

Poster Session I (Tuesday, 24.9.2019)

Synthetic biology

PI 1 Design of split superantigen fusion proteins for cancer immunotherapy
[Anja Golob-Urbanc](#)

PI 2 Triangular protein nanostructures self-assembled *in vivo*
[Helena Gradišar](#)

PI 3 Minimization of gas vesicle cluster
[Vid Jazbec](#)

PI 4 Nanobodies targeting coiled-coil protein origami cages for structure determination and introduction of delivery application
[Andreja Majerle](#)

PI 5 Sonogenetics - transcriptional regulation by ultrasound
[Maja Meško](#)

PI 6 De novo designed parallel heterodimeric coiled coil peptide pairs with high affinity
[Tjaša Plaper](#)

PI 7 In vitro evolution as a tool to study the specificity of proteins for membrane lipids
[Aleksandra Šakanović](#)

Molecular interactions and networking

PI 8 Tumour Spheroid Cell Model with Stem-like Properties
[Larisa Goričan](#)

PI 9 Interacting partners of the human retrotransposon L1 ORF1p
[Anamarija Habič](#)

PI 10 The effect of listeriolysin O binding to cholesterol-rich membranes studied by solid-state NMR
[Mirijam Kozorog](#)

PI 11 Lytic/ lysogenic switch of the *Bacillus thuringiensis* temperate bacteriophage GIL01
[Anja Pavlin](#)

PI 12 Phosphoproteomic analysis of legumain deficient mice
[Tilen Sever](#)

PI 13 NLP proteins as pore-forming toxins
[Tina Snoj](#)

Protein structure and function

PI 14 Mechanisms of action and interplay of three key virulence factors of *Listeria monocytogenes*
[Maksimiljan Adamek](#)

PI 15 Role of the unique insertion sequence in subtilisin-like proteinase from hyperthermophile *Aeropyrum pernix* K1

[Miha Bahun](#)

PI 16 A platform for protein production and crystal structure determination

[Katarina Karničar](#)

PI 17 The interaction of RahU protein with invertebrate lipids and its biological role

[Eva Kočar](#)

PI 18 Proteomic and biological characterisation of the venom from *Vipera ursinii ssp.*, a karst viper from Croatia

[Adrijana Leonardi](#)

PI 19 Can structure of annexin A11 explain its ALS-associated mutations?

[Vera Župunski](#)

PI 20 Advanced isotopic labelling of MurD for protein-based NMR studies of ligand-MurD binding

[Iza Ogris](#)

PI 21 ATP binding to the Nerve Growth Factor: a molecular switch for neurotrophins signaling?

[Francesca Paoletti](#)

PI 22 Bacterial surface-layer-protein assemblies at atomic scale

[Tea Pavkov-Keller](#)

PI 23 Evaluation of computational approaches for use of chemical crosslinking-based spatial restrains in modeling of homo-oligomeric complexes

[Miha Pavšič](#)

PI 24 Determination of kinetic parameters of paraoxonase 1 based on time-course data

[Boštjan Petrič](#)

PI 25 Substrate recognition and cleavage of *Staphylococcus aureus* GH73 family hydrolases is accompanied by a large conformational change and domain movement

[Sara Pintar](#)

PI 26 Fungal lectin KKP affects bacterial adhesion

[Jerica Sabotič](#)

PI 27 Visualization of oligomeric Cyt2Aa toxin from *Bacillus thuringiensis* on model membrane systems

[Gašper Šolinc](#)

PI 28 Insight into thyroid hormone formation

[Ajda Taler-Verčič](#)

PI 29 How is salicylic acid perceived in potato?

