

OBITUARY

Luiz Eloy Pereira (1950-2020)



Luiz Eloy Pereira at the Legislative Assembly of São Paulo (Alesp), 2013.
Photo: Marco Antonio Cardelino/Alesp

Luiz Eloy Pereira was born on November 14, 1950, in São Paulo, Brazil, and passed away in São Paulo – on July 7, 2020. He was married to Wanda Aparecida dos Santos Pereira, with whom he had two children, Roberta dos Santos Pereira (a biologist) and Marcus Eloy dos Santos Pereira (a lawyer), as well as four grandchildren: Ana Júlia, Luiz Fernando, Ana Laura and João Pedro.

His professional career began at the age of 16, in 1966, when he joined the Seção de Vírus Transmitidos por Artrópodos (now, Núcleo de Doenças de Transmissão Vetorial, Centro de Virologia), at the Instituto Adolfo Lutz (São Paulo) as an intern. Between 1969 and 1981, he worked as a laboratory technician and from 1981 to 2017, he worked as supervisor (1981 to 1984) and coordinator (1984 to 2017) of fieldwork focused on the epidemiological surveillance of arboviruses, hantaviruses, and arenaviruses in the state of São Paulo. He retired from the Instituto Adolfo Lutz in 2017, but remained active as a technical consultant for various projects and institutions. Additionally, he held leadership roles as an advisor, president, and vice president of the Conselho Regional de Biologia (CRBio-01).

He earned his degree in Biological Sciences from the Universidade de Santo Amaro (UNISA) in 1980 and completed his doctorate in Laboratory Research in Public Health in 2006 at the Coordenadoria de Doenças of the São Paulo State Health Department. Throughout his career, he published 31 scientific articles (list at the end of this text), two book chapters, 93 abstracts presented at scientific events, and 34 scientific outreach articles in news newspapers and magazines, along with other technical productions. He was a member of 12 doctoral and four master's thesis committees and participated in approximately 88 technical-scientific events among others (a full list is available at: <http://lattes.cnpq.br/7931951730960105>).

For his contributions to the community, he was honored by the Câmara Municipal de Nova Guataporanga (São Paulo) and the Secretaria Municipal de Saúde of the Municipality of Uberlândia (Minas Gerais), and to the Brazilian army, by the Ministério do Exército. His work and knowledge were of

great importance for the discovery of several viral agents and their reservoirs, including the Rocio virus, Arenavirus Sabiá and Juquitiba and Araraquara hantaviruses.

In 1961, the Seção de Vírus Transmitidos por Artrópodos initiated a program to study arboviruses in various locations São Paulo state, capturing mosquitoes, birds, and mammals. In 1966, birds captured with mist nets began to be banded with aluminum rings bearing the Instituto Adolfo Lutz (IAL code)¹. In 1977, the Centro Nacional de Pesquisa e Conservação de Aves Silvestres (CEMAVE)² was established under the responsibility of ICMBio. By 1982, Luiz Eloy was already engaged in bird banding at the Instituto Adolfo Lutz, and he participated in the 5th bird banding course organized by CEMAVE. From 1983 onward, he became the institutional coordinator at the project “Anilhamento de Aves Silvestres no Estado de São Paulo”, carried out between the Seção de Vírus Transmitidos por Artrópodos and CEMAVE. This long-term project aimed to identify bird species responsible for maintaining viruses in nature and their role in viral circulation across the Americas through marking, capturing and recapturing birds. It was one of the first bird-banding initiatives in Brazil (CEMAVE 2020). During several CEMAVE courses, he delivered lectures on virology and provided guidance on fieldwork.

Luiz Eloy was one of the leading figures in arbovirus research in Brazil, leaving a significant legacy in virology and ornithology. He will always be remembered by colleagues and friends for his charisma, smile, joy, and unique sense of humor marked by characteristic jokes and pranks and well as for his boundless energy, which was evident both in the laboratory and in the field. Above all, he was a true friend. He treated everyone with the same kindness and respect, from doctors to farmers, from laypeople to highly qualified professionals. He loved life and, for those who had the privilege of knowing him, he was an example of dedication and humility.

