

8. CROATIAN NEUROSCIENCE CONGRESS

24th and 25th September 2021
Zagreb - Virtual congress

GENERAL INFORMATION

SCIENTIFIC PROGRAMME OVERVIEW

Presidential lecture

Speaker: Ivica Kostović (Croatian Institute for Brain Research, School of Medicine, University of Zagreb, Croatia)

Presidential symposium „Current trends in neuroscience“

Speakers: Dean Nižetić (Queen Mary University of London, United Kingdom); Dimitri Krainc (Northwestern University, Evanston and Chicago, United States); Lana Vasung (Harvard Medical School, Boston, United States); Stephan Schwarzacher (Goethe University, Frankfurt am Main, Germany)

Special symposium „Neuroinflammation and COVID-19“

Speakers: Marija Santini, Mario Habek, Milan Radoš, Ilija Brizić

Thematic symposia

Speakers:

Symposium I. “Sleep and sleep research during the COVID-19 pandemic” - Zoran Đogaš, Rozi Andretić Waldowski, Ivana Rosenzweig, Ivana Dodig Pavlinac

Symposium II. “Brain lipidomics” - Marija Heffer, Željka Korade, Karoly Mirnics, Kristina Mlinac-Jerković

Symposium III. “Alzheimer’s disease” - Maja Jazvinščak Jembrek, Petra Kalember, Mirjana Babić Leko, Jelena Osmanović-Barilar, Tena Sučić Radovanović, Dubravka Švob Štrac

Symposium IV. “Preclinical models of neurological diseases” - Dinko Mitrečić, Miranda Mladinić Pejatović, Marta Balog, Marina Dobrivojević Radmilović, Damir Sapunar, Srećko Gajović

Poster session topics

Basic neuroscience; Clinical neuroscience; Cognitive neuroscience; Hypoxic-ischemic damage; Molecular neuroscience; Neurodegenerative disorders; Neurodevelopmental basis of cognitive, mental and neurological disorders; Sleep

Satellite events

- Presentation of the Centre of Excellence for Basic, School of Medicine University of Zagreb, Clinical and Translational Neuroscience, CoreNeuro (Miloš Judaš and collaborators)
- Students in Neuroscience (Student section for neuroscience)

POSTER SESSIONS

Posters will be displayed during two on-line Poster sessions on Saturday, 25th September 2021 according to a schedule announced at the congress web-site. Presence of presenting authors is mandatory during specified scheduled poster session. Presenting authors of posters will be obliged to present the main findings of their work in 3 minutes talk/on-line presentation, according to a schedule.

Poster session I. will be held on-line from 9.30 to 12.00 and will cover following topics: Basic neuroscience, Molecular neuroscience, Cognitive neuroscience, Neurodevelopmental basis of cognitive, mental and neurological disorders, and Sleep. Poster session II. will take place from 12.15 to 14.30 and will present topics related to: Clinical neuroscience, Hypoxic-ischemic damage, and Neurodegenerative disorders.

PROGRAMME

Friday, 24th September 2021

- Welcome and opening remarks by President of the Croatian Society for Neuroscience - **Marijan Klarica**
- Welcome video-message from Secretary General of the Federation of European Neuroscience Societies - **Dóra Reglődy**

PRESIDENTIAL LECTURE

Introductory words - Marijan Klarica and Miloš Judaš (Chairs)

Ivica Kostović: Subplate compartment - main playground for construction and functions of the human fetal cortex

PRESIDENTIAL SYMPOSIUM

“CURRENT TRENDS IN NEUROSCIENCE”

Introductory words - Marijan Klarica and Miloš Judaš (Chairs)

Dean Nižetić: Dissecting pathogenic and protective mechanisms for Alzheimer's disease using human cerebral organoid models

Stephan Schwarzacher: Synaptic plasticity in postnatal and adult hippocampal neurogenesis

Lana Vasung: Kinematic study of *in utero* fetal movements

Dimitri Krainc: The interplay of mitochondrial and lysosomal dysfunction in Parkinson's disease

SYMPOSIUM “NEUROINFLAMMATION AND COVID-19”

Introductory words – Zoran Đogaš and Maja Valić (Chairs)

Marija Santini: COVID-19 and encephalitis

Milan Radoš: The Spectrum of Neuroimaging Findings on MRI in patients with COVID-19.