[Špela Tomaž](#)

PI 30 The role of thiopurine S-methyltransferase in biotransformation of selenium compounds

[Dunja Urbančič](#)

PI 31 Characterization of the export system of *C. difficile* surface proteins

[Aleksandra Usenik](#)

PI 32 Analysis of EpCAM's lateral oligomerization shows cis-dimerization is more robust than previously expected

[Tomaž Žagar](#)

Biotechnology and bionanotechnology

PI 33 Systems biology of oxytetracycline production in *Streptomyces rimosus*

[Selma Beganovic](#)

PI 34 Multiplex Quantification of Six in EU Authorised Genetically Modified Soybean Lines Using Crystal Digital PCR

[Alexandra Bogožalec Košir](#)

PI 35 Vitamin C: biochemistry and detection

[Sabina Fijan](#)

PI 36 Systems biology of rare omega fatty acid biosynthesis in *Yarrowia lipolytica*

[Sofija Jovanovic](#)

PI 37 Structure-based engineering of flexuous filamentous virus-like particles for potential bionanotechnological applications

[Luka Kavčič](#)

PI 38 The effect of stabilized in basil extract silver nanoparticles on rats' liver fibrosis experimental model

[Shushanik Kazaryan](#)

PI 39 Establishment of CRISPR/Cas9-mediated microRNA knock-out in potato

[Tjaša Lukan](#)

PI 40 The unique binding properties of aegerolysins and their application as biopesticides

[Anastasija Panevska](#)

PI 41 Deciphering the binding and disaggregating potential of New Methylene Blue towards fibrillation of lysozyme

[Puja Paul](#)

PI 42 Evaluation of qPCR and dPCR Instruments Performance using Single Control DNA

[Dejan Štebih](#)

PI 43 Targeting tumor cell lines with lactic acid bacterium *Lactococcus lactis*

[Tina Vida Plavec](#)

PI 44 Antibiotic resistant bacteria in waste waters from Slovenian general hospital

[Urška Rozman](#)

PI 45 Intracellular expression of cytotoxic fluorescent protein KillerRed in *Lactococcus lactis* for imaging and treating colorectal cancer

[Abida Zahirović](#)

Poster Session II (Wednesday, 25.9.2019)

Functional genomics and system biology

PII 46 Development of an Open Information System for Sample Management in Biomedical Research Studies and in a Biobank Repository

[Laura Bohinc](#)

PII 47 Pharmacogenetics of postoperative pain management with tramadol

[Jakob Jeriha](#)

PII 48 Gene ontology of anti-TNF therapy response biomarkers in rheumatoid arthritis

[Gregor Jezernik](#)

PII 49 Development and improvement of insect sex pheromone bioproduction in plants using systems biology approaches

[Mojca Juteršek](#)

PII 50 Microfluidic capillary electrophoresis for next-generation sequencing (NGS) library quantification and quality control

[Simon Koren](#)

PII 51 The role of small RNA regulatory networks in tolerance and resistance responses of potato to PVY infection

[Maja Križnik](#)

PII 52 Robust *de novo* assembly of tetraploid potato transcriptomes

[Marko Petek](#)

PII 53 Landscape exploration of motifs in *Arabidopsis thaliana* and *Solanum tuberosum* networks

[Živa Ramšak](#)

PII 54 Identification of Novel Splicing Factors influencing Circular RNA Expression in Hepatocellular Carcinoma

[Rok Razpotnik](#)

PII 55 Association between response to anti-TNF treatment with adalimumab and genetic variants within the TLR signalling pathway in Crohn's disease

[Katja Repnik](#)

PII 56 Modelling of Cell Growth

[Domen Vaupotič](#)

PII 57 Proteomic identification of legumain physiological substrates provides a novel link with innate immune response in mice

[Robert Vidmar](#)

PII 58 Preemptive pharmacogenomic testing for preventing adverse drug reactions – PREPARE study in Slovenia

[Maja Žugec](#)

Molecular basis of disease

P11 59 A transcriptome-wide approach to identifying RNA targets of the Prader-Willi locus
snoRNAs

[Janja Božič](#)

P11 60 Cholecalciferol ameliorates insulin signalling in the male rat heart

[Tijana Culafic](#)

