

Hrvatski zavod za javno zdravstvo/Croatian Institute of Public Health  
Referentni centar Ministarstva zdravstva za dijagnostiku i praćenje virusnih zoonoza/  
Reference Centre for Diagnosis and Surveillance of Viral Zoonoses Croatian Ministry of Health  
Veterinarski fakultet Sveučilišta u Zagrebu/Faculty of Veterinary Medicine University of Zagreb  
Hrvatski veterinarski institut/Croatian Veterinary Institute  
Nastavni zavod za javno zdravstvo "Dr Andrija Štampar"/Andrija Štampar Teaching Institute of Public Health  
Medicinski fakultet Sveučilišta u Zagrebu/School of Medicine University of Zagreb  
Hrvatsko društvo za kliničku mikrobiologiju/Croatian Society for Clinical Microbiology

Virtualni simpozij s međunarodnim sudjelovanjem  
Virtual Symposium with International Participation

## **(RE-)EMERGENTNI ARBOVIRUSI U SJENI PANDEMIJE COVID-19 (RE-)EMERGING ARBOVIRUSES IN THE SHADOW OF COVID-19 PANDEMIC**

**uz potporu/with support of**

**Svjetske zdravstvene organizacije, Regionalni ured za Europu  
World Health Organization, Regional Office for Europe**



### **Voditelji/Chairs**

**Tatjana Vilibić-Čavlek, Ljubo Barbić, Vladimir Savić, Irena Tabain, Bernard Kaić**

#### **Organizacijski odbor/Organizing committee:**

Ljubo Barbić, Maja Bogdanić, Ivana Ferenčak, Maja Ilić, Nataša Janev-Holcer, Pavle Jeličić, Bernard Kaić, Vladimir Savić, Vladimir Stevanović, Irena Tabain, Tatjana Vilibić-Čavlek

#### **Znanstveni odbor/Scientific committee:**

Elkhan Gasimov, Krunoslav Capak, Kirk Osmond Douglas, Gaëlle Gonzalez, Ana Klobučar, Branko Kolarić, Mladen Kučinić, Jasna Leniček Krleža, Josip Madić, Alemka Markotić, Anna Mrzljak, Nenad Pandak, Tamaš Petrović, Marija Santini, Giovanni Savini, Ivan Toplak, Nenad Turk, Klaudija Višković, Jasmina Vraneš, Snježana Židovec-Lepej

Zagreb, 10-11. lipnja/June 2021

Četvrtak/Thursday, 10. lipnja/June 2021

08.30 – 08.45 Otvaranje simpozija/Opening

**(RE-)JEMERGENTNI ARBOVIRUSI NA PODRUČJU EUROPE**

**(RE-)EMERGING ARBOVIRUSES IN EUROPE**

**Moderator/Chairs: Vladimir Savić**

- 08.45 – 09.05 **Invited lecture:** *Report on vector-borne diseases - Interim Risk Assessment in the WHO European Region* (Elkhan Gasimov, Malaria and Other Vector-Borne and Parasitic Diseases, WHO Regional Office for Europe, Copenhagen, Denmark)
- 09.05 – 09.25 **Invited lecture:** *Overview of West Nile virus and Usutu virus circulation in Europe from 2016 to 2020* (Gaëlle Gonzalez, Agence Nationale de Sécurité Sanitaire de l'Alimentation, de l'Environnement et du Travail, Maisons-Alfort, France)
- 09.25 – 09.45 **Invited lecture:** *Emerging flaviviruses in Italy* (Giovanni Savini, OIE Reference Center for West Nile Disease, Istituto Zooprofilattico Sperimentale "G. Caporale", Teramo, Italy)
- 09.45 – 10.05 **Invited lecture:** *Viral and vector-borne viral zoonoses in Serbia - activities of the veterinary profession* (Tamaš Petrović, Scientific Veterinary Institute, Novi Sad, Serbia)
- 10.05 – 10.15 Rasprava/Discussion

