Brazil’s Pre Eminent Parasite Hunter: The commemorative stamp was issued by Brazil on 28 Dec 1959 to mark the centenary of the discovery of Schistosomiasis by Bilharz. The stamp depicts the profile of Dr Piraja da Silva and an inset showing the leaf-shaped adult male trematode (fluke) of S. mansoni holding a single threadlike female in its gynecophoric canal flanked by a pair of oval eggs with their characteristic lateral spine.

Humans are hosts to nearly 300 species of parasitic worms and over 70 species of protozoa, some derived from our primate ancestors and others acquired from the animals we have domesticated or come in contact with during our relatively short history on Earth. Schistosomiasis (bilharzia or “snail fever”) is tropical disease with significant socioeconomic impact. The WHO estimates that 85% of the 200 million people infected by the helminth live in Africa. Another 600 million are at risk worldwide. The largely tropical distribution reflects the geographical distribution of the intermediate host, the aquatic snail species.

Since the middle of the past century, morphological features of the genus Schistosoma have eluded taxonomic questions about the main species known to infect man. 1852, Theodor Bilharz, a German physician working in Egypt, described for the first time the parasitic disease which would be after called schistosomiasis. He also presented the first contribution to the diagnostic techniques of the infection: the drawing of the spiculate eggs. These drawings, even containing a conceptual inaccuracy, were the theoretical start for the description of this parasitosis in other regions of the world. Bilharz was mistaken when considering the eggs with terminal spicules and the ones with lateral spicules as pertaining to the same species. This concept was questioned by Patrick Manson (1902) and the controversy persisted for half a decade until Piraja da Silva (1908) described a schistosome worm whose measurements were distinct from other species and had a lateral-spined egg. He wrote to Patrick Manson about the identification detailing his repeated encounters with these eggs in the faeces of his patients in Bahia, Brazil and provided ample evidence from autopsied human victims to differentiate the new Schistosoma from the haematobium. He published his findings in France and in England. Later, in 1912, Piraja da Silva described, for the first time, a Schistosoma cercaria, providing evidence for the complicated cycle of this flatworm. In spite of all the evidence, a good part of the international community, ignored him and denied him credit for his work. He was never fully recognised as the true discoverer of Schistosoma mansoni and is not even mentioned regarding the elucidation of the parasite’s life cycle. In 1953, Philip Manson-Bahr published a review in which he acknowledged that Piraja da Silva as the first researcher to describe the parasite that is now known as Schistosoma mansoni. In 1954, Piraja da Silva was awarded the Bernhard Nocht medal, conferred by the Institut für Schiff- und Tropenkrankheiten. Ernst Nauck, then director of the German institution, referred to Piraja da Silva as the scholar who settled a controversy over Schistosoma morphology. Piraja also served as an appointed scientist to the Nobel commission to scrutinise nominations for the Nobel prize.