smooth out differences and submitting a draft treaty at the fourth meeting of the WHO Interim Commission.342 That draft was approved at the First Meeting of the Pan American Sanitary Organization's Directing Council, held in Buenos Aires in 1947, and it was sent to and accepted by the WHO World Health Assembly.343 The agreement was finally approved at the Second Meeting of the Directing Council, held in Mexico City in 1948. This was reflected in the aforementioned Article 54 of the WHO Constitution, which proposed a future integration based

on mutual consent of the competent authorities. In the agreement between the two organizations the Pan American Sanitary Bureau was defined as the Regional Office of WHO for the Western Hemisphere. In deference to tradition, the Bureau and Sanitary Conferences would keep their own names, with the addition that the Bureau is a "regional" representative office of WHO. On 24 May 1949, in Washington, D.C., Brock Chisholm (1896–1971), the first Director-General of WHO, and Fred L. Soper, representing the Pan American Sanitary Bureau, signed this agreement, thus formalizing cooperation between the two institutions.344 The Second World Health Assembly, held in Rome in 1949, ratified it, and the agreement entered into force on 1 July 1949.345

The Buenos Aires meeting approved another fundamental document: the Constitution of the Pan American Sanitary Organization. Its first article set forth the Organization's fundamental goals:

to promote and coordinate efforts of the countries of the Western Hemisphere to combat disease, lengthen life, and promote the physical and mental health of the people.<sup>346</sup>

In contrast, the first Constitution of WHO set forth a dramatic definition of health which, in the opinion of some, holds permanent relevance, and, in the opinion of others, represents a controversial, idealistic effort. The definition says: "Health is a state of complete physical, mental, and social wellbeing and not merely the absence of disease or infirmity." One undeniable virtue was that the second sentence of this Constitution described health as a right of every human being, regardless of creed, race, ideology, or socioeconomic level. But this definition was, and still is, debated. One of the first and less well-known criticisms of this definition associated the supposed authority to determine the level of health with the monopolization of international health activities. A pamphlet written in Nicaragua talked about the fear of absorption by asking: "Why should a newly formed administrative modality assume the privilege of determining how to 'achieve the maximum level of health' for a certain region?"347

Under Soper's leadership, the Pan American Sani~ tary Bureau adopted an approach that enabled it to survive in the midst of this new scenario of health organizations: launching ambitious programs and not duplicating the activities of other national or international organizations, but complementing them and doing something that no one else was doing. Also, Soper maintained cordial and official relations with WHO's leadership. The first Director-General of WHO, formally elected in 1948 (although he had been Executive Secretary of the organizing Interim Commission since 1946) was the Canadian psychiatrist Brock Chisholm. His career path and his style differed from those of Soper. He studied at Yale University and in England, served on the battlefront in the First World War, and then practiced psychiatry in Toronto. Intellectually, he was tied to the European tradition of social medicine and the work of René Sand of Belgium, close to the staff of the League of Nations' Hygiene Section, and removed from the tradition of U.S. military health and sanitation campaigns that influenced Soper so deeply.

Although Chisholm was called to public health rather late in life, he distinguished himself in the field, rising to the position of Canada's Deputy Minister of Health. After the Second World War, he was considered an exemplary citizen because he had denounced Hitler since the 1930s, when few were taking such a stand. During the Second World War, he became Director General of the Medical Services, the highest medical rank within the Canadian Army. He concluded that the source of all wars was inferiority, blame, and fear, "recognized neurotic symptoms."348 Chisholm was convinced that emotional maturity and an adequate standard of living would ward off any future conflict. Some said he placed too much emphasis on mental health during the early years of WHO, emphasis that seemed to give short shrift to the perennially urgent demands created by communicable diseases. His voice was soft and controlled, as was his style of managing the Organization. At some point Chisholm "resented" he could not express it more strongly—the tendency toward excessive decentralization, which he saw as a loss of power for WHO.349 Clearly, he

was a leader unlike Soper; this may be an additional explanation for the initial differences of opinion between the two organizations—which were, nevertheless, always managed with a high degree of professionalism by both directors.<sup>350</sup>

Soper's position with respect to WHO was reinforced when, in 1950, he was reelected as Director of the Pan American Sanitary Bureau at the XIII Sanitary Conference held in Ciudad Trujillo (the temporary name of Santo Domingo between 1936 and 1961), Dominican Republic. Relations between the two institutions became less strained in 1953, when Marcolino Gomes Candau, of Brazil, who had worked in Brazil and Washington, D.C., under Soper, became WHO's new Director-General.<sup>351</sup>

Joint activities by both organizations in different parts of the Region became common in the 1950s. Plans were drawn up for a rural health demonstration area that would organize general health services in the San Andrés Valley, a 1,200 km² expanse in El Salvador. Héctor Acuña, a young Mexican epidemiologist and future Director of the Pan American Sanitary Bureau, participated in the project. Also, a tuberculosis teaching center was built in Ecuador, with participation by the Red Cross and the young Danish health official Halfdan Mahler, whose early years were mostly spent traveling around the Andes on horseback. Mahler directed WHO in the 1970s and spearheaded the primary health care movement.<sup>352</sup>

During the Cold War, the direction and meaning of Pan Americanism remained a topic of discussion among the health officials of the Americas. In addressing the abysmal social and economic differences that coexisted in the Region, a speaker at the Pan American Sanitary Conference held in the Dominican Republic wisely observed:

... the presence of pain and hunger on the one hand, and comfort and even luxury on the other, may conceal an even greater truth: that the rich communities also have immense responsibilities on their shoulders and that, in addressing them, they collaborate, without any doubt, in their own happiness and in partially obtaining the happiness of

others...Thus, Pan Americanism, understood as the multiform embodiment of a reciprocal understanding among the different languages, races, customs, and philosophies that comprise the Americas, and not as a mere political or economic fact stripped of any humanity, will lead to the magnificent dawning of the day when the people of the Americas level their current social differences.<sup>353</sup>

The resurgence of Pan Americanism after the Second World War resulted in the redefining of relationships between the Bureau and the Organization of American States, directed at that time by Secretary-General Alberto Lleras Camargo of Colombia. Inter-American cooperation, strongly influenced by U.S. foreign policy, encompassed the economic, political, and military arenas. "Pan American" meetings, including those of specialists in tuberculosis, pharmacology, and brucellosis, just to mention a few areas, were organized. The U.S. Department of State explicitly promoted the participation of the countries of the Region in the various inter-American organizations that were being established at that time. The Inter-American Conference for the Maintenance of Continental Peace and Security, held in Rio de Janeiro in 1947, produced the historic Inter-American Treaty of Reciprocal Assistance (also known as the Rio Treaty). Its central principle is that an attack against any of the American republics is to be considered an attack against them all, thereby providing security and protection in the form of a hemispheric defense doctrine.

The Third Meeting of the Directing Council of the Pan American Sanitary Organization, held in Lima in October 1949, approved a draft of the agreement between the Organization and the OAS, and established a negotiating committee with representatives from El Salvador, the United States, and Peru. <sup>354</sup> It is worth noting that this was when the Pan American Conferences of National Directors of Health of the American Republics, held at the request of the former Pan American Union (OAS) and discussed in the previous chapter, were replaced by meetings of the Directing Council. The agreement approved in Lima, and finally signed in 1950, recognized the Pan American Sanitary Organization as an "Inter-American Spe-

cialized Organization" (the use of upper case letters emphasized its official nature) and its status as a "regional organization of the World Health Organization in the Western Hemisphere." That gave the health organization of the Americas more autonomy and flexibility while maintaining its official ties. Also, it was stipulated that the Pan American Sanitary Organization would advise the OAS in all matters of public health and medical care. Both organizations could send nonvoting observers to their respective governing bodies.<sup>355</sup>

The Sanitary Bureau's support of Pan Americanism reflected concern for improving the people's living conditions. Its Director said that, to ensure that cooperation in the Region would result in the well-being of the Americas, it was essential that "inequalities of health conditions now existing in different regions be eliminated."

He was, moreover, convinced that:

[it was] right and just that those countries in a satisfactory economic position should contribute, proportionately, throughout the Pan American Sanitary Bureau, first to the solution of regional health problems, and, eventually, to the development of adequate health and medical care programs. In doing so, those countries will be promoting their own future welfare. 356

#### THE GROWTH OF THE ORGANIZATION

Almost immediately after his election in Caracas, Soper devoted himself to seeking out funding for the Bureau. In 1947, the Bureau's expenses exceeded its income by 50%, despite the fact that, at that juncture, it did not have to pay rent and had only a small professional staff. A decisive measure was increasing the per capita contribution paid by each country from US\$ 0.40 to US\$ 1 for every 1,000 inhabitants. This resulted in a significant, fixed increase in annual income from US\$ 115,000 to US\$ 280,000. Also, Soper paid visits to the leaders of various countries in the Region and obtained voluntary contributions from Argentina, Brazil, Chile, the Dominican Republic, El Salvador, Mexico, and Venezuela. In 1950,

thanks to Soper's work, the Bureau's budget came to US\$ 1,378,971. The balance in debts or arrears was just US\$ 117,499, and income exceeded expenses.<sup>357</sup>

At the same time, Soper began recruiting employees for the Washington, D.C., Headquarters office. In December 1946, the Bureau had just 32 employees, many of whom were paid by their own countries. By April 1950 it had 171 employees, the vast majority paid by the Sanitary Bureau or by WHO. Four years later, there was a staff of 412, including 72 medical officers, 1 dental officer, 28 nurses, 18 scientists, 7 veterinarians, 8 sanitary engineers, and 44 technicians and non-professional field personnel. Of these, 219 (more than 50%) worked outside Washington.<sup>358</sup>

Order, professionalism, administrative efficiency, transparent accounting, and loyalty were the values Soper sought in the team that would support him. He appointed Dr. John R. Murdock, formerly in charge of planning and coordinating the Bureau's program activities, as Assistant Director. Murdock had extensive field experience in Brazil and Ecuador. He had also actively participated in setting up the Bureau's first regional organizations. In 1951, after 15 years with the Bureau, Murdock retired and was replaced by Paulo C. A. Antunes of Brazil. When Antunes returned to his country to accept the position of Dean of the São Paulo School of Public Health, Marcolino Gomes Candau of Brazil (1911–1983), Assistant Direc~ tor-General of WHO in Geneva, accepted the position. He did not stay long in that position, however, because, as we have mentioned, he was chosen to be Director-General of WHO in 1953.

Another close collaborator of Soper's was the Mexican epidemiologist trained at Johns Hopkins University, Miguel E. Bustamante, who was responsible for the *Boletín de la Oficina Sanitaria Panamericana* and the Spanish version of the *WHO Chronicle*. We can learn something about Bustamante from what he said at one of the first meetings of the Region's medical educators: that health officials had two salient characteristics—having dreams and trying to make them come true.<sup>359</sup> By 1951 the *Boletín* was being published

monthly, distributed free of charge to the authorities of the Region, was printing more original articles, and had grown markedly: 1,446 pages and 7,400 copies, of which 7,115 went to subscribers and, of those, 6,895 were distributed in the Americas. The *Boletín* also became more scientific in nature, as indicated by the "writers' guidelines" that were developed during this period:

- (1) Articles submitted for publication shall be unpublished.
- (2) Originals, written in English, French, Portuguese, or Spanish, shall be sent to the Editorial Section, which shall submit them for the decision of the Publications Committee.
- (3) The text shall not exceed 20 pages ... typewritten on one side of the page, double spaced, with a wide margin. The original shall be on plain paper, with one copy.
- (4) The title shall be as brief as possible. The name of the author(s) shall be shown immediately after the title and at the end, along with, in the former case, the official position or academic degree and name of the institution, if the author is associated with one, and, in the latter case, the address.
- (5) Each work shall include a summary and conclusions, if any. The bibliography shall adhere to the established guidelines: author's surname; initial; title of the work in its original language; name of the publication, in abbreviated form (journals), or publisher and city (books); volume number; numbers of the first and last pages, separated by a hyphen; month; and year.
- (6) The illustrations, with their captions, shall accompany the work.
- (7) The originals shall not be returned under any circumstances.
- (8) The authors of articles solicited by the Director of the Bureau shall receive 20 copies of the *Boletín* free of charge. Other authors shall receive 10 copies. Offprints shall be made at the request of the author and at his/her expense. Total or partial reproduction of the material published in this *Boletín* is authorized on condition that the source is cited.<sup>360</sup>

Bustamante was also responsible for preparing summary records of the Bureau's meetings and for editing the *Weekly Epidemiological Report* on diseases subject to quarantine, which was distributed by airmail, and another Monthly Epidemiological Report, which dealt with the incidence and mortality of the major communicable diseases. Another valuable publication was the Spanish translation of the first volume of the *International Pharmacopeia*, originally published in English by WHO.<sup>361</sup>

A letter from Bustamante to the representatives at one of the first Directing Council meetings in which he participated highlights the challenges of trying to overcome the problems inherent in a slow, incomplete epidemiological information system.

#### REQUEST TO THE DELEGATES

I ask that you kindly supply, on the attached page, the current list of the major sections, divisions, or departments of your country's sanitary organization. This request is made because the reports that the undersigned has in his possession are from prior years and, in some cases, are five years old. 362

Bustamante also played a decisive role in organizing the First Inter-American Congress of Public Health, held in Havana in October 1952. The meeting was called by resolution of the XIII Pan American Sanitary Conference to commemorate the 50th anniversary of the Sanitary Bureau and as a tribute to Carlos Finlay. The meeting, held in Cuba's ornate Capitol building, was attended by leaders in the field of health in the Americas, such as Mario Pinotti, Director of Brazil's Malaria Service, and Brock Chisholm, Director-General of WHO. On that occasion, the Cuban scientist was recognized for being the first to discover the mechanism of transmission of yellow fever, and the status of medical and health education in the Region was studied.<sup>363</sup>

Soper also hired a legal advisor to study the contracts, agreements, and documents that had to be interpreted and signed, and, also essential to his work, he hired a secretary who could read his

Pitman shorthand—a communication form that, in and of itself, indicated that he lived in a perpetual hurry. He also established a cable address—OFSANPAN—which appeared on all letterhead. 364 These actions implemented an organizational structure in which the activities of the three major Divisions—Public Health, Administration, and Education and Training—were clearly specified.

The Division of Public Health was responsible for health promotion services. It included sections for administration, nursing, nutrition, and maternal and child health, among others, as well as environmental sanitation services (including sanitary engineering and insect control programs), and communicable disease services. The Administration Division had a legal office, an administrative management and personnel service, and a finance and budget service. The Education and Training Division was responsible for scholarships and educational programs. Some of the scholarships were from PAHO, and others were from institutions such as UNICEF, which had entrusted the scholarships' selection, oversight, and administration to PAHO.<sup>365</sup> After the Second World War, UNICEF, an arm of the United Nations established in December 1946 to save European children from famine and disease, extended its assistance to poor countries. Although it was not involved in health matters alone, it devoted a good part of its budget and efforts to them.<sup>366</sup>

Also, Soper was attracting other talented, hardworking young people to the field of Pan American health. Noteworthy among them was the U.S. pediatrician Myron Wegman who had, as Chief of the Bureau's Education and Training Division since 1952, increased the number of scholarships and travel grants. Wegman later became Secretary General of PAHO (a high-level position that no longer exists) and, thanks to help from the W.K. Kellogg Foundation, organized two important meetings at which Latin American medical education was analyzed and more importance was placed on prevention. One was held in Viña del Mar, Chile, in 1955, and the other in Tehuacán, Mexico, in 1956.367 It was during that period that the Bureau was joined by Benjamin Blood of the United States as head of a new veterinary health section; Clarence H. Moore, also of the United States, in charge of administration; Chilean bacteriologist Abraham Horwitz as country representative in the Lima office; and Mexican epidemiologist Héctor Acuña as the Bureau's first representative in the Dominican Republic. The latter three also held degrees in public health. Another official who began his career with the Bureau in 1957 was Pedro N. Acha of Peru (1931–1988), an expert in veterinary medicine, especially agricultural veterinary medicine, and in international health. He was also a noted academic and coauthor of a widely-cited book on zoonosis and communicable diseases common to human beings and animals.<sup>368</sup>

Soper himself interviewed several young people who hoped to work at the Bureau. It seems that the interviews were something to be feared. According to one report, when Soper entered a room it was immediately apparent "who was the boss."369 He valued creativity, persistence, astuteness, and courage. And it was precisely courage that was needed in a job interview with Soper. At one, he received a young man who was applying for the position of sanitary engineer with a mixture of warning and reproach. Soper told him he thought that the members of his profession had aggravated several sanitary problems because of a lack of knowledge about public health. The applicant was undaunted. He answered, defiantly, that the real problem in public health was the doctors, who used engineering but knew nothing about it. Soper hired him on the spot.<sup>370</sup>

The Director of the Bureau concerned himself with having a centralized library; a unit of professional translators of English, French, Portuguese, and Spanish; and with finding more space. In this respect he had to show his character, sometimes facing down his own government. An envoy from President Truman tried to convince him to accept a building that had belonged to a truckers' association. Although there was more space than the Bureau had at the Pan American Union building, the proposal meant being far from downtown Washington, the site of many meetings. The contract was for just 20 months, the rent was high

and had to be paid by the Union, and the move had to be completed in one month. After seeing the building, Soper said he preferred to stay "where they were" because in that way "everyone" could see the Bureau's "poverty," but that if they took refuge in the proposed location, they would be forgotten. With some irony, he wrote in his diary that the employee who showed them the building "... seems to think that beggars have no right to be choosers! Too bad his experience with beggars is not more extensive!"<sup>371</sup>

Finally, that same year, Soper obtained for the Bureau's use a beautiful mansion that had been used for the training of U.S. diplomatic personnel.372 Not long after that, thanks to a very favorable loan from the W.K. Kellogg and Rockefeller Foundations, the Pan American Sanitary Bureau moved to the Hitt House in Dupont Circle, an area surrounded by embassies and other public buildings. It also occupied a neighboring building known as Blodgett House.<sup>373</sup> A short time later, the Executive Committee (a smaller subdivision of the Directing Council, created at the Sanitary Conference in Caracas in 1947) thought about moving the Bureau's headquarters to some city in Latin America, such as Mexico City or Lima, and a committee was set up to seriously study the matter. But that never happened, and the headquarters remained in the capital of the United States. Nevertheless, the move discussed here would not be the last. In the mid-1960s, under the leadership of Dr. Abraham Horwitz, PAHO moved to a building especially built for its purposes near the Foggy Bottom section of Washington, D.C., which it continues to occupy until this day.

Another important step taken by the new Director was making the Bureau's bank account independent. A large part of the institution's funds came from the United States Department of the Treasury but, since they came through the Pan American Union's account, there were delays and other complications. <sup>374</sup> Soper's solution was to open a business account and to establish a revolving fund at Riggs National Bank. That action enabled the Bureau to fulfill its financial responsibilities without undue delay and ensured better control

over the disbursement of salaries and pensions to staff members.

Although the documents merely hint at it, the style of officials such as Moll did not fit in with Soper's plans. It would seem that Moll was not interested in working with Soper either. 375 Beyond their differences of opinion, each represented a different era of the Bureau. Moreover, the generation of Latin American health officials that shone with Cumming—such as Paz Soldán and Alberto Zwanck (a professor of hygiene, Director of the Institute of Hygiene of the University of Buenos Aires, and representative of and advisor on international health policy to the Department of Public Health of Argentina) was moving on to retirement or was no longer being considered for service as official representatives at the inter-American meetings. John D. Long, for example, had died in Guayaquil in 1949. Nevertheless, Carlos Enrique Paz Soldán and other distinguished, experienced public health officials, such as João de Barros Barreto of Brazil, Edmundo Fernández of Venezuela, and Manuel Martínez Báez of Mexico, were recognized as "honorary members" of the Organization and, from there on out, their names appeared on back cover of official publications.<sup>376</sup>

Once decisions had been made about the location of the Pan American Sanitary Bureau in Washington and its place in the realm of international organizations, Soper devoted himself to setting up a series of programs in the Region. These included organizing a nursing section under Agnes Chagas, who was appointed Regional Advisor in Nursing in 1947. Her duties included surveying the Region's nearly 60 heterogeneous nursing schools, about which little was known—such as the fact that they had an annual enrollment of 4,000 students—and providing support to the governments and health services in the area of nursing. The first two regional nursing meetings were held in 1949 (San José, Costa Rica, and Lima, Peru, respectively).377

At that time, the field of nursing was growing along with the construction of urban hospitals and the setting up of new services. It was estimated that there were 5,000 nursing professionals by the

early 1950s—a significant number, but still in-sufficient to meet the growing demand for personnel of this type.<sup>378</sup>

Skillfully, Chagas melded the desire for social advancement felt by many young women with the professionalization of advanced education in nursing and the needs for improved management in the practice of nursing.<sup>379</sup> It was a professionalization process similar to the one many health workers had followed in the early twentieth century, and it transformed the nurse into an intermediary between doctor and patient, a family health advisor, and a more specialized caregiver. This evolution coincided with other important changes affecting women's status in Latin America, since many countries were starting to legally recognize women's right to vote and even be elected to hold high public office.

Chagas summed up the change in a profession that was largely feminine and whose prestige grew:

Formerly, when the word "nurse" was mentioned, people pictured a slovenly, untrained woman working in hospitals who often could not read or write. Nowadays, however, it is very likely that the word will evoke a neat young woman, well educated in her field, dressed in a crisp, white uniform.<sup>380</sup>

By late 1951 there were 17 nurses working for the Bureau, just two of whom were stationed in Washington, D.C. In El Salvador, the nursing section offered nursing graduates a refresher course. In Ecuador, nurses assigned to the tuberculosis program received special training. In Colombia, an obstetrics course was organized for nurses, and in Paraguay, a course was developed to qualify them for general public health services.

Another important change promoted by the Bureau was the significant increase in scholarships for young doctors, sanitary engineers, nurses, dentists, veterinarians, and other health professionals of the Region. Up until the Second World War, the organizations that supported study abroad and the number of scholarships were limited. But after the War, an explosion in the number of scholarships, especially to U.S. institutions, resulted in

the "Americanization" of medical education and public health in the Region. The inter-American health organization set criteria that continue to be valid today, such as selecting candidates and fields of study in accordance with the given country's most urgent needs and emphasizing the scholarship winner's commitment to return to his or her country and the country's promise to hire the scholarship winner after his or her studies were completed. In 1953 alone the Sanitary Bureau awarded a total of 415 scholarships, of which 60 were for the study of health administration and 32 were for the study of nursing.<sup>381</sup> In 1958 the number of scholarship winners climbed to 560, a growth rate of more than 30% with respect to the previous year; many of these scholarships were directed at sanitation and medical education.382

In the early 1950s, the Organization's work was divided among three governing bodies. The first, the Pan American Sanitary Conference, was held every four years with delegates from the Member and Observer States. The second, the Directing Council, comprised of a representative from each of these countries, met every year. The third, the Executive Committee, consisting of representatives from seven countries, held biannual meetings. The First Meeting of the Directing Council was held in 1947 in Buenos Aires. As we have mentioned, it was here that the relationship between the Organization and WHO was defined. The major areas of work and the budget were Headquarters activities, field work, and the organization of work by zones.

Zone I, with headquarters in Washington, consisted of Alaska (with U.S. territorial status until gaining statehood in 1959), Canada, the United States, and the non-self-governing territories of the Region, except British Honduras (now Belize). Zone II was headquartered in Mexico City and included Belize, Cuba, the Dominican Republic, Haiti, and Mexico. Zone III operated out of Guatemala City and included Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama. Zone IV had its headquarters in Lima and included the Andean countries: Bolivia, Colombia, Ecuador, Peru, and Venezuela. Zone V included only Brazil and had its headquarters in Rio de Janeiro.

Finally, Zone VI included Argentina, Chile, Paraguay, and Uruguay, and was headquartered in Buenos Aires. The field offices in El Paso, Texas, and in Jamaica remained in operation; the latter concentrated its efforts on the control of *Aedes aegypti* in the Dutch-, English-, and French-speaking Caribbean.<sup>383</sup>

Clarence H. Moore of the United States (1909–1988) was a prominent official who joined the Bureau in 1952 to coordinate the expansion of the zone and country offices. His training as an administrator, his experience as a WHO official in Geneva, and his altruism prepared him to assume these difficult tasks. In 1957 he took on another very important duty: head of the budget and finance section. In this capacity he helped develop the program budgets, shape institutional policy, and provide funds for the growing number and variety of regional activities.