P11 61 Aberrant miR137 Host Gene methylation at the CpG island that encompasses miR137 in
head and neck cancer patients

[Helena Čelešnik](#)

P11 62 Expression of CB1, CB2 and GPR55 Receptors in Selected Breast Cancer Cell Lines

[Luka Dobovišek](#)

P11 62-A The influence of tramadol pharmacogenetics on treatment outcome in patients after
breast cancer surgery

[Katja Goričar](#)

P11 63 Molecular mechanism of NLRP3 inflammasome assembly and self-regulation

[Iva Hafner-Bratkovič](#)

P11 64 Obstacles in studying human myeloid-derived suppressor cells

[Tanja Jakoš](#)

P11 65 Diagnostic and/or prognostic value of plasma concentration of angiogenic factors in
endometrioid endometrial cancer

[Tamara Knific](#)

P11 66 Sepsis, non-canonocal inflammasome activation and cystatins

[Nataša Kopitar-Jerala](#)

P11 67 Circulating plasma placenta specific miR-518b could serve as a potential biomarker for
discriminating pre-eclampsia and healthy pregnancies

[Rok Košir](#)

P11 68 Insight into genome methylation patterns of suicide victims: potential association with
brain plasticity

[Katarina Kouter](#)

P11 69 Understanding metabolic changes in schizophrenics through AKT/FOXO signaling pathway

[Barbara Kramar](#)

P11 70 Diagnosis of familial erythrocytosis in clinical practice

[Aleša Kristan](#)

P11 71 Extracellular vesicle cargo and morphology as potential diagnostic tools for
neurodegenerative diseases and cancer

[Teja Lavrin](#)

PII 72 Cannabidiol and Δ^9 -tetrahydrocannabinol affect human glioblastoma cell proliferation and survival

[Bernarda Majc](#)

PII 73 Antisense RNA transcript from C9orf72 gene mutation binds RNA binding proteins

[Mirjana Malnar](#)

PII 74 Synergistic activity of 15-lipoxygenase and sPLA2 promotes inflammation by formation of TLR4 agonists from extracellular vesicles

[Mateja Manček-Keber](#)

PII 75 The effects of *Cimicifuga racemosa* extract on hormone-dependent malignant gynaecological diseases

[Kristina Marton](#)

PII 76 Kinase mediated Y526 phosphorylation of FUS afflicts its inclusions formation

[Helena Motaln](#)

PII 77 Serum Adiponectin, Resistin and Leptin Levels in Peripheral Arterial Disease (PAD) and Buerger's Disease

[Elif Özkök](#)

PII 78 PPAR- γ serum levels and PPAR- γ Pro12Ala polymorphism in Peripheral Arterial Disease

[Elif Özkök](#)

PII 79 Important roles of OATP, OAT and ABC transporters in endometrial cancer

[Renata Pavlič](#)

PII 80 Is the action of amyloid beta peptide in SH-SY5Y cells associated with profilin 1?

[Urša Pečar Fonović](#)

PII 81 Resolving the puzzle: How NLPs disrupt plant plasma membranes?

[Katja Pirc](#)

PII 82 Effects of acute versus long-term treatment with antipsychotics in liver cell model

[Tinkara Pirc Marolt](#)

PII 83 Cytotoxicity of cytotoxic T cells is affected by endogenous as well as extracellular cystatin F

[Mateja Prunk](#)

PII 84 Identification of dipeptide repeat proteins interacting protein targets by proximity-dependent labeling

[Anja Pucer Janež](#)

PII 85 Genetic variation in cell cycle related genes and gastric cancer risk

[Pia Pužar Dominkuš](#)

PII 86 Identification of biomarkers for early detection of kidney allograft dysfunction

[Ivana Sedej](#)

PII 87 Risk factor assessment for cryptorchidism in Slovenian population using array comparative genomic hybridisation (aCGH)

[Alenka Hodžić](#)

