



P7-06

AN IMPROVED AND WIDELY ACCESSIBLE dNTP QUANTITATION TOOL

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Cells maintain a fine-tuned concentration balance in the pool of deoxyribonucleoside 5'-triphosphates (dNTPs). The perturbation of this balance results in increased mutation frequencies suggested to promote cancer development and drug resistance. To study dNTP imbalances and their consequences, an accurate and relatively high-throughput method is necessary. The dNTP quantitation method of our choice is a fluorescence-based, TaqMan-like polymerase assay published by Wilson et al, NAR 2011. This assay has the advantages of being accessible in a standard molecular biology laboratory and having the potential to be automated in contrast to mass spectrometry or radioactive measurements. Although this method works well in diluted samples with high dNTP levels, we observed that the sample matrix largely decreases assay performance.

Upon thorough kinetic analysis of the fluorescent dNTP incorporation curves, we found that the Taq polymerase exhibits a dNTP independent, signal generating exonuclease activity and that the polymerization and exonuclease activity are partially inhibited by the sample matrix. Based on our kinetic investigations we suggest several assay modifications and a novel, kinetics-based and automated analysis method. Using these modifications, we measured dNTP pools in widely different organisms including *Mycobacterium smegmatis*, *Staphylococcus aureus* and human cancer cells. We found that our improved method is capable of i) determining dNTP concentrations in samples previously proved to be unmeasurable by eliminating the interfering matrix effect, and ii) improving the quantitation limits of the assay.

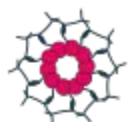
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to living systems

Final Programme & Book of Abstracts



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WELCOME

Dear Colleagues,

It is our honour and pleasure to welcome you at the FEBS3+ conference '*From molecules to living systems*', in Siófok, Hungary. The FEBS3+ conference scheme supports the joint organisation of scientific meetings by three or more FEBS constituent societies. Accordingly, the Siófok meeting is hosted by the Hungarian Biochemical Society, and is organised together with the Slovenian Biochemical Society, the Croatian Society of Biochemistry and Molecular Biology, and Serbian Biochemical Society. With this conference we aim to replicate the format and build on the success of two earlier FEBS3+ meetings held in 2012 in Opatija, Croatia; and in 2015 in Portorož, Slovenia. The conference will also be considered the National Annual Meeting of the participating societies.

The scientific program will cover the most up-to-date topics in the field of molecular life sciences, particularly biochemistry and molecular biology. Special attention will be given to omics and systems approaches, and to studies exploring the molecular basis of disease. The scientific sessions are organised around themes that are most attractive to the participating societies. We are pleased and honoured the Scientific Program is hallmarked by 1-1 plenary speakers from each organising country; moreover, two of them are FEBS National Lecturers at the same time. We believe that the conference will also provide an excellent opportunity to showcase our latest results in this collection of fast moving and topical research fields, find new ideas and establish new scientific collaborations among the organising countries. We wish to thank the suppliers of laboratory consumables and equipment who are essential for the progress of biomolecular science. We are very grateful for their support of the conference.

In addition to the dynamic and interesting scientific program, we invite you participate in social events. In the first evening we organise a Welcome Party, while on Tuesday afternoon the participants of the conference are invited to get to see the largest freshwater lake of Central Europe, Lake Balaton, by a boat cruise. During the cruise, you can admire the Balaton and its active sailing scene, and the lakeside attractions such as the Tihany Peninsula with its 11th century Benedictine Abbey, which has been declared one of the World Heritage Sites by UNESCO. After the boat excursion, a unique style conference dinner will be organised in the form of a barbecue party on the shore of Lake Balaton.

We wish you all a fruitful and enjoyable meeting and a pleasant staying at picturesque Lake Balaton.

