

List of Posters

Poster Session I

Structure and Function of Proteins (PI-1 – PI-40)

- PI-1 **Characterization of the DNA remodeling activity of human HLTF protein**
David Balogh, Yathish Jagadheesh Achar, Dante Neculai, Szilvia Juhasz, Monika Morocz, Himabindu Gali, Sirano Dhe-Paganon, Česlovas Venclovas, Lajos Haracska,
- PI-2 **Effect of extracellular S100A4 on cell adhesion and migration of epithelial carcinoma cells**
Beáta Biri, Henrietta Vadászi, Bence Kiss, Zoltán Ligeti, György Csikós, Eszter Lajkó, Orsolya Láng, László Kóhidai, László Nyitray
- PI-3 **Structural and functional aspects of Ca²⁺ loaded S100A4 – what can NMR see?**
Gyula Pálffy, Péter Ecsédi, Bence Kiss, László Nyitray, Andrea Bodor
- PI-4 **Investigating the Specificity of Human Elastase 3A (ELA3A) and Elastase 3B (ELA3B) by Phage Display**
Eszter Boros, Andras Szabo, Balint Nemeth, Miklos Sahin-Toth, Gabor Pal
- PI-5 **The role of P53 during transcriptional blockage**
Barbara Nikolett Borsos, Ildikó Huliák, Zsuzsanna Újfaludi, Péter Pukler, Tibor Pankotai, Imre Miklós Boros
- PI-6 **Interaction of human cholinesterases with bisdimethylcarbamate derivative of albuterol**
Anita Bosak, Anamarija Knežević, Vladimir Vinković, Zrinka Kovarik
- PI-7 **The role of the Asp76-Lys41 salt bridge in the amyloid formation of genetic β 2m D76N mutant**
Éva Bulyáki, Judit Kun, András Micsonai, Linda Kernya, Zsófia Kele, Yuji Goto, Károly Liliom, József Kardos
- PI-8 **Intramolecular interactions and lipid binding of the scaffold protein Tks4**
Anna Cserkaszky, László Radnai, Kitti Koprivanacz, Balázs Merő, Bálint Szeder, László Buday
- PI-9 **Hormone-sensitive fluorescent biosensors and *in vitro* assays for steroid receptors and steroid oxidoreductases**
Jovana Plavša, Sofija Bekić, Jovana Krtinić, Andrea Benić, Nevena Kitanović, Edward Petri, Andjelka Čelić
- PI-10 **Tyrosine 24 phosphorylation of annexin A2 regulates isoform-selective S100 protein binding**
Peter Ecsédi, Bence Kiss, Ibolya Leveles, Gergő Gogl, Beáta Vértessy, László Radnai, László Nyitray
- PI-11 **Understanding the functional role of segments involved in lipid-mediated regulation of a key lipid biosynthetic enzyme from the malaria parasite**
Hajdu Fanni, Nagy Gergely Nándor, Marton Livia, Dr. Vértessy G. Beáta
- PI-12 **Structural Characterization of an Organophosphate Sequestering Esterase from *Culex pipiens*, a Disease Carrying Mosquito**
Davis Hopkins, Nicholas Fraser, Paul Carr, Colin Jackson
- PI-13 **EpCAM oligomerization analysis**
Aljaž Gaber, Miha Pavšič, Brigita Lenarčič
- PI-14 **Investigation of potential steroid binding sites in ABCG1 protein**
Zoltan Hegyi, Laszlo Homolya