From a historical perspective, that incipient regionalization came after the work of the traveling representatives and ensured that direct responsibility for planning and implementing the field programs fell to the local Bureau officials. The presence of international consultants, with contacts abroad, who addressed the countries' everyday health problems, frequently enabled them to act as catalysts vis-à-vis the national health organizations and obtain professors for training courses or technical experts for new programs. Organization by zone meant that it was no longer necessary to seek consultations and wait for decisions and funds to emanate centrally from Head~ quarters, thus making for more efficient decisionmaking and dispersal of funds as they were needed. Moreover, the zones became a source for the recruitment of new international health personnel as well as new scholarship opportunities that enabled young Latin American doctors to take postgraduate courses in public health in the United States.

Another significant process that began in the 1950s and continued through the next two decades was the progressive inclusion of the countries of the Caribbean, Central America, and northern South America in the meetings as full members, no longer

just as observers. One way to do this was to invite representatives from France (with a presence in the Caribbean and French Guiana), the Netherlands (representing the Netherlands Antilles and Dutch Guiana), and the United Kingdom (whose possessions included British Honduras, Jamaica, and British Guiana) as full delegates. At the 1951 meeting of the Directing Council, the report of the delegate from the Netherlands made it clear that "the Americas" was still not perceived as a region that included the Caribbean:

The OAS... [is a] purely American organization in which no foreigner has the right to participate. So I cannot but be surprised by the generosity shown in accepting foreigners at your meetings.<sup>384</sup>

Over time, the foreigners stopped being foreigners and, as this statement suggests, concern over health in the Region would supersede political interests.

A basic Bureau objective during this period was that of establishing national health services with well-trained staffs. This required candidates to possess an advanced university degree in medicine or one of the health sciences and experience in public health and administrative duties. Those who met these qualifications reaped the benefit of being able to work full-time, with a secure position, adequate salary, and opportunities for career advancement—in other words, they were able to remove themselves from the vicissitudes of partisan politics. The goal was to establish services with administrative responsibilities that were decentralized (i.e., not concentrated in the office of a ministry); produced timely, clear, quantitative indicators; conducted research; adapted themselves to local conditions; and, above all, sought to extend health activities as the appropriate personnel became available, because: "rapid expansion without well-trained personnel is one of the most serious errors that can be made in public health work."385

While it is true that these objectives, approved at the XIII Pan American Sanitary Conference in 1950, were not embodied in all the national services, they had a marked influence on the employees of the zones, various research institutes to be described shortly, and Headquarters. The cadre of consultants was becoming homogeneous, and a career path and identity that were more international than national were gelling. The employees' loyalty was to the Bureau, since they were not detailed members of the U.S. Public Health Service or of their countries' ministries of health. They began receiving stable salaries and attractive pensions, reimbursement for settling-in expenses, and other types of assistance.<sup>386</sup>

Another important feature was the increasing national and cultural diversity of the Bureau's personnel. In 1952, of the 191 Headquarters employees, 72 were not U.S. citizens, a significant difference with respect to previous eras in which almost all the personnel were from the United States. Of the 42 employees assigned to the different zones, 24 were "international" (i.e., not nationals of the countries in which the zone offices were located). And of the 143 employees assigned to special projects, 84 were international. The constant participation in activities carried out in different parts of the world, fluency in two or more languages and their respective colloquialisms, and the ability to adapt to working with people of different nationalities and to a peripatetic existence, helped forge a new identity and career profile for the Bureau's staff.387

Many of those employees were considered regional public servants, experts in the design and application of scientific methods that led to social progress and a better quality of life. Among the problems that had to be addressed are those resulting from the fact that some of them were young professionals whose advice experienced or apprehensive national directors of health found difficult to accept. Moreover, when the Bureau hired a large number of employees who were experienced in the local arena, there were protests because the national services had been left without employees.<sup>388</sup>

The staff increases of the various international organizations after the Second World War were tied to new values on the international scene, such as technical competency in contrast to politicization, the possibility of development in the poorer countries, the universality of human experience, and professionalism as opposed to improvisation. That produced relative autonomy for these institutions vis-à-vis the foreign policy of the most powerful countries during the Cold War years the United States and the former Soviet Union. It was a process which, according to the historian Irye, can be clearly traced to and identified with the early twentieth century. But a group of health officials whose identity was not branded by their countries' foreign policies or by nationalist motives was established only in the second half of the century.<sup>389</sup> This process confirmed the value of health as a supranational objective.

In the 12 years during which Soper was Director of the Pan American Sanitary Bureau (1947-1959), the number of employees rose dramatically: from 88 to 750. That was accompanied by the establishment of a Staff Association and a series of newsletters. One of the earliest was Óbice, Voz, Voix, which first appeared in December 1951 in all the official languages of the Organi~ zation.<sup>390</sup> By the late 1950s, the Bureau's budget then in the neighborhood of US\$ 2.5 million became more regularized and clear (two noteworthy characteristics) and continued to grow steadily.391 The first evaluation of the state of health of the population of the Americas was prepared in 1954. Since that time, a comprehensive overview has appeared regularly, every four years, under the title of Health Conditions in the Ameri~ cas (it has been called Health in the Americas since 1994).<sup>392</sup>

The increase in the number of the Organization's employees was not limited to the Washington, D.C., Headquarters office. During Soper's administration, research institutes located in Latin America and associated with the Organization were founded: the Institute of Nutrition of Central America and Panama (INCAP), with headquarters in Guatemala City, and the Pan American Footand-Mouth Disease Center (PANAFTOSA), established in 1950 in Rio de Janeiro. Also established was the Pan American Zoonoses Center (known as CEPANZO) in the city of Azul, Argentina, de-

voted to the study of important communicable diseases common to human beings and animals (such as brucellosis, bovine tuberculosis, anthrax, and rabies, just to name a few). This Center is now known as the Pan American Institute for Food Protection and Zoonoses (or INPPAZ), and has been operating out of Buenos Aires, Argentina, since 1991.

The decision to establish INCAP in Guatemala City dates back to the XI Sanitary Conference in Rio de Janeiro in 1942, but it was not fully operational until 1949. From its earliest days it enjoyed the valuable support of the W.K. Kellogg Foundation, which provided scholarships, donations, and laboratory equipment. Also, the Rockefeller Foundation facilitated the training of agronomists in Mexico under the supervision of J. G. Harrar, then the leader of the "green revolution." Experts and authorities from Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama participated in INCAP's work. The institution's importance to Guatemalan professionals is attested to by the fact that, in 1951, that country had the second-highest number of employees in the Organization, after the United States.<sup>394</sup>

INCAP's guiding principles were pertinent and relevant: to investigate the foods of greatest nutritional value and lowest cost (such as vegetable proteins), to understand the eating habits and nutritional deficiencies of the Region's poorest social segments, and to promote food production in accordance with the population's basic needs, with special attention to the problems of the single-crop farming areas. Likewise, the programs involving cooperation with agricultural entities acquired growing importance in connection with the identification of more nutritious varieties of corn and beans capable of surviving in difficult and diverse conditions of soil, rain, and altitude. Another project entailed producing iodizing sea salt to prevent goiter, a disease associated with deafness, muteness, and mental retardation.<sup>395</sup> The Institute produced the film Los ángeles con hambre, which discussed the widespread practice among poor families of diluting milk with water based on the erroneous assumption that this would increase its yield without nutritional loss. One of the most interesting achievements of those years was the development of Incaparina, a flour with high nutritive and protein value.

PANAFTOSA was designed as a technical cooperation project of the OAS (with the collaboration of PAHO) and the Inter-American Institute for Agricultural Sciences, with the support of the Brazilian Government and the Food and Agriculture Organization of the United Nations. The Center's work was to train laboratory personnel to identify and study the virus that causes the disease, run national-level programs or fieldwork, and train veterinarians to examine the tongues and hooves of cattle in order to control foot-and-mouth disease in the Americas. 396 The objective was to encourage each country to establish a regular service with its own laboratories to diagnose a disease that was ravaging the Region's cattle and causing, in some countries, a drop of up to 25% per annum in livestock productivity. In addition to conducting studies, analysis of samples to diagnose the disease, disinfection programs, and seminars with participants of various nationalities, films and pamphlets with interesting titles such as El magnífico toro were produced.397

Although they did not attract as much funding as the diseases targeted for eradication, other actions promoted by the Bureau speak to the diversity of its activities and suggest that, while the "vertical" perspective concentrating on the application of technology could be dominant, other, more holistic approaches did not go away. For example, the *Boletín* disseminated information about a seminar on the teaching of preventive medicine held in Puebla, Mexico, in April 1956, and revealed an interest in two related, but often overlooked, areas: oral public health and the teaching of dentistry.<sup>398</sup>

One lasting decision that was made during Soper's tenure was that of renaming the institution. At the XV Pan American Sanitary Conference, held in San Juan, Puerto Rico, in 1958, public health leaders proposed that the Pan American Sanitary Organization instead be called the Pan American Health Organization. It was felt that the former did not fully describe the entity's functions and

suggested isolated interventions that were no longer representative. The word "health," however, was a broader term that better captured the Organization's character and the nature of its ongoing activities, and it would facilitate efforts to garner more support from the general public. Special care was taken to ensure that the name worked in the Organization's four languages: Pan American Health Organization, Organisation Panaméricaine de la Santé, Organização Pan-Americana da Saúde, and Organización Panamericana de la Salud. One important continuity was that the name of the Pan American Sani~ tary Bureau, which basically referred to the employees in the Washington, D.C., Headquarters office, remained the same.<sup>399</sup>

Another change in the Organization's life was that, prior to the Second World War, the majority of the Conferences' resolutions were basically recommendations for the Member Governments. But, since the late 1940s, the meetings decided on the actions that the Bureau itself should undertake, with the countries' consent. 400 Some of these, perhaps the most important, were imbued with an ideal that began to gain acceptance in the imaginations of Soper and the Organization: the possibility of eradicating or eliminating certain infectious diseases. A noteworthy project in those days was the fight against yaws in Haiti. The fight against this disease triggered the deployment of wellthought-out eradication strategies as an all-encompassing public health intervention.

#### Eradication as Doctrine

During the Cold War years, Soper was one of the architects of the concept of eradication of certain infectious diseases. He believed that this concept could be applied to a series of diseases, such as malaria, yellow fever, and even tuberculosis. One of his first experiences in applying this concept occurred in Haiti in the early 1950s. That country was plagued by a disease caused by the same treponema that is responsible for syphilis: yaws. It was found in all the rural areas, where it affected 40% to 60% of the population. It was feared because of its contagiousness and its effects: it ate

away at the skin, leaving the bones almost exposed, spread across the palms of the hands, and, in severe cases, mutilated the face. Some patients walked slowly, like crabs, to avoid pain from the lesions on the soles of their feet. The traditional response was often the terrible segregation in leprosaria or yaws houses, which also entailed the loss of jobs, family, and social support.

With the excessive hope spawned by many new medical technologies, intramuscular injections of penicillin appeared as a solution more effective than the traditional drugs made with arsenic and bismuth. The Pan American Sanitary Bureau, UNICEF, and the Government of Haiti joined forces in 1950 in a titanic effort to "eradicate" the disease.401 Using a model that would be reproduced in other campaigns (such as those against malaria), a division of labor was established. The Sanitary Bureau's cooperation focused on technical consultants: their travel and lodging expenses, inside and outside of Haiti. UNICEF provided the penicillin, the equipment and materials for the campaign, and the vehicles needed to carry out the program. Haiti paid for the employees in charge of performing the administrative work, administering the treatments, conducting the surveys, and tabulating the statistical data. Also, the government supplied space, furnishings, and supplies for the program offices. The Bureau's contribution for the 1950–1954 period was estimated to be US\$ 200,055; UNICEF's contribution was approximately US\$ 580,000, and Haiti's was US\$ 605,650.402 The Government of Haiti established a specialized service known as Campagne pour l'Eradication du Pian (Campaign for the Eradication of Yaws) which, while subordinate to the Ministry of Public Health, enjoyed a high degree of administrative and financial autonomy.

Early on, treatment centers, to which it was assumed that the patients would come, were set up. Later it was discovered that it was much more effective to set up outpatient clinics in the field and make house-to-house visits. A detailed administrative pyramid and epidemiological map of the country were developed. The country was divided into five zones, 10 subzones, and 78 districts. Each district had an inspector trained to diagnose yaws

and perform epidemiological work. The program doctors and the chief and assistant chief zone inspectors carefully supervised the district inspectors. Such impressive care was taken in attempting to cover every base that it was apparent even in the campaign reports. For example, special attention was given to preventing the disease from spreading by treating the people who had come in contact with the patients with penicillin. These were not just the members of the immediate family and/or household where the patient had been identified, but included the residents of the neighboring houses and, in the case of schoolchildren, all the students at that particular school. According to Soper, this care was the essence of the "Haitian" method, and precedents included the campaigns against Aedes aegypti and Anopheles gambiae in Ceará, Brazil.403

Another important lesson learned in this public health intervention was the need to understand popular sentiment. At the outset, the houses checked by the health officials would be marked with red wax pencil, but when a local resident alerted them that red was a sign of "bad luck," they changed the system for identifying homes. 404 The experience also brought to light the tension among the international health organizations. Soper, who had turned down the position of health director of the Institute (Office) of Inter-American Affairs because he felt it was too political, had to confront entities and institutions of his own government: he rejected using international health as a tool of U.S. or any other country's foreign policy, an attitude which was uncommon at the time. His position was inspired by a practical conviction: in order to be effective, public health had to be concerned only with itself. A few years earlier, he had emphatically said as much to a U.S. official: "When politics and science are mixed, science generally loses out."405

As Director of the Bureau, Soper believed it was necessary and possible to maintain an organization that was eminently technical, impartial, and objective, whose purpose was to ensure the well-being of the inhabitants of the Americas. In other words, it had to be apolitical, or at least not have any partisan political commitments. This perspective—

the practicality of which is still subject to debate—legitimized the concept of inter-American public health and enabled him to use it as a shield against political pressures to accept projects that would serve chiefly as propaganda for a given regime or that were being promoted only because of their low cost. According to Soper, the "determining factor" for choosing a health program should be its appropriateness, regardless of whe-ther it was large or small, expensive or cheap.<sup>406</sup>

Some of these ideas were applied to the fight against yaws.<sup>407</sup>

The campaign was huge: between July 1950 and March 1952, some 895,354 people were treated, and it was expected that the country's entire affected population would be treated in short order. 408 By August 1956, some 68,332 patients and 297,408 contacts had been treated with penicillin. In other words, the program cared for a total of 365,740 people affected by yaws. That was a significant number, considering the fact that Haiti had slightly more than 3.5 million inhabitants. Another impressive figure is that, by late 1954, 97% of the country's rural population had received injections of penicillin to cure or prevent yaws.409 Complementary programs were established to fight the disease in neighboring or nearby countries, such as the Dominican Republic and Venezuela. The samples collected between 1958 and 1959 indicated that the prevalence rate for yaws in Haiti had been reduced to 0.32%, which is significant considering that the estimated percentage at the beginning of the decade was between 30% and 60%. This meant that just 40 infectious cases remained in the entire country.410

The remembrances of one of the Bureau's health officials who worked in Haiti reveals the human and compassionate face of the medical treatment, as well as the health officials' learning process. There is testimony about health professionals picking up a patient named Aceife from a health center and taking her to visit her family, in keeping with the practice of treating the infected person's entire family in order to reduce the likelihood of reinfection by contact with another patient.<sup>411</sup> Despite its grammatical flaws, what follows reads

more like the script for a documentary film than a report:

Aceife is a pregnant woman who was treated for secondary syphilis. During her stay in the hospital . . . her husband . . . was also treated to avoid "pingpong" infections. It was then decided to take the patient Aceife to her home and examine the rest of the family. . .

At 8:30 a.m. we were in Thomazeau. The road to Thomazeau is passable except for a few miles which in rainy season would be quite a job. From Thomazeau to the patient's home, we will have to go on foot. We asked Aceife if it is far, but she immediately affirmed that it is "very near." ... This ... meant 15 kilometers and took us 2 hours and 40 minutes. . . . As we approached her house the patient complained she is sorry that she has nothing to offer us. We explained to her that our only purpose in coming [was] to clean up her household of sickness and not to be entertained.... We arrived at 11:30 a.m. The consultation starts. The husband who was treated by us made the propaganda for us. We wished to start with Aceife's family, but it is out of the question, as she insisted upon cleaning her house first, washing the children, and only then ... will she show them to us.... We are installed in a house, and the people are starting to come from all sides. We see many cases of mycotic infections, herpes . . . yaws, and one case of otitis. Finally we have the pleasure of confronting Aceife's family. Two girls do not show any clinical evidence of the disease but as a prophylactic measure we inject them with penicillin. The smallest, however, shows evidence of the disease and also is treated. For this little patient it was worthwhile the entire trip.

Two final comments remain on this fascinating testimony. The health officials returned to the hotel "tired but satisfied." The author drew some conclusions from this experience. One, which he underlined, was: "You cannot hurry these people." Another thought reinforces the first: "To obtain cooperation . . . their native traditions need to be respected." Finally, in pencil, he wrote a community maxim that still resonates today: "The best propaganda is done by patients." 412

The work against yaws resulted in some encounters between Soper and one of the most feared personalities in the history of Latin American politics, the dictator François "Papa Doc" Duvalier.

On one occasion, Soper and a group of officials were brought before Duvalier, a former physician who had headed Haiti's national public health service in the 1940s and later became his country's health minister:

when ushered into the *sanctum sanctorum* we found the President's desk at the far corner of a long narrow room . . . . In moving an extra chair from along the hall . . . I came to see, on a low table [at the] back of his desk at his right hand, a pistol which was not apparent to the others. <sup>413</sup>

Very probably, Duvalier did not have the pistol there for use against the visitors, but the incident suggests that the dictator was aware that he could be killed at any moment.

Besides yaws, there were other "vertical" programs that absorbed massive amounts of resources from the health organization of the Americas. One related to the decision to eliminate smallpox, made in 1950. This objective was achieved slowly because of the difficulties involved in preserving the vaccines, since keeping them at low temperatures, for example, was not always possible in rural areas. Also, the Bureau tried to eliminate the Aedes aegypti mosquito, the principal transmitter of urban yellow fever. In the budget of US\$ 6,149,690 for 1958, which included all the funds administered by the Bureau, the eradication programs (malaria, yellow fever, yaws, and smallpox) and programs for the control of other communicable diseases accounted for 59.3% and 7.8% of the total, respectively. In contrast, the items "Strengthening of general services" and "Education and training" accounted for just 25.7% and 7.2%, respectively.414

It is true that many of the aforementioned activities earmarked a portion of their budget for "training," but that part was generally around 10% of the total allocated for each program. It is also true that when only the expenses covered with PAHO's budget were considered, the budget was reduced almost to half and the programs for eradication and control of communicable diseases came to 24.9% and 14.3%, respectively, while the amounts for strengthening of general services came to 46.6%.

The notion of eradication colored many of the Bureau's activities during Soper's tenure. In the mid-1950s, in a pamphlet published in Brazil, the Director explained that: "the complete eradication of communicable diseases or their vectors is replacing, insofar as possible, simple control measures." In a pivotal article published in the *Boletín* in 1957, Soper masterfully used historical examples to justify the new public health perspective. The article starts off with an example and a definition of what he understood by eradication:

Since the moment Pasteur did away with the concept of spontaneous generation of infectious disease, the concept of eradication of the causative agents of communicable disease necessarily arose. Etymologically, the word "eradicate" comes from the Latin and means "to pull out by the root" or "extirpate." Prior to Pasteur, the verb "eradicate" and the noun "eradication" were used in medicine in a more restrictive sense, and so we spoke of eradicating a disease from a specific patient. Nowadays we understand the eradication of a disease to mean the total suppression of all sources of infection or infestation so that, even if no preventive measures of any kind are taken, the disease does not reappear. 417

The most famous and widespread eradication operation was the battle against malaria, an overwhelmingly rural disease. In 1954, the Pan American Sanitary Bureau launched an ambitious effort to eradicate the disease from the Americas. This illness, characterized by intermittent fever that generally did not kill but affected peoples' ability to work and their lucidity, was certainly one of the major diseases of rural Latin America. Arnoldo Gabaldón of Venezuela, an internationally renowned pioneer in malaria control, described in dramatic terms the humanitarian reasons for fighting the disease and recalled his own experiences:

a great tragedy was the finding [by a health official] of a boy tied to a table leg as the only safety measure his mother had when she lost consciousness due to the fever... the scene a doctor found, a baby trying to suckle from his dead mother's breast, was dreadful. The ranch where a putrid corpse lay on the ground for 48 hours following death because no one in the village had the strength to bury him was a den of terror: everyone was groaning under the devastating fever. 418

The desire to eradicate the disease was marked by confidence that science and technology could win out over nature. The decision was made at the XIV Sanitary Conference held in 1954 in Santiago, Chile, where Soper was also reelected to serve another term as Director of the Bureau. Among the leaders of this campaign were Soper himself, Carlos Alvarado of Argentina, who headed the campaign in Washington, D.C., and Arnoldo Gabaldón who, while in charge of a malaria division, was successful in eliminating the disease from a good part of his country. Gabaldón, who eventually became Venezuela's Minister of Health, 419 shared preeminence in the valuable work of controlling the disease with Dr. George Giglioli (1897–1975) in British Guiana and Amador Neghme (1912–1987) in northern Chile. The three were firmly convinced that there were no technical or economic barriers to success in the Region.

This effort was joined by other cooperative organizations, such as UNICEF and the principal U.S. bilateral cooperation entity, the International Cooperation Administration (ICA), predecessor to the U.S. Agency for International Development (USAID), established in 1961. The ICA called the campaign the "most important program backed by U.S. foreign aid policy."420 In 1956, the United States made a special contribution of US\$ 1.5 million for the Special Malaria Eradication Fund administered by the Bureau. To this were added the contributions of the Governments of the Domini~ can Republic (which donated US\$ 100,000 and promised a total of US\$ 500,000) and Venezuela, which donated US\$ 300,000. Subsequently, the Governments of Haiti and Colombia, among others, also made donations to the Fund. 421

It is clear that, in the case of some Latin American dictatorships, the work of ridding malaria was a means of legitimizing their governments' position in a national and international political context that questioned the absence of democracy. For example, this was the case of François Duvalier, who governed Haiti from 1957 to 1971 and who, shortly before his death, transferred power to his son; of Rafael Trujillo, who governed the Dominican Republic with force and brutality for decades;

and of the military regime led by Marcos Pérez Jiménez who, after manipulating the 1952 elections in Venezuela, remained in power until 1958.

UNICEF contributed significant amounts to the work of eradicating malaria in the Americas: more than US\$ 14 million. Moreover, it was expected that an additional US\$ 5.5 million would be added to that contribution in a short time. While substantial, these contributions did not cover all the expenses as estimated by the Bureau. In 1956, it was thought that the international assistance needed to achieve the objective would be more than US\$ 40 million. But that turned out to be just 27% of the estimated total of US\$ 144,406,370 that was to be contributed by the governments for malaria eradication. 422

According to its supporters, total eradication was far better than the traditional control measures, which, due to chronic shortages of money, resources, and personnel, were basically limited to draining swamps, promulgating laws to prohibit the planting of rice fields in close proximity to cities, and administering quinine salts. 423 The campaign's principal weapons were the application of new malaria drugs and the spraying of the interiors of dwellings with insecticides with residual activity, mainly DDT. There was great confidence in these technologies, despite reports that also pointed to their imperfections. The preliminary studies mentioned the resistance of some species of the Anopheles mosquito to insecticides. But those who championed eradication used this information to demonstrate the danger of a light, incomplete application of DDT. According to those who favored eradication, the mosquitoes' resistance could be overcome only with a drastic and total application of the insecticide. In this respect, eradication was the only possible way to prevent an eventual explosion of malaria in the world. With these weapons, a model for national campaigns was developed involving four major phases of work spread over an estimated period of five to eight years.424

In general, the national campaigns began with a tripartite agreement between the Pan American Sanitary Bureau, UNICEF, and the country. These agreements specified that UNICEF's responsibility was to provide vehicles, materials, and fumigation equipment. The Pan American Sanitary Bureau, in turn, provided technical cooperation and experts. Finally, the governments saw to the appropriate legislation and the provision of local workers, including the campaign leaders. These agreements, moreover, provided for the establishment of a specialized and practically autonomous national entity devoted to malaria eradiation. While most of the funding came from UNICEF and most of the bilateral cooperation came from the United States, the Sanitary Bureau provided strong leadership in the campaigns and awarded a significant number of scholarships for the study of the different aspects of malariology to prestigious academic centers in Brazil, Mexico, the United States, and Venezuela.

