

EDITOR'S NOTE

Dear readers,

This issue of *História, Ciências, Saúde – Manguinhos* presents a dossier on malaria, which is a by-product of the seminar entitled Henrique Aragão and Malaria Research: 100 years Since the Discovery of the Exoerythrocytic Malaria Cycle, held at the Oswaldo Cruz Foundation in April 2007. Malaria was one of the main challenges facing tropical medicine in the late nineteenth century, when this scientific field was first laying down its roots, and it is still considered the world's number one endemic disease today. According to the World Health Organization (WHO), it affects from three hundred to five hundred million people and takes some one million lives worldwide per year, killing twice as many as AIDS and making it much deadlier than any other infectious disease. This dossier brings contributions to the history of malaria, with a focus primarily on Brazil but from an international perspective – which I feel is the most original feature of these studies.

Magali Romero Sá, chair of the seminar's steering committee, authored "Studies of avian malaria and Brazil in the international scientific context (1907-1945)," an analysis of the genesis, significance, and impacts of the 1907 discovery by Henrique Aragão, one of the young researchers at what was then known as the Serum Therapy Institute, rechristened the Oswaldo Cruz Institute the following year. This name change accompanied a *metamorphosis* in both the institution's facilities and its program, grounded in an ambitious three-pronged approach: research in various realms of microbiology and medical zoology; production of sera, vaccines, and other biological products for use in human and veterinary medicine; and specialization courses in bacteriology and tropical medicine to train physicians to work in laboratories, public health, and the fight against animal and plant diseases.

The transformations then underway at the Institute – long to be the center of gravity for Brazilian experimental medicine and public health – were leveraged by a number of events and factors. Foremost among these were the sanitary campaigns against yellow fever, bubonic plague, and smallpox led by Oswaldo Cruz in the capital of Brazil, as well as the noteworthy participation of the Institute itself and the General Directorship of Public Health (Diretoria Geral de Saúde Pública) at the Fourteenth International Congress of Hygiene and Demography and accompanying Hygiene Exposition, held in Berlin in September 1907. News of the gold medal awarded there reverberated around Brazil and lent an unexpected boost to the government's promotional efforts to convince international public opinion that Rio de Janeiro was no longer the plague-ridden city from which money and immigrants fled. Within the tapestry of relationships woven between scientific institutions on the cutting edge of tropical medicine, and even before the discovery of

human American *trypanosomiasis* had earned Carlos Chagas his fame, Henrique Aragão's discovery was of major importance. His work was published first in *Brazil-Medico* in 1907 and then in the prestigious *Archiv für Protistenkunde* after he won acclaim at the Berlin Congress for his invaluable contribution to studies on the growth of the malaria parasite in its vertebrate hosts.

The seminar held one hundred years later at the Oswaldo Cruz Foundation commemorated this achievement. Another paper included in these pages is "Malaria epidemics in Europe after the First World War: the early stages of an international approach to the control of the disease." Gabriel Gachelin and Annick Opinel analyze reports and guidelines issued by the Malaria Committee, established in 1923 by the League of Nations' Health Committee to cope with fresh outbreaks of the disease around Europe during and following First World War.

The journal received the other dossier articles after the 2007 seminar. Juliana Manzoni Cavalcanti, doctoral candidate with the Casa de Oswaldo Cruz's Graduate Program in the History of the Sciences and of Health, and her co-author, Marcos Chor Maio, analyze studies on sickle cell anemia published in Brazil in the 1930s and 1940s and compare these with the international literature. They address hematological and epidemiological investigations conducted in Brazil and the ambivalences in associations then being made between this hereditary blood disorder and the 'black race.'

Exploring a later period, that is, the 1950s and 1960s, Renato da Silva, of Unigranrio University, and Gilberto Hochman, of the Casa de Oswaldo Cruz, examine the rise and fall of a method of combating malaria that was developed in Brazil by Mario Pinotti and broadly adopted during the WHO-coordinated campaign to eradicate malaria: kitchen salt mixed with chloroquine.

Identified in the 1960s, plasmodium resistance to chemotherapeutic agents and the resistance of malaria-transmitting mosquitoes to DDT form the crux of the article by Ivone Manzali de Sá, contributing researcher at Rio de Janeiro's National Museum. Relying on her background in pharmacology and botany, the author looks at scientific research into the development of new antimalarial drugs from the 1960s to the 1980s, especially in the United States and China, while also taking into account the central role played by WHO in intermediating between the groups operating in these two countries, which were Cold-War opponents. Manzali de Sá shows that U.S. scientists concentrated on screening synthetic molecules, drawing inspiration from the quinine model, while China adopted a research line that incorporated traditional knowledge based on medicinal plants and eventually developed a medication that became the new benchmark antimalarial drug in the late 1980s.

In "Fear of the sertão: malaria and the Rondon Commission (1907-1915)," Arthur Torres Caser, M.A. in the History of the Sciences and of Health from Casa de Oswaldo Cruz, and Dominichi Miranda de Sá, researcher with the same institute, examine how endemic malaria impacted the health of the men in charge of installing telegraph lines in regions now belonging to the states of Mato Grosso, Rondônia, and Amazonas and resulted in the creation of a sanitary service aimed at controlling the disease. This article ties in closely with a piece in our Sources department, where André Vasques Vital, master's degree

candidate with the same Casa de Oswaldo Cruz Graduate Studies Program, offers his commentaries on a newspaper article republished in this issue, “Região do Madeira: Santo Antônio,” by physician Joaquim Augusto Tanajura (1878-1941), head of the Rondon Commission’s health service from 1909 to 1912.

Randall Packard, professor with the Johns Hopkins University’s Institute of the History of Medicine and co-editor of the *Bulletin of the History of Medicine* was in attendance at the seminar held at the Oswaldo Cruz Foundation in April 2007, and we took the opportunity to interview this eminent expert in the history of malaria and international health relations. The same department of our journal also presents a brief testimony by Doctor Ruth Sonntag Nussenzweig, a shining star in Brazilian science who began her career at the University of São Paulo Medical School and now continues sparkling at New York University’s Langone Medical Center, where she is working to develop a malaria vaccine.

This issue presents five other, unsolicited submissions to the journal, none of which is related to the Malaria Dossier. These additional original articles are all of the highest quality and make this issue of *Manguinhos* a veritable tome that no student or lover of the history of the sciences can do without on his or her bookshelf or hard drive.

Jaime L. Benchimol
Scientific editor