



**XIIIth International
Conference of Lithuanian
Biochemical Society**

„50th anniversary of FEBS“

June 18-20, 2014

**Symposium
„Young biochemistry“**

June 17th, 2014
Birštonas, Lithuania

XIIIth International Conference of Lithuanian Biochemical Society

June 18 -20, 2014/Culture Centre of Birštonas (Jaunimo str. 4, Birštonas)

Symposium “Young biochemistry”

June 17, 2014/youth resort “Nemuno Vingis” (Turistų str. 18, Birštonas)

PROGRAM

17 JUNE

Youth Resort “Nemuno Vingis” (Turistų str. 18, Birštonas)

11.00	Ship departure from main Birštonas to resort “Nemuno Vingis” <i>You may also go to resort “Nemuno Vingis” directly.</i>
From 11.00	Arrival, registration [conference building], coffee and networking [catering area]
12.00-12.15	Opening of the Symposium [conference hall] Session 1 [conference hall] Chair: Indrė Dalgėdienė <i>Those, who have their presentations during session 1 are kindly requested to check them before 11.45 at the conference hall.</i>
12.15-12.30	Silvija Jankevičiūtė (Lithuanian University of Health Sciences), “MK-801 protective effect against A β 1-42 oligomer-induced neuronal death”
12.30-12.45	Dovilė Dekaminavičiūtė (Vilnius University, Institute of Biotechnology), “Novel inhibitory monoclonal antibodies against tumour-associated carbonic anhydrase XII”
12.45-13.00	Milda Zilnytė (Vilnius University, Institute of Biotechnology), “Vaginolysin from Gardnerella vaginalis: a candidate for a new group of cholesterol-dependent cytolysins”
13.00-13.15	Martynas Simanavičius (Vilnius University, Institute of Biotechnology), “Development and Characterization of Monoclonal Antibodies against Human Parvovirus 4 Major Capsid Protein VP2”
13.15-13.30	Vilija Rubinaitė (Vilnius University, Institute of Biotechnology), “Analysis of atopy-associated genetic markers in the Lithuanian birth cohort”
13.30-14.30	Lunch [catering area] Session 2 [conference hall] Chair: Dalius Kučiauskas <i>Those, who have their presentations during session 2 are kindly requested to check them before 14.15 at the conference hall.</i>
14.30-14.45	Indrė Dalgėdienė (Vilnius University, Institute of Biotechnology), “The immunogenicity of amyloid beta oligomers and their role in macrophage mediated inflammation”
14.45-15.00	Mantas Riauka (Vytautas Magnus University), “The Comparative Analysis of Multidrug Resistance Pumps in Jurkat and MX1 Cells”
15.00-15.15	Eglė Kukcinavičiūtė (Vilnius University), “Characterization of A 5-fluorouracil-resistant Human Colon Cancer Cell Line”
15.15-15.30	Raimonda Kubiliūtė (Vytautas Magnus university), „Influence of lipophilic agents on the formation of multidrug resistance in cell cultures“
15.30-15.45	Kastytis Šidlauskas (Lithuanian University of Health Sciences), “IDH1 mutation promotes migration and invasion and acts synergistically with p53 and PTEN loss murine tumour cells”
15.45-16.00	Vaida Simanavičienė (Vilnius University, Institute of Biotechnology), “Studies on the prevalence of oncogenic HPV types among Lithuanian women with cervical pathology”