By the early 1960s, the majority of the governments and public health authorities of the Region had accepted the challenge of malaria eradication. The specialized services linked to the ministries of health, generally called National Malaria Eradication Services, had significant power, resources, and prestige. 425 During the first 10 years, the majority of the Latin American countries achieved noteworthy results, especially in the control of transmission in the areas that were most economically productive, most densely populated, and most accessible by road. In addition, they were able to significantly decrease the mortality associated with malaria. By 1974, it was said that the areas where 90 million people of the Americas resided had been freed of the disease through eradication efforts.426

Despite these achievements, the malaria eradication campaign had reductionist connotations, as suggested by a hopeful press release about its effect on a town in Venezuela:

The village of Manuaré in the highlands of Venezuela's Carabobo province is a prosperous place. Its inhabitants are healthy and well housed. There is about them an air of confidence in their town and its future.

A few years ago things were not so pleasant in Manuaré. Most of its residents lived in miserable shanties. Not a few of them were sick, unemployed, or both. Many of the naturally rich fields that bound the village lay abandoned. Commerce and new construction were at a trickle. Manuaré had all the look of a town up against more than it could handle.

Why was Manuaré in such a state? Because malaria was over the land and there was very little, if anything, the villagers—by themselves—could do to get rid of it.

Why is Manuaré thriving today? Because the land is now clean of malaria and the government has provided the villagers the means of helping themselves to a better life.

Although the same text mentions that, in addition to the work against malaria, a housing program that raised "the hope and self-confidence of the people" was in progress, there were great expectations for the almost-immediate effect eradication would have on socioeconomic development in general.427 From a historical perspective, the malaria eradication campaigns had the effect of stimulating a greater awareness by public health authorities in the Americas of the special problems faced by rural populations. If the Organization's first actions had concentrated on the ports and cities, this was an opportunity for intense work to be brought to the countryside, where the majority of the population of many Latin American countries still lived. It is true that national and local organizations had already performed valuable work in remote rural areas, but it was only with the malaria eradication program that massive economic and human resources became available and initial contact was established between public health services and many disadvantaged populations—contact which generally continued.

An unexpected consequence of the campaigns was that individuals and organizations in the community adopted them as their own. Thus, in some Latin American countries, the DDT sprayers became well-known and respected figures in the popular culture, and new volunteers stepped forth to assume increasingly important duties. They were known as "notifiers" because their formal function was to report to the public health authorities the existence of any cases of fever and to take

blood samples. They were generally school-teachers recruited in the rural communities themselves. Their responsibilities grew, eventually coming to include health education and the distribution of medicines.

In a series of rudimentary mimeographed magazines produced by Mexican health workers during the early 1960s and currently maintained in the Historical Archives of Mexico's Ministry of Health, one can see a certain popular tone and a noteworthy esprit de corps among those involved in local anti-malaria efforts. Two of these publications, prepared in Tamaulipas and Nuevo León, include poems in homage to the "comrades and doctors" who died and reflect the feelings of comradeship and special, lasting solidarity that united those who worked on eradication:

Tedious death came to carry Ramoncito away, obliging him promptly to dig his own grave.

Poor professor, death carried him off, the man was so good that even his mother-in-law wept.

. . . . . .

Davalitos died with his beer in his hand, and entered heaven as a good citizen of Monterrey.

I am a malaria doctor from the Monterrey sector, if you have to pay to get in I won't pay; that's my law.

Saint Peter pulled his hair unceremoniously, and said to himself it's no good, I can't bear this. 428

But the popular tone achieved by the fight against malaria sometimes was not enough to resolve the serious technical, social, cultural, and economic problems that eradication began to face in the mid-1960s, resulting in a decline of international sup-

port for the regional eradication program. 429 Some of the principal technical problems were the resistance of *Plasmodium falciparum*—the agent that causes the most serious form of malaria—to chloroquine, and a greater level of insecticide resistance than expected in some species of *Anopheles* mosquitoes. Some of the species did not live inside homes, as assumed in the original design, so residential spraying turned out to be ineffective. Moreover, the campaign lost some of its authority when cases of malaria were discovered to have resulted from transmission in urban hospitals through transfusions of contaminated blood. 430

The most important social problems were the poor condition of rural homes (there were few walls or surfaces that could retain the insecticides), the rural custom of sleeping outdoors during the summer, and the constant movement of itinerant popu~ lations that slept anywhere, especially those who were unaccounted for in official records. Of special importance was the appearance of new mosquito breeding grounds precipitated by road construction, deforestation, hydroelectric projects, and mining operations in rural areas. These activities, carried out in the 1960s and 1970s, with few public health considerations in some South American countries (such as Brazil and Peru), attracted numerous migrants in search of work opportunities who instead became victims of malaria.

There were also significant technological and cultural problems. The insecticides were toxic and killed not just mosquitoes, but also chickens, honey-producing bees, and other small animals bred to feed families. In some places, medical science was unable to overcome deeply rooted folk and religious beliefs related to the body, fever, and disease. Many rural dwellers believed that fevers were due to sharp changes in temperature or to the ingestion of unripe fruit. And they were opposed to providing blood samples due to fear of a loss of vigor or virility or that they could be used to cast spells or cause bad luck.

One economic limitation of the campaign was the unforeseen effect of environmental contamination, an issue which became increasingly important in the United States, especially following publication in 1962 of Rachel Carson's book, *Silent Spring*.<sup>431</sup> The book, which sustained that DDT was endangering human life as well as poisoning wildlife and the environment in general, quickly became the bible of emerging ecology movements that urged respect for the natural environment and an end to insecticides use.

Also, at the same time that the unpopularity of insecticides was growing the costs to produce them was rising. Over the years, the geographical areas vulnerable to malaria began to expand once more, the amount and quality of blood samples studied declined, and the percentage of people living in malarial areas increased considerably. As a result, malaria has reemerged as a serious public health threat in many corners of the Region where it had once been brought under control.

#### THE WARRIOR'S REST

On 31 January 1959, Soper stepped down as Director of the most important health organization of the Americas. But he remained devoted to international health, first as a consultant for the ICA, and later as director of a cholera laboratory in Dacca, in the former East Pakistan, now Bangladesh. The year he retired, he sent a card to a colleague regarding the annual meeting of the American Public Health Association, stressing the importance of ethics:

A scientist must have the following characteristics: intelligence, industry, integrity. Of these, intelligence may be mediocre; industry should be great, and integrity must be absolute. 432

The statement seems to suggests that, to get something in life, the important things are determination, honesty, and persistence. Soper's career at PAHO is a testimony to, and even a reflection of, a certain obsession with these maxims.

When Soper celebrated his 80<sup>th</sup> birthday, the Organization honored him, with many people fondly remembering a person who at times had difficulties in directly expressing his own emotions and feelings. Some carefully penned their

memories in a handsome blue book, and others sent heartfelt letters which were subsequently inserted into the book. Minnie Coe, the secretary who for many years had deciphered his abbreviated penmanship, wrote: "You bring out the best in us." Myron Wegman, who had known him since the start of his tenure and was appointed Secretary General of the Bureau in 1957 by Soper himself, wrote him a poem:

Saluting you at eight times ten
Demands much more than prose;
A giant in the lives of men,
Your stature grows and grows.
To try to do you justice then
An epic style I chose.

Now hear ye, and the world as well, Our statement shouted loud and clear, With echoes like a ringing bell, That we our champion Fred revere.

Scientific papers tell
That friend and foe shed ne'er a tear,
As *Ankylostoma* heard the knell
When Soper's entourage drew near.

On Aedes he cast a spell; Anopheles soon quaked with fear. "Eradicate!" we learned to yell As Soper's couriers sped like deer, O'er land and sea his creed to sell.

Rickettsia turned a frightened ear,
The lice were quiet as they fell.
Polioviruses proved no peer
As Fred L. Soper gave them hell
Until they had to disappear.

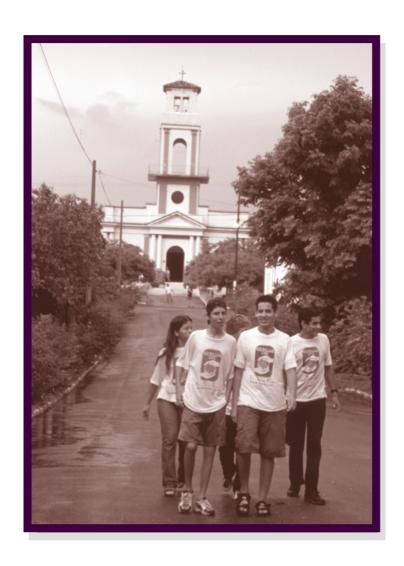
Triumphant he in public health, We rightly call him sage and seer. For none can measure all the wealth, The joy he has made appear.

So, proudly, it's abandon stealth, For Fred, our hero, Cheer, cheer, cheer!!! $^{434}$ 

Shortly before Soper's death, a former colleague sent him a letter summing up his true feelings of devotion: "For a quarter of a century I have been preaching your approach, repeating your precious words, and telling life to meet your path . . . and to feel all the time that you are around."<sup>435</sup> In the year of his death—1977—an emotional ceremony was held at PAHO Headquarters. Near the conclusion, a member of his family told an anecdote that captured the true treasure of a health official, national or international: Soper had joined a study group whose members knew of his good reputation, but were not well aware of the reason for it. At one of the first meetings, his new colleagues asked what his biggest achievement had been. Soper did

not mention his battles against malaria, *Aedes aegypti*, or yaws, or his passion for nearly perfect order and punctuality. Instead, he answered: "my many friends around the world." <sup>436</sup>

His reply suggests that public health—to play with WHO's famous definition—is more than the unachievable "complete physical, mental, and social well-being." It is, or can be, a brotherhood of those who practice it and those who are close to it; a necessary form of solidarity.



A fundamental premise in the work of the Pan American Health Organization is that only with a healthy, active population can progress be nurtured.

# Health, Development, and Community Participation

etween the 1960s and the early 1980s, the Pan American Health Organization continued to grow and face new challenges. This chapter describes and analyzes the Organization's activities and approaches for addressing the short-, medium-, and long-term problems of inter-American public health, especially under the leadership of the Pan American Sanitary Bureau's fifth and sixth Directors: Drs. Abraham Horwitz and Héctor Acuña. Also noteworthy during those years was the inclusion of a group of Caribbean nations as new Member States in the Organization.

Two major perspectives that are still evident today could be distinguished during this period in the Organization's life. The first is the incorporation of health programs into socioeconomic development; the second is community participation in health activities. Some Organization officials emphasized the institutional development of health services, management of technical programs by professionals, and the extension of health care services to marginal urban and rural zones. Others focused instead on the importance of sparking positive change from the bottom up, giving priority to what the community needed, felt, and could itself contribute. Tension between these two points of view existed throughout the 1970s, and even intensified with the emergence of the primary health care strategy at the end of that decade.

Dilemmas of this type emerged as a response to essential questions that are still valid today. Is health the result of an external intervention aimed at improving the living conditions of the beneficiary population, or is it a tool to give the community power in its struggle for development? How might the two ideas be combined? How might high-quality technical work and solidarity be partnered? How could whomever needed to be convinced be successfully persuaded that investing in and promoting health are vital? The answers to these questions opened up a rich process, marked by diversity of thought and action in the field of Pan American health, and pointed to new paths for public health.

At that time, PAHO was operating in a political context marked by the Cold War and the rise and fall of an ambitious approach to development put forth by the United States known as the Alliance for Progress. The need for social reform did not come just from the north, but was also posited by

Latin America. In the early 1960s, President José Figueres of Costa Rica, President Rómulo Betancourt of Venezuela, and President Eduardo Frei of Chile pointed to the need for agrarian reform, a move away from latifundismo, and increased opportunities for employment, housing, and education for society's poorest sectors. These reforms, like the Alliance for Progress, were born, in large part, as a response to the Cuban Revolution of the early 1960s, a challenge to U.S. hegemony and to the conservative regimes of the Americas. The idea was to provide an alternative model for many radical intellectual youths, politicians, and physicians in Latin America. As the Pan American Health Organization moved into the final decades of the twentieth century, the Cold War crisis and a questioning of the United States' world hegemony came to the forefront.

### ABRAHAM HORWITZ, THE FIRST LATIN AMERICAN DIRECTOR

In the midst of this scenario, the Pan American Health Organization was directed with prudence and wisdom by a distinguished Chilean physician and public health servant highly devoted to his work: Abraham Horwitz. He became the Bureau's new Director in 1959 and held the post for 16 years, until 1975.437 This was the first time the responsibility had fallen to a Latin American surely an honor for him and for his country. In order to understand his contribution to the Organization, it is important to know a bit of information about his background and career. He was born in a small town in Belarus (Belorussia) to a Jewish family that emigrated to Santiago, Chile, fleeing czarist persecution. The Horwitzes' had initially thought of going to New York, but his mother had conjunctivitis at the time, thus preventing them from meeting entry requirements into the country. Paradoxically, the sanitary controls for immigrants set up at almost the same time as the International Sanitary Bureau—PAHO's precursor—came into existence made the family look to Chile, perhaps with the thought that they would still be in the Americas, the dream of many immigrants, albeit at the other end. Abraham would be born in Santiago in 1910. No member

of the family had been a physician or scientist, nor of an academic background, but he graduated with a medical degree from the University of Chile in 1936. This achievement is perhaps one of the hallmarks of the immigrant mindset: to work hard and see one's children have the possibility, through higher education, of a better life. At the same time, it is illustrative of the magnificent opportunities offered at the time by Chile's public education system for the social betterment of its citizens.

His talent, spirit, sense of responsibility, and love of the arts were among the qualities that made him a unique individual. Another of his traits is also worth noting: he never took vacations. To him, his work was not just an occupation, it was a devotion. That must have been part of the reason why he never had children and married only when he left the Director's position. 438

Horwitz chose to specialize in infectious diseases, working in a laboratory, where he learned the value of patience and precision. He published noteworthy papers on tuberculous meningitis and the epidemiology of infectious hepatitis. His interest in public health was born around 1943 when he was studying on a Rockefeller Foundation scholarship in Detroit, Michigan. There he served his medical residency at the Herman Kiefer Hospital. The same scholarship helped him earn a master's in public health at Johns Hopkins University. When he returned to Chile, he was appointed to a professorship in the University of Chile's School of Public Health, one of South America's most prestigious academic institutions, where he eventually became its director.<sup>439</sup>

Then Horwitz shaped and was shaped in the ranks of one of the first unified services in the Americas: the National Public Health Service of Chile, an official institution established in 1952. 440 He eventually became its policy director, the secondranking position, and editor of the Service's *Boletín*, to which he added a somewhat cryptic but logical tagline: "Any action in individual and collective medicine takes shape in the application of a technical standard through an administrative procedure." The rationality of

this statement is best understood within the context of the rivalries and disputes that were prevalent among the various organizations comprising the National Service. It was also a tacit recognition of the ups and downs that characterize partisan politics and generally interfere with the experts' decisions. The entities that came to fall under the Service's umbrella—and whose functions Horwitz had to harmonize—were the Directorate of Charity and Welfare, the Medical Service of the Disease and Disability Mandatory Insurance Fund, the National Health Service, the Technical Section of Hygiene and Industrial Safety of the General Directorate of Labor, and the Bacteriological Institute of Chile. Unifying them—to prevent duplication, save resources, and improve the effectiveness of the interventions and coverages—was also a valuable social experience in collective work. The National Health Service was administered by a national board that included workers, businesspeople, and physicans. 442

In the late 1950s, the Government of Chile nominated him for PAHO's top position. When Horwitz assumed the directorship of the Pan American Sanitary Bureau in 1959, some 247 projects were being carried out in diverse areas: infant mortality prevention, environmental sanitation, control of communicable diseases, nutrition, and health education.443 The beginnings of his tenure were dedicated to ensuring the continuity—and the adaptability—of a large international organization during a period of transition. For example, the malaria eradication program continued to move forward. But an idea that was gaining credence was that neither the malaria program nor any other vertical program could be effective or lasting without some form of integration and a strengthening of health services in general.

It wasn't just the vertical programs that were maintained; so were other activities that had been initiated during Soper's tenure, such as those involving the advancement of nursing and scholarships. Horwitz most likely felt a personal commitment to scholarships, since he himself owed his career to the opportunities opened up by a scholarship. During the period of 1958–1961, the Organization awarded 2,098 schol-

arships, an increase of 70% over the previous four-year period. Of these scholarships, 804 were earmarked for advanced studies in specific public health disciplines. Also, in 1961, 21 nursing education programs were carried out with PAHO's cooperation. 444 At the same time, Horwitz began to introduce new objectives and methodologies to inter-American public health work and to allocate more resources to activities that had been initiated previously, such as basic sanitation, nutrition, and the risks to health caused by tobacco use.

Another of Horwitz's noteworthy contributions was the promotion, in international forums, of the importance of vitamin A. Vitamin A deficiency was common in the poorest countries and entailed a set of health risks, especially for mothers and children. His interest in the issue continued and, after leaving PAHO's directorship, Horwitz chaired the vitamin A consultation group of the U.S. National Academy of Sciences and the U.N. Sub-Committee on Nutrition. Another important foundation was created around the same time under Horwitz's leadership: the Latin American Center for Perinatology and Human Development, with headquarters in Montevideo, devoted to perinatal health. This institution was an offshoot of the obstetrical physiology service directed by two prominent Uruguayan physicians: Roberto Caldeyro Barcia (who was the Center's first director, start~ ing in 1970) and Hermógenes Álvarez.

PAHO studies and programs on the harmful effects of tobacco use were also strengthened under Horwitz's leadership: in 1964, the Director endorsed the conclusions of the U.S. Surgeon General's Report, which addressed the harm caused by the smoking habit. A short time later, in 1969, the Directing Council advised the Member Governments of the taxation and legal measures that should be taken to control cigarette advertising and, in 1971, the "Tobacco or Health" Unit was established within the Organization. One study conducted in eight Latin American countries during that time period showed that at least one-third of men smoked. In subsequent years, the requirement to include stern warnings on ciga~ rette packages became widespread, subregional workshops were organized, and a series of fundamental studies and publications on the subject was produced. 445

Horwitz used to write short yet substantive articles for the editorial section of the Bureau's *Boletín*. One of them shows that he placed a high value on culture and cultural diversity:

Health is not an end in itself; we do not live only to be healthy. One of the greatest endeavors of our time is the preservation of cultures with due respect for traditions and the way of life of all peoples, and with full confidence in the supreme values of humanistic ethics. 446

A valuable innovation Horwitz introduced to the Organization's agenda was the promotion and dissemination of information about the close relationship between health and economics. To him, this meant, first of all, that health conditions depended on the level of economic development achieved, and that an example of this was the drop in the infant mortality rate: it could only be decreased to a certain degree by health care interventions, but beyond that limit further reductions required the presence of such factors as good nutrition, adequate housing and sanitation, and a reasonable per capita income. Measures such as these did not depend on health care, he noted, but rather on socioeconomic development. 447 Sec~ ond, to Horwitz this relationship meant that the health of the population, especially the economically active population, was a necessary ingredient for improving productivity and consumption in society in general.

The latter concept is reflected in a phrase that contains terms more suited to economics and that Horwitz would repeat in various publications: "without high-quality human energy, there can be neither efficient production nor sufficient consumption." Health was also indispensable to the economy as a result of the growing importance of occupational illnesses, such as miners' problems with silicosis and agricultural laborers with pesticide poisoning, as well as the exposure of other large groups of workers to air pollution and

ionizing radiation. Horwitz wisely asserted that while social security systems were addressing the consequences of these problems, they were not doing much to prevent them. According to the Bureau's Director, the incidence of job-related accidents and occupational illnesses was higher among workers in Latin America and the Caribbean than among those in the United States and Europe. Moreover, he stressed, investment in the creation of safer workplace environments would be easier in places where an adequate public health infrastructure was already present.

These concepts and assertions therefore posited a concrete linkage between health and economics. Or, said another way, they recognized that, unfortunately, there generally existed a vicious cycle of lack of health and of economic underdevelopment. In this cycle,

... the lack of resources causes high rates of disease, while the high rates of disease make it impossible to produce the resources needed to improve health conditions for the population and the economy in general.

A *New York Times* journalist who interviewed Horwitz summed up the argument, saying that the basic problem in Latin America was that:

...low productivity leads to inadequate income, resulting in deficient diet [and] inadequate housing, which, in turn, lead to poor health and low productivity. This is the cycle which must be broken.<sup>449</sup>

It is important to stress that Horwitz's ideas reflected and inspired the work and the research of other health workers of the Region. For example, Jordan J. Bloomfield, a PAHO consultant, drew up a document on health and industrial development in Latin America. Gustavo Molina and Freda Noam proposed a methodology and indicators for measuring the relationship between health and economic development in Latin America that were presented at various national forums and were published in the *American Journal of Public Health*. 450

Moreover, it is worth mentioning that Horwitz was in no way naïve about the intrinsic benefits of economic growth, and he criticized the assumptions of some economists who considered health an epiphenomenon of development. In a 1963 publication he clearly indicated that some of them maintained that health was merely an indirect consequence of economic growth.

 $\dots$  without considering that neither one nor the other is possible without human development, which is synonymous with health and education  $\dots$  only with a healthy, active population can progress be nurtured.

Likewise, his notion of linking health to economics was not limited to a passive attitude with respect to policies and economic models. For example, Horwitz never tired of criticizing the harmful dependence that resulted whenever economies of the Region chose to concentrate on only one or a few export products, generally raw materials subject to the vicissitudes of the international markets. And he thought it was not only necessary to convince private enterprises and international organizations to invest in public health and social infrastructure, but also to make a special effort to avoid the pattern of discontinuity in these investments. 452

Horwitz also showed a concern for needs-based planning, particularly as this related to the projected population explosion and the development of effective responses to the new challenges that would inevitably result from this population growth. In the mid-1970s the estimated population of Latin America was 324 million, and there was a fear that it would double by the end of the twentieth century. That translated into a growth rate much higher than that experienced by the United States. During the first five years of the 1970s, the annual population growth rate in Latin America was 2.7%, in comparison to 0.9% in the United States.

Among the diverse social investments needed to address the needs of this new population, Horwitz assigned great importance to the issue of clean drinking water. He believed that water was key to economic progress and essential in almost all spheres of human life, such as health, agriculture, and industry. He also felt it was necessary to explain that supplying water was a costly service, that appropriate rates for water provision had to be established, and that this service had to be administered efficiently. 455 To illustrate the magnitude of the task, it should be pointed out that in the early 1960s there were an estimated 100 million people in Latin America without access to clean drinking water services. Supplying such a large population segment required undertaking a 10-year program and planning for an annual investment of US\$ 300 million.456 This task was begun with support from the W. K. Kellogg Foundation. Joint Foundation-PAHO programs made it possible to fluoridate the water (effective in preventing tooth decay), equip local laboratories to measure water purity, and train sanitary engineers and technicians to carry out these tasks. In this way, between 1966 and 1971, the Pan American Health Organization and the W. K. Kellogg Foundation supported the training of about 500 sanitary engineers from 24 countries in the Region of the Americas.457

In addition to the W. K. Kellogg Foundation, Horwitz's ideas found a sounding board in the Inter-American Development Bank (IDB), an institution established in 1959 and directed, at that time, by another Chilean and a friend of Horwitz's, economist Felipe Herrera. Herrera was convinced that the Bank was a powerful tool for development and that supporting health was a fundamental means of investing in human resources that would, in turn, lead to economic growth. The fact that the Director of the Pan American Sanitary Bureau and the President of the Inter-American Development Bank believed that health would increase the workers' and a country's productivity resulted in important social programs. 458 By early 1966 the IDB had granted 60 loans (46 for urban projects and 14 for rural projects) in the amount of US\$ 243,562,296 for initiatives to benefit some 30.5 million people. The Bank also contributed funds for other environmental sanitation projects, for hospital construction, and to improve schools of medicine and public health. 459

The ideas of Horwitz, Herrera, PAHO, and the IDB are better understood within the ideological context in which they developed. They reflected an aspiration—and a certain urgency—for "development," an idea that was gaining important hold in Latin America at that time. It was formulated on the basis of two great models: the model of modernization and the theory of dependency. The seminal text on the model of modernization was the book by W.W. Rostow, an economist and advisor to the U.S. Government, entitled *The Stages* of Economic Growth. Its subtitle clearly stated the author's intention: A Non-Communist Manifesto. Rostow believed that the process of development was basically the same for all countries and that their history would run from a traditional, agricultural stage to a modern, capitalist stage. The key was creating the conditions sufficient for a rapid, irreversible economic take-off.

