



# The tropical disease scientist

Luiz Hildebrando Pereira da Silva was one of the most respected parasitology experts in the world

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**R**esearcher and public health physician Luiz Hildebrando Pereira da Silva died on September 24, 2014, in São Paulo at the age of 86. He had been previously hospitalized for pneumonia at the Heart Institute (InCor) in São Paulo. Hildebrando did not respond to treatment and suffered multiple organ failure. The researcher's coffin was available for viewing only by family and friends, as reported by one of his closest friends, parasitologist Erney Plessmann de Camargo, researcher at the Institute of Biomedical Sciences, University of São Paulo (USP). "I met Hildebrando at the USP School of Medicine in 1959, and we worked together on many research projects," said Camargo, who collaborated with Hildebrando on malaria research in the state of Rondônia.

A professor emeritus at USP and at the Federal University of Rondônia, Luiz Hildebrando was one of the most respected specialists in tropical medicine in the world. He spent most of his career

at the Pasteur Institute in France, where he moved after being persecuted by the military government established in Brazil in 1964, when he was an associate professor at the USP School of Medicine. He returned to Brazil in the 1990s and began research on malaria in Rondônia.

He completed his degree in Medicine at USP in 1953, and the following year he traveled with parasitologist Samuel Pessoa to Misericórdia de Piancó, in the scrublands of the state of Paraíba, where he helped organize the Parasitology Laboratory and taught classes in the field at the new João Pessoa School of Medicine. There he studied the epidemiology of schistosomiasis and Chagas disease from 1954 to 1956. It was in this location that, through the lens of a microscope and the light of an amateurish electrical connection, he saw the parasite *Schistosoma mansoni*, which was very common along the northeastern coast, but until then had never been seen in the scrublands. For the first time, he felt "the aesthetic

thrill of discovery," as he recounted in an interview in 2013 when he won an award from the Conrado Wessel Foundation in the Medicine category, the twelfth time that the honor had been given.

Invited to become an assistant professor of parasitology at the University of São Paulo School of Medicine (FMUSP), he returned to São Paulo and carried out research on chemotherapy for American trypanosomiasis from 1956 to 1960. After passing the exam to become an associate professor, he obtained a grant from the National Council for Scientific and Technological Development (CNPq) to carry out post-doctoral research. He spent a year at the Free University in Brussels. In 1962 and 1963 he worked at the Pasteur Institute with researcher François Jacob, who, along with Jacques Monod, had just published their model for the regulation of gene expression in prokaryotes that would earn them the Nobel Prize for Medicine in 1965. He returned to Brazil in late 1963 and set



up the Laboratory for Protozoa Genetics at the USP School of Medicine with researcher Erney Camargo.

Then came the military coup. A militant communist since adolescence, Luiz Hildebrando was imprisoned for three months on the ship Raul Soares after having been reported for collecting money and giving asylum to individuals being hunted. He was fired from his university post by an act of Governor Ademar de Barros on the last day on which Institutional Act No. 1 was in force. He returned to Paris and to the Pasteur Institute, but in 1967, spurred by a campaign to repatriate scientists, sponsored by the Ministry of Foreign Affairs, he taught a course in Brazil on molecular genetics at the USP Biochemistry Department. The following year, he accepted a position as professor in the Genetics Department at the USP Ribeirão Preto campus, researching the genetics of unicellular eukaryotes. In 1969, he was again discharged, this time by Institutional Act N<sup>o</sup>. 5, and he returned to Paris and his positions at the National Center for Scientific Research (CNRS) and the Pasteur Institute. During his exile, he became a key well-known intellectual for Brazilian exiles in France as the political secretary of the Brazilian Communist Party in Paris.

**When he saw *Schistosoma mansoni* in the scrublands for the first time, when it had previously been found only along the coast, he felt “the aesthetic thrill of discovery”**

In 1971, he was appointed Head of the Cell Differentiation Unit in the Molecular Biology Department of the Pasteur Institute. In 1976, he was invited by Jacques Monod, director of the Pasteur Institute to organize a new unit for Experimental Parasitology. The unit was established in 1978 to carry out research on the molecular biology of malaria para-

sites, especially *Plasmodium falciparum*. It was a period of intense activity, with a team that carried out studies in experimental models and human volunteers on malaria vaccine candidate molecules.

In 1990, while still in Paris, he organized a research team in Rondônia in collaboration with Erney Camargo. He retired from the Pasteur Institute in 1996 and decided to return to Brazil. He was hired as a full professor of parasitology by USP in 1997, and assumed management of the research programs in Rondônia, in USP's active front in the Amazon. Over the course of a decade, under his capable direction the percentage of malaria cases reported in Rondônia decreased from 40% to 7% of the total number of cases of disease in the Amazon region.” He went on to establish the Center for Research in Tropical Medicine (Cepem) under the Rondônia Health Department, and founded the Tropical Pathology Research Institute (Ipepatro), which brings together specialists and researchers trained in the graduate programs at the Federal University of Rondônia. Ipepatro was absorbed by the Oswaldo Cruz Foundation and became one of the five new Fiocruz units in 2009. Luiz Hildebrando Pereira da Silva was married and had five children. ■