- PI-15 **Using a molecular switch to decipher protein-protein interactions within the living cell: what can we learn about horizontal gene transfer?**
Rita Hirmondó, Szilvia Tarjányi, Kinga Nyíri, Bianka Kóhegyi, Judit Tóth, Beata Vértessy
- PI-16 **Characterization of plant dipeptidyl-peptidases III from *Physcomitrella patens* and *Arabidopsis thaliana***
Zrinka Karačić, Marija Abramić
- PI-17 **Chloride/formate exchanger (CFEX/Slc26a6) in rat organs; sex-dependent expression in kidneys**
Dean Karaica, Davorka Breljak, Jovica Lončar, Marija Ljubojević, Carol Herak-Kramberger, Vedran Micek, Ivana Vrhovac, Jana Ivković Dupor, Ivan Mihaljević, Petra Marić, Tvrtko Smital, Burckhardt Birgitta Christina, Burckhardt Gerhard, Ivan Sabolić
- PI-18 **Pinpointing the interaction domains of plant seryl-tRNA synthetase and metabolic protein BEN1**
Mario Kekez, Vladimir Zanki, Vesna Hodnik, Gregor Anderluh, Anne-Marie Duchêne, Jasmina Rokov Plavec
- PI-19 **pH regulated pore-forming activity of listeriolysin O mutant**
Matic Kisovec, Marjetka Podobnik, Gregor Anderluh
- PI-20 **Mechanism of Ca²⁺-dependent membrane bridging by annexin A2 and its regulation by tyrosine phosphorylation and S100 binding**
Bence Kiss, Peter Ecsedi, Gergo Gogl, Gitta Schlosser, Norbert Jeszenoi, Csaba Hetenyi, Laszlo Nyitray
- PI-21 **Selection, binding and structural analyses of peptide ligands for the Fc portion of human immunoglobulin G**
Nika Kruljec, Peter Molek, Borut Štrukelj, Tomaž Bratkovič
- PI-22 **MD and QM/MM modeling of nitric oxide binding to myoglobin**
Aniko Labas, Julianna Olah, Jeremy Harvey
- PI-23 **Insights into NLP activity**
Tea Lenarčić, Isabell Albert, Thorsten Nuernerberger, Vesna Hodnik, Marjetka Podobnik, Gregor Anderluh
- PI-24 **First characterization of multidrug and toxin extrusion (MATE/SLC47) proteins in zebrafish (*Danio rerio*)**
Jovica Lončar, Marta Popović, Petra Krznar, Roko Zaja, Tvrtko Smital
- PI-25 **Compounds with phenanthridine moiety as potential modulators of butyrylcholinesterase activity**
Nikola Maraković, Marijana Radić Stojković, Ivo Piantanida, Stefka Kaloyanova, Goran Šinko
- PI-26 **HPLC, ESI qTOF and MALDI TOF/MS reveal target sequence and binding stoichiometry of novel Ru(II) complexes to serum albumin**
Marija Nišavić, Romana Masnikosa, Marijana Petković, Mario Cindrić
- PI-27 **Secreted aegerolysins and MACPF domain-containing proteins in the filamentous fungus *Aspergillus niger***
Maruša Novak, Nada Kraševac, Urška Čepin, Toshihide Kobayashi, Peter Maček, Gregor Anderluh, Kristina Sepčić
- PI-28 **Structural and functional characterisation of a staphylococcal repressor**
Veronika Papp-Kádár, Kinga Nyíri, Judit Eszter Szabó, Ildikó Scheer, Beáta Vértessy G.
- PI-29 **Tumor marker Trop2 - a phosphorylation-triggered structural switch at the membrane-cytosol interface**
Miha Pavšič, Gregor Ilc, Tilen Vidmar, Janez Plavec, Brigita Lenarčić
- PI-30 **Improved detection of protein-protein interactions using proximity ligation assay**
Mateja Prunk, Milica Perišić Nanut, Jerica Sabotič, Janko Kos
- PI-31 **Fourier transform infrared spectroscopy provides an evidence of papain denaturation and aggregation during cold storage**

Brankica Rašković, Natalija Polović

- PI-32 **Listeriolysin O membrane interactions and pore formation on giant unilamellar vesicles**
Saša Rezelj, Apolonija Bedina Zavec, Gregor Anderluh
- PI-33 **Foreign epitope presentation with chimeric potato virus Y virus-like particle**
Andreja Šink, Nejc Rojko, Marko Šnajder, Magda Tušek Žnidarič, Ion Gutiérrez Aguirre, Nataša Poklar Ulrih, Maja Ravnikar, Gregor Anderluh
- PI-34 **Comparison of water and methanol extracts from hyperthermophilic archaeon *Aeropyrum pernix***
Mihaela Skrt, Polona Jamnik, Nataša Poklar Ulrih
- PI-35 **Aha1 and cIAP1 isoform-specific interaction with human Hsp90 is mediated by N-terminal and middle domain of Hsp90**
Kamil Synoradzki, Pawel Bieganowski
- PI-36 **Alteration of cholinesterase activity in *Daphnia magna* after the exposure to silver nanoparticles**
Goran Šinko, Ivana Vinković Vrček, Lea Ulm, Adela Krivohlavek
- PI-37 **Investigation of biochemical, molecular and morphological consequences of the expression of BFSP1 in tumour cells**
Peter Jakus, Kinga Vajda, Fatime Schreck, Ferenc Gallyas, Balazs Sumegi, Antal Tapodi
- PI-38 **Characterization of the interaction between metastasis-associated ezrin and S100A4**
Henrietta Vadász, Beáta Biri, Bence Kiss, László Nyitray
- PI-39 **Sodium-glucose cotransporter SglT1 (Slc5a1) is present in various murine organs; sex-related expression in kidneys**
Ivana Vrhovac, Davorka Breljak, Dean Karaica, Hermann Koepsell, Ivan Sabolic
- PI-40 **Evidence for the cytosolic location of NAD(P)H cytochrome b5 oxidoreductase**
Veronika Zámbo, Éva Kereszturi, Mónika Tóth, Gábor Lotz, Miklós Csala
-

Membrane Structure and Function (PI-41 – PI-45)