According to Rostow, all societies went through similar stages until reaching—thanks, above all, to impetus from external forces—a moment when they were launched on the road to industrialization. Some ideas derived from the model were that the Latin American societies possessed a modern focal point, generally associated with that which is urban, that which is industrial, and West~ ern culture, and a traditional focal point, almost always related to that which is rural, the indigenous cultures, and the absence of a sustainable, ongoing relationship with the commercial marketplace. The modern focal point would need to spread its cultural values and its systems of work through political projects that would stimulate, regulate, direct, and control change. In other words, in both the industrialized countries and the modern focal points of traditional societies, development could be promoted and overseen.

The theory of dependency has a different perspective. The theory's leading exponent was Argentine economist Raúl Prebisch, and its mecca was the Economic Commission for Latin America and the Caribbean (ECLAC), a United Nations body operating out of Santiago, Chile. One of the principal postulates of that theory was that the international market persistently reproduced a relationship of inequality between the center and

the periphery. The center was comprised of the industrialized countries, which processed the raw materials from the peripheral countries. The peripheral countries consumed products manufactured abroad and were subject to the vicissitudes of worldwide demand for their products. Their export economies were often mining or farming enclaves that were connected mainly with the outside world; that is, with sending the profits abroad. So they did not have major local impact on the labor market or on increased consumption. According to those who subscribed to the dependency theory, development of the Latin American countries entailed breaking a pattern that robbed them of autonomy and imposing equity in the terms of exchange on the international market. They also championed the idea that import substitution industrialization and the creation of a domestic market for consumption of locally made products were highly desirable goals, noting that some Latin American countries were already on the road toward achieving them.

While at the time the modernization model and the theory of dependency seemed very different from one other, they actually had some points in common—the notion that development should be directed by the State, for example. They did not assign an important role to private institutions, civil organizations, or community efforts. The most important determinant of development appeared to be the wisdom of economic policies. Both constructs also suggested that true ruling classes in Latin America had not been in evidence, at the same time that they embodied a certain disdain for everything that was agrarian, considering it to be in conflict with that which was industrial and synonymous with underdevelopment. Also, both schools showed a fear of social movements, such as the one that occurred with the 1959 Cuban Revolution, and of the more radical and antiimperialist tendencies which emerged in its wake.

Official PAHO documents of the early 1960s make little mention of the Cuban Revolution. But it is clear that the OAS, the U.S. Government, other governments of the Region, and PAHO itself were concerned and sought a road to consistent development that would offer an alternative to the

radical measures adopted in Cuba. It is also clear that there was tension at the Pan American Health Organization during the early days of the Revolution, especially with respect to the U.S. delegation. Significant changes in Cuban public health, such as the establishment of a single national health system, formalized by law in 1961, began during those years. It was a State system in which there was no place for private ownership in any health-related activity (such as clinics, pharmacies, learning centers, equipment, or the manufacturing of drugs). In addition, priority was assigned to prevention, and efforts focused on comprehensive, universal coverage. Noteworthy among the processes related to the emergence of this system were the extension of health services to the most remote areas in the countryside, thanks to the Rural Social Medical Service; the establishment of hospitals far from the cities; the formation of sanitary brigades by the Federation of Cuban Women and of a volunteer corps for the malaria eradication campaigns; and the reorientation of medical education following the large-scale exodus of Cuban physicians after the Revolution.461 It is important to note that the Cuban revolutionary regime, which in its early days had not participated in PAHO's malaria eradication program, signed an agreement with Horwitz to initiate the campaign. Under this agreement, Cuba promised to contribute US\$ 5 million toward carrying out the malaria elimination program over the next four years. 462

One indication of the tension generated at the Pan American Health Organization by the Cuban Revolution is the report of a delegate from the United States to the XII Meeting of the Directing Council, held in August 1960 at the La Habana Libre Hotel (prior to 1959, the Havana Hilton). The PAHO meeting took place at the same time as the Seventh Meeting of Consultation of Ministers of Foreign Affairs held in San José, Costa Rica. This latter group would take initial steps—in the name of regional unity—that would culminate in the expulsion of Cuba from the OAS two years later. PAHO—partly because it had a more direct connection with the United Nations system and partly because it was considered a technical and

apolitical organization—did not proceed in the same way. At the time of the holding of the PAHO meeting in Cuba's capital, Fidel Castro was already in power, holding the official title of prime minister while Oswaldo Dorticós occupied that of President. The government had already issued a series of nationalization measures and had implemented radical agrarian reform, but had not yet announced its alliance with the former Soviet bloc and had not severed diplomatic relations with the United States.

The opening ceremony of the XII Meeting of PAHO's Directing Council was held in Havana's famous Capitolio where, at a rally the night before, a large banner reading "Cuba sí, yanquis no" had been unfurled. The meeting was attended by delegates from almost all the member countries. According to the U.S. delegate's report, there was a highly charged political atmosphere, even though the agenda included an innocuous array of routine administrative, financial, and technical matters. Included among the Council's resolutions was a recommendation for a future "technical" discussion of the methods for evaluating the contribution of national public health programs to economic development. 463 As interesting (or perhaps more interesting) than the matters discussed were the delegates' impressions. According to the U.S. delegate, the day before the meeting opened, the hotel had been full of Cuban youths from the rural areas "dressed in uniforms and quasi-uniforms, carrying battered knapsacks or gunnysacks with attached cups, tin plates, and canteens." The author said that most of the young men "wore beards or, in many cases, fuzz that was heroically attempting to shape itself into a beard," and that many made it clear: "we like Americans; it is only your government we don't like."464

An essential link among the delegates was proffered by Pedro Nogueira of Cuba, who had been participating in PAHO meetings ever since the Pan American Sanitary Conference held in Caracas in 1947. He knew PAHO and Cuba well. He worked tirelessly to ensure that things went as smoothly as possible, welcoming delegates as they

arrived at the airport and explaining to the new Cuban officials that if the meeting went badly for political reasons, that this would be harmful to Cuba. The aforementioned report describes Nogueira's unflagging efforts to make the meeting a success:

... as a link between the new regime and the old-timers.... He may well have been the key political factor in preventing the introduction of controversial political matters into the sessions.<sup>465</sup>

The report also says that while they were in Cuba, the delegates were overwhelmed with propaganda about the work of the hospitals and health centers established by the Revolution. In a final comment, the author of the report made a prediction, acknowledged a new political reality, and suggested the importance of U.S. foreign aid to international health and, above all, to countering the influence of the Soviet model:

There is no reason to believe that the government is faking. If they hold out, they will get health services to the people as all communist countries are doing.... Observing Cuba today raises the question of whether the U.S. is making maximum use of health in combating communist infiltration there and elsewhere. In every country in the hemisphere, except Argentina and Cuba, there are health facilities . . . that are joint projects of the country and the U.S. They stand as symbols of our interest in the people of those countries. Are there enough of them? Are we now standing by to let the Soviet Union move in to fill the vacuum we will not fill? . . . It would appear that the Soviet Union has learned much from our foreign aid program and is using effectively methods that we have tended to abandon. Chief among these is the creation of material things to serve as a lasting symbol of our interest. 466

The above quote is best understood within the framework of the United States' foreign policy response to the social revolution that had arisen in the Caribbean and appeared to be spreading to the rest of the Americas, and which crystallized in an ambitious proposal for socioeconomic development. In March 1961, President John F. Kennedy announced an Americas-wide program called Alliance for Progress. Kennedy was convinced that social reform was essential for pre-

venting violent revolution. Hundreds of U.S. volunteers answered his call and joined the Peace Corps, assembling their backpacks and traveling to Latin America and other regions of the Third World to promote community health and education projects.<sup>467</sup>

One individual who maintained continuity in U.S. foreign policy was Dean Rusk. After serving as president of the Rockefeller Foundation for nearly a decade (1952–1961), he was named Secretary of State, a position in which he remained when Kennedy was tragically assassinated and Lyndon B. Johnson assumed the presidency. Rusk actively championed the provision of economic aid to developing countries, the maintenance of low tariffs to strengthen world trade, and the use of military force to stop the "expansion of Communism."

A special OAS meeting of the Inter-American Economic and Social Council, held in August 1961 in Punta del Este, Uruguay, was decisive for the Alliance for Progress. It was then that the urgent need to promote sweeping social and economic reforms, to encourage a more equitable distribution of national income, and to raise the standard of living—including providing better employment opportunities and access to arable land and social services for the rural population—were stressed. These changes were framed in terms of gradualism and evolution, because it was felt that violent social upheavals, hurried nationalizations, and preemptive expropriations of foreign holdings did not serve progress and development over the long run. In the Alliance's Charter and the discussions related to it, the close relationship between the attainment of public health objectives and the improvement of social and economic conditions was recognized, and it was announced that the governments would develop national health plans for the decade and install planning units in their ministries of health.468

The proposal won support and enthusiasm at the Pan American Health Organization. For example, water supply goals were established for the coming 10 years: to supply 70% of the urban population and 50% of the population in rural areas, where the difficulties were greater. By 1966, nine

Latin American countries had exceeded this objective first put forth in the Punta del Este Charter, benefiting 44 million inhabitants. But the goal was far from accomplished in the rural areas: only two countries had succeeded by the decade's midpoint. The appropriate combination of health and socioeconomic development programs would be—and continues to be—a matter of reflection and action for PAHO.

#### A BUILDING AND NEW PROGRAMS

One of the most momentous events for PAHO during the 1960s was the opening of its new Headquarters building, the first permanent home for the staff of the Pan American Sanitary Bureau, who, until this time had either occupied rented space or shared offices with other institutions, such as the Pan American Union. The land where the building was to be constructed was at the intersection of 23rd Street and Virginia Avenue, in a picturesque part of the city known as Foggy Bottom. A few blocks away was the future site of the John F. Kennedy Center for the Performing Arts (inaugurated in 1971), and just a block away was the U.S. Department of State. It was close to the White House and across the Potomac River from the historic Arlington Cemetery. The plot consisted of an entire block, with an irregular triangular shape, truncated at two vertexes, donated by the U.S. Government thanks to arrangements made by Soper. The gift came with a caveat: the height of the building needed to comply with Washington, D.C.'s, requirement that no construction rise above the city's national monuments.470

The best architects of the Americas competed, and nearly 60 proposals were submitted. <sup>471</sup> It was a time when Latin American architecture was blazing new frontiers. Perhaps the most quintessential expression of its bold and pioneering spirit was the design and construction of Brasilia, the new capital of Brazil, in the country's geographical center, by Oscar Niemeyer and Lúcio Costa. Román Fresnedo Siri, a Uruguayan architect who devoted six months to the development of his winning formula for the PAHO project, acknowledged that he had been strongly influenced by such ar-

chitectural luminaries as Le Corbusier of Switzerland, who had placed extraordinary importance on the use of concrete columns to express verticality, and by the clean esthetic of Frank Lloyd Wright of the United States. He was, moreover, an astronomy buff, and that may be the reason his constructions always imparted a sensation of open space.

Fresnedo Siri's design combined simplicity and moderation, in which he proposed two buildings, esthetically and functionally complementary, to occupy part of the allocated land, with the rest to be accented by a small plaza. The first building was a rectangle, slightly arched, like a half moon, with a series of solid, medium-high columns connecting the rotunda with the second floor to create the impression that the second floor was floating on air. The other building, partially surrounded by the half-moon structure, was circular and looked like a giant drum. The first building housed the lobby and reception area, two meeting halls, and staff offices, including the Director's suite on the top floor. In the second building was the large, circular council chamber to be used for the Organization's regional meetings with public health authorities and other dignitaries. The buildings were connected at the second floor, easily accessible from the reception area.

The building luminously melded seemingly disparate elements: steel, wood, marble, granite, and glass. According to an article in the OAS's Américas magazine, the complex was a sculpture of light and concrete. The paneling in the offices was Honduran mahogany, Brazilian jacaranda, and American oak. But even more important than esthetics was the building's embodiment of the Organization's essential requirements: highly functional office space, accommodations for all sizes of meetings, and the projection of an image of professionalism, solidity, and moderation.

The Region's public health ministers caught their first glimpse of PAHO's new Headquarters on 27 September 1965, the opening day of the XVI Meeting of PAHO's Directing Council.<sup>472</sup> Since that day, the flags of the member nations and the PAHO flag have flown in the plaza adjacent to the

entrance. The inauguration ceremony was attended by representatives of the international organizations headquartered in Washington as well as officials of the W. K. Kellogg Foundation, which had generously provided an interest-free US\$ 5 million loan for the building's construction. 473 Several countries of the Americas also made valued contributions. At the opening ceremony, Horwitz quoted Churchill: "We shape our buildings, and afterwards they shape us."

As part of the celebration of the new building, Professor René J. Dubos, a famous microbiologist and pathologist at Rockefeller University, gave a lecture entitled "Man and His Environment," and four days later, a piano recital was held. <sup>474</sup> Dubos proposed a comprehensive vision of the relationship between human beings and the environment, marked by the coexistence of health and disease. <sup>475</sup> Since its opening, the Headquarters simultaneously has become an emblem, a reference point, and a place of business for the health workers of the Americas.

In 1966, the Bulletin of the Pan American Health Organization was launched. It was published annually with selections from the Boletín de la Oficina Sanitaria Panamericana. From 1973 to 1996 the journal appeared quarterly. At that time the Organization had a budget of US\$ 16,277,238.476 By 1966, the largest share of its revenue was coming from the member countries' contributions (US\$ 6,460,000, or 40% of the total budget). An additional US\$ 100,000 came mainly from quota payments from France, the Netherlands, and the United Kingdom. To this was added the voluntary funds for special projects, such as malaria eradication. For example, in 1964, quota assessments under this heading came to US\$ 5 million. In addition, as the Regional Office for the Americas, PAHO received approximately US\$ 2.8 million from the regular WHO budget and US\$ 1.5 million from United Nations funds for various specific technical cooperation initiatives. To PAHO's total budget of more than US\$ 16 million, between 1961 and 1964, UNICEF added its valuable contribution of an estimated US\$ 5,000,000 per annum

for the malaria eradication campaigns and another US\$ 1,000,000 for other health campaigns.

Environmental health, environmental preservation, and the dissemination of medical and scientific information were important areas of concern and action starting in the late 1960s. By that time, large metropolises such as the Mexico City, Santiago in Chile, and São Paulo in Brazil were already beginning to face significant air pollution problems, and other Latin American cities had dangerous levels of water contamination. Given that situation, the Inter-American Association of Sanitary and Environmental Engineering (AIDIS) and PAHO's environmental health division agreed on the need to establish a multinational sanitary engineering center dedicated to cooperating with the countries to resolve environmental health problems. A PAHO consultant determined that the major cities in the best position to accommodate that center were Lima and Caracas. After Lima was selected, a PAHO mission visited the city in 1967 and began negotiations with the Government of Peru. The Pan American Center for Sanitary Engineering and Environmental Sciences (CEPIS) was formally established in Lima in September 1968. Its members quickly moved to consider general programs of technical cooperation and specific environmental health projects. In general, they were concerned with the establishment of conditions favorable to the development of a healthy environment at the community level. Over time, CEPIS included in its work the study of the epidemiological, biological, and toxicological impact of the principal environmental contaminants on human health.477

Another regional center important to the Organization during that period was the Latin American and Caribbean Center for Health Sciences Information (BIREME), established in March 1967 in São Paulo thanks to an agreement signed by PAHO, the Government of Brazil, and the Universidade Federal de São Paulo's School of Medicine, and with support from the W. K. Kellogg Foundation. The decision to establish a center of this kind was based on the spectacular growth in the number of students, professors, and journals

of medicine and the health sciences throughout the Region, 478 resulting in the need for centralization of the production and indexing of bibliographical references, often scattered among distant libraries. Another fundamental task assumed by BIREME was the training of librarians specialized in health sciences. Under the leadership of Amador Neghme of Chile, BIREME's capacity expanded rapidly. One indicator of this growth is the fact that, between 1969 and 1973, the library processed almost 250,000 requests for photocopies of journal articles.<sup>479</sup> In 1968, the Expanded Textbook and Instructional Materials Program (PALTEX), which made it possible to produce a series of high-quality scientific teaching materials at affordable prices for university students and health workers, was established at PAHO's Headquarters.

Two other issues that were on the Organization's agenda during those years deserve to be highlighted because of the quantity and quality of talent they attracted: health planning and studies on medical education; or, better said, increased efforts to correct the misalignment between medical education curricula and current public health needs. In the eyes and minds of many health professionals at that time, the dilemma was "planning or revolution," a consequence of the fact that human resources and materials for health training were both scarce and often misused. Moreover, these human and material resources were technically deficient and poorly distributed; being concentrated in the cities and in critically short supply in the rural areas. So planning was seen as an unavoidable need, both for promoting development and for avoiding the social upheaval of a revolution.480

Mindful of these problems, PAHO sponsored, in conjunction with the Government of Canada, the First Pan American Conference on Human Resources Planning in Health, which was held in Ottawa in September 1973. One of the most interesting proposals for national health systems planning, which emerged a short time later as the result of a collaborative effort between the Organization and the Center for Development Studies, or CENDES, created at Venezuela's Universidad

Central, was the so-called "PAHO-CENDES method." It was inspired, in part, by the Punta del Este agreements made in 1961. According to PAHO staff member Juan Manuel Sotelo, the collaboration between PAHO and CENDES originated with a conversation between Horwitz and fellow Chilean Jorge Ahumada, who was then the head of CENDES.481 Ahumada was interested in health planning and called a meeting of various Latin American public health planning experts, including Mario Testa of Argentina.482 They promoted the training of health professionals in planning and the use of statistics in the development of health programs. The PAHO-CENDES method borrowed heavily from economics in evaluating health systems, needs, and resources; determining opportunities for coverage, growth, and intervention; maximizing the availability of services (bearing in mind that resources were limited); and developing specific regional plans.

These activities received more impetus when the United Nations declared the 1960s the decade of development and, through ECLAC, set up, in 1962, the Latin American and Caribbean Institute for Economic and Social Planning (ILPES) in Santiago, Chile. Upon the foundation of ILPES, the Center for Health Planning was established, also in Santiago. It was directed by David A. Tejada de Rivero, who would later play a leading role at WHO in the promotion of primary health care. One of his colleagues at that institution was Carlyle Guerra de Macedo of Brazil, who would later become Director of the Pan American Sanitary Bureau in 1983. Several countries of the Region adopted all or part of the PAHO-CENDES method and began making intensive use of the Center's planning methods. But an evaluation conducted early on indicated that the results had not been satisfactory because they had been limited to only a part of the work performed by health ministries and because there was no direct connection to the national health budgets.<sup>483</sup>

One indication of the influence that public planning had during Horwitz's tenure was the development of a decade-long health plan for the Americas.<sup>484</sup> The plan was intended to anticipate the population's health needs and the public's

perceptions of these. It tried to strengthen capacity for control, oversight, and administration and to expand the coverage of health services. The continuity of these objectives became apparent when, at the Third Special Meeting of Ministers of Health of the Americas, held in Santiago in 1972, a new 10-year plan, more sensitive to the individual circumstances of each public health program and to the diversity of subregions within each country, was approved.

One of the most fundamental of all planning issues was the need for an evaluation of the training level and distribution of human resources devoted to health. In February 1962, experts from Brazil, Chile, Colombia, Mexico, and the United States met at PAHO Headquarters to study the most effective methods of reorienting medical education in accordance with the premises of the Punta del Este Charter.485 The problems were many and complex. One very important problem was that there weren't enough medical school and public health school graduates. At that time, just 63% of the population was receiving any type of health service at all. In other words, almost 40% relied on self-care or traditional medicine. 486 One reason was the critical shortage of professionals. In the early 1960s, it was felt that the approximately 100,000 doctors in the Region represented just half of the number that was actually needed. The scarcity of well-trained health professionals was felt in other areas as well, such as nurses (there were 37,000, and at least 23,000 more were needed), dentists (there were 38,000, and 62,000 more were needed), and sanitary engineers (there were 2,000 and, ideally, there should have been 4,000 more). Added to these shortages was the fact that professionals were concentrated in the urban areas and the major capitals and training did not emphasize prevention.

All of the concerns just described precipitated a series of studies and proposals for the reform of medical education, placing more importance on prevention and on service to society. Many of these criticized an educational system that was incongruent with current realities, the lack of local opportunities for professional work and research,

and the large-scale emigration of skilled health workers from Latin America to the developed countries, especially the United States. One PAHO study estimated that approximately 565 Latin American doctors, or 8% of those who graduated each year from Latin American medical schools, emigrated to the United States every year between 1960 and 1965. 487 What started out as a flaw of the higher education systems became a pattern: the health systems of the developed countries began to operate on the assumption of an ongoing influx of professionals trained abroad. Meanwhile, some Latin American medical schools resigned themselves to accepting a permanent exodus of some of their most promising graduates. 488

PAHO collected some of those studies in a new journal: Educación Médica y Salud, developed by PAHO's Division of Human Resources and Research. Among the works showcased were those of Juan César García, a distinguished Argentine physician and sociologist, highly esteemed by his colleagues, who had joined the newly established Division in 1966. He was the author of several academic pieces, not just on medical education, but also on the history of health in Latin America and the various schools of thought prevalent in the health field; all were quality works that demonstrated the relevance of social studies to health. 489 García died in Washington, D.C., in June 1984, while serving as PAHO's Acting Research Coordinator. His presence at PAHO suggests the malleability of an institution that did not have, as a rule, a permanent team of researchers, but whose members were considered "advisors," "consultants," or "specialists" whose priority was not to publish academic works. It is, moreover, an indication of a time of reorientation for the Organization, when a new international public health strategy was being forged, extending from Geneva to its regional entities: primary health care. This will be studied in the section that follows.

The adoption and adaptation of the primary health care strategy to the Pan American context occurred during a time of flux at PAHO. In January 1975, Horwitz stepped down after four terms as the Sanitary Bureau's Director. At the

end of his tenure he bequeathed a very important institution: the Pan American Health and Education Foundation, with headquarters in Washington, D.C., the purpose of which was to promote the acquisition of additional funding for the Organization's work through philanthropic and private foundations. The previous year, at the XIX Pan American Sanitary Conference, the Mexican Government had nominated as Horwitz's successor Dr. Héctor R. Acuña, who received a surgeon's degree at the National Autonomous University of Mexico (1947) and a master's in public health at Yale University (1951). Acuña brought with him valuable experience in field work and a distinguished national and international career that included serving as WHO Country Representative in Pakistan in the early 1960s. In 1964 he returned to his native country, where he carried out a series of planning activities and held the position of Director of International Affairs for the Department of Health and Welfare. 490 Dr. Acuña served as Director of the Sanitary Bureau from 1 February 1975 to 1983. One of PAHO's new perspectives under his direction was that of primary health care.

#### PRIMARY HEALTH CARE

The criticism of traditional medical training, the push for community medicine, and an ongoing concern with linking health to development that had been evident in the Organization since the 1960s all laid the groundwork for the adoption and adaptation of the primary health care approach. The origin of the concept dates back to a series of critical studies on the limitations of West~ ern medicine in the developing countries. According to those studies, the principal flaw was the assumption that the training of more health professionals, the establishment of hospitals, the extension of services, and the organization of vertical programs would solve the Region's health problems. Several authors, such as John H. Bryant, thought that this model failed to consider the common preventable health problems in the population, many of which were caused by lack of safe drinking water; inadequate housing, nutrition, and hygiene; and generalized circumstances of poverty. 491 Singularly influential was the Lalonde Report, published in 1974, bearing the name of Canada's Minister of National Health and Welfare, Marc Lalonde. (Canada joined the Pan American Health Organization as a Member Government in September 1971.) This report views health as the result of four factors: human biology, the physical and social environment, appropriate financing of health care organization, and lifestyles. 492

The Christian Medical Commission, which Bryant chaired, was a semiautonomous body formed in 1968 to assist the World Council of Churches in evaluating and assisting church-related medical programs in the developing world and provided valuable input to WHO in its development of the concept of primary health care. Also, in the early 1970s, the People's Republic of China joined the United Nations system, (and thus WHO), and it became clear that one of the country's main achievements during this period was a vast rural medical service known as the "barefoot doctors." These health care providers were locally trained, lived and worked in remote villages, and gave priority to prevention. 493 It was during this time that WHO and its charismatic leader, Halfdan T. Mahler, adopted the cause of primary health care and proposed that WHO Member Governments strive for the attainment, by the year 2000, by all peoples of the world of a level of health that would permit them to lead socially and economically productive lives.

