



FEBS3+ Tallinn

15-17 June 2022

POSTERS

The number before the poster (1-1-16) represents:

1 (number of the poster) - 1 (number of the stand at the poster area) - 16 (poster presented on June 16).

15/17 or 16/17 the poster will be presented on both days (all student posters).

1-1-16 Dr. Nikhil Agrawal (Latvian Institute of Organic Synthesis, Latvia) „ Investigating the early stages of misfolding of amyloid-forming peptide PAP248-286 using molecular dynamics simulations“

2-2-15 Dr. Dominykas Aleknavičius (Nature Research Centre, Lithuania) „Metagenomic analysis of bacterial communities of the edible insect the house cricket“

3-3-16 Dr. Egle Balciunaite (National Cancer Center, Lithuania) “miRNAs as potential biomarkers for lung cancer”

4-4-15 Dr. Ina Balke (Latvian Biomedical Research and Study Centre, Latvia) “Ryegrass mottle virus protease structure and proteolytic properties”

5-5-16 Prof. Rasa Baniene (Lithuanian University of Health Sciences, Lithuania) “The effect of hypoxia/reoxygenation on renal cells mitochondrial function “

6-2-16/17 Elina Berntsson (Tallinn University of Technology, Estonia) „Mercury ion binding to Apolipoprotein E variants ApoE2, ApoE3, and ApoE4: similar binding affinities but different structure induction effects“

7-1-15/17 Shapla Bhattacharya (Latvian Institute of Organic Synthesis, Latvia) „ Enzyme engineering of fructosyl peptide oxidase to widen its active site access tunnel and improve its thermal stability“

8- 7- 16 Jhon Alexander Rodriguez Buitrago (Latvian Institute of Organic synthesis, Latvia) „Molecular and structural bases of the *Plasmodium falciparum* threonyl-tRNA synthetase inhibition“

9-9-16 Dr. Rossella Castagna (Latvian Institute of Organic Synthesis, Latvia) “Photoswitchable ligands as tool to modulate biological activity”

10-3-15/17 Enrika Celitan (Life Sciences Center, Lithuania) “Synthesis and assembly of *Saccharomyces cerevisiae* L-BC virus-like particles”

11-11-16 Ugne Drazdauskiene (Thermo Fisher Scientific Baltics UAB, Lithuania) „Semi-targeted sequencing of fusion transcripts in prostate cancer enabled by oligonucleotide-modified dideoxynucleotides“

12-6-15 Dr. Virginija Dudutienė (Vilnius University, Lithuania) „Ligand augmentation in the active site of carbonic anhydrase leads to the discovery of CAIX-selective inhibitors“

13-8-15 Dr. Erki Enkvist (University of Tartu, Estonia) “Protein induced phosphorescence and its amplification through the energy transfer”

14-13-16 Dr. Hajar Nika Estiri (Latvian Institute of Organic Synthesis, Latvia) „Epileptic seizure suppression by xenograft of engineered human Wharton’s jelly mesenchymal stem cells in kindling model“

15-5-15 /17 Marius Gedgaudas (Vilnius University, Lithuania) “Thermott: tool for protein stability and protein-ligand interaction analysis”

16-10-15 Dr. Renu Geetha Bai (Estonian University of Life Sciences, Estonia) „Production of microalgae for fish feed using flue gas as an input“

17-7-15 /17 Aurimas Greičius (Institute of Biosciences, Lithuania) “Activity and functionality analysis of *Streptomyces* and *Arthrobacter* bacterial cutinases”

18-9-15/17 Henri Ingelman (University of Tartu, Estonia) „Faster growth enhances low carbon fuel and chemical production through gas fermentation“

19-11-15/17 Anatolii Ivankov (Vytautas Magnus University, Lithuania) „Changes in hemp growth and content of cannabinoids after seeds treatment with cold plasma, vacuum, and electromagnetic field“

20-15-16 Silvija Jankeviciute (Lithuanian University of Health Sciences, Lithuania) “The effect of metformin on cultured microglia cells under normoxic and mild-hypoxic conditions”

21-4-16/17 Eva Lea Jääger (University of Tartu, Estonia) „The development of a selenophene- and deazapurine-based photoluminescent probe of protein kinases“

22-13-15/17 Karl Jürgenstein (University of Tartu, Estonia) „Translational fidelity in the absence of Ψ 32 and Ψ 38-40 in the anticodon stem-loop of tRNAs“

23-6-16 /17 Justina Kamarauskaite (Lithuanian University of Health Sciences, Lithuania) “Ischemia/reperfusion and caffeic acid phenethyl ester effect on kidney mitochondria *in vivo*”

24-17-16 Dr. Sergei Kopanchuk (University of Tartu, Estonia) “(Sweet)MultiBac(Mam) library for frizzled receptors studies with fluorescence spectroscopy and microscopy“

25-8-16/17 Ksenija Korotkaja (Latvian Biomedical Research and Study Centre, Latvia) “Quantification of alphaviral vectors using droplet digital PCR”