Ilija Brzić: Mechanisms of neuroinflammation and pathology induced by virus infection

Mario Habek: *To be announced*

THEMATIC SYMPOSIA

I. SLEEP AND SLEEP RESEARCH DURING THE COVID-19 PANDEMIC

Introductory words - Zoran Đogaš and Renata Pecotić (Chairs)

Zoran Đogaš: Sleep and sleep research update in the COVID-19 pandemic

Rozi Andretić Waldowski: Back to the basics - learning how redox modulation regulates sleep and addiction using animal model

Ivana Rosenzweig: Effects of lockdown during the COVID-19 pandemic on sleep and mental health

Ivana Dodig Pavlinac: Sleep and lifestyle habits during the COVID-19 pandemics in Croatia

II. BRAIN LIPIDOMICS

Introductory words – Marija Heffer and Svjetlana Kalanj Bognar

(Chairs)

Marija Heffer - Lipidomic analysis of demyelination associated with complex ganglioside deficiency

Željka Korade - Disruption of brain sterol biosynthesis by commonly used prescription medications

Karoly Mirnics - Interaction of genetics, pregnancy and medications on the developing brain

Kristina Mlinac Jerković - Gangliosides framework for optimal function of plasma membrane ion transporters

III. ALZHEIMER'S DISEASE

Introductory words – Goran Šimić (Chair)

Maja Jazvinščak Jembrek - Pro-oxidative effects of flavonols in copper-induced oxidative stress

Petra Kalember - The role of proton magnetic resonance spectroscopy in diagnostics and investigating the disease course and treatment response in Alzheimer's disease

Mirjana Babić Leko - *APOE* genotype and essential metals in Alzheimer's disease

Jelena Osmanović-Barilar - Different effects of acute central inhibition of the GLP-1 and glucose-dependent insulinotropic peptide receptors in rat model of sporadic Alzheimer's disease

Tena Sučić Radovanović – The role of arterial spin labeling magnetic resonance technique in diagnostics of Alzheimer's disease: our initial findings

Dubravka Švob Štrac – Dehydroepiandrosterone and brain-derived neurotrophic factor: potential therapeutic targets in Alzheimer's disease

IV. PRECLINICAL MODELS OF NEUROLOGICAL DISEASES

Introductory words – Srećko Gajović (Chair)

Dinko Mitrečić - Application of stem cells in brain diseases: focus on mitochondria and cell death

Miranda Mladinić Pejatović - Opossum *Monodelphis domestica* in research of neuroregeneration and neurodegeneration

Marta Balog - Rat model of chronic stress: connection to neurodegeneration

Marina Dobrivojević Radmilović - Retinal ischemia in rodent stroke models

Damir Sapunar - What can rats tell us about neuropathic pain?

Srećko Gajović - Repairing mouse brain after stroke

Saturday, 25th September 2021

9.30 -12.00	POSTERS AND DISCUSSIONS I
12.15-14.30	POSTERS AND DISCUSSIONS II
14.30-15.00	Presentation of Centre of Excellence for Basic, Clinical and Translational Neuroscience, School of Medicine University of Zagreb Miloš Judaš and collaborators
15.00-15.45	Students in neuroscience Student section for neuroscience
16.00	Conference closing remarks and announcement of the Best poster award

PROGRAMME AT GLANCE

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Friday, 24 th September 2021		Saturday, 25 th September 2021	
10:00	OPENING REMARKS BY MARIJAN KLARICA & MESSAGE FROM FENS BY DÓRA REGLODY	9:30	POSTERS AND DISCUSSIONS I
10:15	PRESIDENTIAL LECTURE BY IVICA KOSTOVIĆ	12:15	POSTERS AND DISCUSSIONS II
11:00	PRESIDENTIAL SYMPOSIUM "CURRENT TRENDS IN NEUROSCIENCE"	14:30	PRESENTATION OF CENTRE OF EXCELLENCE FOR BASIC, CLINICAL AND TRANSLATIONAL NEUROSCIENCE
13:15	SYMPOSIUM "NEUROINFLAMMATION AND COVID-19"		
16:00	THEMATIC SYMPOSIA I) SLEEP AND SLEEP RESEARCH DURING THE COVID-19 PANDEMIC II) BRAIN LIPIDOMICS	15:00	STUDENTS IN NEUROSCIENCE
18:00	THEMATIC SYMPOSIA III) ALZHEIMER'S DISEASE IV) PRECLINICAL MODELS OF NEUROLOGICAL DISEASES	16:00	CLOSING REMARKS, AWARD CEREMONY