- PI-41 **PaNIE binds to plant and yeast membrane lipids**
Vesna Hodnik, Akiko Yamaji, Toshihide Kobayashi, Saša Rezelj, Polona Bedina Zavec, Gregor Anderluh
- PI-42 **Absence of cyclophilin D enhances the cholesterol and fat anabolism in mouse liver**
Peter Balazs Jakus, Fruzsina Fónai, Aniko Takatsy, Csenge Antus, Nikoletta Kálmán, Krisztián Erős, Zita Bognár, Balazs Veres
- PI-43 **Neuropathy target esterase-related enzyme: a possible role in skeletal muscle energy metabolism**
Maja Katalinić, Katarina Miš, Katarina Gros, Urška Matkovič, Zoran Grubič, Tomaž Marš, Sergej Pirkmajer
- PI-44 **Changes in the membrane phospholipid composition in erythrocytes at patients with metabolic syndrome after consumption of pomegranate juice**
Milica Kojadinovic, Aleksandra Arsic, Aleksandra Konic Ristic, Nevena Kardum, Tamara Popovic, Jasmina Debeljak Martacic, Marija Glibetic
- PI-45 **α -Synuclein interactions with phospholipid model membranes**
Katja Pirc, Nataša Poklar Ulrih
-

Synthetic Biology and Biotechnology (PI-46 – PI-59)

- PI-46 **Engineering the folding pathway of a designed topological protein**
Igor Drobnač, Ajasja Ljubetič, Karen Butina, Helena Gradišar, Roman Jerala
- PI-47 **Synthetic multi-enzymatic intracellular compartments and non-cellular particles**

Rok Gaber, Bojana Stevovic, Tina Fink, Nik Franko, Mojca Benčina, Helena Gradišar, Roman Jerala

- PI-48 **Action of propolis in the yeast cell**
Tanja Petelinc, Tomaž Polak, Polona Jamnik
- PI-49 **Electrophysiological properties of rhodopsins from selected halotolerant and halophilic fungi**
Tilen Konte, Sabine Panzer, Janja Zajc, Ana Plemenitaš, Ulrich Terpitz
- PI-50 **Changes in cytosolic distribution of toxic metals Cd and Pb in liver, gills and intestine of Vardar chub (*Squalius vardarensis*) induced by exposure to mining effluents**
Nesrete Krasnići, Zrinka Dragun, Vlatka Filipović Marijić, Marijana Erk, Sheriban Ramani
- PI-51 **Interactions of secondary metabolites from cyanobacteria and invasive tropical algae with the cellular detoxification mechanism in zebrafish (*Danio rerio*)**
Petra Marić, Ivan Mihaljević, Jovica Lončar, Jelena Dragojević, Tvrtko Smital
- PI-52 **Designing fluorescent probes by bipartite phage display**
Peter Molek, Mariša Gasparini, Borut Štrukelj, Tomaž Bratkovič
- PI-53 **Successful panning of a pre-immune VHH phage display library directly on exosomes**
Milica Popović, Barbara Toffoletto, Daniela Cesselli, Ario de Marco
- PI-54 **Screening Of Endophytic Fungi Isolated From Conifers Needles For Antibacterial Properties**
Matjaž Ravnikar, Matic Terčelj, Damjan Janeš, Borut Štrukelj, Samo Kreft
- PI-55 **Codon optimisation is key for pernisine expression in *Escherichia coli***
Marko Šnajder, Nataša Poklar Ulrih, Marko Mihelič, Dušan Turk
- PI-56 **Hydrolysis of concentrated raw corn starch with *Bacillus licheniformis* 9945a α -amylase**
Marinela Šokarda Slavić, Zoran Vujčić, Nataša Božić
- PI-57 **Oxidative stress biomarkers as predicting factors for boar semen characteristics following short-term liquid storage**
Maja Zakošek Pipan, Janko Mrkun, Marjan Kosec, Alenka Nemeč Svete, Petra Zrimšek
- PI-58 **Nuclease resistant oligonucleotide receptor for troponin diagnostics**
Zsuzsanna Szeitner, Anna Doleschall, Gergely Lautner, Katalin Keltai, Róbert Gyurcsányi, Tamás Mészáros
- PI-59 **Growth parameters and protein production of *E. coli* strains containing different copy number of ribosomal RNA operons**
Gyorfy Zsuzsanna, Draskovits Gabor, Vernyik Viktor, Urmos Kitti, Posfai Gyorgy
-

Molecular Signalling (PI-60 – PI-73)

- PI-60 **Structural assembly of the signaling competent ERK2–RSK1 complex**
Anita Alexa, Gergő Gógl, Csaba Hetényi, Attila Reményi
- PI-61 **Stress triggers mitochondrial biogenesis to preserve steroidogenesis in Leydig cells**
Igor Gak, Sava Radovic, Natasa Stojkov-Mimic, Tatjana Kostic, Silvana Andric
- PI-62 **Ubiquitin-dependent phosphorylation of ERKS in a three component signaling complex**
Gábor Glatz
- PI-63 **A novel crosstalk of MAPK- and Ca-signaling pathways: comprehensive characterization of S100-MAPKAPK interactions**
Gergo Gogl, Bence Kiss, Anita Alexa, Peter Sok, Attila Remenyi, Laszlo Nyitraj
- PI-64 **Agrin signalling in primary human myoblasts**
Katarina Gros, Giulia Parato, Urška Matkovič, Zoran Grubič, Tomaž Marš, Paola Lorenzon, Sergej Pirkmajer
- PI-65 **PARP-1 inhibitor attenuates mitochondrial ROS production and cell death through PARP-1-ATF4-MKP-1 pathway in oxidative stress**
Enikő Hocsák, Nikoletta Kalman, Ferenc Gallyas Jr., Balazs Sumegi, Boglarka Racz

