Baltic Biophysics Conference

4th- 5th October 2018

Conference program:

Day 1 October 4, Small Conference hall (2nd floor), Vytautas Magnus University, Daukanto st. 28, Kaunas

13:00 – 14:00 Arrival and registration

14:00 – 14:15 Welcome address and introduction

Chairs: ***Saulius Šatkauskas, Daumantas Matulis***

14:15 – 15:00 Opening plenary lecture. **Anthony Watts** (University of Oxford, Oxford, UK).
Peering into ligand binding sites of membrane bound targets: novel dynamics are functional determinants

15:00 – 15:20 **Franz-Josef Meyer-Almes** (University of Applied Sciences, Darmstadt, Germany)
Why does drug-target binding kinetics matter?

15:20 – 15:40 **Daumantas Matulis** (Vilnius University, Vilnius, Lithuania)
CA protein-ligand binding - Gibbs energies, enthalpies, entropies, and crystallographic structures for drug design

15:40 – 16:00 **Mindaugas S. Venslauskas** (Vytautas Magnus University, Kaunas, Lithuania)
Fields, driving forces, cell poration and bioactive molecules delivery. A biophysical approach

16:00 – 16:20 Coffee break

Chairs: ***Vytenis Arvydas Skeberdis, Janis Spigulis***

16:20 – 16:50 Invited lecture. **Gražvydas Lukinavičius** (Max Planck Institute for Biophysical Chemistry, Göttingen, Germany)
Biocompatible Probes for Imaging of Cellular Structures

16:50 – 17:10 **Krzysztof Bryl** (Department of Physics and Biophysics, Univwersity of Warmia and Mazury, Olsztyn, Poland)
Can Purple membranes of Halobacterium Salinarum function as biosensors?

17:10 – 17:30 **Rima Budvytytė** (Vilnius University, Vilnius, Lithuania)
Interaction of tethered bilayer membranes with beta-amyloid and s100a9 aggregates

17:30 – 17:40 **Marijonas Tutkus** (State Research Institute Center for Physical Sciences and Technology, Vilnius, Lithuania)
Nanoscale platform for DNA - protein interaction studies at the single-molecule level

17:40 – 19:20 Lithuanian Biophysical society member's meeting

19.30 Welcome reception and Social meeting.

Day 2 October 5, Small Conference hall (2nd floor), Vytautas Magnus University, Daukanto st. 28, Kaunas

*Chair **Aidas Alaburda***
9:00 – 9:30 Plenary lecture. **Jorn Hounsgaard** (Department of Neuroscience, University of Copenhagen, Copenhagen, Denmark)
Making sense of Motoneurons

09:30 – 09:50 **Armuntas Baginskas** (Lithuanian University of Health Sciences, Kaunas, Lithuania)
Muscarinic delayed inhibition of the recurrent excitation of the frog tectum column

09:50 – 10:10 **Rapolas Žilionis** (Vilnius University, Vilnius, Lithuania)
Revisiting the composition of airway epithelium by single cell RNA sequencing

10:10 – 10:30 **Visvaldas Kairys** (Vilnius University, Vilnius, Lithuania)
Analysis of the putative ligand binding to CARF domain of Csx1 protein using molecular docking and Molecular Dynamics simulations

10:30 – 10:50 **Vytenis Arvydas Skeberdis** (Lithuanian University of Health Sciences, Kaunas, Lithuania)
Putative mechanism of Cx36 gap junction channel potentiation by short carbon chain alcohols

10:50 – 11:00 **Lukas Gudaitis** (Lithuanian University of Health Sciences, Kaunas, Lithuania)
Influence of N-terminus amino acids on sensitivity of connexin-36 gap junctions to voltage gating

11:00 – 11:20 Coffee break

*Chairs: **Artūras Žiemys, Gražvydas Lukinavičius***
11:20 – 11:50 Plenary lecture. **Donatas Zigmantas** (Chemical Physics, Lund University, Lund, Sweeden)
Light-harvesting processes in photosynthetic bacteria

11:50 – 12:10 **Janis Spigulis** (University of Latvia, Riga, Latvia)
In-vivo skin imaging techniques

12:10 – 12:30 **Julita Kulbacka** (Department of Molecular and Cellular Biology, Wroclaw Medical University, Wroclaw, Poland)
Enhancement methods in photodynamic therapy in vitro

12:30 – 12:50 **Vida Mildažienė** (Vytautas Magnus University, Kaunas, Lithuania)
Pre-sowing treatment with cold plasma efficiently breakes seed dormancy

12:50 – 13:00 **Tomas Drevinskas** (Vytautas Magnus University, Kaunas, Lithuania)
Instrumentation and Computations in Bio and Related Analytics

13:00 – 14:00 Lunch

14:00 – 15:00 Poster Session and companies' exhibition