PII 88 Characterization of cell lines with CRISPR-Cas9 mediated deletion of late genes from cholesterol synthesis

[Cene Skubic](#)

PII 89 Expression of potassium ion channel and calcium handling proteins in aorta of fructose and walnuts fed rats

[Jelena Stanišić](#)

PII 90 Association of polymorphisms in selected matrix metalloproteinase genes with histological subtype and TNM stage of malignant mesothelioma

[Danijela Štrbac, Katja Goričar](#)

PII 91 Glucose transport and metabolism in the heart of vitamin D treated rats

[Snežana Tepavčević](#)

PII 92 Microscopic imaging of the activity of cathepsin B and K in human glioblastoma tumors with metabolic mapping (enzyme histochemistry)

[Cornelis Van Noorden](#)

PII 93 Nanobodies Anti-TufM (Nb225) and anti-vimentin (Nb79) are cytotoxic to glioblastoma (stem) cells and reduce cell migration

[Alja Zottel](#)

PII 94 The characterization of DNA sequence containing G4C2 repeats

[Karmen Žbogar](#)

Cell signaling and membranes

PII 95 Autophagy is a Prosurvival Pathway in Chronic Lymphocytic Leukemia

[Damjan Avsec](#)

PII 96 Effect of Ouabain on IL-6 Signaling in Human Skeletal Muscle Cells

[Katja Bezjak](#)

PII 97 5-hydroxymethylcytosine alterations in peritumoral melanocytes and in normal melanocytes after skin exposure to UV irradiation

[Simon Caserman](#)

PII 98 Efficacy of C87, a small molecular inhibitor of Tumour necrosis factor, in human cells

[Boris Gole](#)

PII 99 Effects of alanosine and mercaptopurine on AMPK activity in skeletal muscle cells

[Matic Kolar, Tim Hropot](#)

PII 100 Effect of fructose enriched diet and walnut consumption on iNOS and phospho-ERK1/2 protein expression in rat aorta

[Tamara Ivkovic](#)

PII 101 Targeting lipid droplets and autophagy to reduce cancer cell resistance to stress

[Eva Jarc](#)

P11 102 Increased intracellular production and cell-to-cell transfer of serum amyloid A1 in IL-1 β stimulated coronary endothelial cells

[Tadeja Kuret](#)

P11 103 Oestrane Derivatives as New Inhibitors of Steroidogenic Enzymes and as Anti-Proliferative Agents

[Neža Lipušček](#)

P11 104 Functional characterization of Tyr10 phosphorylation site of the Na⁺, K⁺-ATPase α 1-subunit in skeletal muscle cells

[Metka Petrič](#)

P11 105 Hormonal and pharmacological regulation of AMP-activated protein kinase in cultured skeletal muscle cells

[Tina Požun](#)

P11 106 Quorum sensing and quorum quenching in *Campylobacter jejuni* – selection of the reporter strains of *Vibrio harveyi* for optimized studying

[Dina Ramić](#)

P11 107 Distribution of purinergic receptors and transient receptor potential channels in urinary bladder wall – the role in urothelial signalling

[Rok Romih](#)

P11 108 The variation of intracellular calcium concentration in different endothelial cells in response to several vasoactive substances

[Barbara Starešinič](#)

P11 109 NLRP3 inflammasome is triggered by trimerisation of pyrin domains and can be specifically inhibited by designed peptides

[Petra Sušjan](#)

P11 110 The effect of sulfasalazine on the regulation of glucose metabolism in skeletal muscle

[Anja Vidović](#)

P11 111 Regulation of LPS/TLR4/IL-6 signalling pathway in human skeletal muscle cells

[Maja Zupanc](#)

P11 112 Mycophenolate mofetil promotes activation of AMP-activated protein kinase in cultured skeletal muscle cells

[Katja Šopar](#)

P11 113 Engineering atypical tetracycline formation in *Amycolatopsis sulphurea* for the production of modified chelocardin antibiotic

[Špela Pikel](#)