- PI-66 **Melatonin replacement restores the circadian behavior in adult rat Leydig cells after pinealectomy**
Aleksandar Baburski, Srdjan Sokanovic, Sava Radovic, Maja Bjelic, Silvana Andric, Tatjana Kostic
- PI-67 **Structural background of the regulation of SH3 domains by tyrosine phosphorylation**
Balázs Merő, László Radnai, Ibolya Leveles, Bálint Szeder, Gréta Kuzma, Anna Fekete, Anna Cserkaszky, Beáta G. Vértessy, László Buday
- PI-68 **BEST channels - possible mediators of H2S-induced relaxation of rat uteri?**
Ana Mijusković, Nikola Tatalović, Zorana Orescanin Dusic, Aleksandra Nikolic Kokic, Mihajlo B. Spasic, Dusko Blagojevic
- PI-69 **The role of the L5/L11-Mdm2-p53 signaling pathway in response to ribosomal and genotoxic stresses**
Ines Oršolić, Deana Jurada, Siniša Volarević
- PI-70 **10 Years of Ibogaine Research in Slovenia**
Roman Paškulin
- PI-71 **Myosin phosphatase regulates gene expression via mediating arginine methylation in human hepatocarcinoma cells**
Adrienn Sipos, Judit Iván, Zsuzsanna Darula, Bálint Bécsi, Ferenc Erdődi, Beáta Lontay
- PI-72 **Ibogaine relaxes rat arteries: the role of endothelium**
Nikola Tatalović, Mina Bajrica, Ana Mijusković, Zorana Oreščanin Dušić, Aleksandra Nikolić Kokić, Mihajlo Spasić, Duško Blagojević
- PI-73 **Fungal lectins: versatile molecular triggers and their potential use in biomedicine**
Simon Žurga, Janko Kos, Jerica Sabotić
-

Functional Genomics and Gene Maintenance (PI-74 – PI-83)

- PI-74 **Correlation between MXR inhibitors in wastewater and zebrafish embryotoxicity**
Sanja Babić, Ruben Strecker, Roberta Sauerborn Klobučar, Rozelindra Čož-Rakovac
- PI-75 **Genome stability enzymes are essential for building CRISPR-cas immunity in bacteria**
Ivana Ivančić-Baće, Simon Cass, Wearne Stephen, Edward Bolt
- PI-76 **The effect of chronic renal failure on the expression of drug-metabolizing cytochrome P450 enzymes**
Máté Déri, Ádám Kiss, Katalin Tóth, Edit Háfra, Katalin Monostory
- PI-77 **An experimental test of the adaptive genome streamlining hypothesis**
Gabor Draskovits, Ildiko Karcagi, Kinga Umenhoffer, Balazs Bogos, Tamas Feher, Zsuzsanna Gyorfy, Frederick R. Blattner, Gyorgy Posfai, Balazs Papp, Csaba Pal
- PI-78 **The role of the hepatic cholesterol synthesis in the bile acids synthesis/excretion in mice with Cyp51 liver knockout**
Urša Kovač, Gregor Lorbek, Žiga Urlep, Peter Juvan, Martina Perše, Jera Jeruc, Ingemar Bjorkhem, Claudia Fuchs, Michael Trauner, Damjana Rozman
- PI-79 **Examining genome integrity maintenance in human cell lines by site-specific, biallelic gene knock-out technology**
Hajnalka Laura Pálinkás, Gergely Róna, András Horváth, Máté Borsos, Júlia Batki, Beáta Vértessy
- PI-80 **Detection of genomic uracil from bacteria to human**
Ildiko Scheer, Gergely Róna, Kinga Nagy, Hajnalka L. Pálinkás, Gergely Tihanyi, Gergely Takács, Beáta G. Vértessy
- PI-81 **Clinical relevance of patients' CYP3A-status in clozapine therapy**
Katalin Toth, David Sirok, Gabor Csukly, Judit Bulucz, Istvan Bitter, Pal Szabo, Balazs Magda, Katalin Monostory

- PI-82 **VNTR patterns in TPMT promoter region affect TPMT activity via linkage disequilibrium with TPMT*3 alleles**
Dunja Urbančič, Tina Kuhar, David Gurwitz, Andres Metspalu, Irena Mlinarič-Raščan
- PI-83 **Variant rs10757278 in 9p21 region is associated with coronary artery disease as comorbidity with carotid atherosclerosis, in males only**
Ivan Zivotic, Ana Djordjevic, Tamara Djuric, Igor Koncar, Dragan Alavantic, Aleksandra Stankovic, Maja Zivkovic