**(RE-)JEMERGENTNI ARBOVIRUSI NA PODRUČJU HRVATSKE U KONTEKSTU JEDNOG ZDRAVLJA**

**(RE-)EMERGING ARBOVIRUSES IN CROATIA IN THE 'ONE HEALTH' CONTEXT**

**Moderator/Chair: Ljubo Barbić**

- 10.15 – 10.30 *Prevalencija i molekularna epidemiologija arbovirusnih infekcija na području Hrvatske/Prevalence and molecular epidemiology of arboviral infections in Croatia* (Tatjana Vilibić-Čavlek, Hrvatski zavod za javno zdravstvo/Croatian Institute of Public Health, Zagreb)
- 10.30 – 10.45 *Seroprevalencija West Nile virusa u peradi u Hrvatskoj u 2020. i 2021. godini/Seroprevalence of West Nile virus in poultry in Croatia, 2020-2021* (Vladimir Savić, Hrvatski veterinarski institut/Croatian Veterinary Institute, Zagreb)
- 10.45 – 11.00 *Rezultati praćenja proširenosti West Nile virusa u konja u Republici Hrvatskoj u razdoblju od 2010. do 2020. godine/Results of West Nile virus surveillance in horses in Croatia from 2010 to 2020* (Iva Benven, Veterinarski fakultet Sveučilišta u Zagrebu/Faculty of Veterinary Medicine University of Zagreb)
- 11.00 – 11.15 *Flavivirusi u komaraca na području Hrvatske/Flaviviruses in mosquitoes in Croatia* (Ana Klobučar, Nastavni zavod za javno zdravstvo "Dr Andrija Štampar"/Andrija Štampar Teaching Institute of Public Health, Zagreb)
- 11.15 – 11.30 *Epidemija krpeljnog encefalitisa nakon konzumacije sirovog kozjeg mlijeka/Outbreak of tick-borne encephalitis after consumption of raw goat milk* (Maja Ilić, Hrvatski zavod za javno zdravstvo/Croatian Institute of Public Health, Zagreb)
- 11.30 – 11.45 Rasprava/Discussion
- 11.45 – 12.15 Stanka/Break

**KLINIČKA SLIKA I DIJAGNOSTIKA ARBOVIRUSNIH INFEKCIJA**  
**CLINICAL MANIFESTATIONS AND DIAGNOSIS OF ARBOVIRAL INFECTIONS**

**Moderator/Chair: Snježana Židovec-Lepej**

- 12.15 – 12.35 **Invited lecture:** *The envelope protein of Usutu virus attenuates West Nile virus virulence in immunocompetent mice* (Lucija Jurišić, Istituto Zooprofilattico Sperimentale "G. Caporale", Teramo, Italy)
- 12.35 – 12.50 *Klinička slika krpeljnog encefalitisa/Clinical manifestations of tick-borne encephalitis* (Dario Sabadi/Ljiljana Perić, Klinički bolnički centar Osijek/Clinical Hospital Center Osijek)
- 12.50 – 13.05 *Teški oblici West Nile neuroinvasivnih infekcija/Severe cases of West Nile neuroinvasive infection* (Marija Santini, Klinika za infektivne bolesti/University Hospital for Infectious Diseases "Dr Fran Mihaljević", Zagreb)
- 13.05 – 13.20 *Encefalitis uzrokovan West Nile virusom - radiološki nalazi s kliničkom korelacijom/West Nile encephalitis - radiologic findings with clinical correlation* (Klaudija Višković, Klinika za infektivne bolesti/University Hospital for Infectious Diseases "Dr Fran Mihaljević", Zagreb)

- 13.20 – 13.35 *Imunološki biljezi u neuroin vazivnim arbovirusnim infekcijama/Immunological markers in neuroinvasive arboviral infections* (Snježana Židovec-Lepej, Klinika za infektivne bolesti/University Hospital for Infectious Diseases "Dr Fran Mihaljević", Zagreb)
- 13.35 – 13.45 Rasprava/Discussion