16.00-16.15	Agata Mlynska (Vilnius university), "Potential immunosuppression, drug resistance and stemness biomarkers for ovarian cancer"
16.15-16.30	Edita Bakūnaitė (Vilnius University, Institute of Biotechnology), "Heat shock at the late-log growth phase improves protein translocation and invertase secretion in <i>Saccharomyces cerevisiae</i> "
16.30-16.45	Milda Šulcienė (Vilnius University, Institute of Biotechnology), " Immobilization of Enzymes on Silica Nanoparticles"
16.45-17.00	Coffee break [catering area]
	Session 3 [conference hall] Chair: Paulius Toliušis <i>Those, who have their presentations during session 3 are kindly requested to check them before 16.45 at the conference hall.</i>
17.00-17.15	Simona Baranauskė (Vilnius University, Institute of Biotechnology), "Mapping the functional domains of plant small RNA methyltransferase HEN1"
17.15-17.30	Janina Ličytė (Vilnius university, Institute of biotechnology), "Archaeal protein aFib and Nop5p heterodimer methylates 16S rRNA site-specifically, independently of C/D guide RNA"
17.30-17.45	Inga Songailienė (Vilnius University, Institute of Biotechnology), "Cascade complex – identifying the clue to PAM recognition"
17.45-18.00	Miglė Kazlauskienė (Vilnius University, Institute of Biotechnology), "Characterization of <i>Streptococcus thermophilus</i> Csm complex mediated CRISPR interference in vitro"
18.00-18.15	Justas Dapkūnas (Vilnius University), "The PPI3D web server for searching, analysing and modelling protein-protein interactions in the context of 3D structures"
18.15-18.30	Vesta Aleknavičiūtė (Vytautas Magnus university), "Response of perennial plants to seed treatment by low temperature plasma and electromagnetic field: reactive oxygen species are involved in changes of seed germination and early plant development"
18.30-18.45	Dainius Tautvaišas (The University of Edinburgh), "The University of Edinburgh iGEM 2013 Project: Remediation and Valorisation of Industrial Waste"
18.45-19.30	Free time
19.30-22.00	Symposium dinner, cultural program [resort "Nemuno Vingis"]
22.15	Ship departure from resort "Nemuno Vingis"

JUNE 18

Culture Centre of Birštonas (Jaunimo str. 4, Birštonas)

08.30	Ship departure from youth resort "Nemuno Vingis" to main Birštonas
From 9.00	Registration [reception hall] <i>Not necessary for those who have registered during the Symposium.</i>
10.00-10.10	Opening of the conference [main conference hall] Chair: Rimantas Daugelavičius
10.10-10.50	Opening lecture [main conference hall]

	Virginijus Šikšnys (Institute of Biotechnology, Vilnius University, (IBT VU), “CRISPR-Cas craze: from antiviral defense system to novel genome editing tools”
	Plenary lectures [main conference hall]
10.50-11.20	Vilmantė Borutaitė (Lithuanian University of Health Sciences, Kaunas, (LUHS)), “Pathophysiological aspects of antibody-induced neuronal death”
11.20-11.50	Peep Palumaa (Tallinn University of Technology), “Structure and functioning of copper chaperones”
11.50-12.10	Coffee break, poster session [welcome hall]
	Biotechnology [main conference hall] Chair: Saulius Klimašauskas
12.10-12.30	Alma Gedvilaitė (IBT VU, Vilnius), “Application possibilities of yeast-expressed virus-like particles derived from polyomaviruses”
12.30-12.50	Nomeda Kuisienė (Faculty of Natural Sciences, Vilnius University, (VU), “Biotechnologically relevant prokaryotes: search and identification using molecular techniques”
12.50-13.10	Vytautas Švedas (Lomonosov Moscow State University), “Knowledge-based design of enzyme functional properties”
13.10-13.30	Giedrius Sasnauskas (IBT VU), “Novel mechanisms of site-specific endonucleases”
13.30-13.50	Lolita Zaliauskienė (ThermoFisher Scientific Baltic, Vilnius), “CRISPR/Cas9 system application for mammalian genome editing”
13.50-15.00	Lunch [welcome hall]
	Plenary lectures [main conference hall] Chair: Peep Palumaa
15.00-15.30	Daumantas Matulis (IBT VU, Vilnius), „Biothermodynamics for Target Oriented Anticancer Drug Discovery“
15.30-16.00	Aurelija Žvirblienė (IBT VU, Vilnius), “Immunogenic properties of recombinant virus-like particles”
	Biochemistry of Prokaryotes [main conference hall]
16.00-16.20	Milda Plečkaitytė (IBT VU, Vilnius), “Is Gardnerella vaginalis the pathogen responsible for the initiation of bacterial vaginosis?”
16.20-16.40	Česlovas Venclovas (IBT VU, Vilnius), “Bacterial replicative DNA polymerases: new insights into structure, evolution and function”
16.40-17.00	Coffee break, poster session [reception hall]
	Biochemistry of Prokaryotes [main conference hall] Chair: Renate Ranka
17.00-17.20	Milda Jurėnaitė (VU, Vilnius), “Toxin antitoxin systems in bacterial pathogens: battle ready weapons”
17.20-17.40	Jaunius Urbonavičius (Institute of Biochemistry, Vilnius University, (IBCh VU), “Deciphering the complex biosynthetic pathway of wyosine derivatives in tRNA-Phe of archaea”
17.40-18.00	Inga Matijošytė (IBT VU, Vilnius), “Better Biocatalysis Through Immobilization of Enzymes”
18.00-18.30	Poster session [reception hall]
19.00-22.00	Welcome reception [Kurhauzas, B.Sruogos str.2]
	<i>Atmosphere created by „Jazz miniatures“ program.</i>
22.30	Ship departure from main Birštonas to youth resort “Nemuno Vingis”