Poster Session II

Stem Cells in Molecular Medicine – HBS (PII-84 – PII-86)

- PII-84 **Direct cross-talk between mesenchymal stem cell and glioblastoma cells enhances the expression of the proteolytic enzymes urokinase-type plasminogen activator (uPA) and metalloprotease MMP-9 along with increased invasion of U373 glioblastoma cells**
Barbara Breznik, Miloš Vittori, Helena Motaln, Tamara Lah Turnšek
- PII-85 **Kinin Receptor Expression and Activity in Co-cultures of Mesenchymal Stem and Glioblastoma Cells**
Mona N. Oliveira, Michelli M. Pillat, Helena Motaln, Henning Ulrich, Tamara Lah T.
- PII-86 **Paracrine effects of mesenchymal stem cells on differentiation of glioblastoma stem-like cells**
Katja Kološa, Helena Motaln, Tamara Lah Turnšek
-

Lipidomics and Imaging of Mobile Nanodomains – HBS (PII-87)

- PII-87 **Nonpolar bases hexylamine and trihexylamine are powerful antioxidants in lipid systems**
Tjaša Prevc, Anja Rečnik, Alenka Levart, Nataša Šegatin, Nataša Poklar Ulrih, Blaž Cigić
-

Cell Death and Differentiation (PII-88 – PII-103)

- PII-88 **Characterization of organic cation transporters in zebrafish (*Danio rerio*)**
Jelena Dragojević, Ivan Mihaljević, Marta Popović, Roko Žaja, Nikola Maraković, Tvrtko Smital
- PII-89 **Analysis of changes in neutrophil extracellular trap (NET) proteins profile using proteomic methods**
Bernadett Jakob, Endre Kristóf, Krisztián Csomós, László Fésüs, Éva Csósz
- PII-90 **Anticancer potential of steroidal 16,17-seco-16,17a-dinitrile derivatives against triple negative MDA-MB-231 breast cancer cells**
Suzana Jovanović-Šanta, Vesna Kojić, Lidija Aleksić, Gordana Bogdanović, Andrea Nikolić, Marija Sakač, Dimitar Jakomiv
- PII-91 **Metformin enhances protective signalling responses but fails to improve survival of cultured myotubes exposed to ischemia and reperfusion**
Matic Kaiser, Katarina Miš, Urška Matkovič, Matej Podbregar, Zoran Grubič, Tomaž Marš, Sergej Pirkmajer
- PII-92 **The effect of various antioxidants in cell death-related oxidative stress**
Nežka Kavčič, Katarina Pegan, Peter Vandenabeele, Boris Turk
- PII-93 **Orthocaspases: the proteolytically active prokaryotic caspase homologues**
Marina Klemenčič, Marko Novinec, Marko Dolinar
- PII-94 **Novel nuclear specific regulatory role of LIN28A protein in pluripotent stem cell lineage acquisition**
Sabina Kolar, Miha Modic, Gregor Rot, Markus Grosch, Tanja Orschmann, Boris Rogelj, Micha Drukker
- PII-95 **Conserved functions at the domain level during the uni-multicellular transition**
Jeromos Kun, Illes Farkas
- PII-96 **Photosensitizing effect of PARP inhibitor PJ-34 in a UVA irradiated human epidermoid carcinoma cell line model**
Petra Lakatos, László Virág

- PII-97 **Altered development of adipose tissue may contribute to the decreased tolerance to cold exposure of tissue transglutaminase knock-out mice**
Andras Madj, Ixchelt Cuarenta Monroy, Kinga Lenart, Timea Veres, Gabor Mocsar, Peter Bai, Laszlo Fesus
- PII-98 **Effects of individual and combined treatment of Raloxifene and estrogen on apoptosis in human endometrial stromal ThESC cell line**
Ivana Nikolic, Marina Mitrovic
- PII-99 **The TAF10-containing TFIIID is necessary for the ecdysone induced larval-pupal transition of *Drosophila melanogaster***
Zoltan Gabor Pahi, Zsuzsanna Kiss, Orbán Komonyi, Barbara Nikolett Borsos, Laszlo Tora, Imre Miklos Boros, Tibor Pankotai
- PII-100 **Oleuropein ameliorates cisplatin-induced oxidative damage, inflammation and apoptosis in mice kidneys by modulating CYP2E1, NF-κB and ERK1/2 expression**
 Robert Domitrović, Iva Potočnjak, Marko Škoda, Martina Pavletić Peršić
- PII-101 **Epimer-specific effects of bile acids on the anti-neoplastic activity of doxorubicin in MCF-7 breast adenocarcinoma cells**
Bojan Stanimirov, Karmen Stankov, Nebojša Pavlović, Maja Đanić, Vesna Kojić, Gordana Bogdanović, Momir Mikov
- PII-102 **The role of Hmgb1 in the unique transcriptional mechanism of the matrilin-1 gene and the early step of chondrogenesis**
Tibor Szénási
- PII-103 **Role of gamma-enolase in tumor cell survival in starvation and hypoxia: regulation by cysteine protease cathepsin X**
Tjaša Vižin, Anja Pišlar, Janko Kos
-