We extend our heartfelt condolences to his family and friends.



Luiz Eloy Pereira in Taim National Park (RS), during a bird banding course: A. observing the birds in a ground trap; and B. collecting samples (swab) from a Southern Lapwing (*Vanellus chilensis*). Photos: Fabio Schunck

Bibliographic references by Luiz Eloy Pereira (in chronological order)

Lopes OS, Sachetta LA, Coimbra TL, Pereira LE. Isolation of St. Louis encephalitis virus in South Brazil. Am J Trop Med Hyg. 1979;28(3):583-5.

<https://doi.org/10.4269/ajtmh.1979.28.583>

Tolezano JE, Chieffi PP, Dias RMDS, Nunes EV, D'Andrade OM, Pereira LE et al. *Trypanosoma* do subgênero *Herpetosoma* Doflein, 1901 em *Proechimys iheringi* Thomas 1911 capturados no estado de São Paulo, Brasil. Rev Inst Adolfo Lutz. 1984;44(1):47-53.

<https://doi.org/10.53393/rial.1984.v.44.36826>

Tolezano JE, Nunes EV, D'Andrade OM, Araújo MFL, Balanco JMF, Chieffi PP et al. Técnicas parasitológicas para investigação de animais naturalmente infectados por flagelados do gênero *Trypanosoma* Gruby, 1843. Rev Inst Adolfo Lutz. 1989;49(1):85-92.

<https://doi.org/10.53393/rial.1989.49.36937>

Pereira LE, Souza LTM, Coimbra TLM, Rocco IM, Nassar ES, Souza DM. Studies on wild birds from the Region of the Atlantic Forest, Brazil. I. Longevity records observed in captured birds of state of São Paulo. Ciênc Cult. 1992;44:167-71. Disponível em:

<https://memoria.bn.gov.br/docreader/DocReader.aspx?bib=003069&pagfis=59599>

Coimbra TLM, Nassar ES, Nagamori AH, Ferreira IE, Pereira LE, Rocco IM et al. Iguape: a newly recognized flavivirus from São Paulo State, Brazil. Intervirology. 1993;36(3):144-52.

<https://doi.org/10.1159/000150333>

Ferreira IB, Pereira LE, Rocco IM, Marti AT, Souza LTM, Iversson LB. Surveillance of arbovirus infections in the Atlantic Forest region, State of São Paulo. I. Detection of hemagglutination-inhibiting in wild birds between 1978 and 1990. Rev Inst Med Trop S Paulo. 1994;36(3):265-74.

<https://doi.org/10.1590/s0036-46651994000300011>

Nassar ES, Coimbra TLM, Rocco IM, Pereira LE, Ferreira IB, Souza LTM et al. Human disease caused by an arbovirus closely related to Ilheus virus: report of five cases. Intervirology. 1997;40(4):247-52.

<https://doi.org/10.1159/000150554>

Vasconcelos MI, Lima VP, Iversson LB, Rosa MDB, Rosa APAT, Rosa EST et al. Hantavirus pulmonary syndrome in the rural area of Juquitiba, São Paulo metropolitan area, Brazil. Rev Inst Med Trop São Paulo. 1997;39(4):237-8.

<https://doi.org/10.1590/S0036-46651997000400012>

Nagamori AH, Coimbra TLM, Nassar ES, Pereira LE, Souza LTM, Kimura EK et al. Presence of Bunyaviruses (Bunyamwera Serogroup) in São Paulo State, Brazil. Rev Inst Adolfo Lutz. 1998;57(2):13-8.

<https://doi.org/10.53393/rial.1998.57.36629>

Pereira LE, Suzuki A, Souza RP, Souza MFCG, Flauto G. Sazonalidade das populações de *Vireo olivaceus* (Linnaeus, 1776) (Aves, Vireonidae) em regiões da Mata Atlântica do estado de São Paulo, Brasil. Rev Bras Ornitol. 1998;6(9):117-22.