26-12-15 Dr. Kaia Kukk (Latvian Biomedical Research and Study Centre, Latvia) „Expression of "the blue gene", flavonoid 3', 5'-hydroxylase from *Vaccinium* species in the yeast *Pichia pastoris*“

27-14-15 Dr. Maria Kulp (Tallinn University of Technology, Estonia) „ Quantification of beta-lactam antibiotics in human plasma by HPLC-MS/MS method for therapeutic drug monitoring “

28-10-16/17 Pille-Riin Laanet (Tallinn University of Technology, Estonia) „Antioxidative and anti-*Borrelia* activity of phytochemicals in *Rubiaceae* species“

29-15-15/17 Marlen Leemet (Tallinn University of Technology, Estonia) „The second life of mandarine pomace: a valuable source of bioactive compounds“

30-19-16 Dr. Ilva Liekniņa (Latvian Biomedical Research and Study Centre, Latvia) „Creation of virus-like particle-based therapeutic vaccine candidate against Alzheimer’s disease“

31-17-15/17 Rebeka Ludviga (Latvian Biomedical Research and Study Centre, Latvia) “Marafivirus coat protein variants’ expression in bacterial system for virus-like particle self-assembly”

32-16-15 Dr. Juliana Lukša (Vilnius University, Lithuania) „Impact of *Totiviridae* L-A dsRNA virus on *Saccharomyces cerevisiae* host: transcriptomic and proteomic approach“

33-21-16 Dr. Helike Löhelaid (University of Helsinki, Finland) „Modulating microglia phagocytosis“

34-19-15/17 Greta Mačiuiytė (Vilnius University, Lithuania) “Oxyfunctionalization study of aromatic compounds by biocatalytic and chemical methods”

35-23-15/17 Vilius Malūnavičius (Vilnius University, Lithuania) „*Geobacillus* sp. 95 esterase: analysis of important amino acids for substrate binding and activity“

36-25-15/17 Bernadeta Masiulionytė (Vilnius University, Lithuania) “Engineered DNA methyltransferase DNMT1 for selective covalent tagging of methylation sites in live cells”

- 37-27-15/17 Domas Mašonis** (Vilnius University, Lithuania) “Investigation of genes and enzymes involved in the metabolism of pyrazine derivatives”
- 38-12-16/17 Sten Miller** (National Institute of Chemical Physics and Biophysics, Estonia) “Optimization and application of stable isotope mass spectrometry method to study breast cancer energy metabolism”
- 39-21—15/17 Marcel Mäger** (Tallinn University of Technology, Estonia) “The biochemical characterization of *Thermus thermophilus* large laccase in relation to the valorization of lignin”
- 40-18-15 Deimantė Naruskaitė** (Lithuanian University of Health Sciences, Lithuania) „Microglia immunometabolism changes after virus mimetic poly I:C-primed human airway exosome-like vesicles uptake“
- 41-20-15 Dr. Zita Naučienė** (Vytautas Magnus University, Lithuania) “Pre-sowing treatment of common buckwheat seeds with cold plasma and electromagnetic field results in stimulated seedling growth and increased grain harvest”
- 42-14-16/17 Helvijs Niedra** (Latvian Biomedical Research and Study Centre, Latvia) “Genome wide analysis of circulating miRNAs in growth hormone secreting pituitary neuroendocrine tumor patients’ plasma”
- 43-29-15/17 Anete Ogrīņa** (Latvian Biomedical Research and Study Centre, Latvia) „Bacterial expression systems based on potato virus Y-like particles for vaccine generation“
- 44-23- 16 Aistė Polikaitytė** (Thermo Fisher Scientific Baltics UAB, Lithuania) „Detection of SARS-CoV-2 in clinical samples in <10 min using SuperScript IV RT-LAMP Master Mix“
- 45-16-16/17 Leenu Reinsalu** (National Institute of Chemical Physics and Biophysics, Estonia) „Metabolic plasticity supports colorectal cancer progression”
- 46-25-16 Evelina Rekuviene** (Lithuanian University of Health Sciences, Lithuania) “The effects of Complex I inhibitors on mitochondrial permeability transition and ischemic brain injury”
- 47-18-16/17 Oļesja Rogoza** (Latvian Biomedical Research and Study Centre, Latvia) „Transcriptome study of pancreatic neuroendocrine tumour tissue“
- 48-20-16/17 Kristine Roos** (Tallinn University of Technology, Estonia) “Using deconvolution to dissect cell-cluster-specific transcriptome profiles of the human preovulatory follicles to reveal gene expression disturbances between hypo- and normoresponders”
- 49-27-16 Dr. Evita Rostoka** (University of Latvia, Latvia) “In search of biomarkers for type 1 diabetes”
- 50-22-15 Prof. Nils Rostoks** (University of Latvia, Latvia) “Towards improving adaptability and resilience of perennial ryegrass for safe and sustainable food systems using genome editing - EditGrass4Food“
- 51-24-15 Anastasija Rudnickiha** (LOSI, Latvia) “Optimization of crystallization conditions for stabilized tubulin complex”
- 52-26-15/52-44-17 Lukas Krasauskas** (Vilnius University, Lithuania) „Pro-inflammatory S100A9 Protein Effect on Tau Protein Aggregation“
- 53-22-16/17 Naatan Seeba** (Tallinn University of Technology, Estonia) „The effect of vegan diet on exogenic lipoprotein lipase activity in healthy individuals“
- 54-24-16 Dr. Kaido Viht** (University of Tartu, Estonia) “Development of protein kinase inhibitors that lose affinity upon physical or chemical action”
- 55-29-16 Dr. Sandrita Simonyte** (Lithuanian University of Health Sciences, Lithuania) “The effect of *Elsholtzia ciliata* essential oil on the oxidative stress in mice organs”
- 56-26-16/17 Misela Sivaka** (Latvian Biomedical Research and Study Centre, Latvia) „Interaction and dynamics of intestinal IgA and gut microbiome profile during antidiabetic therapy“
- 57-31-16 Kristina Skemiene** (Lithuanian University of Health Sciences, Lithuania) “The effects of imeglimin on developing brain microglial cells after hypoxia and reoxygenation”