Immunity and Inflammation (PII-104 – PII-116)

- PII-104 **A dual recognition mechanism of flagellin by cytosolic and membrane sensors**
 Vida Forstnerič, Tjaša Plaper, Mojca Benčina, Roman Jerala
- PII-105 **Susceptibility of human antimicrobial peptides to the action of aspartic proteases secreted by pathogenic yeast *Candida albicans***
Oliwia Bochenska, Maria Rapala-Kozik, Natalia Wolak, Wataru Aoki, Mitsuyoshi Ueda, Andrzej Kozik
- PII-106 **Crucial role of cyclophilin D in the pathogenesis of LPS induced acutelung injury**
Fruzsina Fónai, János Krisztián Pribér, Nikoletta Kálmán, Péter Balázs Jakus, Csenge Antus, Balázs Sümegi, Balázs Veres
- PII-107 **Impaired autophagy results in increased inflammasome activation in stefin B deficient mice**
 Mojca Trstenjak-Prebanda, Katarina Maher, Janja Završnik, Boris Turk, Nataša Kopitar-Jerala
- PII-108 **Filamentous phages as immunogenic carriers of Fel d 1 mimotopes for allergen specific immunotherapy**
Jernej Luzar, Manca Ogrič, Mira Šilar, Borut Štrukelj, Peter Korošec, Mojca Lunder
- PII-109 **Interaction of perforin monomer with the membrane in micromolar dependence of calcium**
Omar Naneh, Franci Merzel, Mirijam Kozorog, Robert JC Gilbert, Vesna Hodnik, Gregor Anderluh
- PII-110 **Examining the role of inflammasome activation and identifying novel diagnostic innate immunity biomarkers in children with hypercholesterolemia**
 Tina Tinkara Peternelj, Iva Hafner Bratkovič, Urh Grošelj, Katarina Trebušak Podkrajšek, Nevenka Bratanič, Tadej Battelino, Roman Jerala, Simon Horvat

- P11-111 **Minimal oligodeoxynucleotide motifs that are distinctively recognized by human TLR9**
Jelka Pohar, Alenka Kužnik-Krajnik, Miša-Mojca Cajnko, Duško Lainšček, Chikako Yamamoto, Ryutarō Fukui, Kensuke Miyake, Roman Jerala, Mojca Benčina,
- P11-112 **Inhibition of the NLRP3 inflammasome formation by the designed peptides**
Petra Sušjan, Roman Jerala, Iva Hafner Bratkovič
- P11-113 **Serine proteinase inhibitor ecotin of various pathogen microbes inhibits lectin pathway of the complement system**
Dávid Szakács, Eszter Vigh, Zoltán Attila Nagy, Eszter Boros, Dávid Héja, Péter Gál, Gábor Pál
- P11-114 **Colocalization of galectin-1 and osteopontin in mouse uterus during early pregnancy**
Sandra Šučurović, Tamara Nikolić, Biserka Mulac-Jeričević
- P11-115 **Identification and function of ghrelin receptor and ghrelin-O-acyltransferase in human keratinocytes**
Miha Vodnik, Eva Knuplež, Patrik Milić, Valentina Kubale Dvojmoč, Mojca Lunder, Borut Štrukelj
- P11-116 **An atypical bactericidal, cytotoxic, and modulatory peptide from *Staphylococcus pseudintermedius* exhibits properties of bacteriocin and virulence factor**
Benedykt Władyka, Marcin Piejko, Monika Bzowska, Piotr Pieta, Ibeth Guevara-Lora, Michał Bukowski, Emilia Bonar, Jacek Miedzobrodzki, Adam Dubin, Paweł Mak
-

Molecular Basis of Disease (P11-117 – P11-158)