19 JUNE

Culture Centre of Birštonas (Jaunimo str.4, Birštonas)

08.00	Ship departure from "Nemuno Vingis" to main Birštonas
From 08.00	Registration [reception hall] <i>Not necessary for those who have registered on 17/18 June.</i>
	Plenary lectures [main conference hall] Chair: Virginijus Šikšnys
09.00-09.30	Saulius Klimašauskas (IBT VU), "Catalytic plasticity of DNA methyltransferases"
09.30-10.00	Renate Ranka (Latvian Biomedical research and Study center, Riga), "Exploring the role of <i>B. burgdorferi</i> outer-surface proteins involved in host-pathogen interaction"
	Emerging techniques and new methods in biochemistry [main conference hall]
10.00-10.20	Regina Mačianskienė ((LUHS, Kaunas), "Optical mapping and transmural microelectrode recordings for investigation of propagation and arrhythmogenesis in the heart"
10.20-10.40	Valdas Laurinavičius (IBCh VU, Vilnius), "Electrochemical monitoring of enzymatic reactions"
10.40-11.00	Arvydas Skeberdis (LUHS, Kaunas), "Electrical and metabolic communication between laryngeal carcinoma cells through tunnelling nanotubes"
11.00-11.30	Coffee break, poster session [reception hall]
	Emerging techniques and new methods in biochemistry [main conference hall] Chair: Daumantas Matulis
11.30-11.50	Peter Lindqvist (EMEA Academic Research, Sigma-Aldrich), "Targeted Genome Editing using CompoZr ZFN and CRISPR Technology"
11.50-12.10	Marika Raitio (Linea Libera, Thermo Fisher), "Multimode reader as a tool for protein analysis"
12.10-12.30	Saulius Šumanas (University of Cincinnati), "How to make a blood vessel: insight from zebrafish"
12.30-12.50	Gintaras Valinčius (IBCh VU, Vilnius), "Surface-immobilized phospholipid bilayers for studies of protein interactions with membranes"
12.50-13.10	Gražvydas Lukinavičius (EPFL, Lausanne), "Silicon-rhodamine - a far-red fluorophore for cellular structures imaging"
13.10-13.30	Poster session [reception hall]
13.30-14.30	Lunch [reception hall]
	Plenary lectures [main conference hall] Chair: Vilmantė Borutaitė
14.30-15.00	Nina Kanunnikova (Grodno State University, Grodno, Belarus), "Correction of Brain Ischemic and Reperfusion Injuries by Metabolic Substances"
15.00-15.30	Siamon Gordon (University of Oxford), "Macrophage receptors and activation of the immune system"