With the invaluable assistance of David A. Tejada de Rivero, one of the WHO's Assistant Directors, Mahler organized, jointly with UNICEF, the International Conference on Primary Health Care, held in September 1978 in Alma-Ata, Kazakhstan, in the former Soviet Union. Some 134 countries, 67 United Nations organizations, and dozens of specialized national institutions participated. In some cases, the representation was at the highest level. For example, the Costa Rican delegation included Rodrigo Altman, first Vice President of the Republic. Costa Rica had been firmly committed to primary health care since the decade's beginning and had taken appropriate steps, such as promulgating a national health plan, reaching almost

universal social security coverage for its citizens, and launching a rural health and child vaccination program. <sup>494</sup> The Alma-Ata Conference concluded with a Declaration stating that:

Primary health care is essential health care based on practical, scientifically sound, and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self reliance and self-determination. It forms an integral part both of the country's health system, of which it is the central function and main focus, and of the overall social and economic development of the community.<sup>495</sup>

Three ideas pervaded the thinking behind the Declaration of Alma-Ata: "appropriate technologies," opposition to medical elitism, and the concept of health as part of and an impetus for socioeconomic development. With respect to appropriate technologies, there was criticism of diseaseoriented medical technology which was too sophisticated and/or costly for underdeveloped countries with more urgent and basic health problems, such as the diarrheal diseases, which could be resolved in the presence of adequate water and sanitation systems, and respiratory diseases, which would abate with improved conditions of housing, food, and shelter. Moreover, there was criticism of the assumption that the establishment of more hospitals in urban areas would resolve the problems of medical care. Health facilities and technologies adapted to the majority of the population, exemplified by adequately equipped health centers established in rural and peri-urban areas, were offered as viable alternatives.

A second idea contained in the Declaration was criticism of medical elitism and the over-specialization of health workers in developing countries. Rather, the training of community health workers and the incorporation of informal practitioners—such as traditional healers and midwives—into the continuum of health services, as well as the promotion of community participation, were proposed.

Finally, the Declaration posited a relationship between health and development. Public health work was no longer considered an isolated short-term intervention, but part of an ongoing process focused on improving the population's health and living conditions. Moreover, it was thought that primary health care was the new crux of health work, requiring both public and private intersectoral coordination to ensure effective results.

In embracing the new directions of international and Pan American health, Acuña adapted the primary health care approach and applied it to a series of activities and programs.<sup>496</sup> At that time, certain groups of professionals in the Region, such as nurses, were already applying essential elements of primary health care. During this same period, maternal and child health was becoming one of the central pivots of the Organization's new agenda. PAHO incorporated an important program bearing this name into its structure. 497 In the ensuring years, the Region made original contributions to the Alma-Ata initiative, such as promoting a local infrastructure of services throughout each country that supported the objectives of primary health care. This effort resulted in the creation of local health systems (or SILOS, for its Spanish acronym).

To discuss how best to achieve the objectives of the International Conference on Primary Health Care, the Fourth Special Meeting of Ministers of Health of the Americas was organized by PAHO in Washington, D.C., in September 1977 and was considered to be a preparatory meeting for the Alma-Ata Conference the following year. 498 It was understood that the goal of "health for all" implied not merely the achievement of a significant improvement in the traditional indicators of health—such as an increase in life expectancy and decrease in child mortality—but also, in the interpretation of public health leaders in the Region, the extension of health services coverage to underserved populations in rural and marginal urban areas. Many of these unifying ideas had, in fact, already been advanced five years earlier at the previous (Third) Special Meeting of Ministers of Health of the Americas, held in Santiago, Chile.

Some of the interventions that emerged as a result of the primary health care approach proposed at Alma-Ata focused on one problem, such as malnutrition, or on a vulnerable group, such as mothers, and, especially, on children. Some thought that the goal of health for all was too idealistic, did not have a clear source of funding, or involved an unrealistic timeframe. Consequently, an alternative, more restricted interpretation of primary health care attracted the attention of some organizations (UNICEF was one), which began promoting a set of specific, low-cost interventions. 499 This new approach, known as selective primary health care, was associated with the acronym GOBI, representing four major interventions: growth monitoring, oral rehydration techniques, breast-feeding, and immunization. Also, training of midwives and health assistants, education of mothers, and close collaboration with practitioners of traditional medicine were encouraged. 500 But some experts felt that this interpretation of primary health care undermined the original concept, resulting in a loss of the holistic potential that had existed at the outset and a return to reductionist interventions very similar to vertical, isolated campaigns. To some Latin American thinkers, this version reduced primary health care to a first level of basic care and exacerbated the danger of turning it into poor medicine for poor people.<sup>501</sup>

In 1983 Acuña published a book in which he used the history of the Organization as a backdrop for delineating the path PAHO should follow to reach the goal of health for all by the year 2000. He pointedly noted that the potential obstacles to achievement of the Alma-Ata objectives included recession and inflation, political instability, and poorly integrated health systems. Acuña also explained that: "the goal of health for all should be considered not just a desired objective, but also an essential dynamic factor for the process of change." 502

The positive reception for primary health care in the Region coincided with the attention the Caribbean was starting to receive at PAHO. Examples of effective community health work were emerging in several different countries. One worthy example was the Community Health Aides program carried out in rural Jamaica. In 1972, the Department of Social and Preventive Medicine of the University of the West Indies in Kingston published (and twice republished) a manual for these workers. In that year there were 300 community health aides in Jamaica; by 1979 the number had grown to 1,200.503 Michael Manley, leader of the People's National Party and Prime Minister of Jamaica from 1972 to 1980 and again from 1989 until 1992, made a strong commitment to the program as part of his political platform for what he called "democratic socialism." 504 In 1977, Manley unveiled a national policy known as Health for the Nation, defining health as a basic human right and not as a privilege reserved for a minority.

One of PAHO's achievements during the Acuña years was undoubtedly the inclusion of several Caribbean nations, many of which had been part of European empires as late as the 1960s, in the Organization. 505 Haiti and Cuba were the only two Caribbean charter members of the Organization, having joined in 1924 and participated in PAHO sanitary meetings since the early years of the century. The fact that the rest of the Caribbean countries, once sovereign, eventually joined PAHO was a highly significant step forward in the life of the Organization. According to Peter Carr, one of the first Jamaican officials to have a distinguished career with the Organization, starting in the 1970s, the stimulus for requesting admission into the Organization came about when the prevalent stereotype of the day held by many Latin and North American officials—that the Caribbean "was a single country"—began to change. 506 Addition~ ally—contrary to the way others viewed them the Caribbean public health leaders themselves were keenly aware that their countries' social and public health challenges were not simply a miniature version of the problems of the larger or more populous Latin American nations. They were, instead, diverse and complex problems with their own set of characteristics and dynamics.

The motivation to participate in PAHO and other inter-American organizations ultimately came from the individual Caribbean countries, one by one. An interesting case is that of the three largest

members of the British-sponsored West Indies Federation. Formed in 1958 and comprised of 10 British West Indian territories, the Federation was dissolved four years later in 1958 due to nationalist pressures that soon led to the independence of Barbados, Jamaica, and Trinidad and Tobago. Each of the three new nations sought membership in the inter-American system, increased trade with the United States and Latin America, and access to financial entities such as the Inter-American Development Bank. All in all, the Caribbean subregion included a total of 17 political units; the largest, geographically speaking, being Barbados, Dominica, Grenada, Guyana, Jamaica, and Trinidad and Tobago. 507 The first of them to join the OAS was Trinidad and Tobago (1967). Two years later Jamaica joined (although it had officially joined PAHO much earlier, in 1962). One milestone in this Caribbean self-government and identity movement was the establishment of the Caribbean Community and Common Market (CARICOM) in 1973.

The ties between the Caribbean countries and the rest of their geographical neighbors had been limited until then, partly due to the legacy of British colonialism. Some authors believe that entry into the inter-American system was part of the former colonies' strategy for protecting themselves from the influence of U.S. foreign policy. According to this line of thought, the inter-American system of that era was also used by the Latin American countries as a way of maintaining their autonomy. Both subregions—Latin America and the Caribbean—felt antipathy toward any form of colonialism and sought sovereignty and self-determination.

During the 1960s and 1970s, several Caribbean countries joined PAHO, including Trinidad and Tobago (1963) and Barbados and Guyana (1967). During Dr. Acuña's tenure, the Bahamas joined in 1974, Suriname in 1976, Grenada in 1977, Saint Lucia in 1980, Dominica and Saint Vincent and the Grenadines in 1981, Antigua and Barbuda and Belize in 1982, and Saint Kitts and Nevis in 1984 (shortly after Acuña left). <sup>508</sup> In 1977, Sumedha Khanna was named PAHO/WHO Representative in Jamaica, becoming the first woman to head a country office. Spain and Portugal,

which had traditional ties to various countries of the Americas, joined the Organization as observers in 1981 and 1986, respectively. Finally, in 1992, Puerto Rico was recognized as an Associate Member Government of the Organization.

The Caribbean's public health and political leadership was partly due to the training of several generations of doctors, scientists, and health officials at the University of the West Indies. The University, located in Mona, Kingston, Jamaica, had been established in 1948 as a college of the University of London, but in 1962 it became an autonomous institute of higher education. The West Indies Medical Journal which it publishes has gained wide currency and respect among physicians, nurses, researchers, and health officials not just in Jamaica but throughout the Englishspeaking Caribbean. The University established a presence on various Caribbean islands and appointed prominent researchers, such as Dr. George A. O. Alleyne of Barbados (who was elected to be Director of the Sanitary Bureau in 1994), as professors.

One example of the Caribbean's leading role in Pan American public health was the establishment of new specialized centers as part of the Organization. In association with the University of the West Indies, and with support from the U.N. Food and Agriculture Organization, the Caribbean Food and Nutrition Institute (CFNI) and its journal, Cajanus, named after the local pigeon pea found throughout this subregion, were established. Following its creation in 1967, the Institute began conducting essential studies to address the challenges of a population suffering the double burden of nutritionally deficient diets and insufficient local production of meat and vegetables. 509 CFNI's activities were directed at a diverse clientele of government officials, physicians, researchers, and community workers in the fields of health, agriculture, and nutrition. Another Caribbean institution associated with the Organization was established in the mid-1970s: the Caribbean Epidemiology Center (CAREC). The Center was established with support from the Caribbean Health Ministers' Conference held in Dominica in 1973, and it was set up two years later, using a regional laboratory operating in Port-of-Spain, the capital of Trinidad and Tobago, as its base.

Other noteworthy achievements by the Organization under Dr. Acuña's leadership were the strengthening of epidemiological services, an administrative reorganization, and the establishment in 1977 of a regional disaster preparedness program. With respect to the first of these, the *Epidemiological Bulletin*, which, starting in 1980, disseminated not just information but also qualityrelated norms, methods, and standards for compiling and analyzing quantitative health indicators, is worthy of special mention.<sup>510</sup>

The principal modification of PAHO's structure consisted of doing away with organization by zones and setting up country-level offices, with representatives who had significant authority and substantial resources. They were generally not natives of the host country and were supported by a small group of resident consultants. Concern for dealing with the public health emergencies caused by natural disasters such as earthquakes, hurricanes, floods, and volcanic eruptions led to a consideration of how best to address this issue through the development of appropriate, ongoing technical cooperation activities. In 1976, at the XXIV Meeting of the PAHO Directing Council, the Region's ministers of health called on the Organization to establish a program that could formulate plans of action to respond to the various types of disasters, and concepts that were novel at the time, such as the idea of "preparing" for disasters and the possibility of "mitigating" their effects, informed the program's basis. When an earthquake devastated Mexico City in 1985, teams of PAHO and Ministry of Health experts provided valuable logistical support and assistance to the thousands of injured left in the tragedy's wake. 511

### THE VICTORIES OVER SMALLPOX AND POLIOMYELITIS

The development of primary health care made it necessary to change the structure and approach of the disease eradication programs, which traditionally had been vertical. The most important change was that eradication and immunization programs, especially those aimed at smallpox and poliomyelitis, stopped working in accordance with a rigid "top-down" design. At the same time, attempts were made to avoid a repetition of errors committed in the past, such as excessive confidence in technology and weak community participation. Rather, the new thrust was to adapt program design to local conditions and obtain cooperation from a variety of private organizations and community leaders, thereby enlisting the support of interests outside the public health sector and stressing the principle of inclusion. This new strategy made it possible to strike an appropriate, sustainable balance between new, powerful, lowcost medical technologies and the commitment of individuals and society.

The decision to eradicate smallpox from the Americas dates back to a resolution of the XIII Pan American Sanitary Conference, held in 1950, which recommended that countries cooperate in the eradication effort through an intensive program of vaccination and revaccination. By this time, the disease already had been eliminated from Canada and the United States, whereas endemic smallpox was gone from the Caribbean and virtually nonexistent in Central America. In 1967, WHO launched a comprehensive plan for global eradication, at which time a special budget was allocated and the WHO Intensified Smallpox Eradication Program began. By this time, several types of vaccines were available, but the most costeffective and efficacious was a freeze-dried thermostable vaccine administered with a jet-injector gun, which began to be used in the mid-1960s following a PAHO-assisted pilot project in Brazil. Using this newer and quicker method, a health worker could vaccinate 259 people in a single day, as opposed to 68 using the more traditional multiple pressure technique. Decisive in the Americas campaign were the enthusiasm and dedication of young health workers and the wide dissemination of two principles: each local situation would be different, and adapting to it was the key to success. Also, the campaign against smallpox introduced a new concept in the history of eradication: acceptance of the fact that while it would be impossible to vaccinate entire populations, a

disease could nonetheless be eliminated by concentrating on the endemic areas.

By 1960, the number of officially reported cases of smallpox in South America was 9,075, and the majority of these were in Brazil (72%). By 1967 the number of cases had decreased significantly: 4,544. Almost all of these were in Brazil, where the disease was clearly endemic. Since Brazil shares borders with all but two South American countries, the danger of cases and/or outbreaks being imported into neighboring countries was real.<sup>512</sup> The process of eradicating the disease was progressive, with advances and setbacks. For example, in Peru, where no cases of smallpox had been reported since the mid-1950s, a major epidemic broke out in 1963–1964, with 1,319 cases; it took two years of painstaking work before transmission was interrupted and the disease was gone once again from that country.

Since the best way to eliminate smallpox was to conduct a simultaneous vaccination campaign, PAHO signed agreements with most of the South American countries in 1966 and 1967 to coordinate this task and deploy massive vaccination efforts. The following figures for 1970 are indicative of the scope of this effort: more than 37 million vaccinations in Brazil, a country whose total population was nearly 96 million; 11 million vaccinations in Argentina, which was home to almost 24 million people; almost 3.6 million in Colombia, a country with nearly 21 million inhabitants; and 2.6 million in Peru, with a population of 13 million.<sup>513</sup> The last case of smallpox in the Americas was recorded in April 1971 in Brazil.

Of all the PAHO programs that derived from the primary health care strategy, immunization was probably the one that achieved the greatest success. In 1980, many developing countries had low immunization coverage, sometimes just 5% of children for one or more of the six most important vaccines: measles, tetanus, diphtheria, tuberculosis, poliomyelitis, and whooping cough. Yet by the end of the decade the majority of the countries had immunized more than 50% of all children, thanks to greatly intensified campaigns at the community level. For example, in 1984, im-

munization in Colombia became a national crusade whose promoters included teachers, priests, police officers, nurses, union leaders, and journalists.<sup>514</sup>

Immunization, moreover, served as a powerful catalyst for reconciliation in Central America following a decade of political violence and civil war there during the 1980s. 515 In 1985, the Organization launched an initiative utilizing health because of its unique value and universal acceptance—as a "bridge for peace" to promote soli~ darity, greater understanding among the warring parties (the government and guerilla forces), and preservation of the health infrastructure. For example, in El Salvador, during the height of civil conflict, one-day truces were negotiated for immunization against poliomyelitis, diphtheria, whooping cough, tetanus, and measles. During these "days of tranquility," held every year between 1985 and 1991, around 20,000 people health workers, community volunteers, and guerilla soldiers-administered the actual vaccinations. Radio and television announcements and newspaper articles urged parents to bring their children to health posts and special vaccination sites, and the collaboration of all those working in health helped to raise the population's level of trust and hope. By the late 1980s, the regional levels of vaccination were high: 86% for diphtheria, whooping cough, and tetanus; 89% for poliomyelitis; and 85% for measles.<sup>516</sup> The strategy used by PAHO in Central America (and shortly after in Peru, in the midst of the Shining Path guerilla movement) was later adapted by WHO and its partners in the global polio eradication campaign.<sup>517</sup>

PAHO's work against poliomyelitis, a highly contagious disease that paralyzes the muscles of the arms, legs, and respiratory system, was precipitated by a meeting held in Washington, D.C., in the late 1950s to discuss vaccines against this crippler and killer, particularly of children. The first vaccine (injectable) was developed by Jonas Salk of the United States in 1955 and consisted of killed virus, which produced immunity in the human body. In 1961, virologist Albert Sabin introduced an oral form of the vaccine, consisting of the weakened virus, which was more effective, cheap, and easy to administer. Because no needles were

needed, the oral vaccine could be administered on a wide scale by nonmedical personnel and volunteers. Sabin and his team had first demonstrated the power of this new vaccine earlier that year during field trials in Chiapas, Mexico, which had suffered a polio epidemic. In order to ensure the vaccine's affordability, Sabin refused to patent his discovery. PAHO worked actively with the countries to establish and preserve the "cold chain" required for the vaccine's potency, using both modern refrigeration and portable ice chests for its storage, and delivering it to every corner of the Region, whether by truck, motorcycle, horse, or on foot.<sup>518</sup>

Various countries of the Region, such as Cuba and Mexico, implemented effective and widely publicized vaccination programs during the 1960s. One indicator of the campaign's value was brought to light by an evaluation conducted in Cuba, which estimated that 1,200 cases of paralysis and 200 deaths were prevented between 1962 and 1970 as a direct result of mass immunization campaigns carried out by the Ministry of Public Health. 519 In May 1974, the WHO World Health Assembly created the Expanded Program on Immunization (EPI), signaling the beginning of a global thrust to immunize all children under age 5 against the six earlier-mentioned vaccine-preventable diseases over the next decade and a half. In the case of polio, EPI experts felt that if the human reservoir of the wild poliovirus were eliminated, the disease would be extinguished. The campaigns were designed to overcome the obstacles faced in the past, such as intermittent political will and support, rigid administrative systems, lack of ongoing epidemiological surveillance, and the need for a stable corps of volunteers.

Under the leadership of an internationally renowned Brazilian physician, Dr. Carlyle Guerra de Macedo, who directed the Pan American Sanitary Bureau from 1983 to 1995, PAHO proposed the eradication of indigenous transmission of wild-type poliovirus from the Americas by the end of 1990. When the announcement was made in 1985, US\$ 500 million was budgeted for achieving this objective. Essential support for conquer-

ing the disease also came from the International Rotary Club, a private nonprofit organization, which adopted the cause as its own. In 1987, Rotary Clubs all over the world began collecting funds in order to meet the goal of US\$ 120 million which would guarantee universal child vaccination. By the following year they had vastly exceeded the goal: US\$ 247 million, largely due to the mobilization of local Rotary chapters throughout the Region and the commitment of its volunteers.

Building on the success of the "days of tranquility" in Central America, a series of national vaccination days was organized that encouraged the widest participation possible of health and other government authorities, the media, and the community at large, a strategy that became a true health promotion movement. <sup>520</sup> One example of the campaign's success occurred in Mexico, where 10 million children were vaccinated in a single day in January 1986. <sup>521</sup>

The goal of eliminating poliomyelitis from the Americas was finally achieved. The last case of poliomyelitis in the Region was that of a two-yearold Peruvian child, Luis Fermín Tenorio Cortez, who lived in Pichanaqui, a rural Andean town in the department of Junin, an eight-hour car trip from Lima. Health workers found the child in August 1991; that is, eight months after the original date targeted for eradication that had been established in 1985. Once the case became known, and despite the danger of working in an area where the Shining Path terrorist group was known to be active, workers from Peru's Ministry of Health, with PAHO's assistance, launched what became the most comprehensive "mop-up" exercise in the history of the campaign, conducting some two million house-to-house vaccinations of nearly the same number of children under the age of 5, all in a single week. In September 1994, the International Commission for the Certification of Poliomyelitis Eradication confirmed that the disease had disappeared from the Americas.<sup>522</sup>

A testimonial to hope in the face of adversity was obtained in 1996 by a journalist for *Perspectives* 

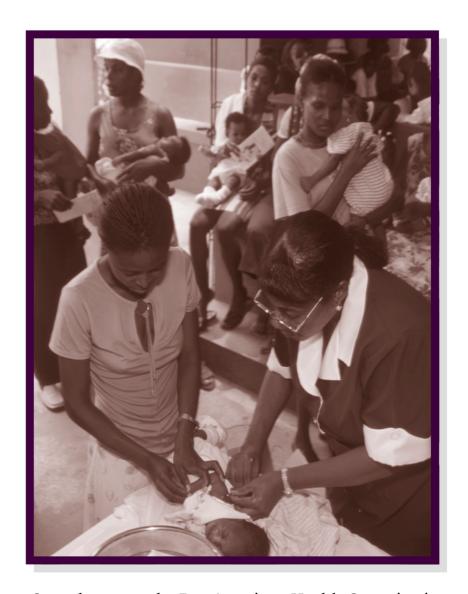
in Health, PAHO's general audience magazine, who visited Luis Fermín:

Luis ... 7 years old, has left his small town in central Peru... and has moved to Lima.... Since the time doctors first examined Fermín, his young life has gone through several stages. After the initial notoriety subsided, his life regained much of its normalcy. He began to grow. And soon he realized that he couldn't run as well as his brothers and friends and that he had trouble speaking (he could only say two or three words well).... He's in the first grade now, and when visitors arrived at his school one day recently, the first thing he did was hold out his hand and ask "Do you want to see my notebook?" His handwriting is very good, even though he only learned to write last April and came to this school with a series of problems. Psychologists working with him felt, nonetheless, that it would be best to place him in a regular school for his formal education.... It is time for the visitors to leave. Fermín waves and tells them cheerfully, "Come and see me again." "We will, Fermín. We will," the visitors reply. "To learn from you."523

In 1989 the WHO World Health Assembly issued a call for the global elimination of neonatal tetanus by 1995. At that time it was estimated that 10,000 newborns would die of this disease in the Americas every year. By 1990, PAHO had put into place its regional strategy: reduce the case numbers down to less than one per 1,000 live births, emphasizing the vaccination of women of

childbearing age living in high-risk areas, the training of midwifes in vaccination administration, and the importance of hygienic deliveries and neonatal care, among other measures. PAHO also focused its attention on measles: in September 1994 the countries of the Americas set the goal of interrupting the autochthonous transmission of measles by 2000. The following year, the ministers of health approved an action plan to eliminate the transmission of that disease.

Despite these achievements, primary health care remains controversial even today. In the opinion of some, the original principles of Alma-Ata were never fully implemented. Moreover, it is clear that the initial proposal failed to specify some factors, such as the importance of including a gender perspective, the source of funds to support it, and how to achieve alliance-building for health in civil society. What is certain is that while vertical and primary health care programs coexisted, the comprehensiveness, flexibility, and consistency of the health systems remained in question. In the decades that followed the Declaration of Alma-Atathe 1980s, the 1990s, and into the new millennium—increasing evidence was offered that political commitment and community participation were indeed essential to the sustainability of any health work. These were some of the major lessons learned in the struggle against the cholera and AIDS epidemics, as we will see in the next chapter.



Over the years, the Pan American Health Organization has supported the principle that health is a right of the neediest and a means of achieving equity.

## Validity and Renewal

uring the final decade of the twentieth century, the Pan American Health Organization faced new epidemiological, economic, and administrative challenges with efficiency and humanity. In this way it was able to maintain its validity in the changing political context of the Americas and on the even more changing global scene. The late twentieth century was marked by the fall of the Berlin Wall in 1989, the collapse of Communism in eastern Europe, and the end of the Cold War. It was, moreover, a time when the neoliberal offensive, within the framework of the so-called Washington Consensus, produced a series of government reforms aimed at reducing deficits. In this context, health was perceived as a sphere in which administration and efficiency had to be improved and the cost to governments had to be decreased. The public health leaders in the Americas then intensified their support of the principle that health is a right of the neediest to physical and mental well-being and a means of achieving equity, not just in health, but in all social spheres.

In early 1991, cases of cholera caused by *Vibrio cholerae* broke out for the first time in several cities along the Peruvian coast. Some 322,562 people became ill that year, and 2,909 of them died. With 20 million inhabitants, that meant that a little more than 1.5% of Peru's population experienced, in one way or another, the ravages of the disease.<sup>524</sup> By the end of the year, cholera had spread to 14 countries in Latin America and the Caribbean, for a total of 366,017 cases. Despite the extent of the epidemic, the mortality rate in Peru was surprisingly low, at less than 1.5% of cases. However, that rate reached 6% in the Amazon region and as high as 10% in other remote rural areas.