- P11-117 **Biological evaluation of the novel ruthenium(II) complexes**
Maja Anko, Katja Traven, Jakob Kljun, Maša Sinreih, Žiga Ude, Jure Stojan, Iztok Turel, Tea Lanišnik-Rižner
- P11-118 **Role of CYP2E1 in female-predominant resistance to hyperoxia**
Željka Mačak Šafranko, Sandra Sobočanec, Ana Šarić, Tihomir Balog
- P11-119 **Wound healing process in conditions of CD26 deficiency**
Lara Batičič Pučar, Natalia Jug, Dijana Detel, Jadranka Varljen
- P11-120 **Identification and spatio-temporal expression profiling of *Verticillium albo-atrum* effectors in infected hop plants**
Kristina Marton, Vasja Progar, Nataša Štajner, Branka Javornik, Sabina Berne
- P11-121 **Molecular background and physiological consequences of altered peripheral 5-HT homeostasis in adult rats perinatally treated with tranlycypromine**
Sofia Blazević, Dora Persic, Dubravka Hranilovic
- P11-122 **Global DNA hypomethylation in white blood cells represents a feature of multiple sclerosis**
Maja Bundalo, Maja Živković, Smiljana Ristić, Nada Starčević Čizmarević, Ivana Babić Božović, Bojana Brajenović Milić, Aleksandra Stanković
- P11-123 **LLO related drop in TEER of Caco-2 monolayer is Dependent on Pore Formation with no major role of Ca²⁺ influx**
Miša Mojca Cajnko, Maja Marušić, Matic Kisovec, Nejc Rojko, Mojca Benčina, Simon Caserman, Gregor Anderluh
- P11-124 **Finding a new regulatory function for the proteasome activator PA200 in a cellular model for Huntington's disease**
Rita Czinege, Ciyu Yang, Peter Bay, Erik Lee Snapp, Laszlo Virag, Marion Schmidt, Krisztina Tar
- P11-125 **Alterations in ophthalmological parameters and cytokine levels in tears of patients with glaucoma**
Eszter Deák, Éva Csósz, Adrienne Csutak

- PII-126 **Relationship between tumor necrosis factor α and insulin sensitivity in rats with impaired glucose tolerance**
Branka Djordjevic, Dusan Sokolovic, Jelena Basic, Andrej Veljkovic, Milena Despotovic, Tatjana Cvetkovic, Tatjana Jevtovic Stoimenov, Davor Djukic, Natasa Zivkovic
- PII-127 **Modulation of multiple drug resistance by proprietary potassium ionophores in breast cancer stem cell model**
Katja Ester, Iva Guberović, Marko Marjanović, Lidija Uzelac, Ana-Matea Mikecin, Irena Martin-Kleiner, Tatjana Šumanovac-Ramljak, Kata Mlinarić-Majerski, Marijeta Krajl
- PII-128 **Regulative role of Tks4 adaptor protein in the cell differentiation process**
Anna Fekete, Virág Vas, Gyöngyi Kudlik, Metta Dülk, Tamás Kovács, Dalma Csécsy, Krisztián Kvell, Judit Pongrácz, Ferenc Uher, László Buday
- PII-129 **Exosomes containing protein Nef are released from microglia and astrocyte cells infected with HIV virus**
Jana Ferdin, Ana Plemenitaš, Matija B. Peterlin, Metka Menassi
- PII-130 **Little babies - Big warriors: The antioxidant response in the umbilical cord of neonates with intrauterine growth restriction**
Agnes Ferencz, Krisztina Nikoletta Dugmonits, Szabolcs Zahoran, Edit Hermes
- PII-131 **Proteomic analysis of gene products that regulate de- and remyelination**
Gabor Szilagyi, Arkadiusz Nawrocki, Janos Schmidt, Zsolt Illes, Ferenc Gallyas
- PII-132 **Assessment of toxicity endpoints of selected cytostatic drugs**
Vera Garaj-Vrhovac, Goran Gajski, Marko Gerić, Bojana Žegura, Metka Filipič
- PII-133 **Cytogenetic status and activation of BRAF-dependent pathway in patients with thyroid diseases**
Marko Gerić, Renato Janušić, Božena Šarčević, Vera Garaj-Vrhovac
- PII-134 **Hepatoprotective effect of cocoa polyphenols (*Theobroma cacao* L.) against carbon tetrachloride-induced hepatic damage in mice**
Jasminka Giacometti, Adriano Pavletić, Damir Muhvić, Ariana Fužinac-Smojver
- PII-135 **Polymorphisms in segregation genes contribute to gastric cancer risk**
Petra Hudler, Marija Rogar, Nina Sodja, Aida Zečkanović, Tadej Žlahtič, Radovan Komel
- PII-136 **Expression analysis of caveolin-1 in papillary thyroid carcinoma with relation to clinicopathological parameters and BRAF mutation status**
Jelena Janković, Svetlana Paskaš, Ilona Marečko, Tijana Išić Denčić, Svetislav Tatić, Dubravka Cvejčić, Svetlana Savin
- PII-137 **Alterations in the chemical barrier components in tears of patients with Alzheimer's disease**
Gergő Kalló, Miklós Emri, Zsófia Varga, József Tózsér, Adrienne Csutak, Éva Csősz
- PII-138 **Different experimental approaches for discovery of diagnostic biomarkers of endometriosis**
Tea Lanišnik Rižner, Katja Vouk, Tamara Knific
- PII-139 **Non-B DNA structures of C9ORF72 hexanucleotide expanded repeat in ALS and FTL**
Anja Kovanda, Primož Šket, Matja Zalar, Sabina Vatovec, Jure Pohleven, Maja Štalekar, Vera Župunski, Janez Plavec, Boris Rogelj
- PII-140 **Plasma Nef-exosomes: putative biomarkers for active reservoirs in ART treated HIV infected patients**
Jana Ferdin, Pia Pužar Dominkuš, Katja Goričar, Vita Dolžan, Ana Plemenitaš, Steven G. Deeks, Matija B. Peterlin, Metka Lenassi
- PII-141 **Development of new peptide drug leads interfering with activity of orexigenic hormone ghrelin**
Mojca Lunder, Miha Vodnik, Eva Knuplež, Valentina Kubale Dvojmoč, Borut Štrukelj
- PII-142 **Aggrin modulates early stages of skeletal muscle regeneration**
Katarina Gros, Sergej Pirkmajer, Urška Matkovič, Giulia Parato, Katarina Miš, Matej Podbregar, Zoran Grubič, Tomaz Mars, Paola Lorenzon,