László Buday

Chair of the Scientific Committee

Dávid Szüts

Chair of the Organising Committee

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PROGRAMME

SUNDAY, SEPTEMBER 2, 2018

| | |
|---------------|--|
| 12:00 – 15:30 | Registration |
| 15:30 – 16:00 | Opening ceremony |
| 16:00 | PL-01 Opening lecture / <i>Toscana room</i> THE ROLE OF CO-ACTIVATOR COMPLEXES IN REGULATING RNA POLYMERASE II TRANSCRIPTION <u>László Tora</u> |
| 16:50 – 17:30 | <i>Coffee break</i> |
| 17:30 – 19:05 | #1 Regulation of gene expression / <i>Toscana room</i> chair: Jasmina Rokov-Plavec; co-chair: Melita Vidakovic |
| 17:30 | IT-01 FINE TUNED GENE EXPRESSION VIA Epi-CRISPR-INDUCED TARGETED DNA (de)METHYLATION <u>Melita Vidaković</u> , M. Sinadinović, J. Arambašić Jovanović, A. Tolić, J. Rajić, M. Đorđević, A. Uskoković, N. Grdović, M. Mihailović, S. Dinić and T. Jurkowski |
| 17:55 | IT-02 IDENTIFICATION OF NOVEL REGULATION OF CAS3 ACTIVITY IN <i>ESCHERICHIA COLI</i> <u>Ivana Ivančić-Baće</u> , D. Markulin, P. Peharec Štefanić, K. Majsec, A. Čulo, M. Pandžić and M. Matković |
| 18:20 | SL-01 THE INFLUENCE OF <i>ROBINIA PSEUDOACACIA</i> L. AND <i>AMORPHA FRUTICOSA</i> L. ON RELATIVE EXPRESSION OF THE GENES FOR APOPTOSIS AND BIOTRANSFORMATION IN NORMAL AND BREAST CARCINOMA CELLS <u>Aleksandra G. Nikezić</u> , Danijela M. Cvetković, Jovana V. Jovankić and Snežana D. Marković |
| 18:35 | SL-02 A POSSIBLE MECHANISM EXPLAINING THE TELOMERASE PROMOTER INACTIVATION IN MAMMALIAN SOMATIC CELLS <u>Balázs Vedelek</u> , Asha Maddali Kiran, Imre Miklós Boros |
| 18:50 | SL-03 UNDERSTANDING mRNA DEGRADATION CAUSED BY MISSENSE MUTATION IN AHCY DEFICIENCY <u>Filip Rokić</u> , Robert Belužić and Oliver Vugrek |



SUNDAY, SEPTEMBER 2, 2018

| | | |
|---------------|--------------|---|
| 17:30 – 19:05 | | #2 Membrane structure and function / Marbella room chair: Gregor Anderluh; co-chair: Aleksandra Zeljković |
| 17:30 | IT-03 | CHARACTERISTICS OF ADVANCED LIPID PROFILE IN PATIENTS WITH COLORECTAL CANCER <u>Aleksandra Zeljkovic</u> , Sandra Vladimirov, Tamara Gojkovic, Aleksandra Stefanovic, Jelena Janac, Jelena Vekic, Dejan Zeljkovic, Bratislav Trifunovic, Zoran Rujanovski and Vesna Spasojevic-Kalimanovska |
| 17:55 | IT-04 | EPCAM: NOT AN ADHESION MOLECULE, RATHER A SIGNALING RECEPTOR <u>Miha Pavšič</u> , Aljaž Gaber and Brigita Lenarčič |
| 18:20 | SL-04 | COORDINATED ACTION OF LKB1 AND PKA IN REGULATION OF EPITHELIAL CELL POLARITY Zeöld Anikó and <u>László Homolya</u> |
| 18:35 | SL-05 | PROTEIN-LIPID INTERPLAY IN THE NEURONAL MEMBRANE: GANGLIOSIDES AND SPECIFIC GLYCOPROTEINS AS NEW INTERACTING PARTNERS <u>Kristina Mlinac-Jerković</u> |
| 18:50 | SL-06 | NANOEMULSION-BASED LIPID DROPLETS AS A NEW MODEL LIPID SYSTEM <u>Valerija Vežočanik</u> , Vesna Hodnik, Halil I. Okur, Simona Sitar, Magda Tušek-Žnidarič, Ksenija Kogej, Kristina Sepčić, Sylvie Roke, Ema Žagar and Peter Maček |
| 20:00 – 22:00 | | Welcome party |