- 58-33-16 Prof. Andrejs Skesters** (Riga Stradins University, Latvia) „Are the course and severity of COVID-19 related to selenium, selenoprotein P and blood oxidative stress level in patients with acute and post-COVID-19 disease? „
- 59- 33- 15/17 Gerda Skinderytė** (Vilnius University, Lithuania) “Insights of the ScV-LBC Gag expression in *Saccharomyces cerevisiae* strains”
- 60-28-16/17 Giedrė Skliutė** (Vilnius University, Lithuania) “Changes of immune response related genes expression profile in endometrium tissue of females with reproductive disorders”
- 61-35-15/17 Joana Smirnovienė** (Vilnius University, Lithuania) “Engineering of chimeric carbonic anhydrases for designing isoform-selective inhibitors”
- 62-37-15/17 Ramunė Stanevičienė** (Nature Research Centre, Lithuania) “Antagonistic traits of yeasts isolated from the surface of sour and sweet cherries”
- 63-39-15/17 Rokas Statkevičius** (Vilnius University, Lithuania) “Aminotransferases for chiral amine synthesis”
- 64-30-16/17 Arvydas Strazdauskas** (Lithuanian University of Health Sciences, Lithuania) “Ischemia *in vivo* causes cardiolipin peroxidation and mitochondrial damage in rat kidneys”
- 65-35-16 Dr. Rasa Sukackaitė** (Thermo Fisher Scientific Baltics UAB, Lithuania) „MuA-based molecular indexing for rare mutation detection by next-generation sequencing“
- 66-31-15/17 Jelizaveta Širokova** (Daugavpils University, Latvia) „Applications of new fluorescent disubstituted benzanthrone dyes for DNA study“
- 67-40-16/17 Vilma Zigmantaite** (Lithuanian University of Health Sciences, Lithuania) “Effect of pro-antiarrhythmic *Elsholtzia ciliata* essential oil on blood parameters in swine”
- 68-42-16/17 Deimantė Žukauskaitė** (Vilnius University, Lithuania) “Different inducers impact for endometrial stromal cells *in vitro* decidualization”
- 69-32-16/17 Rutt Taba** (National Institute of Chemical Physics and Biophysics, Estonia) „Effect of cell culture conditions on cellular bioenergetics and viability“
- 70-28-15 Dr. Paulius Lukas Tamošiūnas** (Latvian Biomedical Research and Study Centre, Latvia) “Yeast-based system for *in vivo* evaluation of alleles of the anthocyanin production pathway”
- 71-41-15/17 Kannan Thirumalmuthu** (Tallinn University of Technology, Estonia) “Organosolv lignin degradation by *Actinomyces*”
- 72-43-15/17 Elisabeth Undrits** (University of Tartu, Estonia) “Development of visible-light activated photocaged bisubstrate inhibitor of protein kinases”
- 73-30-15 Prof. Asko Uri** (University of Tartu, Estonia) „Discovery of strong inhibitory properties of a monoclonal antibody of protein kinase A“
- 74-34-16/17 Maija Ustinova** (Latvian Biomedical Research and Study Centre, Latvia) “Metagenomic characterization of untreated wastewater acquired from 15 municipalities of Latvia“
- 75-36-16/17 Ieva Vaicekauskaitė** (National Cancer Institute, Lithuania) “Prognostic insights from the analysis of uterine lavage samples in ovarian cancer patients”
- 76-38-16/17 Algirdas Valys** (Nature Research Centre, Lithuania) „Antimicrobial potency of essential oils“
- 77-37-16 Dr. Agne Velthut-Meikas** (Tallinn University of Technology, Estonia) “Ovarian sensitivity index as a measure for female infertility correlates with endocrine disruptive chemical mixture exposure”