

The Symposium “Actual Parasitic Zoonoses” – to mark the centenary of the birth of academician Teodor Wikerhauser

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The symposium entitled “Actual Parasitic Zoonoses” was held on November 17th, 2022 in the Library of the Croatian Academy of Sciences and Arts (Hrvatska akademija znanosti i umjetnosti, HAZU). It was organized by the Committee of Animal and Comparative Pathology of the Department of Medical Sciences of HAZU. The symposium marked the 100th birth of the distinguished Croatian parasitologist, academician Teodor Wikerhauser (Zemun, 28th August 1922 – Zagreb, 12th June 2018).

At the beginning of the Symposium, the participants were welcomed by academician Vida Demarin, the secretary of the Department of Medical Sciences of HAZU, and academician Josip Madić, who was the chairman of the Organizing Committee.

After the welcome addresses, Josip Madić briefly presented the scientific and professional work of academician Teodor Wikerhauser. He pointed out his most important achievements and his international reputation. He highlighted his work as an expert with the UN Food and Agricultural Organization (FAO) in Nigeria during two six-month missions in 1962/1963 and 1965/1966.

The first presentation was given by Prof. Tatjana Živičnjak, PhD,

from the Department of Parasitology and Invasive Diseases of the Faculty of Veterinary Medicine, University of Zagreb. She talked about the place and role of humans in the epidemiology of parasitic zoonoses. She emphasized the complex relationships between humans, domestic animals and wildlife, as well as the profound alterations in the environment that can change the epidemiology of zoonotic parasitic diseases.

Prof. Albert Marinculić, PhD, from the same department, spoke about parasitic zoonoses that we have not thought about until now. For example, recurrent outbreaks of muscular sarcocystosis have focused international attention on that disease, once considered rare in humans.

An impressive lecture about leishmaniasis in human beings was given by Prof. Davorka Lukas, PhD, from the University Hospital for Infectious Diseases “Dr. Fran Mihaljević”, Zagreb. She emphasized that visceral leishmaniasis is the most serious clinical manifestation of leishmaniasis in humans. Issues related to the epidemiology, clinical manifestations, control and treatment of visceral leishmaniasis were discussed.



Prof. Franjo Martinković, PhD, summarized the problems of the diagnostics of leishmaniasis in animals. On his behalf, a presentation was given by Prof. Tatjana Živičnjak.

At the end of the first session, Prof. Janez Posedi, PhD, from the Institute of Microbiology and Parasitology of the National Veterinary Institute, University of Ljubljana Veterinary Faculty, spoke about the present situation and future challenges in relation to the epidemiology of *Echinococcus multilocularis* in Slovenia and Croatia. Alveolar echinococcosis caused by *E. multilocularis* is considered one of the most serious parasitic zoonoses in Central and Eastern Europe. The red fox represents the main host.

After the break, the second part of the symposium started with a lecture about parasites of the genus *Trichinella*. This topic was presented by Davor Balić, PhD, from the Croatian Veterinary Institute, Veterinary Department, Vinkovci. He gave a brief overview of the epidemiology of trichinellosis from ancient Egypt until the present day, with special reference to Osijek and the eastern part of Croatia.

Lea Grbavac, PhD, from the Department of Parasitology and Invasive Diseases of the Faculty of Veterinary Medicine, Zagreb, concluded her presentation about *Toxoplasma gondii* saying that farming pigs with low biosafety standards, where cats have access, can be exposed to *T. gondii*, since cats and other felids are

the only animals that excrete the environmentally resistant oocysts in their feces.

Ivona Mladineo, PhD, from the Laboratory of Functional Helminthology of the Institute of Parasitology BCAS, České Budějovice, Czech Republic, and Jerko Hrabar, PhD, from the Institute of Oceanography and Fisheries in Split as the speaker, presented anisakiasis as an important fish-borne zoonosis provoked by the larval stages of nematodes belonging to the genus *Anisakis*. They highlighted the most important recent assessments of clinical cases of anisakiasis at the EU level. In addition, they gave a brief overview of helminths directly associated with carcinogenesis in humans.

Relja Beck, PhD, head of the Department for Bacteriology and Parasitology of the Croatian Veterinary Institute, Zagreb, talked about the detection of multiple adult *D. repens*. A meta-analysis of published literature identified 21 cases of human infection with adult *D. repens*, producing microfilariae. Humans are considered to be accidental hosts in which *D. repens* induces local inflammation, mainly in subcutaneous and ocular tissues.

After the final presentation, a discussion was opened about all the topics that had been presented. The discussion was mostly directed towards the specific subjects of trichinellosis, leishmaniasis, dirofilariosis and anisakiasis.