MONDAY, SEPTEMBER 3, 2018

| | | |
|---------------|--------------|---|
| 08:00 | | Registration |
| 08:30 – 10:05 | | #3 Structure and function of proteins / Toscana room chair: Brigita Lenarcic; co-chair: Vjeko Tomaic |
| 08:30 | IT-05 | HPV-16 E7 PHOSPHORYLATION AS A SIGNATURE OF MALIGNANCY <u>Vjeko Tomaic</u> |
| 08:55 | IT-06 | INTERACTIONS OF NEP1-LIKE PROTEINS WITH PLANT LIPID MEMBRANES <u>Gregor Anderluh</u> , Tea Lenarčič, Tina Snoj, Katja Pirc, Vesna Hodnik and Marjetka Podobnik |
| 09:20 | SL-07 | LIGAND INDUCED CONFORMATIONAL REARRANGEMENTS REGULATE THE SWITCH AMONG FUNCTIONS OF ROCK2 István Hajdú, András Szilágyi, Barbara Végh, András Wacha, Éva Gráczer, Márk Somogyi, Péter Gál and <u>Péter Závodszy</u> |
| 09:35 | SL-08 | RNA-BINDING OF THE DISORDERED REGIONS IN HISTONE LYSINE METHYLTRANSFERASES <u>Ágnes Tantos</u> , Beáta Szabó, Rawan K. I. Abukhairan, Tamás Horváth and Éva Schad |
| 09:50 | SL-09 | HEAT STRESS SIGNIFICANTLY STABILIZES BPM1 PROTEIN IN <i>ARABIDOPSIS THALIANA</i> SEEDLINGS <u>Andreja Škrljajca</u> , Mateja Jagić, Lucija Markulin, Dunja Leljak-Levanić and Nataša Bauer |



MONDAY, SEPTEMBER 3, 2018

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| 08:00 | | Registration |
| 08:30 – 10:05 | | #4 Immunity and inflammation / <i>Marbella room</i> chair: Tihomir Balog; co-chair: Péter Gál |
| 08:30 | IT-07 | CROSS-TALKS BETWEEN THE LECTIN AND THE ALTERNATIVE PATHWAYS OF THE COMPLEMENT SYSTEM <u>Péter Gál</u> , Andrea Kocsis, Gábor Oroszlán, Dávid Szakács, Katalin Paréj, Ráhel Dani, Gábor Pál, Péter Závodszy and József Dobó |
| 08:55 | IT-08 | CYSTATIN F AS A REGULATOR OF IMMUNE CELL CYTOTOXICITY <u>Janko Kos</u> , Milica Perišić Nanut, Mateja Prunk, Jerica Sabotič, Esmeralda Dautović, Emanuela Senjor and Anahid Jewett |
| 09:20 | SL-10 | STUDY OF INTERACTION OF HUMAN ANTIBODIES WITH METALLOPORPHYRINS <u>Nina Božinović</u> , Sébastien Lacroix-Desmazes and Jordan D. Dimitrov |
| 09:35 | SL-11 | HIGH DIMENSIONAL IMMUNOPHENOTYPING OF PATIENTS BY SINGLE CELL MASS CYTOMETRY <u>Gábor J. Szebeni</u> , József Ágoston Balog, Ágnes Zvara, László Kovács, Attila Balog, Klára Szalontai and László G. Puskás |
| 09:50 | SL-12 | IDENTIFICATION OF NOVEL LEGUMAIN PHYSIOLOGICAL SUBSTRATES PROVIDES NOVEL LINK WITH INNATE IMMUNE RESPONSE IN MICE <u>Robert Vidmar</u> , Matej Vizovišek, Janja Završnik, Aleksander Krajnc, Thomas Reinheckel, Boris Turk and Marko Fonović |
| 10:05 – 10:40 | | <i>Coffee break</i> |
| 10:40 | PL-2 | Plenary Lecture / <i>Toscana room</i> mRNA SEQUENCE DETERMINANTS OF EFFICIENT PROTEIN SYNTHESIS <u>Sergej Djuranovic</u> , Kyle Cottrell, Manasvi Verma and Slavica Pavlovic-Djuranovic |
| 11:30 – 13:00 | | Poster Session 1. |
| 13:00 – 16:00 | | <i>Lunch break</i> |

