



ION CHANNELS TRIMMING THE BRAIN

September 24-26, Kiev, Ukraine

Bogomoletz Institute of Physiology
4 Bogomoletz St., Kiev, Ukraine

PROGRAM

1 day, Thursday, September 24, Conference Hall

13:30 – 15:00 – Registration

15:00 – 15:30 – Opening Ceremony. Oleg Krishtal

15.30 – 16.00 – Nana Voitenko. Oleg Krishtal and ion channels

16.00 – 17.00 – Greetings

17:00 – Welcome Party

2 day, Friday, September 25, Conference Hall

Chair – Alexej Verkhratsky

10:00 – 10:30 – Sierd Cloetingh (*President of Academia Europaea*) - Challenges and opportunities for Science in Europe: perspectives from Academia Europaea and the European Research Council

10:30 – 11:00 – Jerzy Duszyński (*President of the Polish Academy of Sciences*) - Recent challenges and opportunities for the Polish Academy of Sciences

11:00 – 11:30 – Eva Kondorosi (*Chair of the Working Group on Widening European Participation of the European Research Council and member of the European Research Council*) - Towards widening of Pan-European participation in the research opportunities provided by the European Research Council

11:30 - 12:00 – Coffee Break

Chair – Dmitri Rusakov

12:00 – 12:30 – Alexej Verkhratsky (*Manchester University, Manchester, UK*) - Principles of Neurogliopathology

12:30 – 13:00 – Ole Peterson (*Cardiff University, Cardiff, Wales, UK*) - 35 years of giga-seal patch clamp current recording in non-neuronal cells

13:00 – 13:30 – Alexey Boyarsky (*EPFL, Lausanne, Switzerland*) - ScienceWISE - collaborative semantic environment for science

13:30 – 14:30 – Lunch, Seminar on High-throughput computing in biological research.

Chair - Martha Nowycky

14:30 – 15:00 – Dmitri Rusakov (*University College London, London, UK*) - Nanomolar Ca²⁺ landscapes in neurons and glia unveiled with time-resolved fluorescence microscopy

- 15:00 – 15:30 – Shyam S. Chatterjee**(*Institute of Medical Engineering and Biophysics, Research Centre Karlsruhe, Karlsruhe, Germany*) - From covalent bonds to phyto-pharmacology via ion channels for trimming the brain
- 15:30 – 16:00 – Evgeni Ponimaskin**(*Hannover Medical School, Hannover, Germany*) - Functional interplay between 5-HT₇ receptor, MMP-9, and CD44 in the regulation of neuronal plasticity
- 16:00 - 16:30 – Coffee Break**
- Chair - Aleksandr Zholos**
- 16:30 – 17:00 –Georgy Bakalkin**(*Uppsala University, Uppsala, Sweden*) - Endogenous Opioid System in Spinal Cord Plasticity
- 17:00 – 17:30 –Boris Safronov**(*Institute for Molecular and Cell Biology, Porto, Portugal*) - Nociceptive processing in the superficial dorsal horn
- 17.30 – 18.00 - Martha Nowycky**(*New Jersey Medical School, New Jersey, USA*)TRPC4/5 channels in neurons
- 18.00 – 18.30 - Emilio Carbone**(*University of Torino, Torino, Italy*) – Cav1.3, BK and SK channels as regulators of neuron-like firing in neurosecretory cells
- 19.00 – 22.00 –Dinner (by invitation)**

3 day, Saturday, September 26. Conference Hall.

Chair - Emilio Carbone

- 10:00 – 10:30 – Aleksandr Zholos** (*Taras Shevchenko Kyev National University, Kyev, Ukraine*) - TRP channels in health and disease: their pharmacology, biophysics and species differences
- 10:30 – 11:00 – Jacek Kuznicki**(*International Institute of Molecular and Cell Biology, Warsaw, Poland*) - SOCE in neurons in health and disease
- 11:00 – 11:30 – Aleksandr Petrenko**(*Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry, Moscow, RF*)- Receptors for hydroxyl
- 11:30 - 11:45 – Coffee Break
- Chair –Nana Voitenko**
- 11:45 – 11:50 – Platon Kostyuk Award 2015 Ceremony and young scientists' session.**
- 11:50 – 12:00 –Talk of the Kostyuk Awardee**
- 12:00 – 12:10 –Volodymir Krotov**(*Bogomoletz Institute of Physiology, Kiev, Ukraine*) - Pain-induced changes in synaptic drive and postsynaptic AMPARs in dorsal horn neurons.
- 12:10–12:20 - Elena Isaeva**(*Bogomoletz Institute of Physiology. Kiev, Ukraine*) – Contribution of PAR1 in epileptogenesis
- 12:20 – 12:30 – Volodymyr Cherkas** (*Bogomoletz Institute of Physiology, Kiev, Ukraine*)– Hippocalcin signaling in hippocampal neurons
- 12:30 – 12:40 – Oleksii Grygogov** (*Bogomoletz Institute of Physiology, Kiev, Ukraine*) – Role of K⁺ channels in firing hippocampal neurons
- 12:40 – 12:50 –Oleksandr Maximyuk** (*Bogomoletz Institute of Physiology, Kiev, Ukraine*) – Novel antagonist of ASIC channels
- 13:00 – 20:00 – Boat Trip on Dnipro River including guided tour to Mezhygirja**(by invitation)