# **Vasily Danilewsky**

Vasily Iakovlevich Danilewsky (variously spelled Vasili Yakovlevich Danilewsky or Vasili Yakolevich Danilevski or Vasily Yakovlevich Danilevsky, Russian: Даниле́вский Васи́лий Яковлевич) (13 or 25 January 1852 – 25 February 1939) was a Ukrainian-born Russian physician, physiologist and parasitologist. [1] He was professor of physiology at University of Kharkiv and then at Kharkiv Medical Institute. He helped to establish the Danilevsky Institute of Endocrine Pathology Problems which he directed until his death.

Danilewsky made important works in physiology, particularly in neurobiology. He was the first to give comprehensive description of nerve impulse in the brain of dogs. He also worked on the physiological responses of hypnosis in animals and humans. He was one of the pioneers in study of insulin action. However his most well known contribution is in parasitology. He was the first to investigate systematically on blood parasites of vertebrates such as birds, reptiles, and amphibians. He is the binomial authority of a number of bird parasites. His paper titled "About Blood Parasites (Haematozoa)" published in 1884 in the *Russian Medicine* journal is regarded as the foundation of modern parasitology in bird malaria and other protozoan infections.

A species of blood parasite in bird *Haemoproteus danilewskyi* is named after him.<sup>[2]</sup>

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## **Biography**

Danilewsky was born in Kharkiv (was under Russian Empire, now Ukraine), and was educated there. He graduated from the University of Kharkiv in 1874, and earned his doctoral degree in 1877, at the age of 25, upon the thesis *Investigations into the physiology of the brain*. [3][4] He was professor of physiology at the University of Kharkiv during 1883 to 1909 and 1917 to 1921. From 1921 he transferred to Kharkiv Medical Institute. In 1927 the Russian Academy of Sciences established Danilevsky Institute of Endocrine Pathology Problems, which he directed until his death.

## **Contributions**

## Vasily lakovlevich **Danilewsky Даниле́вский** Native name Василий Яковлевич **Born** 13 January 1852 Kharkiv, Ukraine Died 25 February 1939 (aged 87) Kharkiv Residence Kharkiv **Nationality** Russian Citizenship Russian Empire Alma mater University of Kharkiv Known for Nervous system and bird parasites Scientific career **Fields** Physiology and parasitology Institutions University of Kharkiv Kharkiv Medical Institute Danilevsky

Danilewsky was one of the pioneers of neurobiology. He was the first to describe the nerve impulse system in the brain of dogs. However his most notable works were in parasitology. In 1884 he was the first to observe the species of Haemoproteus, parasitic protozoan in the blood of birds, and established the order Haemospororida for it. [5][6] He helped to establish a new genus Leucocytozoon (but did not give the name). He was the first to observe the genus in 1889. The first species described in 1898 was even named primarily after him as  $Leukocytozoen\ Danilewskyi$ . [7][8]

	Institute of Endocrine Pathology Problems
Thesis	Investigations into the physiology of the brain (1977)
Author abbrev. (zoology)	Danilewsky

Danilewsky was the first to describe the bird malaria. He discovered the symptoms of malaria in birds such as acute anaemia, enlargement of liver and

spleen, accumulation of pigments in the blood cells. He also gave the first clue to the similarity of malaria of birds to that of humans. [1] (This idea was followed by Ronald Ross in 1898 who won the Nobel Prize for Physiology or Medicine in 1902 for experimentally demonstrating the principle.) He identified the bird malaria parasites as "pseudovacules", and by 1885 he recognised for the first the existence of three separate genera of protozoan parasites in birds, now known as *Plasmodium*, *Haemoproteus* and *Leucocytozoon*. However his publication was in Russian and therefore was not accessible to outside Russia, until they were translated into French in a three-volume book *La Parasitologie Comparée du Sang* in 1889. [9]

Danilewsky described and discovered the protozoan *Trypanosoma avium* in 1885, the first known flagellate protozoan parasite in birds. [10][11][12]