These statistics were in contrast to those found in other parts of the Region, which, at the beginning of the epidemic, reflected fatality rates of 30% to 50%. Curbing the number of deaths in Peru was achieved thanks in part to the tireless work of public health personnel, who discovered, during the emergency, the power of oral rehydration salts, and in part to the leadership exhibited at the outset by the public health sector under the guidance of Carlos Vidal, who had already completed a distinguished career at PAHO. Perhaps inevitably, there were some references to the unhygienic habits of the country's poorest sectors as the root cause of the epidemic.

Once more, attention was drawn to the need to improve water and sanitation infrastructure, not only in Peru, but in other countries of the Region, such as Venezuela, where, according to Briggs and Mantini-Briggs, the cholera epidemic that battered the Amazon region also served as a pretext for casting blame on certain indigenous groups. 525 National and international public health experts were soon forced to recognize that cholera had returned to the Americas after nearly a century's absence because inadequate environmental conditions in coastal Peru had enabled the disease to establish itself and flourish. Within a month, thousands of cases were being reported throughout the country. According to Dr. Carlyle Guerra de Macedo, Director of the Pan American Sanitary Bureau, cholera had offered an opportunity to "raise awareness among political leaders with respect to the importance of health" and to initiate "long-term action with the aim of resolving . . . the principal underlying causes, not just of cholera, but of other communicable diseases."526

Despite political difficulties that intensified in Peru in the epidemic's wake, international organizations supported the actions of the Ministry of Health. Both the PAHO/WHO Country Office and CEPIS in Lima, and PAHO Headquarters in Washington, D.C., where a task force of experts was established, provided technical assistance. The international community provided more than US\$ 2 million, half of which consisted of emergency aid and the rest of which was used in activities related to improved water quality, community education, and local production of oral rehydration salts, as well as the provision of hospital and laboratory supplies. 527 PAHO also produced a variety of technical guidelines and teaching materials, including a document describing how the disease was transmitted through unsafe food handling and preparation practices. 528 In addition, the World Health Organization, various European countries, the ministers of health of the Andean Pact countries, and other ministers of health of various nations of the Americas (such as Brazil, Chile, Cuba, and the United States) supported Peru's efforts to halt the spread of cholera.

There was an important difference between the sudden impact of cholera, called by some a "disease of antiquity," and the struggle against HIV/AIDS, a new and previously unknown disease which first appeared during the early 1980s. In the formulation of policies for prevention and treatment, the battle against HIV/AIDS benefited from the active participation of a large contingent of nongovernmental organizations and of the patients themselves. Many lessons regarding the need for unity emerged in the early days of the epidemic. One of these was that overcoming the discrimination and stigma associated with the disease, especially strong at the beginning of the epidemic, required both individual and collective efforts. Also, as time went on and new treatment options became available, successful adherence to prolonged treatment became a matter involving the families, partners, and friends of those living with HIV/ AIDS. In the process, the consciousness of whole communities was raised regarding the importance of inclusion and education. 529

The HIV/AIDS epidemic was particularly intense in Haiti, where, as of September 1988, 1,661 cases and 277 deaths had been reported. 530 By 2001, there were 250,000 people living with HIV. The struggle against AIDS in that country laid bare the need to overcome the stigma and cultural stereotypes that unjustly focused blame on homosexuals and other social groups for causing the epidemic. 531 In 1987, PAHO organized the First Pan American Teleconference on AIDS, which was broadcast via satellite from Quito, Ecuador, in the Organization's four official languages, linking some 45,000 health workers at 650 sites in Latin America and the Caribbean and some 350 hospitals in the United States. The event demonstrated that telecommunications could be used more efficiently than conventional media to transmit vitally important health information to vast audiences simultaneously. A resolution of the XXXII Meeting of PAHO's Directing Council, approved in September of that year, urged all the countries of the Region "to develop, implement, and sustain strong national AIDS prevention and control programs along the model recommended by the WHO Special Program on AIDS." This resolution also urged PAHO Member Countries to make "use of the AIDS crisis to promote the needed changes in health services." As the first director of the WHO Special (later Global) Program on AIDS from 1986 until 1990, the late Dr. Jonathan Mann pioneered an approach that helped focus public attention on how prejudice and discrimination help drive the epidemic, and it continues to shape public health policy even today.<sup>532</sup>

Another lesson learned in the struggle against HIV/AIDS was that it was essential to understand the culture and environment of the different target groups in order to ensure that health messages would be appropriate to their situations. For example, it was not enough to disseminate technically sound information on what were considered safe sexual behaviors without also understanding young peoples' perceptions of risk, pleasure, and sexuality. Only on that basis was it possible to design effective interventions. This was demonstrated, in large part, by the AIDS program being carried forth courageously and intelligently by the Ministry of Health and nongovernmental organizations in Brazil, which has also championed the right of those living with AIDS to have access to the proper antiretroviral drugs, dramatically reduced the amount spent on these medications by wrestling concessions from international pharmaceutical companies for their local manufacture, and reduced the national mortality rate from HIV/AIDS by one-half in less than a decade.

The HIV/AIDS epidemic made it clear that the Americas were truly living in a globalized world in which diseases and other health problems knew no borders. In addition to HIV/AIDS, the Region was faced with multidrug-resistant tuberculosis, affecting both the residents of Lima's poorer quarters and Boston's Hispanic immigrants; the reappearance of dengue fever in numerous countries throughout the Region; and other "emerging and reemerging" diseases (two terms which began to employed more and more frequently by public health experts and officials by the mid-1990s). At the same time, the speed and intensity of fi-

nancial activity, international migration, and new communications technologies development were extraordinary and dizzying. Yet for all that had changed, some things remained the same. The determinants of disease continued to be strongly influenced by socioeconomic, ethnic, and gender inequities. Basic public health decisions still depended upon long-term political commitments. And lasting change could not be achieved without community participation.

The changing dynamics of the late twentieth century required new responses that were tested, in part, through what became known as "health sector reform," inspired by the principle of optimizing the effectiveness and efficiency of the ministries of health by making them normative and standard-setting entities. At the same time, there were lively discussions about which health system model was most appropriate for the countries of Latin America and the Caribbean. 533 Various international participants, such as the World Bank, whose World Development Report 1993: Investing in Health was devoted to the interaction of human health, public health policy, and economic development, became important players on the scene. A new political context marked by the end of the Cold War, the erosion of populist and nationalist discourse, the impetus of neoliberalism, and the spread of democratic regimes in the Americas (albeit fragile ones, in some cases), mapped out a new theater of operations for PAHO. At the same time, many economies in the Region went through difficult times marked by poor, intermittent growth; galloping inflation that sometimes reached three digits; a sharp decrease in rates of public investment in infrastructure; a dangerous balance of payments deficit; and overwhelming foreign debt.

To all that was added the coexistence, in many of the countries in the Region, of a variety of epidemiological profiles in which the diseases typical of an industrialized society (cardiopathies, cancer, and obesity) were combined with diseases characteristic of the world's poorest societies (preventable communicable diseases). Also, there was a general aging of the population as the number of people over 65 grew. At the end of the twentieth century, the population of the Americas was 850 million (14% of the world's population), and most of them (almost two-thirds) lived in cities.<sup>534</sup> In some countries, violence—whether in the home, on the street, in schools and the workplace, or in the form of political confrontations—was becoming an important cause of disability and death.<sup>535</sup>

Many health systems saw their budgets and staffs cut and had major difficulties in coordinating activities with other entities in the public and private sector and in delivering to the population the benefits of medical research, health care, and water and sanitation services. During these difficult years for public health, PAHO continued to proclaim health as a right of individuals and societies and renewed its commitment to find adequate responses and solutions to the health challenges of the moment.536 A modest example of that was the establishment, in 1994, of the Regional Program on Bioethics in Santiago, Chile. Thanks to an agreement between the University of Chile, the Government of Chile, and PAHO, a series of studies, surveys, academic training activities, and opportunities for reflection were initiated in order to cultivate a human perspective in the midst of heated debate about new drugs, biological experiments with human subjects, cloning, organ transplants, and other controversial topics related to the practice of medicine and public health.

These years also saw noteworthy improvements in health indicators. For example, life expectancy at birth exceeded 65 years in almost all the countries; the infant mortality rate for both sexes fell by almost a third between 1980 and 1985 (from 36.9 to 25.3 deaths per 1,000 live births); the regional fertility rate dropped from 3.1 to 2.4 children per woman during the same period; and the rate of communicable diseases dropped from 95 per 100,000 inhabitants in 1980 to 57 in 2000. <sup>537</sup> In some countries, the improvements produced by public health interventions were very striking: in Costa Rica—which provided many examples of the effectiveness of the primary health care

strategy—the infant mortality rate dropped from 69 deaths per 1,000 live births in 1970 to 20 in 1980, and almost all causes of death— with the exception of complications of pregnancy, delivery, and puerperium, and congenital anomalies—declined.<sup>538</sup>

Despite the strides in health that characterized the end of the twentieth century, the burden of inequity persisted in many Latin America and Caribbean societies. Consequently, the achievement of equity in health became the primary concern of Dr. George A. O. Alleyne of Barbados, who was Director of the Pan American Sanitary Bureau from 1995 to 2003.539 A firm conviction in the right of all people to have access to quality health services characterized every aspect of PAHO's work. Thus, during Alleyne's tenure, a document was drawn up that was fundamental to the evaluation of the practice of public health within the framework of governmental structural reforms and the crises that many countries of the Americas were undergoing. The document noted that "health sector reform processes have concentrated primarily on structural, financial, and organizational changes in the health systems and on adjustments in the delivery of health services to people" and that "public health as a social and institutional responsibility has been neglected, precisely at a time when the demand for care is higher and more government support is needed to modernize the infrastructure necessary for its practice." To revitalize public health practice, a clear definition was needed of its role. The document listed 12 essential public health functions whose performance should be measured at the central and local levels. They are: (1) monitoring, follow-up, evaluation, and analysis of health conditions; (2) public health surveillance, research, and control of risks and damages; (3) health promotion; (4) social participation and citizens' empowerment in health; (5) development of policy and planning to support individual and collective efforts in public health and the steering role of national health authorities; (6) public health regulation and enforcement; (7) evaluation and promotion of equitable access to necessary health services; (8) human resources development and training in public health; (9) ensuring the quality

of personal and population-based health services; (10) research, development, and implementation of innovative public health solutions; (11) management capacity to organize public health systems and services; and (12) reduction of the impact of emergencies and disasters on health.<sup>540</sup>

In September 2002, the ministers of health of the Americas, gathered at the 26th Pan American Sani~ tary Conference, elected Dr. Mirta Roses Periago of Argentina to be the Pan American Sanitary Bureau's next Director for a five-year period. Dr. Roses, the fourth Latin American and first woman appointed to this high office, includes among her goals ensuring that the Region of the Americas commits to achieving the United Nations Millennium Development Goals and renewing, with them, the call for collective action that began with the Declaration of Alma-Ata on primary health care and the goal of health for all. That means, among other challenges, eradicating, by 2015, extreme poverty and hunger; achieving universal primary education; promoting gender equality and empowering women; reducing child mortality; improving maternal health; combating HIV/AIDS, malaria, and other diseases; ensuring environmental sustainability; and developing a global partnership for development.<sup>541</sup>

As the Pan American Health Organization moves into a new millennium, its staff and leadership continue to demonstrate their ability to confront the challenges of an increasingly globalized society with intelligence, technical excellence, and solidarity, working to overcome fragmentation and lack of continuity in the public health sector and its services, and tirelessly championing the value of human health to sustainable socioeconomic progress.

The story told in this book is a rich testimony to the depth and breadth of health's value, whose meaning includes and transcends the aspiration for physical, mental, and spiritual well-being, and the economic, political, and social justifications for its achievement. In a corner of the world marked by its striking contrasts and inherent diversity, PAHO and the health workers of its member countries have affirmed the value of health as a basic and universal right and as an indispensable requirement for peace, security, tolerance, and solidarity.

# Endnotes and Bibliography

### **Endnotes**

- The story is told in Grubbs, *By Order of the Surgeon General*, 78. Hereinafter we will cite, at the bottom of the page, only the surname(s) of the author(s), the abbreviated title of the work, and, if applicable, the page number. The complete references are found in the bibliography. References for archives and publications found only in certain libraries list the full name of the archive the first time the work is cited; subsequent references are abbreviated.
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- <sup>5</sup> Waitzkin et al., "Social medicine."
- <sup>6</sup> See Rosen, "What is social medicine?"; Weindling, "Social medicine."
- Schepin and Yermakov, International Quarantine; Goodman, International Health Organizations; Saralegui, Historia de la sanidad; Cumming, "The United States," 119.
- <sup>8</sup> Williams, *The United States*, 436–437.
- <sup>9</sup> Delgado García and Pincharso, Conmemorando 100 años de salud, 14–17.
- <sup>10</sup> France, Office International, Vingt-Cing Ans.
- <sup>11</sup> Bourdreau, "International health work."
- <sup>12</sup> Bourdreau, "International health."
- <sup>13</sup> Balinska, For the Good of Humanity.
- <sup>14</sup> Cuba, Secretaría de Sanidad y Beneficencia, Trabajos presentados.
- <sup>15</sup> Céspedes, La evolución sanitaria.
- Saralegui, Historia de la sanidad internacional,
   131–142; Convención Sanitaria.

- <sup>17</sup> "Higiene internacional," 314.
- <sup>18</sup> Argentina, Ministerio del Interior, Departamento Nacional de Higiene, *Guía oficial*, 124.
- <sup>19</sup> Muñoz, Congreso Sanitario Americano.
- <sup>20</sup> Ochoa, "Puertos y salubridad."
- Louisiana Board of Health, *The Louisiana Board*,14.
- <sup>22</sup> Carrigan, *The Saffron Scourge*, 2; Humphreys, *Yellow Fever*.
- <sup>23</sup> Wyman, Quarantine and Commerce, 8.
- <sup>24</sup> Scenna, Cuando murió; Benchimol, Dos Micróbios.
- <sup>25</sup> Carrigan, *The Saffron Scourge*, 165; United States of America, Department of the Navy, *Annual Report 1901*, 530. For the epidemics in Louisiana, Mississippi, and Florida, Griffiths, "Henry Rose Carter," 844.
- <sup>26</sup> Wyman, Quarantine and Commerce, 6.
- Mullan, Plagues and Politics, 42. The relationship between fear of illnesses brought in from abroad and immigration is analyzed in Kraut, Silent Travelers and in Fairchild, Science at the Borders.
- <sup>28</sup> Bordi de Ragucci, Cólera e inmigración.
- 29 Sánchez-Albornoz, La población, 168; Cueto, "Laboratory styles."
- <sup>30</sup> Hutter, "Saúde e imigração."
- <sup>31</sup> Organización Panamericana de la Salud, *Actas* de la Tercera Convención, 32.
- Louisiana Board of Health, *The Louisiana Board*,34.

- <sup>33</sup> "The fever quarantine," 4.
- <sup>34</sup> Cited in Williams, The United States, 441.
- Louisiana Board of Health, *The Louisiana Board*,The cited letter is dated 19 July 1883.
- <sup>36</sup> Parker, Beyer, and Pothier, "Report," 12.
- <sup>37</sup> España, Ministerio de Ultramar, *Reglamento*, 14.
- "Informe de Eduardo Licéaga." Undated (probably 1906). Fondo Salubridad Pública, Sección Congresos y Convenciones, Caja 6, Expediente 10. Archivo Histórico de la Secretaría de Salud. México, D.F. [hereinafter, AHSS].
- <sup>39</sup> Stanley, For the Record; Chomsky, West Indian Workers; Scott Jenkins, Bananas.
- 40 Cumming, "Commercial and sanitary relations," 2129–2130.
- <sup>41</sup> Ferrer, Higiene y asistencia pública, 455.
- <sup>42</sup> Skidmore and Smith, *Modern Latin America*, 47.
- 43 Skidmore and Smith, Modern Latin America, 44.
- <sup>44</sup> Freeman Smith, "América Latina," 77–79.
- <sup>45</sup> Halperin Donghi, *Historia contemporánea*, 291.
- The Union and the Bureau may be considered the forerunners for today's Organization of American States (OAS) and its General Secretariat. At the Ninth International Conference of American States, in Bogotá, Colombia, the Pan American Union was transformed into the OAS. See Connell-Smith, The Inter-American System.
- <sup>47</sup> Ashburn, *A History*; Bevoise, *Agents of Apoca-lypse*.

- <sup>48</sup> Sternberg, Sanitary Lessons, 1.
- <sup>49</sup> Williams, *The United States*, 477; "Wyman, Walter." In: *National Cyclopaedia of American Biography*.
- Wyman, "Commissioned Medical Officers," 433.
- For the speech, see Wyman, *Quarantine*. For Congress's Quarantine Act, see United States of America, Congress of the United States, "Act of Congress," 1. The rest of the paragraph in Rosenau, "Report on Second International Conference," 55–56; "Extract from the Annual Report"; United States of America, Department of the Navy, *Annual Report 1902*, 22. Histories of the U.S. Public Health Service include Furman, *A Profile*; Kaiser, *The United States Public Health Service*; Mullan, *Plagues and Politics*; Schmeckebier, *The Public Health Service*; Williams, *The United States*.
- <sup>52</sup> Mullan, *Plagues and Politics*, 35.
- <sup>53</sup> Bustamante, *La fiebre amarilla*, 132.
- <sup>54</sup> Griffiths, "Henry Rose Carter," 843.
- Unbound page by E. Licéaga, undated. Fondo Salubridad Pública, Sección Congresos y Convenciones, Caja 6, Expediente 10. [AHSS].
- <sup>56</sup> Link, A History of Plague, 66.
- <sup>57</sup> Whiteclay, *The Tyranny*.
- <sup>58</sup> Wyman, Quarantine and Commerce.
- Organización Panamericana de la Salud, Actas de la Tercera Convención, 40–41.
- <sup>60</sup> United States of America, Department of the Navy, *Annual Report 1901*, 10.
- <sup>61</sup> United States of America, Department of the Treasury, *Laws and Regulations*.

- <sup>62</sup> Organización Panamericana de la Salud, *Actas* de la Tercera Convención, 176–203.
- <sup>63</sup> For the case of Cuba, see Barnet, *La sanidad*. For the case of Mexico, Orvañanos, "Asociación Americana," 190.
- Licéaga, "Eighth Report" (Presented at the 27th Annual Meeting of the U.S. Public Health Association, Minneapolis, Minnesota). Licéaga was then President of his country's Superior Council of Health. Viesca Treviño, "Eduardo Licéaga"; Martínez Cortés and Martínez Barbosa, El Consejo Superior, México, Instituto Nacional de Salud Pública, Devenir de la salud pública.
- <sup>65</sup> Cueto, Salud, cultura, 17.
- 66 Benchimol, Pereira Passos.
- <sup>67</sup> Coni, La asistencia pública and Memorias.
- Murdock, "Physicians"; Hochman, A Era do Saneamiento; Licéaga, Algunas consideraciones, Colombia, Junta Central de Higiene, Acuerdos, Illanes, "En el nombre del pueblo"; Belmartino et al., Corporación médica; Palmer, From Popular Medicine; Moll, "Physicians in public life."
- 69 Illanes, En el nombre del pueblo.
- <sup>70</sup> Foucault, Discipline and Punish.
- Murdock, "Physicians"; Hochman, A Era do Saneamiento; Licéaga, Algunas consideraciones, Colombia, Junta Central de Higiene, Acuerdos, Illanes, En el nombre del pueblo; Belmartino et al., Corporación médica; Palmer, From Popular Medicine; Moll, "Physicians in public life."
- <sup>72</sup> Teixeira, *Ciência e Saúde*.
- <sup>73</sup> Benchimol and Teixeira, Cobras, Lagartos.
- This section is from Pan American Health Organization, Scientific Societies and Institutions in Latin America.

- 75 "Intervención del Dr. Mendizábal."In: Organización Panamericana de la Salud, Actas de la Tercera Convención, 71.
- <sup>76</sup> Licéaga, Mis recuerdos, 263.
- <sup>77</sup> Finlay, Obras completas; Hill, The Doctors.
- <sup>78</sup> Bustamante, La fiebre amarilla, 138.
- <sup>79</sup> Rucker, *The Administration*, 3.
- 80 Griffiths, "Henry Rose Carter."
- 81 See Parker, "Report"; Benchimol, Dos Micróbios aos Mosquitos.
- <sup>82</sup> Le-Roy y Cassa, Desenvolvimiento de la sanidad, 38; Delgado García, "Conferencias de historia," 68.
- 83 Guiteras, "Papeles."
- <sup>84</sup> Licéaga, Yellow Fever, Almeida, República dos Invisíveis.
- 85 Benchimol, Manguinhos.
- <sup>86</sup> Meade, "Civilizing"; Carvalho, A revolta.
- 87 Leonard, "Carlos Chagas."
- 88 Orvañanos, "Asociación Americana," 190–191.
- On the Foundation's role in Brazil, Mexico, Central America, Guayaquil, and the northern coast of Peru, see Licéaga, "Plan de campaña"; Cueto, "Sanitation from above"; Faria, "A Fundação Rockefeller," and Cueto, Missionaries of Science.
- 90 Wyman, "Insects as factors," 105.
- 91 Wyman, How to Prevent.
- <sup>92</sup> Cuba, Secretaría de Gobernación, Junta Superior de Sanidad, Fiebre amarilla.

- 93 Ferrer, Higiene y asistencia pública, 456.
- 94 Cited by Shaplen, Toward the Well-being, 32.
- 95 On the mortality statistics, Welch, *Public Health*, 40. On the figures, "Beneficencia Pública de Tamaulipas, cuadro estadístico de las mortalidad habida en el Estado en los años de 1892 a 1901, inclusive." Fondo Salubridad Pública, Sección Congresos y Convenciones. Caja 5. Expediente 2. [AHSS].
- Oumming, "Address at the Opening Session, November 1924 (Havana)." In: Folder Speeches of Dr. Hugh S. Cumming, Sr., 1924. Cumming Papers. University of Virginia Library, Charlottesville, Virginia [hereinafter UVL].
- 97 Bustamante, La fiebre amarilla, 127.
- 98 Gorgas, Sanitation in Panama, 3; Litsios, "William Crawford Gorgas."
- <sup>99</sup> El Salvador, Consejo Superior de Salubridad, Instrucciones.
- 100 "Informe del Dr. Juan J. Ulloa, delegado de Costa Rica." Organización Panamericana de la Salud, Actas de la Tercera Convención, 146– 148.
- 101 Licéaga, "Discurso en la Conferencia," 371.
- 102 Wyman, "Plan for International Agreement."
- <sup>103</sup> Wyman, "Plan for International Agreement," 2351.
- <sup>104</sup> United States of America, Department of the Navy, *Annual Report 1902*, 583.
- 105 "Segunda Conferencia Internacional de los Estados Americanos. Resolución. Policía Sanitaria", April 1905. Fondo Salubridad Pública y Asistencia, Sección Congresos y Convenciones, Caja 4, Expediente 21. [AHSS].
- 106 Rosenau, "Report on Second International Conference."

- <sup>107</sup> "Preamble and text of the resolutions concerning International Sanitary Policy adopted by the Second International Conference of American States, held at Mexico City." In: United States of America, Department of the Navy, *Annual Report 1902*, 56.
- "Segunda Conferencia Internacional Americana. Resolución. Policía Sanitaria" (Resolución III), abril 1905. Fondo Salubridad Pública, Sección Congresos y Convenciones, Caja 4, Expediente 21. [AHSS]; Licéaga, "Discurso en la Conferencia," 373.
- <sup>109</sup> Bernstein, The First One Hundred Years, 18.
- <sup>110</sup>This section from "Licéaga," *Dictionary*; Licéaga, *Mis recuerdos*; McLeod, "Public health."
- México, Código Sanitario; "Informe de la Delegación Mexicana (a la Convención de Washington de 1902)" and "Organización del Consejo Superior de Salubridad" (pamphlet), undated; both in Fondo Salubridad Pública, Sección Congresos y Convenciones, Caja 5, Expediente 2. [AHSS].
- "Segunda Conferencia Internacional Americana, Resolución. Policía Sanitaria" (Resolución V), abril 1905. Fondo Salubridad Pública, Sección Congresos y Convenciones, Caja 4, Expediente 21. [AHSS].
- <sup>113</sup> Bustamante, "Los sanitaristas"; Wegman, "Un saludo."
- <sup>114</sup> Copy of the Program in Fondo Salubridad Pública, Sección Congresos y Convenciones, Caja 5, Expediente 2. [AHSS].
- Departamento del Tesoro al Honorable Señor Secretario de Estado" (Translation). Washington, DC, 16 July 1902. Fondo Salubridad Pública, Sección Congresos y Convenciones ("Convención Sanitaria Internacional"), Caja 4, Expediente 21 (1899–1905). [AHSS].