MONDAY, SEPTEMBER 3, 2018

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| 16:00 – 16:50 | | #5 Molecular signaling / Toscana room chair: László Buday; co-chair: Antonija Jurak Begonja |
| 16:00 | IT-09 | VESICULAR TRAFFICKING IN MEGAKARYOPOIESIS AND PLATELET PRODUCTION: THE ROLE OF PI3P AND LATE ENDOSOMES/LYSOSOMES <u>Antonija Jurak Begonja</u> |
| 16:25 | IT-10 | REGULATION OF CELLULAR FUNCTIONS BY THE INTERPLAY OF DISTINCT TYPES OF PHOSPHO-SER/THR SPECIFIC PROTEIN PHOSPHATASE <u>Ferenc Erdódi</u> |
| 16:50 – 17:20 | | <i>Coffee break</i> |
| 17:20 – 18:05 | | #5 Molecular signaling / Toscana room chair: László Buday; co-chair: Antonija Jurak Begonja |
| 17:20 | SL-13 | MYOSIN PHOSPHATASE REGULATES GENE EXPRESSION IN CANCER CELLS <u>Beáta Lontay</u> , Adrienn, Sipos, István Tamás, Evelin Major and Ferenc Erdódi |
| 17:35 | SL-14 | MONITORING RAC DYNAMICS IN HIGHLY MOTILE CELLS <u>Igor Weber</u> , Maja Marinović, Marko Šoštar and Vedrana Filić |
| 17:50 | SL-15 | THE LOSS OF SCAFFOLD PROTEIN TKS4 INDUCES EMT LIKE CHANGES IN HUMAN COLORECTAL CARCINOMA CELLS, AND IN TKS4-KO MICE <u>Bálint Szeder</u> |



MONDAY, SEPTEMBER 3, 2018

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| 16:00 – 16:50 | | #6 Cell death and differentiation / Marbella room chair: Janko Kos; co-chair: László Fésüs |
| 16:00 | IT-11 | MOLECULAR CHARACTERIZATION OF HUMAN BEIGE ADIPOCYTES <u>László Fésüs</u> , Beáta Bartáné Tóth, Mária Szatmári-Tóth, Ágnes Klusóczki, Rini Arianti, Abhirup Shaw, Szilárd Póliska, Ferenc Győry and Endre K. Kristóf |
| 16:25 | IT-12 | BIOPROSPECTING PLANTS AND MICROORGANISMS FOR CYTOTOXIC AND IMMUNOMODULATORY COMPOUNDS: A COMBINED ORGANIC SYNTHESIS AND ANALYSIS APPROACH <u>Niko S. Radulović</u> |
| 16:50 – 17:20 | | <i>Coffee break</i> |
| 17:20 – 18:05 | | #6 Cell death and differentiation / Marbella room chair: Janko Kos; co-chair: László Fésüs |
| 17:20 | SL-16 | PHAGOCYTOSIS OF APOPTOTIC CELLS FROM THE PERSPECTIVE OF TRANSGLUTAMINASE 2 <u>Zsuzsa Szondy</u> , Zsolt Sarang, Katalin Sándor and Krisztina Köröskényi |
| 17:35 | SL-17 | NOVEL WAYS TO CONTROL PARP1-MEDIATED CELL DEATH <u>László Virág</u> , Zsolt Regdon, Agnieszka Robaszkiewicz, Alexandra Kiss, Katalin Kovács and Csaba Hegedűs |
| 17:50 | SL-18 | BATOKINES - INTERLEUKIN-6 RELEASED FROM DIFFERENTIATING HUMAN BEIGE ADIPOCYTES IMPROVES BROWNING <u>Endre Károly Kristóf</u> , Ágnes Klusóczki, Abhirup Shaw, Klára Varga, Boglárka Vinnai, Ferenc Győry, Beáta Bartháné Tóth, Szilárd Póliska, Zsolt Bacsó and László Fésüs |