Figueiredo LTM, Badra SJ, Pereira LE, Szabó MPJ. Report of ticks collected in the Southeast and Mid-West regions of Brazil: analyzing the potential transmission of tick-borne pathogens to man. Rev Soc Bras Med Trop. 1999;32(6):613-9.

<https://doi.org/10.1590/S0037-86821999000600002>

Johnson AM, Souza LTM, Ferreira IB, Pereira LE, Ksiazek TG, Rollin PE et al. Genetic investigation of novel hantaviruses causing fatal HPS in Brazil. J Med Virol. 1999;59(4):527-35.

[https://doi.org/10.1002/\(sici\)1096-9071\(199912\)59:4<527::aid-jmv17>3.0.co;2-y](https://doi.org/10.1002/(sici)1096-9071(199912)59:4<527::aid-jmv17>3.0.co;2-y)

Pereira LE, Souza LTM, Souza RP, Ferreira IB, Suzuki A, Katz G. Histórico da vigilância eco-epidemiológica do hantavírus no Brasil. Revista da Cip. 1999;1:5-12.

Figueiredo LTM, Forster AC, Fulhorst C, Rodrigues EMS, Koster F, Campos GM et al. Contribuição ao conhecimento sobre a hantavirose no Brasil. Inf Epidemiol Sus. 2000;9(3):167-78.

<http://dx.doi.org/10.5123/S0104-16732000000300002>

Bocato-Chamelet EL, Coimbra TLM, Nassar ES, Pereira LE, Ferreira IB, Souza LTM et al. Isolamento do flavivírus Iguape a partir de mosquitos *Anopheles (Kerteszia) cruzii* em Juquitiba – estado de São Paulo – Brasil. Rev Inst Adolfo Lutz. 2001;60(1):65-9.

<https://doi.org/10.53393/rial.2001.60.39302>

Katz G, Williams RJ, Burt MS, Souza LTM, Pereira LE, Mills JN et al. Hantavirus pulmonary syndrome in the State of São Paulo, Brazil, 1993-1998. VBZD. 2001;1(3):181-90.

<https://doi.org/10.1089/153036601753552549>

Pereira LE, Suzuki A, Coimbra TLM, Souza RP, Chamelet ELB. Arbovirus Ilheus em aves silvestres (*Sporophila caerulescens* e *Molothrus bonariensis*). Rev Saúde Pública. 2001;35(2):119-23.

<https://doi.org/10.1590/S0034-89102001000200003>

Luna EJA, Pereira LE, Souza RP. Encefalite do Nilo Ocidental, nossa próxima epidemia? Epidemiologia e Serviços de Saúde. 2003;12(1):7-19.

<http://dx.doi.org/10.5123/S1679-49742003000100002>

Natal D, Araújo FAA, Vianna RST, Pereira LE, Ueno HM. O mosquito das águas poluídas. Saneas. 2004;2(19):26-31.

Pereira LE, Suzuki A, Bisordi I, Souza RP, Mayer SR, Barbosa VM et al. Vigilância Epidemiológica da Hantavirose no Brasil. BEPA. 2004;2:1-3. Disponível em:

<https://periodicos.saude.sp.gov.br/BEPA182/issue/view/2453>

Suzuki A, Bisordi I, Levis S, Garcia J, Pereira LE, Souza RP et al. Identifying rodent hantavirus Reservoirs, Brazil. Emerg Infect Dis. 2004;10(12):2127-34.

<https://doi.org/10.3201/eid1012.040295>

Kawamoto AHN, Mancini DAP, Pereira LE, Cianciarullo AM, Cruz AS, Dias ALF et al. Investigation of influenza in migrating birds, the primordial reservoir and transmitters of influenza in Brazil. Braz J Microbiol. 2005;36(1):88-93.

<https://doi.org/10.1590/S1517-83822005000100017>

Rocco IM, Santos CLS, Bisordi I, Petrella SMCN, Pereira LE, Souza RP et al. St. Louis encephalitis virus: first isolation from a human in São Paulo State, Brazil. Rev Inst Med Trop São Paulo. 2005;47(5):281-85.

