



2nd International Conference on Neuroscience, Neuroinformatics, Neurotechnology and Neuro- Psycho- Pharmacology



November 18-20, 2021

Bucharest, Romania

2ND INTERNATIONAL CONFERENCE ON NEUROSCIENCE, NEUROINFORMATICS, NEUROTECHNOLOGY AND NEURO- PSYCHO-PHARMACOLOGY

We kindly invite you to participate in the

*2nd International Conference on
Neuroscience, Neuroinformatics, Neurotechnology and
Neuro-Psycho-Pharmacology*

*organized by the Romanian Academy - Romanian Center for
Brain Research, Romanian Society of Neurology, the
Foundation of the Romanian Society of Neurology, the National
Neuroscience Society of Romania and the Romanian Society for
Automation and Technical Informatics.*

*The aim of the conference is to bring together experts from
various areas of brain science, neuroscience, clinical neurology,
psychology, pharmacology with engineers in systems science,
neuroinformatics, computer science and technology in order to
debate aspects of the brain and mind, to identify efficient
theories, models and tools that will contribute to a better
understanding of the brain and its functioning. The conference
will be organized in Bucharest on 18-20 November 2021.*

*Due to the epidemiological context, the Conference will be
organized in a hybrid format, both physical and virtual*

*The opening ceremony and the invited papers will be presented
in the "Heliade Radulescu" Hall, Romanian Academy Library.*

ORGANIZERS



Romanian Academy - Center for Brain Research

Foundation of the Romanian Society of Neurology (FSNR)

Romanian Society for Automation and Technical Informatics (SRAIT)

National Neuroscience Society of Romania (NNSR)

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Ioan Sacala, SRAIT, University "Politehnica" of Bucharest, Romania

Octavian Arsene, RSAIT, Romania

KEYNOTE SPEAKERS

Jean-Jacques Askenasy

On the quantic activity of the brain

Victor Voicu

*Neuro-invasion SARS-Cov-2 virus:
symptomatology, penetration routes and pathogenic mechanisms*

Mircea Dumitru

Unlocking the Mind, Deciphering the Consciousness

Daniel David

Clinical cognitive neurosciences: New frontiers

Stuart Hameroff

Consciousness and quantum brain biology

CONFERENCE PROGRAM

Day 1

Thursday - November, the 18th

Location:

Romanian Academy Library - "Heliade Rădulescu" Hall

09:00 – 09:30 **Opening ceremony**

09:30– 13:00 Plenary papers

13:00 – 14:00 Lunch Break

14:00 – 16:15 **Session 1**

16:15 – 16:30 Coffee Break

16:30 – 18:15 **Session 2**

Day 2

Friday - November, the 19th

Location:

Romanian Academy Library - "Heliade Rădulescu" Hall

09:00 – 10:45 **Session 3**

10:45 – 11:00 Coffee break

11:00 – 13:00 **Session 4**

13:00 – 14:00 Lunch Break

14:00 – 16:00 **Session 5**

16:15 – 16:30 Coffee Break

16:30 – 18:30 **Session 6**

19:00 – 19:30 **Conference Closing**

Plenary Paper Session

Day 1 - Thursday - November, the 18th

Chairs:

Ioan Dumitrache, Simona Caramihai

Jean-Jacques Askenasy **On the quantic activity of the brain**

Victor Voicu **Neuro-invasion SARS-Cov-2 virus: symptomatology, penetration routes and pathogenic mechanisms**

Mircea Dumitru **Unlocking the Mind, Deciphering the Consciousness**

Daniel David **Clinical cognitive neurosciences: New frontiers.**

Regular Sessions

Session 1

Session Chairs

*Maria Luisa **Flonta**, Beatrice Mihaela **Radu***

Day 1 - Thursday - November, the 18th

14:00	Roberta Stoica, Mihai Radu and Beatrice Mihaela Radu: Low-energy accelerated protons induce cytotoxic, genotoxic and functional changes of an in vitro Blood- Brain Barrier Model
14:20	Viorel Ovidiu Ciobotaru, Călin Mircea Rusu and Beatrice Mihaela Radu: A novel approach to automatic detection of individual cells from confocal microscopy images: A pilot study on endothelial cells from brain microvasculature
15:40	Cristina Elena Staicu, Florin Jipa, Anca Bonciu, Călin Mircea Rusu, Emanuel Axente, Beatrice Mihaela Radu and Felix Sima: Investigation of new polymeric materials and photosensitive glasses for blood-brain barrier applications
15:00	Florin Zamfirache and Beatrice Mihaela Radu: Low intensity transcranial electrical stimulation (tDCS) in combination with other therapeutic approaches in experimental and clinical depression
15:20	Cătălina Lumpan, Beatrice Mihaela Radu, Carmen Strungaru and Livia Petrescu: Morphometric discriminants for rapid differentiation of emotions
15:40	Andrei C. Miu, Ștefania Crișan, Simina Pițur, Alexandra Huh, Marius Susu, Róbert Balázsi, Gal Sheppes, Seth D. Pollak, Aurora Szentágotai-Tătar : Neural markers of emotion regulation in childhood maltreatment
16:00	Discussions