TUESDAY, SEPTEMBER 4, 2018

| | | |
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| 08:00 | | Registration |
| 08:30 – 10:05 | | #7 DNA repair and cancer / Toscana room chair: Mihály Kovács; co-chair: Maja Herak Bosnar |
| 08:30 | IT-13 | NME/NM23/NDPK FROM UNICELLULAR EUKARYOTES TO HUMANS <u>Maja Herak Bosnar</u> , Drago Perina, Matija Harcet, Andreja Mikoč, Ružica Bago, Martina Deželjin and Helena Četković |
| 08:55 | IT-14 | MUTAGENIC PROCESSES IN HOMOLOGOUS RECOMBINATION DEFICIENT CELLS Judit Gervai, Hella Gyergyák, Ádám Póti, Dan Chen, Zoltán Szállási, Andrea L. Richardson and <u>Dávid Szűts</u> |
| 09:20 | SL-19 | HUMAN BLM HELICASE MAINTAINS BALANCE BETWEEN D-LOOP DISRUPTION AND STABILIZATION <u>Gábor M. Harami</u> , Yeonee Seol, János Pálinkás, Máté Gyimesi, Zoltán J. Kovács, Máté Martina, Keir C. Neuman and Mihály Kovács |
| 09:35 | SL-20 | BRCA1 MUTATION SIGNATURE IN BREAST CANCER <u>Ádám Nagy</u> and Balázs Gyórfy |
| 09:50 | SL-21 | DISSOLVING SINGLE DNA REPAIR FOCI BY SUPER-RESOLUTION STORM MICROSCOPY Hajnalka Majoros, Dániel Varga, Zsuzsanna Újfaludi, Miklós Erdélyi and <u>Tibor Pankotai</u> |



TUESDAY, SEPTEMBER 4, 2018

| | | |
|---------------|--------------|---|
| 08:00 | | Registration |
| 08:30 – 10:05 | | #8 Developmental Biology and neuroscience / <i>Marbella room</i> chair: Zrinka Kovarik, co-chair: Gábor Juhász |
| 08:30 | IT-15 | NON-AUTOPHAGIC ROLES OF ATG PROTEINS IN DROSOPHILA <u>Gábor Juhász</u> |
| 08:55 | IT-16 | ABHYDROLASE DOMAIN-CONTAINING PROTEIN 4 (ABHD4) IS AN ESSENTIAL REGULATOR OF CELL FATE DECISION IN THE MOUSE EMBRYONIC NEOCORTEX Zsófia I. László, Zsolt Lele, Miklós Zöldi, Vivien Miczán, Zsolt Balogi, Fruzsina Mógor, Ashley J. Dorning, Gabriel M. Simon, Ken Mackie, Imre Kacs Kovics, Benjamin F. Cravatt and <u>István Katona</u> |
| 09:20 | SL-22 | A NOVEL CRUCIAL ROLE OF VITAMIN C IN A PROCESS OF NORMAL NEURONAL MIGRATION <u>Ivan Capó</u> , Natasa Hinic, Ivan Milenkovic, Nada Vuckovic, Lalosevic Dusan, Nebojsa Stilinovic and Slobodan Sekulic |
| 09:35 | SL-23 | POTENT LIPOPHILIC REACTIVATORS OF PHOSPHORYLATED CHOLINESTERASES ARE NOT CYTOTOXIC AND ARE METABOLICALLY STABLE <u>Tamara Zorbaz</u> , Petra Mišetić, Antonio Zandona, Anissa Braiki, Nikolina Maček Hrvat, Maja Katalinić, Vesna Gabelica Marković, Ludovic Jean, Pierre-Yves Renard and Zrinka Kovarik |
| 09:50 | SL-24 | WHAT WE HAVE LEARNED FROM THE TKS4 KNOCK OUT MOUSE <u>Virag Vas</u> , Gyöngyi Kudlik, Tamás Háhner, Metta Dülk, Kitti Koprivanacz, Balázs Merő, Bálint Szeder and László Buday |
| 10:05 – 10:40 | | <i>Coffee break</i> |
| 10:40 | PL-3 | Plenary Lecture / <i>Toscana room</i> THE FLUID WORLD OF PROTEIN-RNA COMPLEXES: ASSEMBLY, FUNCTION & EVOLUTION <u>Jernej Ule</u> |
| 11:30 – 13:00 | | Poster Session 2. |
| 13:00 – 14:15 | | <i>Lunch break</i> |
| 14:30 – 16:30 | | <i>Boat Excursion</i> |
| 20:00 – 23:00 | | <i>Congress Dinner</i> |