**(RE-)EMERGENTNI ARBOVIRUSI U TROPSKIM PODRUČJIMA**  
**(RE-)EMERGING ARBOVIRUSES IN THE TROPICS**

**Moderator/Chair: Tatjana Vilibić-Čavlek**

- 13.45 – 14.05 **Invited lecture:** *Emerging arboviruses in the tropics* (Kirk Osmond Douglas, Centre for Biosecurity Studies at The University of the West Indies Cave Hill Campus, Barbados)
- 14.05 – 14.20 *Meningoencefalitis nakon cijepljenja protiv žute groznice - prikaz slučaja/Meningoencephalitis after yellow fever vaccination - a case report* (Neven Papić, Klinika za infektivne bolesti/University Hospital for Infectious Diseases "Dr Fran Mihaljević", Zagreb)
- 14.20 – 14.35 *Epidemiološke karakteristike putnika u Ambulanti za cijepljenje i prevenciju putničkih bolesti NZZJZ "Dr. Andrija Štampar"/Travel related disease prevention in Centre for immunization and prevention of traveller's diseases in Andrija Štampar Public Health Institute* (Mirjana Lana Kosanović Ličina, Nastavni zavod za javno zdravstvo "Dr Andrija Štampar"/Andrija Štampar Teaching Institute of Public Health, Zagreb)
- 14.35 – 14.45 *Emergentne arbovirusne infekcije u putnika/Emerging arboviral infections in Croatian travelers* (Maja Bogdanić, Hrvatski zavod za javno zdravstvo/Croatian Institute of Public Health, Zagreb)
- 14.45 – 15.00 Rasprava/Discussion
- 15.00 – 15.15 Stanka/Break

**PRAĆENJE I PREVENCIJA ARBOVIRUSNIH INFEKCIJA NA PODRUČJU HRVATSKE**  
**SURVEILLANCE AND PREVENTION OF ARBOVIRAL INFECTIONS IN CROATIA**

**Moderator/Chairs: Josip Madić**

- 15.15 – 15.30 *Domaće životinje kao sentinel za praćenje arbovirusnih infekcija/Domestic animals as sentinels for arboviral diseases surveillance* (Ljubo Barbić, Veterinarski fakultet Sveučilišta u Zagrebu/Faculty of Veterinary Medicine University of Zagreb)
- 15.30 – 15.45 *Monitoring invazivnih vrsta komaraca u Hrvatskoj/Monitoring of invasive mosquito species in Croatia* (Nataša Janev Holcer, Hrvatski zavod za javno zdravstvo/Croatian Institute of Public Health, Zagreb)
- 15.45 – 16.00 *DNA barkodiranje i bioraznolikost krpelja (Acari: Ixodidae) Hrvatske/Tick (Acari: Ixodidae) DNA barcoding and biodiversity in Croatia* (Mladen Kučinić, Prirodoslovno-matematički fakultet Sveučilišta u Zagrebu/Faculty of Science University of Zagreb)
- 16.00 – 16.15 *Prevencija emergentnih zoonoza cijepljenjem/Vaccination against emerging zoonoses* (Bernard Kaić, Hrvatski zavod za javno zdravstvo/Croatian Institute of Public Health, Zagreb)
- 16.15 – 16.30 Rasprava/Discussion
- 16.30 – 17.00 **Prikaz kratkih priopćenja i postera/Short report and poster presentations**
- Gorup L, Knežević S. *Neuobičajena prezentacija infekcije virusom krpeljnog meningoencefalitisa bolovima u truhu i povišenjem enzima gušterače – prikaz slučaja/Unusual presentation of tick-borne meningoencephalitis virus infection with abdominal pain and elevated pancreatic enzymes – a case report*
- Vilibić-Čavlek T i sur. *Dijagnostika krpeljnog encefalitisa u bolesnika s ranijom flavivirusnom infekcijom/Diagnosis of tick-borne encephalitis in patient with previous flavivirus infection*