	Cancer cell biology [main conference hall]
15.30-15.50	Sergio Bordel-Velasco (ThermoFisher Scientific Baltic, Vilnius), "Transcriptomics, lipidomics and fluxomics, reveal unexpected relations between cancer and lipids metabolism"
15.50-16.10	Sonata Jarmalaitė (VU, Vilnius), "Epigenetic and Genetic Profile of Stemness and Cancer"
16.10-16.30	Kęstutis Sužiedėlis (Institute of Oncology, Vilnius University), "Molecular radiobiology for the strategies of more efficient anticancer radiotherapy: aims and challenges"
16.30-16.50	Rytis Prekeris (University of Colorado, Denver), "How to make invadopodia: the role of polarized protein transport during cancer cell metastasis"
16.50-17.10	Coffee break, poster session [reception hall]
17.10-19.30	Meeting of Lithuanian Biochemical Society [main conference hall] <i>For members of Lithuanian Biochemical Society</i>
17.30-19.00	Guided tour in Birštonas City [gather in front of the entrance of the Culture Centre of Birštonas] <i>Please register by email ausrine@viaconventus.com or at the registration desk till 19 June 1 pm.</i>
21.45	Ship departure from main Birštonas to youth resort "Nemuno Vingis"

20 JUNE

Culture centre of Birštonas (Jaunimo str.4, Birštonas)

08.00	Ship departure from "Nemuno Vingis" to main Birštonas
From 08.00	Registration [reception hall] <i>Not necessary for those who have registered on 17/18 June.</i>
	Plenary lectures [main conference hall] Chair: Aurelija Žvirblienė
9.00-9.30	Skirmantas Kriaučionis (University of Oxford), "Towards the role of 5-hydroxymethylcytosine in neuronal DNA"
09.30-10.00	Toivo Maimets (Institute of Molecular and Cell Biology, University of Tartu), "Modulation of cell developmental potency - a tool to tackle tumorigenesis"
	Cell biology/Disease [main conference hall]
10.00-10.20	Vytautas Smirnovas (IBT VU), "Proteinaceous infectivity"
10.20-10.40	Saulius Šatkauskas (Vytautas Magnus university (VMU), Kaunas), „Importance of calcium in semaphoring 3A signaling during DRG axon growth and regeneration"

10.40-11.00	Urtė Neniškytė (EMBL Monterotondo), "Molecular signals in synaptic pruning by microglia"
11.00-11.20	Sonata Trumbeckaitė (LUHS, Kaunas), "Mitochondrial dysfunction in experimental acute pancreatitis"
11.20-12.00	Coffee break, poster session [reception hall]
	Cell biology/Disease [main conference hall] Chair: Toivo Maimets
12.00-12.20	Vytautė Starkuvienė (Universität Heidelberg), "MicroRNA-mediated regulation of membrane trafficking"
12.20-12.40	Rūta Gerasimaitė (University of Lausanne), "Yeast vacuoles as a model system to study polyphosphate metabolism in acidocalcisomes"
12.40-13.00	Darius Balčiūnas (Temple University, Philadelphia), "Conditional gene trap mutants for regeneration studies in zebrafish"
13.00-13.20	Saulius Žuklys (University of Basel), "Stromal guides for T cell development in the Thymus"
13.20-13.40	Ramūnas Valiokas (Center for Physical Sciences & Technology, Vilnius), "Microscaffolds for Cell Arrays and Tissue Models"
13.40-14.00	Vida Mildažienė (VMU, Kaunas), "Reactive oxygen species are involved in changes of seed germination and early plant development induced by physical stressors"
14.00-14.30	General discussion. Closing of the conference [main conference hall]