WEDNESDAY, SEPTEMBER 5, 2018

| | | |
|---------------|--------------|---|
| 08:00 | | Registration |
| 08:30 – 10:05 | | #9 Biotechnology / Toscana room chair: Radivoje Prodanovic; co-chair: Kristina Gruden |
| 08:30 | IT-17 | EXPLORING TRANSCRIPTONAL REGULATORY NETWORKS IN POTATO IMMUNE SIGNALING <u>Kristina Gruden</u> |
| 08:55 | IT-18 | ULTRAHIGH-THROUGHPUT SCREENING SYSTEMS FOR DIRECTED EVOLUTION OF ENZYMES <u>Radivoje Prodanovic</u> |
| 09:20 | SL-25 | CROSSING ENHANCED AND HIGH FIDELITY SPCAS9 NUCLEASES <u>Péter István Kulcsár</u> , András Tólas, Krisztina Huszár, Eszter Tóth, Nóra Weinhardt, Elfrieda Fodor and Ervin Welker |
| 09:35 | SL-26 | IMPROVEMENT OF THE OXIDATIVE STABILITY OF FUNGAL LIGNINOLYTIC PEROXIDASES BY FACS-BASED HIGH THROUGHPUT SCREENING SYSTEM <u>Karla Ilic Durdic</u> , R. Ostafe, H. Schinkel, S. Ece, S. Schillberg, R. Fischer and R. Prodanovic |
| 09:50 | SL-27 | ENGINEERING SAFE LACTIC ACID BACTERIA FOR THE TREATMENT OF INFLAMMATORY BOWEL DISEASE <u>Aleš Berlec</u> , Katja Škrlec and Borut Štrukelj |
| 10:05 – 10:35 | | <i>Coffee break</i> |



WEDNESDAY, SEPTEMBER 5, 2018

| | | |
|---------------|--------------|---|
| 08:00 | | Registration |
| 08:30 – 10:05 | | #10 Systems biology and bioinformatics/ <i>Marbella room</i> chair: Edward Petri; co-chair: Marko Fonović |
| 08:30 | IT-19 | PROTEASE CLEAVAGE SITE FINGERPRINTING BY LABEL-FREE IN-GEL DEGRADOMICS Robert Vidmar, Matej Vizovišek, Dušan Turk, Boris Turk, <u>Marko Fonović</u> |
| 08:55 | IT-20 | STRUCTURE BASED DESIGN OF STEROIDAL INHIBITORS OF BREAST AND PROSTATE CANCER CELL GROWTH <u>Edward Petri</u> , Andjelka Čelić, Jovana Plavša, Sofija Bekić, Maja Marinović, Jovana Ajduković, Marina Savić, Olivera Klisurić and Marija Sakač |
| 09:20 | SL-28 | A SYSTEMS BIOLOGICAL ANALYSIS OF CELLULAR LIFE-AND-DEATH DECISION IN NEURODEGENERATIVE DISEASES <u>Orsolya Kapuy</u> , Marianna Holczer, Margita Márton, Boglárka Besze, Bence Hajdú and PK Vinod |
| 09:35 | SL-29 | SLIC-CAGE: HIGH-RESOLUTION TRANSCRIPTION START SITE MAPPING USING NANOGRAM-LEVELS OF TOTAL RNA Nevena Cvetesic , Harry Leitch, Malgorzata Borkowska, Ferenc Müller, Piero Carninci, Petra Hajkova and Boris Lenhard |
| 09:50 | SL-30 | COMBINATORIAL ASSEMBLY OF OVERLAPPING SUPERENHANCERS IN DIFFERENT TISSUES Dóra Bojcsuk, Gergely Nagy and <u>Bálint L. Bálint</u> |
| 10:05 – 10:35 | | <i>Coffee break</i> |