**COVID-19: EMERGENTNA GLOBALNA JAVNOZDRAVSTVENA PRIJETNJA**

**COVID-19: AN EMERGING GLOBAL PUBLIC HEALTH THREAT**

**Moderatori/Chairs: Irena Tabain, Vladimir Stevanović**

- 09.00 – 09.20 **Invited lecture:** *COVID-19: Experiences from the Middle East* (Nenad Pandak, The Royal Hospital, Muscat, Oman)
- 09.20 – 09.35 *Klinička slika COVID-19/Clinical characteristics of COVID-19* (Alemka Markotić, Klinika za infektivne bolesti/University Hospital for Infectious Diseases "Dr Fran Mihaljević", Zagreb)
- 09.35 – 09.50 *Epidemiološke značajke COVID-19 na području Hrvatske/Epidemiological characteristics of COVID-19 in Croatia* (Goranka Petrović, Hrvatski zavod za javno zdravstvo/Croatian Institute of Public Health, Zagreb)
- 09.50 – 10.05 *Epidemiološko i kliničko značenje određivanja Ct vrijednosti RT-PCR testa na SARS-CoV-2/Epidemiological and clinical significance of SARS-CoV-2 RT-PCR Ct value* (Jasmina Vraneš, Nastavni zavod za javno zdravstvo "Dr Andrija Štampar"/Andrija Štampar Teaching Institute of Public Health, Zagreb)
- 10.05 – 10.20 *Genska raznolikost SARS-CoV-2 na području Hrvatske/Genetic diversity of SARS-CoV-2 in Croatia* (Ivana Ferenčak, Hrvatski zavod za javno zdravstvo/Croatian Institute of Public Health, Zagreb)
- 10.20 – 10.30 Rasprava/Discussion
- 10.30 – 10.45 Stanka/Break
- 10.45 – 11.05 **Invited lecture:** *Three human coronaviruses (HKU1, OC43, 229E) from patients and bovine coronavirus (BCoV) from cattle with respiratory disease in Slovenia: genetic characterization of field strains* (Ivan Toplak, Institute of Microbiology and Parasitology, Veterinary Faculty University of Ljubljana, Slovenia)
- 11.05 – 11.25 *Seroprevalencija SARS-CoV-2 na području Hrvatske/Seroprevalence of SARS-CoV-2 in Croatia* (Irena Tabain, Hrvatski zavod za javno zdravstvo/Croatian Institute of Public Health, Zagreb)
- 11.25 – 11.40 *Seroprevalencija SARS-CoV-2 u djece od inicijalnog do trećeg vala COVID-19 epidemije: Rezultati Klinike za dječje bolesti Zagreb/Seroprevalence of SARS-CoV-2 in children from the initial to the peak of the third wave of the COVID-19 epidemic: Results of Children's Hospital Zagreb* (Jasna Leniček Krleža, Klinika za dječje bolesti Zagreb/Children's Hospital Zagreb)
- 11.40 – 11.55 *Prevalencija SARS-CoV-2 antitijela u hrvatskih primatelja solidnih organa/Prevalence of SARS-CoV-2 antibodies in Croatian solid organ transplant recipients* (Anna Mrzljak, Klinički bolnički centar Zagreb/Clinical Hospital Center Zagreb)
- 11.55 – 12.10 *COVID-19 u osoba starije životne dobi – epidemije COVID-19 u domovima za starije osobe na području Grada Zagreba/COVID-19 in older age – COVID-19 epidemics in nursing homes for elderly in the City of Zagreb* (Tanja Čorić/Branko Kolarić, Nastavni zavod za javno zdravstvo "Dr Andrija Štampar"/Andrija Štampar Teaching Institute of Public Health, Zagreb)
- 12.10 – 12.25 *Značaj kućnih ljubimaca u epidemiologiji COVID-19 - što danas znamo?/The role of pet animals in the epidemiology of COVID-19 - What do we know today?* (Vladimir Stevanović, Veterinarski fakultet Sveučilišta u Zagrebu/Faculty of Veterinary Medicine University of Zagreb)
- 12.25 – 12.40 *Cijepljenje protiv COVID-19/Vaccination against COVID-19* (Iva Pem Novosel, Hrvatski zavod za javno zdravstvo/Croatian Institute of Public Health, Zagreb)
- 12.40 – 12.50 Stanka/Break
- 12.50 – 13.30 **Prikaz kratkih priopćenja i postera/Short report and poster presentations**
- Mislav Glibo i sur.: *SARS-CoV-2 antigenski test – manje pouzdan u starijih bolesnika?/SARS-CoV-2 rapid antigen tests – less reliable among the elderly patients?*
- Thomas Ferenc i sur.: *Zanemarujemo li subakutni tireoiditis kao posljedicu bolesti COVID-19?/Is subacute thyroiditis an underestimated clinical feature of COVID-19?*
- Ljiljana Milašinčić i sur.: *Prisutnost protutijela na NP/RBD antigen u bolesnika nakon preboljele SARS-CoV-2 infekcije i cijepljenih osoba/NP/RBD antibody response in patients with SARS-CoV-2 infection and vaccinated persons*
- Ljiljana Antolašić i sur.: *Seroprevalencija na SARS-CoV-2 u profesionalno izloženih osoba nakon prvog i drugog vala COVID-19 pandemije/SARS-CoV-2 seroprevalence in professionally exposed persons after the first and second COVID-19 pandemic wave*
- 13.30 – 14.00 Rasprava. Zaključci. Zatvaranje simpozija/Discussion. Conclusions. Closing.