Regular Sessions

Session 2

Session Chairs

*Ioan **Dumitache**, Mihnea **Moisescu***

Day 1 - Thursday - November, the 18th

16:30	Ioan Dumitrache, Simona Caramihai, Mihnea Moisescu: A systemic view of the human brain
16:50	Mihaela Malița, Marius Stoian and Gheorghe Ștefan: Can the mind-trueRNG-computer loop be a form of ortho-computing ?
17:10	Ștefan Trăușan-Matu: Natural Language Processing with Deep Neural Networks; A Dialogical Hermeneutic Perspective
17:30	Maria-Alexandra Păun, Vladimir-Alexandru Păun and Viorel-Puiu Păun: Image Processing in Serious Brain Disease by Clustering Algorithms
17:50	Mihai Moldovan: The oscillatory macrostate concept and its applications
18:10	Discussions

Regular Sessions

Session 3

Session Chairs

Dafin Mureşanu, Bogdan Popescu

Day 2 - Friday - November, the 19th

9:00

David Good : **What will stroke rehabilitation be like in 2030?**

9:20

Bogdan Popescu : **Biomarkers for neurodegeneration - a continuous challenge for new intervention targets**

9:40

Kenneth Baker : **Cerebellar DBS to Promote Upper Extremity Motor Function in Chronic Stroke - Phase I Trial**

10:00

Wolfgang Grisold : **Paraneoplastic neuropathies**

10:20

Discussions

Regular Sessions

Session 4

Session Chairs

Dafin Muresanu, Bogdan Popescu

Day 2 - Friday - November, the 19th

11:00	Claudio Bassetti : Sleep and brain health
11:20	Dafin Mureșanu: Monomodal versus multimodal drugs in brain recovery
11:40	Volker Homberg: Ways to enable impairment oriented rehab after stroke
12:00	Natan Bornstein: Novel and non-invasive brain-computer interface-based stimulation device using frequency tuned electromagnetic fields to significantly reduce disability following sub-acute ischemic stroke: A BrainQ technology-pilot randomized controlled trial
12:20	Discussions

Regular Sessions

Session 5

Session Chairs

Alexandru **Babeş**, Violeta **Ristoiu**

Day 2 - Friday - November, the 19th

14:00	Roxana-Olimpia Gheorghe, Andreea Violeta Grosu, Mihail-Sebastian Ghenghea, Melania Bica-Popi and Violeta Ristoiu: Harvesting the analgesic and regenerative potential of macrophages from peripheral nervous system.
14:20	Alexandra Manolache, Alexandra Bănică, Teodora Stratulat, Cosmin Trif, Debora Huţanu, Dan Domocoş, George Opriţă, Tudor Şelescu, Alexandru Babeş and Sorin Tunaru: Effects of the prostacyclin receptor on TRPM8 activation
15:40	Melania Bica-Popi and Violeta Ristoiu: Efficient delivery of small interfering RNA in HMC3 human microglia using Magnetofection
15:00	Andreea Grosu, Alexandru Florian Deftu, Marie Pertin, Guylène Kirschmann and Violeta Ristoiu: Activation of dorsal root ganglia's macrophages and spinal microglia is spatially correlated after Spared Nerve Injury model
15:20	Diana Rotaru, Georg Oeltzschner, Richard Edden and David Lythgoe: Advancements in human brain MR spectroscopy: the simultaneous assessment of inhibitory neurotransmitter GABA and antioxidant GSH
15:40	Roxana-Olimpia Gheorghe, Andy-Gabriel Buga, Izabela Cristina Stancu, Elena Olaret and Violeta Ristoiu: Assessing the peripheral nerve regeneration through autotomy parameters development
16:00	Discussions

Regular Sessions

Session 6

Session Chairs

Leon Zăgorean, Bogdan Pavel

Day 2 - Friday - November, the 19th

16:30	Bogdan Pavel, Patricia Popovici, Diana Ilie, Madalina Gherghe, Diana Georgiana Rotaru, Denise Zahiu, Daniela Popa, Ana-Maria Zăgorean and Leon Zăgorean: Clastrum Within Neural Mechanisms of Anesthesia
16:45	Mihail-Sebastian Ghenghea, Florian-Vintilă Armășescu, Roxana-Olimpia Gheorghe, Izabela Stancu, Elena Olaret, Marieta Costache and Violeta Ristoiu: Using Python as a tool to analyze electrical activity of dorsal root ganglia neurons in a model of peripheral nerve regeneration
17:00	Sumit Raman Kumar, Tyger Lin and Tudor Constantin Badea: Physiological Changes in Retinal Ganglion Cells Lacking the Transcription Factor Brn3b/Pou4f2
17:15	Dan Domocoș, Tudor Șelescu, Laura Cristina Ceafalan, Mirela Iodi Carstens, Earl Carstens and Alexandru Babeș: Serotonergic 5-HT1A and 5-HT3 receptors are involved in the activation of rat primary sensory neurons by serotonin
17:30	Alexandra Manolache, Angelika Lampert and Alexandru Babeș: Voltage-gated sodium channels as molecular targets for pain signaling in acute neurovisceral porphyria
17:45	Adrian Sorin Mihalache, Leon Zăgorean: Free Will - an Approach from the Perspective of Neuroscience
18:00	Aurel Popa-Wagner: Genetic conversion of proliferative astroglia into neurons after cerebral ischemia: a new therapeutic tool for the aged brain?
18:15	Stuart Hameroff - Consciousness and quantum brain biology
18:45	Discussions

Conference Venue

The conference attendance will be organized in the
“Heliade Rădulescu” hall of the Romanian Academy Library
Romanian Academy - Calea Victoriei 125, Bucharest, Romania