- <sup>116</sup> Finlay, "¿Es el mosquito el único agente que transmite la fiebre amarilla?" (Apéndice C).
  In: Organización Panamericana de la Salud, Primera Convención.
- Programa de la Segunda Conferencia Panamericana. Fondo Salubridad Pública, Sección Congresos y Convenciones ("Convención Sanitaria Internacional"), Caja 4, Expediente 21 (1899– 1905). [AHSS].
- 118 Licéaga asks the governors for this information in "Minuta de Eduardo Licéaga," undated. Fondo Salubridad Pública, Sección Congresos y Convenciones ("Convención Sanitaria Internacional que se reunirá en Washington en el mes de diciembre de 1902"), Caja 5, Expediente 1, [AHSS]. Mexico's participation is also described in "Las Convenciones Sanitarias Internacionales Panamericanas a las que asistí como delegado del Consejo Superior de Salubridad." In: Licéaga, *Mis recuerdos*, 239–256.
- 119 "Convención Sanitaria" (includes undated program). Fondo Salubridad Pública, Sección Congresos y Convenciones ("Convención Sanitaria Internacional que se reunirá en Washington en el mes de diciembre de 1902"), Caja 5, Expediente 1. [AHSS].
- On the measures to be implemented, "First General International Sanitary Convention," 233–236. The delegate's report, in a letter from Eduardo Licéaga to the Secretary of Foreign Affairs, 1 May 1903 (reporting on the Washington Sanitary Convention). Fondo Salubridad Pública, Sección Congresos y Convenciones, Caja 4, Expediente 21 (April 1905). [AHSS].
- <sup>121</sup> This section from Moll, *The Pan American Sani-tary Bureau*, 25–28.
- <sup>122</sup> Palmer, From Popular Medicine, 75.
- <sup>123</sup> For Licéaga, letter from the Secretary of State and the Office of Governance to Eduardo

- Licéaga, President of the Council of Health, 4 April 1905. Fondo Salubridad Pública, Sección Congresos y Convenciones, Caja 4, Expediente 21 (April 1905), [AHSS]. For Guiteras, in Guiteras, "Resoluciones adoptadas."
- <sup>124</sup> Carrillo, "Surgimiento y desarrollo," 18; Licéaga, *Peste bubónica*.
- <sup>125</sup> Grubbs, By Order of the Surgeon General; México, Consejo Superior de Salubridad, "Documentos oficiales." [AHSS].
- <sup>126</sup> "Scientific Program. 2<sup>nd</sup> International Sanitary Convention of the American Republics," 9 October 1905. R. G. 90, Public Health Service, General Records, Correspondence of International Sanitary Bureau (1903–1907), Vol.1, Folder 1, NC34 Entry 25. National Archives, Maryland (hereinafter, NA).
- Letter from H. A. Taylor, Acting Secretary of the Department of the Treasury, to Walter Wyman, Surgeon General, 12 October 1905.
  R. G. 90, Public Health Service, General Records, Correspondence of International Sanitary Bureau (1903–1907), Vol. 1, Folder 1, NC34 Entry 25, [NA].
- <sup>128</sup> México, Consejo Superior de Salubridad, "Convención ad referendum," 395–396.
- <sup>129</sup> Licéaga, Mis recuerdos, 257.
- Licéaga's report is reproduced in Licéaga, Mis recuerdos, 261–264; the quotation is from page 262. When he returned to his country, Licéaga published the Washington Convention in the journal of the Superior Council of Health. See México, Consejo Superior de Salubridad, "Convención ad referendum." There would be similar situations in other countries.
- <sup>131</sup> Letter from Mr. Corral, Secretary of State and from the Office of Governance, to Eduardo Licéaga, 19 April 1906. Fondo Salubridad Pública, Sección Congresos y Convenciones, Caja 6, Expediente 10. [AHSS].

- <sup>132</sup> In an undated report from Eduardo Licéaga to the Secretary of State. Fondo Salubridad Pública, Sección Congresos y Convenciones, Caja 6, Expediente 10. [AHSS].
- <sup>133</sup> Halperin Donghi, *Historia contemporánea*, 287.
- 134 "Resoluciones adoptadas en Río de Janeiro en agosto de 1906." In: Organización Panamericana de la Salud, Actas de la Tercera Convención, 8.
- <sup>135</sup> México, Consejo Superior de Salubridad, "Convocatoria," 41.
- 136 Licéaga, "Tercera Convención."
- 137 "Provisional Program for the International Sanitary Convention, Mexico, December 2–7, 1905." R.G. 90, Public Health Service, General Records, Correspondence of International Sanitary Bureau, 1903–1907, Vol. 1, Folder 1, NC 34, Entry 25. [NA].
- 138 "Programa de la Tercera Convención Sanitaria Internacional de las Repúblicas Americanas."
  In: Organización Panamericana de la Salud, Actas de la Tercera Convención, 11. The phrase referring to the "learned Doctor Licéaga" also appears in "Festejos y atenciones nacionales. Intervención de Juan J. Ulloa." In: Organización Panamericana de la Salud, Actas de la Tercera Convención, 119.
- <sup>139</sup> "Informe del Dr. Juan J. Ulloa, delegado de Costa Rica." In: Organización Panamericana de la Salud, *Actas de la Tercera Convención*, 146.
- Letter from Oswaldo Cruz to Emilia Fonseca Cruz, "Miloca" (his wife), 26 November 1907 (written from the Hotel Iturbide in Mexico). Archivo Oswaldo Cruz, Serie Correspondência, Subserie Pessoal, OC/COR/PES/19070804, Casa Oswaldo Cruz, FIOCRUZ, Rio de Janeiro; Fraga, Vida e Obra, 133.
- <sup>141</sup> Serpa, Oswaldo Cruz, 138.

- <sup>142</sup> "Informe del Dr. Oswaldo Gonçalvez Cruz, delegado de Brasil." In: Organización Panamericana de la Salud, *Actas de la Tercera* Convención, 143.
- <sup>143</sup> "Tercera Convención Sanitaria Internacional de las Repúblicas Americanas." In: Organización Panamericana de la Salud, *Actas de la Tercera* Convención, 122.
- <sup>144</sup> Letter from Oswaldo Cruz to Emilia Fonseca Cruz, 3 December 1907. In: Girão Soares de Lima, "Meu Caro Oswaldo," 93.
- <sup>145</sup> Serpa, Oswaldo Cruz, 132.
- On the characteristics of the Rio yellow fever campaign and what Cruz thought about it, see "Informe del Dr. Oswaldo Gonçalvez Cruz, delegado de Brasil." In: Organización Panamericana de la Salud, Actas de la Tercera Convención, 142–144. On Oswaldo Cruz, see Leonard, "Oswaldo Cruz"; Serpa, Oswaldo Cruz.
- <sup>147</sup> "Primera Sesión Administrativa del Consejo Directivo de la Oficina Sanitaria Panamericana. Acta Final," 27 May 1929. CF/PI/19290527, Archivo Clementino Fraga, Casa Oswaldo Cruz [hereinafter, COC].
- <sup>148</sup> Guerrero Bascunan and Córdova, La administración, 161; "Informe del Dr. Juan J. Ulloa, delegado de Costa Rica." In: Organización Panamericana de la Salud, Actas de la Tercera Convención, 146.
- <sup>149</sup> Ulloa, "Informe sobre higiene pública de la República de Costa Rica." (Apéndice B), 235–237. In: Organización Panamericana de la Salud, *Primera Convención*.
- <sup>150</sup> Guiteras, "Algunas observaciones."
- <sup>151</sup> This explanation appears in Folder 1948, 921, Cumming Memoirs, Cumming papers. [UVL].
- <sup>152</sup> The episode with the *New York Times* correspondent in "No yellow fever in Cuba," 5.

- Finlay's response to the health official in "Tampa, August 15," 4.
- dates from 1904, when Guiteras sent Wyman an indignant letter complaining about the alarming news being published in U.S. newspapers on yellow fever in Cuba. This news came, in part, from the reports of the U.S. health inspectors who were still stationed in Matanzas, Cienfuegos, and Santiago de Cuba. Letter from Juan Guiteras to Walter Wyman, Havana, 28 November 1904, in Guiteras, "Papeles," 31–33.
- <sup>154</sup> On the plague in San Francisco and New Orleans, in Craddock, *City of Plagues*; Risse, "A long pull." For the plague in other cities of the Americas, in "Plague in the Americas."
- <sup>155</sup> Link, A History of Plague.
- <sup>156</sup> Guiteras, Algunas observaciones, 9.
- 157 Roberts, "Informe."
- <sup>158</sup> Bustamante, *The Pan American Health Organization: Half a Century*, 7.
- <sup>159</sup> "La V Conferencia," 15.
- 160 "Convocatoria para la Quinta Conferencia Sanitaria Internacional." Fondo Salubridad Pública, Sección Congresos y Convenciones ("V Conferencia Sanitaria Internacional que se celebrará en Santiago de Chile del 1 al 12 de noviembre de 1911"), Caja 4, Expediente 1. [AHSS].
- of Governance, 24 June 1911. Fondo Salubridad Pública, Sección Congresos y Convenciones ("V Conferencia Sanitaria Internacional que se celebrará en Sanitago de Chile del 1 al 12 de noviembre de 1911"), Caja 4, Expediente 1. [AHSS].
- <sup>162</sup> "5.ª Conferencia Sanitaria" (clipping from *El Mercurio*, 5 June 1911). Fondo Salubridad

Pública, Sección Congresos y Convenciones ("V Conferencia Sanitaria Internacional que se celebrará en Santiago de Chile del 1 al 12 de noviembre de 1911"), Caja 4, Expediente 1. [AHSS].

- <sup>163</sup> Ribeiro, *História sem Fim*.
- <sup>164</sup> "La V Conferencia Sanitaria Internacional da término," 27.
- <sup>165</sup> "Blue, Rupert." In: National Cyclopaedia of American Biography.
- <sup>166</sup> Blue, Anti-plague Measures; Idem, Methods for the Control of Plague; Idem, The Post-mortem Diagnosis.
- <sup>167</sup> Blue, "The problem," 415.
- 168 The description in the first lines and his interest in boxing in Furman, A Profile, 281–333. Valuable biographical data on Blue in Chase, The Barbary Plague. On his appointment, see Reed, "United States Public Health Service," 373.
- <sup>169</sup> Rucker, The United States Public Health Service.
- <sup>170</sup> Blue, "The problem," 413.
- <sup>171</sup> Williams, The United States, 481.
- <sup>172</sup> Letter from Rupert Blue to Ernesto Fernández, Uruguay, 25 March 1913; letter from Rupert Blue to Eduardo Licéaga, 3 October 1913. Both in R. G. 90, Public Health Service, General Records, Correspondence of the International Sanitary Bureau (1909–1910), NC 34, Entry 25. [NA].
- <sup>173</sup> "Convocatoria para la Sexta Conferencia Sanitaria Internacional." Fondo Salubridad Pública y Asistencia, Sección Congresos y Convenciones, Caja 11, Expediente 16. [AHSS].

- 174 Letter from Rupert Blue to John Barrett, Director of the Pan American Union, 29 October 1914. R. G. 90, Public Health Service, Correspondence of the International Sanitary Bureau (1914), NC 34, Entry 25. [NA].
- <sup>175</sup> Humphrey, The Inter-American System.
- <sup>176</sup> Stuart, *Latin America*.
- <sup>177</sup> Moliner, U.S. Policy, 48.
- 178 Cumming, "El Servicio de Sanidad Pública,"
   1451. In 1922 the Service transferred these responsibilities to the Veterans' Bureau.
- <sup>179</sup> Hektoen, "Presentation of the Public Welfare Medal."
- <sup>180</sup> Letter from the Department of Foreign Affairs to Gabriel Malda, Chief of the Department of Health, 16 October 1922. Fondo Salubridad Pública, Sección Congresos y Convenciones, Caja 13, Expediente 18. [AHSS].
- <sup>181</sup> "Intervención del Ministro de Industrias, Luis C. Caviglia." Organización Panamericana de la Salud, Actas de la Sexta Conferencia Sanitaria Internacional, 17.
- Organización Panamericana de la Salud, Actas de la Sexta Conferencia Sanitaria Internacional, 160, 195.
- <sup>183</sup> Organização Pan-Americana de Saúde, *Atas da XI Conferência*, 49.
- <sup>184</sup> Mullan. *Plagues and Politics*, 82.
- <sup>185</sup> Williams, The United States, 484.
- <sup>186</sup> Hektoen, "Presentation of the Public Welfare Medal."
- Primera Sesión Administrativa del Consejo Directivo de la Oficina Sanitaria Panamericana.
  Acta Final," 24. 27 May 1929. CF/PI/ 19290527. Archivo Clementino Fraga. [COC].

- <sup>188</sup> "William Freeman Snow Award for Distinguished Service to Humanity presented to Hugh Smith Cumming, M.D. Sc.D., L.L.D." Folder 1948. Cumming Memoirs. Cumming papers. [UVL].
- <sup>189</sup> "Intervención del Delegado de los Estados Unidos Joseph H. White." In: Organización Panamericana de la Salud, Actas de la Sexta Conferencia, 27.
- <sup>190</sup> In 1997 the publication was renamed the Revista Panamericana de Salud Pública/Pan American Journal of Public Health.
- <sup>191</sup> Bustamante, *The Pan American Sanitary Bu-reau: Half a Century*, 13.
- <sup>192</sup> Fraga, "Sobre o surto epidémico." Mentioned in letter from Hugh Cumming to Clementino Fraga, 24 January 1929. CF/DNSP/19280716. Archivo Clementino Fraga. [COC].
- 193 "Primera Sesión Administrativa del Consejo Directivo de la Oficina Sanitaria Panamericana.
   Acta Final." 27 May 1929. CF/PI/19290527.
   Archivo Clementino Fraga. [COC].
- <sup>194</sup> Hobsbawm, *Historia del siglo XX*, 42, 104–105.
- <sup>195</sup> Tulchin, The Aftermath of War.
- <sup>196</sup> Wood, La política.
- <sup>197</sup> Thorp, *Progress, Poverty*, 97.
- <sup>198</sup> "Pan American Sanitary Bureau, Annual Report of the Director, Surgeon General H.S. Cumming, Fiscal Year 1938–1939," 40. [WHOL].
- <sup>199</sup> Thorp, *Progress, Poverty*.
- <sup>200</sup> The best study of the genesis of this Code is found in Organización Panamericana de la Salud, El Código. The English-language version is entitled The Pan American Sanitary Code: Toward a Hemispheric Health Policy (Wash-

- ington, DC: PAHO; 1999.[Occasional Publication 1]).
- <sup>201</sup> These ideas were expressed at previous meetings. For example, at the Third International Sanitary Convention held in Mexico City in 1907, a resolution recommended the "nationalization" or "centralization" of sanitary services as well as the establishment of "ministries" of public health. See "Nacionalización de los servicios sanitarios." In: Organización Panamericana de la Salud, *Actas de la Tercera Convención*, 51.
- White's observations in "Report of the Seventh Pan American Sanitary Congress, Havana, 1924." League of Nations Archives, Section D'Hygiene, 12B, 39834/39834X. WHO Archives, Geneva [hereinafter, WHO Archives]. I learned about this document through Iris Borowy.
- <sup>203</sup> Bourdreau, "International health," 878.
- <sup>204</sup> Cumming, "Development."
- <sup>205</sup> "Cumming protests."
- <sup>206</sup> Letter from Hugh S. Cumming to Robert Pierret, Director General, International Office of Public Hygiene. Paris, 9 October 1939. Microfiche OIHP T/87. [WHO Archives].
- White, Frederick Norman, "Report of the Seventh Pan American Sanitary Congress, Havana, 1924." League of Nations Archives. Section D'Hygiene, 12B, 39834/39834X. [WHO Archives].
- <sup>208</sup> "Asks League," 11, New York Public Library [hereinafter, NYPL]; Cuba, Secretaría de Sanidad y Beneficencia, *Trabajos presentados*.
- 209 "International Health Division Fellowships by Country, 1917–1951." Rockefeller Foundation Archives [hereinafter, RFA], R.G. 3. Series 908. Box 15. Folder 173. Rockefeller Archive Center, Sleepy Hollow, New York [hereinafter, RAC].

- <sup>210</sup> Cumming, "Pan American Conference."
- <sup>211</sup> "Primera Sesión Administrativa del Consejo Directivo de la Oficina Sanitaria Panamericana. Acta Final," 27 May1929. CF/PI/19290527, Archivo Clementino Fraga. [COC].
- <sup>212</sup> Bustamante, *The Pan American Sanitary Bureau: Half a Century*, 20; "Primera Sesión Administrativa del Consejo Directivo de la Oficina Sanitaria Panamericana. Acta Final,"
  6, 27 May 1929. CF/PI/19290527, Archivo Clementino Fraga. [COC].
- <sup>213</sup> Paz Soldán, Hacia la creación.
- <sup>214</sup> Rosselot, "Reseña histórica."
- <sup>215</sup> Sepúlveda Amor, *Devenir*; Faria, "O Instituto de Higiene."
- <sup>216</sup> For Johns Hopkins, see Fee, *Disease and Discovery*.
- <sup>217</sup> In: Mundial magazine (Lima), 21 October 1927, 10-11. Biblioteca Nacional, Lima [hereinafter, BNL]. See also "Comunicación de la Comisión Organizadora al Ministro," Lima, 18 April 1927. Congresos y Conferencias, 7–9. [Archivo del Ministerio de Relaciones Exteriores, Lima. In this document, Paz Soldán and another member of the Conference's Organizing Committee ask for confirmation of the Government's support "to demonstrate, along with our glories, our Americanism, and our love of peace and Continental harmony; the extraordinary and many forms of progress achieved by the Republic under the administration of the eminent statesman Mr. Augusto B. Leguía."
- <sup>218</sup> Long, A Squirrel Destroyer, Idem, Sanitation in the Philippine Islands.
- <sup>219</sup> Bustamante, *The Pan American Sanitary Bu*reau: Half a Century, 14.
- <sup>220</sup> "Interview with John D. Long, U.S. Public Health Service," 27 June 1923. F.F. Russell Diaries.

- [RFA]. Box 53, Bound Volume 1922–1924. [RAC].
- <sup>221</sup> Long, "Venenos raticidas"; Idem, *Informe del Delegado Viajero*; Idem, "Cooperative campaign."
- <sup>222</sup> "Report of Dr. John D. Long, Traveling Representative of the Pan American Sanitary Bureau" (mimeographed document). Washington, DC., 1929. R.A. 457, L. 85, Columbus Memorial Library, Organization of American States, Washington, DC. [hereinafter, CL].
- <sup>223</sup> See "Guayaquil has lost place," E8; letter from W. Rose to Hugh Cumming, 2 April 1921. R.G.
  5, Series 1.1, Box 55, Folder 794. [RAC].
- <sup>224</sup> "Americans fight plague," E8. The article includes a photo of John D. Long.
- <sup>225</sup> See "Entry March 6, 1947" (Diary 1946–1948). George Strode Diaries. [RFA, RAC].
- <sup>226</sup> Organización Panamericana de la Salud, "Obituario"; Moll, "La sanidad"; Idem, *Aesculapius*; Osler, *Aequanimitas*.
- <sup>227</sup> Moll, *Spanish-English Medical Dictionary*; Idem, *El Inglés*, 46.
- Moll, "Las obras sanitarias"; Stepan, The Hour of Eugenics. The first Pan American Child Congress was held in Buenos Aires in 1916, and these meetings continue to be held today: there have been 19 to date, with the last one being in Mexico in 2004. Birn, "No more surprising"; Guy, "The Pan American Child Congresses."
- <sup>229</sup> Letter from Hugh Cumming to Fred L. Soper, 3 March 1947. Box 15, Fred L. Soper Papers, National Library of Medicine, Bethesda [hereinafter, Soper Papers, NLM].
- <sup>230</sup> Report of Dr. Moll, 9 November 1943. In: Pan American Health Organization, *Inter-American Conference*, 42.

- <sup>231</sup> Moll, "Decálogo sanitario."
- <sup>232</sup> Portner (Chief of Administration, Pan American Sanitary Bureau), "El edificio," 141.
- <sup>233</sup> Report of H. Cumming (undated). In: Pan American Health Organization, *Inter-American Conference*, 9.
- <sup>234</sup> Appears in the report of Dr. Moll (undated). In: Pan American Health Organization, *Inter-American Conference*, 64.
- <sup>235</sup> Organización Panamericana de la Salud, "Retiro del Dr. Bolívar J. Lloyd"; Lloyd, "The Pan American Sanitary Bureau."
- <sup>236</sup> Macchiavello, "Estudios sobre peste selvática"; Organización Panamericana de la Salud, "Amplíanse los trabajos," 371.
- <sup>237</sup> Bustamante, "Los primeros cincuenta años," 496. This article would become the basis for Bustamante, *The Pan American Sanitary Bureau: Half a Century.*
- One of Cumming's best-known achievements in the United States was the opening of the national leprosy hospital in Carville, Louisiana, in 1921. The facility became a major center for leprosy treatment and research. Cumming Papers, Cumming Memoirs. [UVL].
- <sup>239</sup> Parran, Shadow on the Land.
- <sup>240</sup> Page Zinder, "New York."
- <sup>241</sup> Edward Francis, Department of the Treasury, 27 January 1936. Folder Miscellaneous Correspondence of Hugh S. Cumming and Lucy B. Cumming. 1901–1956, Cumming Papers. [UVL].
- <sup>242</sup> Organización Panamericana de la Salud, *Actas Generales. Novena Conferencia.*
- <sup>243</sup> Cueto, "Laboratory styles."
- <sup>244</sup> Cueto, "Andean biology."

- <sup>245</sup> Stepan, *The Hour*.
- <sup>246</sup> Gast Galvis, *Historia*, 77–78.
- <sup>247</sup> Bustamante, *The Pan American Sanitary Bu*reau: Half a Century, 26.
- <sup>248</sup> Bustamante, *The Pan American Sanitary Bu*reau: Half a Century, 26.
- <sup>249</sup> "Informes, Cumming." In: Organización Panamericana de la Salud, *Actas Generales*. *Novena Conferencia*.
- <sup>250</sup> Organización Panamericana de la Salud, *Décima Conferencia*.
- <sup>251</sup> The program of the Conference's opening ceremony is held in: Folder Letters of Hugh S. Cumming to his wife Lucy B. Cumming, 1920 and 1929–1938, Box 4, Cumming Papers. [UVL].
- <sup>252</sup> "La Décima Conferencia se instala," 15. (See note 254.)
- <sup>253</sup> In speech of Jorge Bejarano, "Veinte países,"2. (See note 254.)
- The following section is based on articles in *El Tiempo* (Bogotá) [BNB]: "La América a la cabeza en la campaña sanitaria," 3 September 1938, 1; "La Décima Conferencia Sanitaria Panamericana se instala mañana," 3 September 1938, 15; "Veinte países concurren hoy a la X Conferencia Sanitaria," 4 September 1938, 1–2; "El Canciller clausuró la Conferencia de Higiene," 15 September 1938, 11.
- 255 Following the creation of the World Health Organization, the Bureau (in practical terms, PAHO) and WHO's other Regional Offices would celebrate together World Health Day on 7 April each year. On this date in 1948, the WHO Constitution entered into force.
- <sup>256</sup> Organización Panamericana de la Salud, "Conmemoración."