<https://doi.org/10.1590/S0036-46652005000500008>

Pereira LE, Suzuki A, Bisordi I, Souza RP, Souza LTM, Oshiro FM et al. Estudo longitudinal da prevalência dos vírus *Juquitiba* e *Araraquara* em roedores das regiões da Mata Atlântica e do Cerrado do Brasil. BEPA. 2007;4(42):1-21.

<https://periodicos.saude.sp.gov.br/BEPA182/article/view/38747>

Donalisio MR, Vasconcelos CH, Pereira LE, Ávila AMH, Katz G. Aspectos climáticos em áreas de transmissão de hantavirose no Estado de São Paulo, Brasil. Cad Saúde Pública. 2008;24(5):1141-50.

<https://doi.org/10.1590/S0102-311X2008000500021>

Figueiredo LTM, Moreli ML, Sousa RLM, Figueiredo GG, Machado AM, Bisordi I et al. Hantavirus pulmonary syndrome, central plateau, southeastern, and southern Brazil. Emerg Infect Dis. 2009;15(4):561-7.

<https://doi.org/10.3201/eid1504.080289>

Santana-Porto EA, Oliveira AA, Costa MRM, Pinheiro AS, Oliveira C, Lopes ML et al. Suspected brazilian purpuric fever, Brazilian Amazon Region. Emerg Infect Dis. 2009;15(4):675-6.

<https://doi.org/10.3201/eid1504.090014>

Souza RP, Foster PG, Sallum MAM, Coimbra TLM, Maeda AY, Silveira VR et al. Detection of a new yellow fever virus lineage within the South American Genotype I in Brazil. J Med Virol. 2009;82(1):175-85.

<https://doi.org/10.1002/jmv.21606>

Souza RP, Petrella SMCN, Coimbra TLM, Maeda AY, Rocco IM, Bisordi I et al. Isolation of yellow fever virus (YFV) from naturally infected *Haemagogus (Conopostegus) leucocelaenus* (Diptera, Culicidae) in São Paulo State, Brazil, 2009. Rev Inst Med Trop São Paulo. 2011;53(3):133-9.

<https://doi.org/10.1590/S0036-46652011000300004>

Limongi JE, Moreira FG, Peres JB, Suzuki A, Ferreira IB, Souza RP et al. Serological survey of hantavirus in rodents in Uberlândia, Minas Gerais, Brazil. Rev Inst Med Trop São Paulo. 2013;55(3):155-8.

<https://doi.org/10.1590/S0036-46652013000300003>

Moreno ES, Spinola R, Tengan CH, Brasil RA, Siciliano MM, Coimbra TLM et al. Yellow fever epizootics in non-human primates, São Paulo State, Brazil, 2008-2009. Rev Inst Med Trop São Paulo. 2013;55(1):45-50.

<https://doi.org/10.1590/S0036-46652013000100008>

Bisordi I, Levis S, Maeda AY, Suzuki A, Nagasse-Sugahara TK, Souza RP et al. Pinhal Virus, a New Arenavirus Isolated from *Calomys tener* in Brazil. VBZD. 2015;15(11):694-700.

<https://doi.org/10.1089/vbz.2014.1708>

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REFERENCES

1. Lopes OS, Sacchetta LA, Dente E. Longevity of wild birds obtained during a banding program for São Paulo, Brasil. Journal of Field Ornithology. 1980;51:144-8.
2. Centro Nacional de Pesquisa e Conservação de Aves Silvestres – CEMAVE. Instituto Chico Mendes. Manual de anilhamento de aves silvestres. Sousa AEBA, Sersfini PP, organizadores. 3ª edição rev e ampli. Brasília. 2020; 113 p. Disponível em:
https://www.gov.br/icmbio/pt-br/assuntos/centros-de-pesquisa/aves-silvestres/arquivos/manual_de_anilhamento_de_aves_silvestres-3a-ed-1.pdf

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