

Symposium: “Zoonotic Characteristics of the SARS-CoV-2 Pandemic”

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On 26th November 2021, a virtual symposium entitled “Zoonotic Characteristics of the SARS-CoV-2 Pandemic” was held, organized by the Committee of Animal and Comparative Pathology of the Department of Medical Sciences of the Croatian Academy of Sciences and Arts (CASA), with almost one hundred participants. The Symposium marked the 100th anniversary of the birth of academician Sergej Forenbacher (Karlovac, 24th April 1921 - Zagreb, 26th May 2010), and was held with the technical and organizational support of the Faculty of Veterinary Medicine of the University of Zagreb.

This Symposium was held exactly one year after last year's event, entitled “Sars-CoV-2 within the One Health concept”, and was an opportunity to present to the professional public the results of many studies which the speakers have conducted over the past year.

At the beginning of the Symposium, the participants were wel-

comed by the academician Vida Demarin, the secretary of the Department of Medical Sciences of the Croatian Academy of Sciences and Arts, and the associate member of the CASA, Prof. Ljubo Barbić, PhD, who was the chairman of the Organizing Committee.

Before the talks about the SARS-CoV-2 pandemic, the chairman of the Committee for Animal and Comparative Pathology, academician Josip Madić, briefly presented the impressive scientific and professional opus of academician Sergej Forenbacher, the 100th anniversary of whose birth this Symposium marked. He covered the most important achievements of this, as was pointed out in the title of his presentation, many faceted veterinarian, an internationally renowned scientist, an expert in the flora and fauna of Velebit and the Žumberak hills, and an enthusiastic mountaineer and philatelist.

The rest of the Symposium was aimed at exchanging the latest insights into the SARS-CoV-2 pandemic. In line with the “One Health” approach and a wide understanding of medicine as the field of work of many different professions, at the beginning the doctors presented the most important insights into this pandemic.



The associate member of CASA, Prof. Alemka Markotić, PhD, presented in her talk the latest insights into the clinical characteristics of COVID-19, with reference to the new guidelines and perspectives for treatment. Following on from her, Associate Prof. Tatjana Vilibić Čavlek, PhD, head of the Department of Virological Serology of the Croatian Institute of Public Health, presented the results of a large number of studies into the prevalence of the disease in Croatia, and also the results of research into the molecular epidemiology of the pathogen. This part of the Symposium was closed by Prim. Tatjana Nemeth Blažić, M.D., from the Croatian Institute of Public Health, presenting the latest information about the possibilities and challenges of vaccination against SARS-CoV-2.

In the introduction to the second part of the Symposium, the features of the COVID-19 pandemic found in animals and the environment were presented by Prof. Ljubo Barbić, PhD, in a talk on corona viruses in animals, with particular emphasis on zoonotic coronaviruses and inter-species transmission. After this, Tamaš Petrović, PhD, from the Scientific Veterinary Institute, Novi Sad, Serbia, presented ways of including the veterinary profession in control of the pandemic, and also the results of research conducted on animals and the environment. Prof. Ivan Toplak, PhD, from the Veterinary Faculty of the University of Ljubljana presented the latest insights into the possible origins of this pathogen, and the molecular epidemiology of the SARS-CoV-2 virus. The results of one of the most extensive studies into the possibilities of infections of dogs and cats with the SARS-CoV-2 virus and their epidemiological significance, and the possible clinical manifestations of infection in house pets were presented by Associate Prof. Vladimir Stevanović, PhD, with the clear message that COVID-19 is a reverse zoonosis, but that pets do not have a significant role in spreading the disease to people.

In the penultimate presentation, Associate Prof. Lorena Jemeršić, PhD, head of the Virology Department of the Croatian Veterinary Institute, presented the results of research into possible infections with SARS-CoV-2 in freely living wild animals and animals in a zoo, emphasizing their negligible epidemiological importance, but also the constant danger of new zoonotic coronaviruses, as was also shown by the results of research into the presence of viruses from that family in bats. The presentations were closed by Dr. Vet. Dragan Brnić, PhD, head of the Laboratory for Serological Diagnostics of Viral Diseases at the Croatian Veterinary Institute, showing the results of monitoring the presence of SARS-CoV-2 in waste water, and the subsequent research into the importance of shellfish as a possible source of infection.

All these presentations aroused exceptional interest in the participants, and a rich and full discussion was opened and conducted, which shed further light on all aspects of the latest insights relating to the current pandemic. One particularly valuable aspect of the discussion were the exchanges of personal experience by the speak-

ers, gathered from a large number of research into SARS-CoV-2 over the past year.

All in all, the Symposium undoubtedly proved that, regardless of all the challenges of everyday life, spreading scientific truth and exchanging experiences in a spirit of strong collegiality and cooperation is the only way to face the challenges of this pandemic, but also future challenges in public health. A comparison of the insights presented at the Symposium held a year ago and this year clearly confirmed that the enthusiasm and excellence of scientists from Croatia and cooperation with scientists from neighbouring countries guarantee success on this path together in the preservation of the health of people, animals and the environment, in line with the "One Health" initiative.