WEDNESDAY, SEPTEMBER 5, 2018

| | | |
|---------------|--------------|---|
| 10:35 – 12:10 | | #11 Metabolism / Toscana room chair: Péter Bay; co-chair: Ivana Novak Nahir |
| 10:35 | IT-21 | REGULATION OF NIX-MEDIATED MITOPHAGY Mija Marinković, Matilda Šprung, Vladimir Rogov, Volker Dötsch, Ivan Đikić and <u>Ivana Novak</u> |
| 11:00 | IT-22 | ESTROGEN BIOSYNTHESIS AND OXIDATIVE METABOLISM IN ENDOMETRIAL CANCER <u>Tea Lanišnik Rižner</u> , Maša Sinreih, Renata Pavlič, Neli Hevir, Suzana Vidic and Tamara Knific |
| 11:25 | SL-31 | WHERE TRANSLATION MEETS PLANT STEROID METABOLISM: INTERACTION OF SERYL-TRNA SYNTHETASE AND BEN1 PROTEIN FROM <i>ARABIDOPSIS THALIANA</i> <u>Mario Kekez</u> , Vladimir Zanki, Ivana Kekez, Dubravka Matković-Čalogović and Jasmina Rokov-Plavec |
| 11:40 | SL-32 | SEXUAL ASPECTS IN HEPATIC METABOLISM AND ITS ABNORMALITIES: A SYSTEMS APPROACH <u>Damijana Rozman</u> , Kaja Blagotinšek, Tanja Cvitanović, Žiga Urlep, Peter Juvan, Miha Moškon and Miha Mraz |
| 11:55 | SL-33 | PREECLAMPSIA MODULATES STRUCTURE OF THE INSULIN AND THE TYPE 1 INSULIN-LIKE GROWTH FACTOR RECEPTOR <u>Dragana Robajac</u> , Romana Masnikosa, Željko Miković and Olgica Nedić |



WEDNESDAY, SEPTEMBER 5, 2018

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| 10:35 – 12:10 | | #12 Molecular basis of disease and therapy / <i>Marbella room</i> chair: Marija Gavrovic-Jankulovic; co-chair: Ferenc Gallyas |
| 10:35 | IT-23 | MITOCHONDRIAL FUSION; A NOVEL THERAPEUTIC TARGET IN MITOCHONDRIAL DISEASES Aliz Szabó, Katalin Sümegi, Katalin Fekete, Enikő Hocsák, Balázs Debreceni, György Sétáló Jr., Krisztina Kovács, Laszlo Deres, András Kengyel, Dominika Kovács, József Mandl, Miklós Nyitrai, Mark A. Febbraio, Balázs Sümegi and <u>Ferenc Gallyas Jr.</u> |
| 11:00 | IT-24 | THE MOLECULAR BASIS OF BEHAVIOURAL TRAITS IN GANGLIOSIDE SYNTHESIS DEFICIENT MICE <u>Marija Heffer</u> , David Andrijević, Milorad Zjalić, Ozana Katarina Tot, Barbara Viljetić, Senka Blažetić, Irena Labak, Siniša Skokić, Srećko Gajović and Ron Schnaar |
| 11:25 | SL-34 | MULTI-TARGET BASED PHENOTYPIC SCREENING: A NEW CONCEPT IN THE STRATEGY OF DRUG DISCOVERY AGAINST ALZHEIMER'S DISEASE <u>László Puskás</u> |
| 11:40 | SL-35 | CATHEPSIN X INHIBITORS: NOVEL OPPORTUNITY TO IMPAIR TUMOR PROGRESSION AND IMPROVE CATHEPSIN B DIRECTED ANTITUMOR THERAPY <u>Ana Mitrović</u> , Janja Završnik, Urša Pečar Fonović, Damijan Knez, Stanislav Gobec, Boris Turk and Janko Kos |
| 11:55 | SL-36 | HOXA10, A PROGNOSTIC MARKER IN ACUTE MYELOID LEUKEMIA PATIENTS WITH NPM1 DRIVER MUTATION <u>Ágnes Ősz</u> , Ádám Nagy, Csaba Bödör and Balázs Gyórfy |
| 12:10 | | PL-4 Plenary Lecture / <i>Toscana room</i> MULTIPLE ROLES OF INTERACTIONS BETWEEN DYNAMIN AND CYTOSKELETON IN THE CELL <u>Sanja Sever</u> |
| 13:00 – 13:05 | | Closing remarks |