#### References

- 1. Valkiunas, Gediminas (2004). *Avian Malaria Parasites and Other Haemosporidia* (https://books.google.com/books?id=2btzeZON0qgC&dq). London: CRC Press. pp. 9–10. ISBN 978-0-2036-4379-2.
- "Haemoproteus danilewskyi" (http://zipcodezoo.com/Animals/H/Haemoproteus\_danilewskyi/). ZipcodeZoo.com.
   David Stang. Retrieved 9 June 2014.
- Eckert, Konrad Maurer; Nicolas Lang; Joachim (2005). Praxis der evozierten Potentiale: SEP AEP MEP VEP; mit 60 Tabellen (2 ed.). Darmstadt: Steinkopff. doi:10.1007/3-7985-1536-0\_3 (https://doi.org/10.1007%2F3-7985-1536-0\_3). ISBN 978-3-7985-1500-0.
- Allefeld, C.; Graben,, P. Beim; editors, J. Kurths, (2008). Advanced Methods of Electrophysiological Signal Analysis and Symbol Grounding?: Dynamical Systems Approaches to Language (https://books.google.com/books?id=9I5gQODiM4kC&pg). New York: Nova Science Publishers. p. 254. ISBN 9781604560220.
- Hunter, edited by Carter T. Atkinson, Nancy J. Thomas, D. Bruce (2008). Parasitic Diseases of Wild Birds (https://books.google.com/books?id=QUjI757YL6wC&dq). Ames, Iowa: Wiley-Blackwell. p. 13. ISBN 978-0-8138-0457-6.
- Valkiūnas, Gediminas (2011). "Haemosporidian vector research: marriage of molecular and microscopical approaches is essential". *Molecular Ecology*. 20 (15): 3084–3086. doi:10.1111/j.1365-294X.2011.05187.x (http s://doi.org/10.1111%2Fj.1365-294X.2011.05187.x). PMID 21901870 (https://www.ncbi.nlm.nih.gov/pubmed/2190 1870).
- 7. Valkiunas, Gediminas (1999). "Leucocytozoon (Protista, Haemosporida): proposed adoption of BerestneflF, 1904 as the author and of Leukocytozoen danilewskyi Ziemann, 1898 as the type species" (https://archive.org/stream/bulletinofzoolog56inte/bulletinofzoolog56inte\_djvu.txt). *Bulletin of Zoological Nomenclature*. **56** (3): 168.
- 8. Bennett, GF; Laird, MS; Khan, RA; Herman, CM (1975). "Remarks on the status of the genus *Leucocytozoon* Sambon, 1908". *The Journal of Protozoology*. **22** (1): 24–30. doi:10.1111/j.1550-7408.1975.tb00939.x (https://doi.org/10.1111%2Fj.1550-7408.1975.tb00939.x). PMID 804039 (https://www.ncbi.nlm.nih.gov/pubmed/804039).
- Cox, Francis EG (2010). "History of the discovery of the malaria parasites and their vectors" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2825508). Parasites & Vectors. 3 (1): 5. doi:10.1186/1756-3305-3-5 (https://doi.org/10.1186%2F1756-3305-3-5). PMC 2825508 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2825508). PMID 20205846 (https://www.ncbi.nlm.nih.gov/pubmed/20205846).

- 10. Baker, JR (1956). "Studies on Trypanosoma avium Danilewsky 1885. II. Transmission by Ornithomyia avicularia L.". *Parasitology.* **46** (3–4): 321–34. doi:10.1017/S0031182000026536 (https://doi.org/10.1017%2FS0031182000026536). PMID 13378882 (https://www.ncbi.nlm.nih.gov/pubmed/13378882).
- 11. Baker, JR (1956). "Studies on Trypanosoma avium Danilewsky 1885. III. Life cycle in vertebrate and invertebrate hosts". *Parasitology*. **46** (3–4): 335–52. doi:10.1017/S0031182000026548 (https://doi.org/10.1017%2FS0031182 000026548). PMID 13378883 (https://www.ncbi.nlm.nih.gov/pubmed/13378883).
- 12. Bennett, Gordon F. (1970). "Danilewsky in the avian host". *Canadian Journal of Zoology*. **48** (4): 803–807. doi:10.1139/z70-140 (https://doi.org/10.1139%2Fz70-140).

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