- <sup>257</sup> Organización Panamericana de la Salud, "Primer Día Panamericano."
- <sup>258</sup> See, for example, Organización Panamericana de la Salud, "Peligro de la importación"; Idem, "Enfermedades tropicales."
- <sup>259</sup> Organización Panamericana de la Salud, "La guerra bacteriana."
- <sup>260</sup> Organización Panamericana de la Salud, "XI Conferencia."
- <sup>261</sup> Peru, Peruvian Delegation to the XI Pan American Sanitary Conference, *XI Conferencia*, 48.
- <sup>262</sup> Barreto, Atividades.
- <sup>263</sup> "Acta Final de la XI Conferencia Sanitaria Panamericana efectuada en la ciudad de Río de Janeiro del 7 al 18 de septiembre de 1942." Fondo Salubridad Pública, Sección Congresos y Convenciones, Caja 16, Expediente 18. [AHSS]; Castro Gomes, *Capanema*.
- <sup>264</sup> On Cumming's speech, "XI Conferência Sanitária Pan-americana. A Sessão Preparatória de anteontem," 4 [BNR]. On Parran's presentation, "XI Conferência Sanitária Panamericana, os Trabalhos de Ontem," 3. [BNR].
- <sup>265</sup> "XI Conferência Sanitária Pan-americana, a Reunião de Ontem," 7. [BNR].
- <sup>266</sup> Guillermo Román y Carrillo, Chief of the Office of Epidemiology. "Defensa Continental" (Work presented to the XI Pan American Sanitary Conference), 2. Fondo Salubridad Pública, Sección Congresos y Convenciones, Caja 16, Expediente 18. [AHSS].
- <sup>267</sup> "Report Prepared by the United States Delegation for Submission to the Department of State, Covering the Proceedings of the Fourth Pan American Conference of National Directors of Health, Washington, D.C., April 30–May 8, 1940." Folder 551. Box 75. R.G. Faculty Papers. Thomas Parran Personal Papers Series.

- University of Pittsburgh Archives, Pittsburgh [hereinafter, Parran Papers, UPA].
- <sup>268</sup> Organización Panamericana de la Salud, *Atas da XI Conferência*, 15.
- <sup>269</sup> "Pan American Sanitary Organization, Executive Committee, Final Report of the Fourth Meeting, Washington, D.C., May 3–13, 1948" (mimeographed), 13. Folder 1135, Box 75. Parran Papers. [UPA].
- <sup>270</sup> "Programa tentativo para la Onceava Conferencia Sanitaria Panamericana." Fondo Salubridad Pública, Sección Congresos y Convenciones, Caja 16, Expediente 18. [AHSS].
- <sup>271</sup> "Discurso pronunciado en la sesión del día viernes 11 por el Dr. Carlos de la Puente, presidente de la delegación peruana a la XI Conferencia Sanitaria Panamericana, con relación al tema *Defensa continental y salud pública*." In: Peru, Peruvian Delegation to the XI Pan American Sanitary Conference, XI Conferencia, 20.
- <sup>272</sup> The quote is from Dr. Pedro José Rueda y Gamio of Peru. Cuaresma, *Oficina Sanitaria Panamericana*, 16.
- <sup>273</sup> The intervention of Brazilian delegate João de Barros Barreto appears in "XI Conferência Sanitária Pan-americana. O Encerramento," 3. [BNR].
- <sup>274</sup> Organización Panamericana de la Salud, "Comisión Panamericana de Ingeniería Sanitaria."
- <sup>275</sup> "Intervención de Hugo Pesce." In: Organização Pan-Americana de Saúde, *Atas da XI Conferencia*, 609–610. For Núñez Butrón, see Cueto, "*Indigenismo* and rural medicine."
- <sup>276</sup> Strode, Yellow Fever.
- <sup>277</sup> "Informe Anual del Director de la Oficina Sanitaria Panamericana." In: Organización Panamericana de la Salud, *X Reunión*.

- <sup>278</sup> Shea, *Panagra*.
- <sup>279</sup> Primera Conferencia Panamericana de Aviación Sanitaria, *Acta final.*
- <sup>280</sup> Organización Panamericana de la Salud, "Medicina de aviación."
- <sup>281</sup> United Nations Relief and Rehabilitation Administration, *International Sanitary Convention*.
- 282 "Discurso del Doctor Hugh S. Cumming." In: Diario de la XII Conferencia Sanitaria Panamericana, No. 1, 6. Caracas, 13 January 1947. Francis P. Corrigan Papers, Box 19, Franklin D. Roosevelt Presidential Library, Hyde Park, New York [hereinafter, RA].
- <sup>283</sup> Moll, "Salud a las Américas."
- <sup>284</sup> Pan American Health Organization, *Inter-American Conference*.
- <sup>285</sup> Intervention of G.H. de Paula Souza (undated). In: Pan American Health Organization, *Inter-American Conference*, 13.
- <sup>286</sup> Romero Álvarez. Health without Boundaries.
- <sup>287</sup> "Pan American Sanitary Organization, Executive Committee, Final Report of the Fourth Meeting, Washington, D.C., May 3–13, 1948" (mimeographed). Folder 1135, Box 75, Parran Papers. [UPA].
- <sup>288</sup> Resolution adopted by the Governing Board of the Pan American Union on 5 December 1945. No folder, oversized materials. Cumming Papers. [UVL].
- <sup>289</sup> This entity has been known by various names over the years. At the time of this writing (2006), it is called the Bureau of Western Hemisphere Affairs.
- <sup>290</sup> Dunham, "The cooperative health programs"; Idem, "Role of tropical medicine."

- <sup>291</sup> See "NX Cables SA by Harry W. Frantz, United Press International Staff Correspondent," 23 January 1948. Nelson A. Rockefeller, Series 114, Box 111, Folder 932. [RAC]; United States Public Health Service, Bureau of State Service, "Ten years of cooperative health programs in Latin America, an evaluation" (mimeographed). Washington, DC: U.S. Public Health Service; 1953 [Library of the New York Academy of Medicine].
- <sup>292</sup> United States of America, Department of Health, Education, and Welfare; U.S. Public Health Service, *United States Participation*, 4.
- <sup>293</sup> United States of America, Department of Health, Education, and Welfare; U.S. Public Health Service, *United States Participation*, 6.
- <sup>294</sup> Chávez and Cuthbert, *Un hemisferio unido*, 20, 106.
- <sup>295</sup> The information on both men in a letter from James A. Doull to Thomas Parran. San Francisco, 11 May 1945. Folder 1149, Box 79, Parran Papers. [UPA].
- <sup>296</sup> Souza, *A Organização Mundial*, 12. (Pamphlet published by the Ministry of Foreign Affairs and held at the National Library, Rio de Janeiro.)
- <sup>297</sup> "Agencia Internacional de Saúde. Memorando apresentado pela Delegação do Brasil em 14 de maio de 1945, Conferencia das Nações Unidas para Organização Internacional." In: Souza, A Organização Mundial, 56.
- The parallel with what happened after the First World War in Souza, A Organização Mundial, 13. The worldwide spread of infectious diseases in "Agencia Internacional de Saúde. Memorando apresentado pela Delegação do Brasil em 14 de maio de 1945, Conferencia das Nações Unidas para Organização Internacional." In: Souza, A Organização Mundial, 52.
- <sup>299</sup> Souza, A Organização Mundial, 15.

- 300 Parran, "The first 12 years."
- <sup>301</sup> Folder 1948, p. 1054. Cumming Memoirs, Cumming Papers. [UVL].
- <sup>302</sup> "Como se recuerda." In Bustamante, *La salud pública*, 95.
- 303 Cuaresma, Oficina Sanitaria Panamericana, 15.
- <sup>304</sup> "Final Act of the XII Pan American Sanitary Conference." Caracas, 24 January 1947 (English version, mimeographed). Folder 1135, Box 75, Parran Papers. [UPA].
- Discurso del Dr. Hugh S. Cumming." In: Diario de la XII Conferencia Sanitaria Panamericana, No. 1, 6–7. Caracas, 13 January 1947. Francis P. Corrigan Papers, Box 19. [RA].
- <sup>306</sup> Cumming to Nelson Rockefeller, 10 February 1945, 944. The description of the meeting with Truman and the seven-page letter he wrote to him (Cumming to Truman, 9 June 1945) on p. 975 [1–7]. In: Folder 1948, Cumming Memoirs, Cumming Papers. [UVL].
- 307 "Moción presentada por el Dr. Víctor Santamaría, Director General de Asistencia ante el Consejo Directivo de la Oficina Sanitaria Panamericana." In: Santamaría, *La reorganización*, 12–23.
- 308 Organización Panamericana de la Salud, "La Oficina Sanitaria Panamericana."
- "Exposición del Dr. Thomas Parran." In: *Diario de la XII Conferencia Sanitaria Panamericana*,
   No. 1, 4. Caracas, 15 January 1947. Francis P. Corrigan Papers, Box 19. [RA].
- <sup>310</sup> Goodman, *International Health Organizations*, 157.
- 311 Quotes from Cumming's intervention in "Discurso del Doctor Hugh S. Cumming." In:

- Diario de la XII Conferencia Sanitaria Panamericana, No. 1, 7. Caracas, 13 January 1947. Francis P. Corrigan Papers, Box 19. [RA].
- <sup>312</sup> "La Organización Sanitaria Panamericana y la Organización Mundial de la Salud." In: *Diario de la XII Conferencia Sanitaria Panamericana*, No. 1, 7. Caracas, 15 January 1947. Francis P. Corrigan Papers, Box 19. [RA].
- <sup>313</sup> Paz Soldán, *La OMS*, 176–178.
- <sup>314</sup> "Resolution concerning the Agreement between the Pan American Sanitary Bureau and the WHO." In: *Final Report of the XII Pan American Sanitary Conference*, 15–19. Caracas, 24 January 1947 (English version, mimeographed). Folder 1135, Box 75, Parran Papers. [UPA].
- <sup>315</sup> Organización Panamericana de la Salud, *Actas* de la Decimosegunda Conferencia, 118.
- <sup>316</sup> Cueto, Missionaries of Science.
- 317 Letter from the President of the Rockefeller Foundation to Fred L. Soper, 12 December 1947.
  [RFA]. Folder 2504, R.G.2, Series 200, Box 370.
  [RAC].
- <sup>318</sup> Berridge, Health and Society.
- "Final Report of the XII Pan American Sanitary Conference," 23–24. Caracas, 24 January 1947 (English version, mimeographed). Folder 1135, Box 75, Parran Papers. [UPA].
- <sup>320</sup> Veronelli and Testa, La OPS en Argentina, 70.
- 321 Mundial magazine (Lima), 14 October 1927, 33. [BNL].
- <sup>322</sup> "La mujer debe ser primero mujer, tres preguntas a la doctora Mercedes Chávez Arango." In: *Diario de la XII Conferencia Sanitaria Panamericana*, No. 1, 3. Caracas, 17 January 1947. Francis P. Corrigan Papers, Box 19. [RA].

- "In Memoriam: Dr. Hugh S. Cumming." Folder "Pan American Sanitary Bureau." R.G. 90-41, Box 9, Graduate School of Public Health Series. [UPA].
- The anecdote about the cable and the letter to Paz Soldán in Paz Soldán, *La OMS*, 5. The cable in Paz Soldán to Fred L. Soper, 28 December 1948. No folder, oversized materials. Cumming Papers. [UVL]. The letter in Paz Soldán, *La OMS*, 5. The article appeared in *La Crónica* (Lima), 26 December 1948.
- This section is based on materials found in Box 1 Ms C 359, 1893–1977, Soper Papers. [NLM]. Also, in Bedwell, "A Bio-bibliography"; Waserman, "Fred L. Soper"; Gladwell, The Mosquito Killer."
- <sup>326</sup> The story of Egypt appears in the intervention of Henry van Zile Hyde on a magnetic tape called "Memorial Gathering, Washington, D.C., Fred L. Soper, 14 April 1977."
- <sup>327</sup> Sheinin, *The Organization of American States*; Stoetzer, *The Organization*.
- <sup>328</sup> Levering, *The Cold War*; Cohen, *America in the Age*.
- <sup>329</sup> For the Cold War, see Bethell and Roxborough, "Introduction"; Rock, *Latin America*.
- <sup>330</sup> Rabe, Eisenhower and Latin America.
- <sup>331</sup> Alemán, Juntos hemos de vivir.
- <sup>332</sup> Sánchez-Albornoz, La población, 207.
- 333 Organización Panamericana de la Salud, *Resumen de los informes*, 3.
- 334 Organización Panamericana de la Salud, "Tendencias demográficas," 2.
- 335 Thomen, "Intervención," 122.
- 336 Organización Panamericana de la Salud, "Actas resumidas de las sesiones plenarias y de las

- sesiones de comisiones de la V Reunión del Consejo Directivo de la Organización Sanitaria Panamericana, III Reunión del Comité Regional de la Organización Mundial de la Salud," 4. Washington, DC, 24 September–3 October 1951. Fondo Salubridad Pública, Sección Congresos y Convenciones, Caja 44, Expediente 9 (1952, Oficina Sanitaria Panamericana). [AHSS].
- <sup>337</sup> World Health Organization, *The Lamp*.
- <sup>338</sup> "Annex: Fifth Report of the Director to the Directing Council." Buenos Aires, 24 September 1947, Folder 1135, Box 75, Parran Papers. [UPA].
- 339 "Seventh Meeting of the Executive Committee of the Pan American Sanitary Organization," Washington, DC, 23–30 May 1949. Folder "Pan American Sanitary Bureau," R.G. 90-41, Box 9, Graduate School of Public Health Series. [UPA].
- <sup>340</sup> World Health Organization, *Annual Report*, 102.
- <sup>341</sup> "Pan American Sanitary Organization, Executive Committee, Final Report of the Fourth Meeting, Washington, DC, May 3–13, 1948" (mimeographed). Folder 1135, Box 75, Parran Papers. [UPA].
- 342 "Committee on Relations with WHO, Directing Council PASO" (unbound page). Buenos Aires, 25 September 1947. Folder 1135, Box 75, Parran Papers. [UPA].
- 343 "Report of the United States Representative to the Meeting of the Executive Committee and the Directing Council of the Pan American Sanitary Organization," Buenos Aires, 22 September–2 October 1947. Folder 1135, Box 75, Parran Papers. [UPA]. It bears noting that since the Bureau was no longer an "executive board" as before, but the secretariat of a regional organization, the Directing Council also was reconstituted, and thus the word "First" appears in the official meeting title.

- <sup>344</sup> World Health Organization, "Temporary working arrangement," 41–42.
- <sup>345</sup> Fred L. Soper, "Informe del Director de la Oficina Sanitaria Panamericana a los Gobiernos Miembros de la Organización Sanitaria Panamericana. January 1947–April 1950," 171. In: OPS, Actas de la Decimotercera Conferencia, 144–412.
- 346 Organización Panamericana de la Salud, *Constitución*, 1.
- <sup>347</sup> Cuaresma, Oficina Sanitaria Panamericana, 21.
- <sup>348</sup> Charles S. Ascher, "Chisholm of WHO" (reprinted from the Survey, February 1952, New York, pp. 1–3). Folder 1718, Box 126, Parran Papers. [UPA].
- <sup>349</sup> Letter from Carlos Enrique Paz Soldán to Thomas Parran, Lima, 14 October 1949. Folder 1270, Box 88, Parran Papers. [UPA].
- The tense relationship between Soper and Chisholm can be seen in "Friday, October [date missing] 1949" (Interview of Charles Strode with Brock Chisholm). Bound Volume 1949. R.F. 12.1, Box 61, George K. Strode Diaries. [RAC].
- <sup>351</sup> World Health Organization, Former Directors-General.
- <sup>352</sup> Acuña, Héctor R., interview with the author, Cuernavaca, Mexico, 14–15 August, 2003.
- <sup>353</sup> "Discurso de Ricardo Cappeletti, Presidente de la Mesa Directiva Provisional de la Sesión Preliminar de la XIII Conferencia Sanitaria Panamericana." In: OPS, Actas de la Decimotercera Conferencia, 17.
- "Report of the United States Representative to the Directing Council of the Pan American Sanitary Organization. Third Meeting." Lima, 6–13 October 1949. Folder 1269, Box 88, Parran Papers. [UPA].

- Organización Panamericana de la Salud, Organización de Estados Americanos, Acuerdo suscrito.
- <sup>356</sup> "Annex Fifth Report of the Director to the Directing Council." Buenos Aires, 24 September 1947. Folder 1135, Box 75, Parran Papers. [UPA].
- 357 "Informe Anual del Director" (mimeographed),
   70. Washington, DC, 1951, CD6/13. Fondo
   Salubridad Pública, Sección Congresos y
   Convenciones, Caja 60, Expediente 1. [AHSS].
- <sup>358</sup> Bustamante, *The Pan American Sanitary Bu*reau: Half a Century, 67.
- <sup>359</sup> Intervention of Dr. Bustamante (undated). In: Pan American Health Organization, *Inter-American Conference*, 55.
- <sup>360</sup> Organización Panamericana de la Salud, "Reglamento de publicaciones."
- <sup>361</sup> "Informe Anual del Director" (mimeographed), 43. Washington, DC, 1951, CD6/13. Fondo Salubridad Pública, Sección Congresos y Convenciones, Caja 60, Expediente 1. [AHSS].
- <sup>362</sup> Miguel Bustamante, "Atenta súplica a los señores delegados." In: *Directing Council of the Pan American Sanitary Organization. Third Meeting.* Lima, 6–13 October 1949. Folder 1270, Box 88, Parran Papers. [UPA].
- <sup>363</sup> Organización Panamericana de la Salud, *Memoria del Primer Congreso*.
- 364 On Bustamante, see Birn, "Miguel Bustamante." The information about the *Boletín* comes from "Informe Mensual de la OSP," 5–6. December 1951. Fondo Salubridad Pública, Sección Congresos y Convenciones, Caja 44, Expediente 7 (1952, Oficina Sanitaria Panamericana). [AHSS].
- 365 "Informe Anual del Director" (mimeographed),5. Washington, DC, 1951, CD6/13. Fondo

- Salubridad Pública, Sección Congresos y Convenciones, Caja 60, Expediente 1. [AHSS].
- 366 Black, Children First.
- <sup>367</sup> Chávez and Cuthbert, Un hemisferio unido, 21.
- <sup>368</sup> Acha and Szyfres, *Zoonosis y enfermedades transmisibles*.
- 369 "Ceremony. Fred L. Soper on his Eightieth Birthday, Pan American Sanitary Bureau. Washington, DC, December 13, 1973." Transcription of Myron Wegman. Folder "Eightieth Birthday." Soper Papers. [NLM].
- <sup>370</sup> The anecdote appears in the intervention of Patrick E. Owens, preserved on a magnetic tape titled "Memorial Gathering, Washington, DC, Fred L. Soper, 14 April 1977." Box 1, Soper Papers. [NLM].
- <sup>371</sup> "October 8." Folder "Soper Diary. May–September 1947." Box 11, Soper Papers. [NLM].
- <sup>372</sup> Letter from Fred L. Soper to John Marshall, 15 December 1947. Folder 2504, R.G. 2, Series 200, Box 370. [RAC]. The letter is accompanied by a photo of the new building.
- <sup>373</sup> "Pan American Sanitary Bureau. Information Office. Pan American Sanitary Bureau Purchases Headquarters Building" (unbound page). 6 February 1951. Fondo Salubridad Pública, Sección Congresos y Convenciones, Caja 42, Expediente 3 (Oficina Sanitaria Panamericana). [AHSS].
- <sup>374</sup> Letter from Fred L. Soper to Alberto Lleras Camargo, Secretary-General of the OAS, 22 December 1948. Folder "Lleras Correspondence." [CL].
- <sup>375</sup> The tension between Soper and Moll is discussed in a letter from Fred L. Soper to George K. Strode, 11 February 1947. No folder. Box 11. [RAC].

- <sup>376</sup> In fact, Paz Soldán, despite his wishes, did not attend the XI Pan American Sanitary Conference held in Rio de Janeiro in 1942, and, while he attended the subsequent Conference in 1947, this was the last time he did so. Paz Soldán, *La solidaridad*, 3:151.
- <sup>377</sup> Agnes Chagas, "Study of the Schools of Nursing in Latin America" (First Regional Nursing Congress, San José, Costa Rica, 11–18 September 1949). Folder 1270, Box 88, Parran Papers. [UPA].
- <sup>378</sup> "Informe Anual del Director" (mimeographed),
  4. Washington, DC, 1951, CD6/13. Fondo Salubridad Pública, Sección Congresos y Convenciones, Caja 60, Expediente 1. [AHSS].
- <sup>379</sup> Chagas, "La educación de enfermeras," "La enfermería"; Lozier, "Reclutamiento de alumnas"; Velanda, *Historia de la enfermería*.
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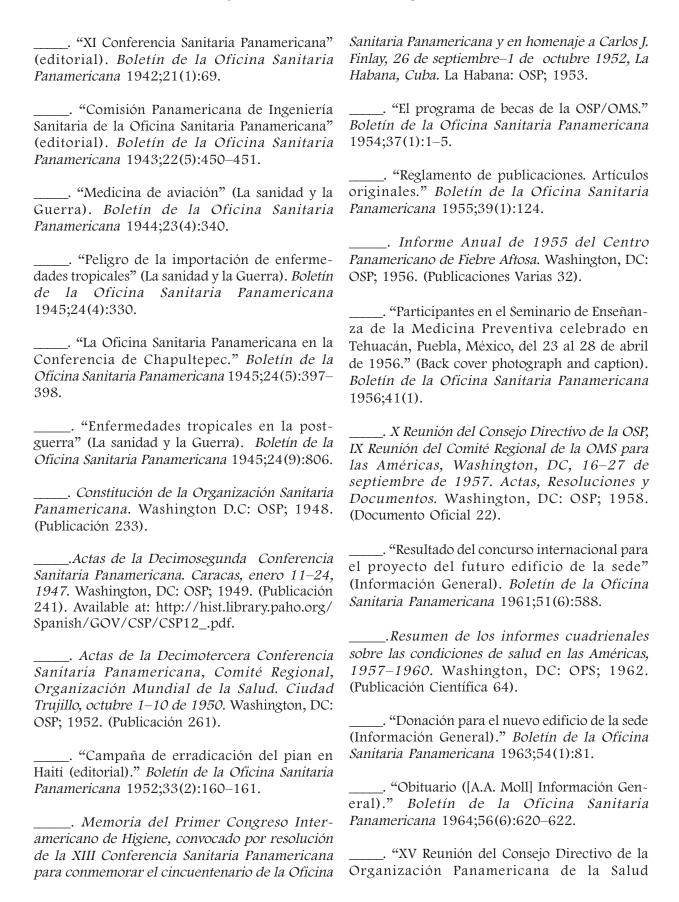
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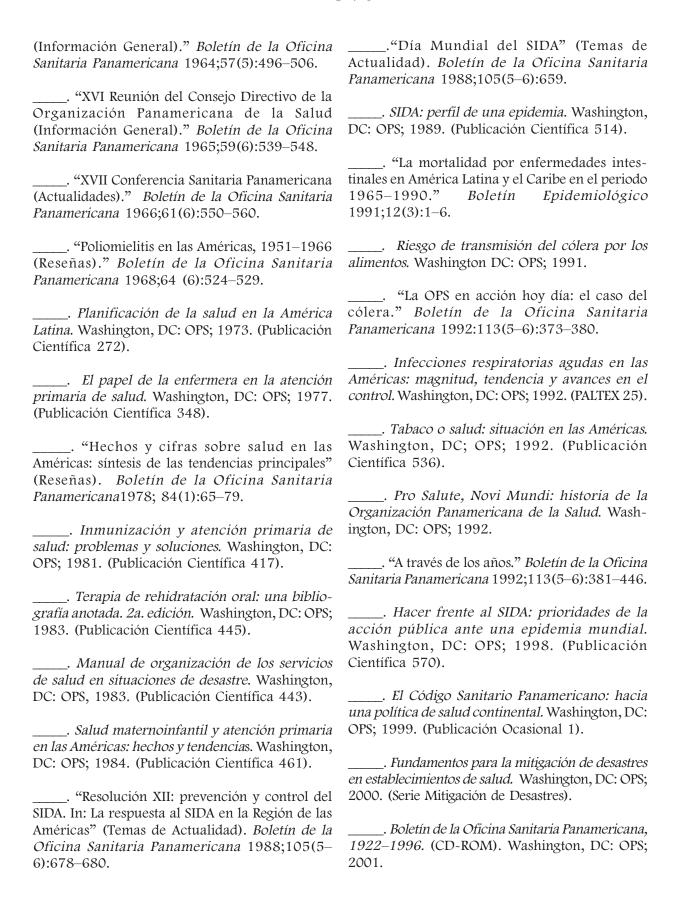
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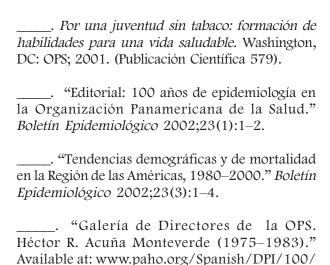
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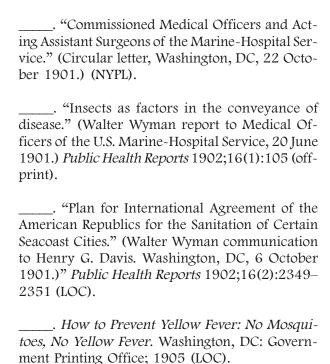
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