- P11-143 **Transmembrane protein CD9 and glioma cell stemness**
Helena Motal, Neža Podergajs, Urška Verbovšek, Miloš Vittori, Christel Herold-Mende, Rolf Bjerkvig, Tamara Lah Turnšek
- P11-144 **Loss of a brain-specific tRNA isodecoder affects neuronal function**
Gabor Nagy, Mridu Kapur, Susan Ackerman
- P11-145 **Glycogen phosphorylase inhibition has positive effect on metabolism**
Lilla Nikoletta Nagy, Tibor Docsa, Attila Tóth, László Somsák, Tamás Fodor, Mónika Gönczi, Pál Gergely, Péter Bai
- P11-146 **Ibogaïne effects on uterine smooth muscle contractions: the role of antioxidant enzymes**
Zorana Oreščanin-Dusić, Nikola Tatalović, Aleksandra Nikolić-Kokić, Ana Mijušković, Roman Paskulin, Mihajlo Spasić, Dusko Blagojević
- P11-147 **Secreted phospholipase A2 induces the formation of cytosolic lipid droplets enriched with polyunsaturated fatty acids and enables cancer cell survival**
Anja Pucer Janež, Vesna Brglez, Thomas O. Eichmann, Petra Malavašič, Tjaša Blatnik, Jernej Šribar, Igor Križaj, Jože Pungerčar, Robert Zimmermann, Toni Petan
- P11-148 ***In vitro* study of a nerve-muscle co-culture after electroporation with FUS, a protein involved in ALS/FTLD**
Sonja Prpar Mihevc, Mojca Pavlin, Simona Darovic, Marko Živin, Tomaž Marš, Boris Rogelj
- P11-149 **Localization of dipeptide repeat proteins in human cells**
Anja Pucer Janež, Mirjana Malnar, Anja Kovanda, Sonja Prpar Mihevc, Toni Petan, Boris Rogelj
- P11-150 **HIV protein Nef is secreted via exosomes from Nef-transfected human microglia**
Pia Pužar Dominkuš, Anja Kežar, Ana Plemenitaš, Matija Peterlin, Metka Lenassi
- P11-151 **The effect of lipoproteins and western diet on myocardium**
Tadeja Režen, Jera Jeruc, Damjana Rozman, Mauro Giacca
- P11-152 **Metabolism of progesterone in endometriotic 12-Z cells**
Maša Sinreih, Sven Zukunft, Jerzy Adamski, Tea Lanišnik Rižner
- P11-153 **Effect of Metformin on the Regenerative Capacity of Skeletal Muscle *In Vitro***
Urban Slokar, Nejc Umek, Urška Matkovič, Katarina Miš, Matej Podbregar, Zoran Grubič, Sergej Pirkmajer, Tomaž Marš
- P11-154 **Biomarkers of protein and lipid oxidative damage as prognostic factors in ESRD patients**
Sonja Suvakov, Tatijana Pekmezovic, Vesna Coric, Jasmina Ivanisevic, Aleksandra Stefanovic, Zorana Jelic-Ivanovic, Tanja Damjanovic, Nada Dimkovic, Tatjana Simic
- P11-155 **γ Klotho is a novel marker and cell survival factor in a subset of triple negative breast cancers**
Nuša Trošt, Jurij Stojan, Klementina Fon Tacer, Elisabeth D. Martinez
- P11-156 **Proteomic insights in cancer-related extracellular proteolysis with cathepsin K**
Matej Vizovišek, Robert Vidmar, Barbara Sobotič, Lovro Kramer, Veronika Stoka, Boris Turk, Marko Fonovič
- P11-157 **Phosphorylation of FUS 526Y affects its interaction with TNPO1 and nuclear import**
Simona Darovic, Vera Župunski, Sonja Prpar Mihevc, Maja Štalekar, Youn-Bok Lee, Gregor Gunčar, Christopher E. Shaw, Boris Rogelj
-

Systems Biology and Bioinformatics (P11-159 – P11-160)

- P11-158 **Drug metabolism and circadian clock interplay in mouse liver**
Anja Korenčič, Rok Košir, Tjaša Bensa, Eva Oblak Zvonar, Hanspeter Herzel, Damjana Rozman

PII-159 **Analysis of communication networks of glioblastoma stem cell markers**
Marko Vidak, Ivana Jovcevska, Neja Zupanec, Radovan Komel