POSTER SESSION

POSTER SESSION 1. - MONDAY, SEPTEMBER 3, 2018**11:30 – 13:00****Poster mounting:** September 2, 12:00-; **Removal:** September 5, 12:00

- P1-01** **CANONICAL ELEMENTS DRIVE SUPER-ENHANCER FORMATION**
Dóra Bojcsuk, Gergely Nagy and Bálint L. Bálint
- P1-02** **COMPARING CHROMOSOMAL INTERACTION PATTERNS IN HUMAN DRUG RESISTANT AND SENSITIVE CANCER CELLS**
Anikó Szabó, Gábor Jaksa, Lajos Pintér and Imre Boros
- P1-03** **COMPARISON OF GENE EXPRESSION PROFILES OF DEEP NECK AND SUBCUTANEOUS HUMAN ADIPOCYTES TO INVESTIGATE THERMOGENIC POTENTIAL**
Rini Arianti, Beáta Bartáné Tóth, Abhirup Shaw, Attila Vámos, Ferenc Gyóry, Szilárd Pólska, Endre Károly Kristóf and László Fésüs
- P1-04** **COOPERATION OF PROTECTIVE MOLECULAR AND BEHAVIOURAL RESPONSES TO EARLY LIFE STRESS IN CAENORHABDITIS ELEGANS**
Eszter Gecse, Beatrix Gilányi, Csaba Márton, Gábor Hajdú and Csaba Sóti
- P1-05** **COUP-TFII (SUPER) ENHANCERS ARE ASSOCIATED WITH CTCF MEDIATED INTERACTIONS IN CANCER CELL LINES**
Edina Erdős and Bálint László Bálint
- P1-06** **DAF-21/HSP90 IS REQUIRED FOR *C. ELEGANS* LONGEVITY BY ENSURING DAF-16/FOXO ISOFORM A FUNCTION**
Milán Somogyvári, Eszter Gecse and Csaba Sóti
- P1-07** **FUNCTIONAL GENOMIC VARIABILITY OF HUMAN B-LYMPHOBLASTOID CELL LINES WITH IMPLICATIONS IN PHARMACOGENOMIC RESEARCH**
Lilla Ozgyin, Attila Horváth, Zsuzsanna Hevessy and Bálint L. Bálint
- P1-08** ***MGAT3* AND *BACH2* PROMOTER METHYLATION CORRELATES WITH THE IGG GLYCOME IN INFLAMMATORY BOWEL DISEASES**
Marija Klasić, Dora Markulin, Aleksandar Vojta, Ivana Samaržija, Ivan Biruš, Paula Dobrinić, Irena Trbojević-Akmačić, Gordan Lauc and Vlatka Zoldoš
- P1-09** **THE CROSS-TALK OF CHOLESTEROL HOMEOSTASIS AND THE CIRCADIAN CLOCK**
Cene Skubic, Živa Drakulić, Andrej Vrankar, Žiga Urlep and Damjana Rozman
- P1-10** **PLANT AMINOACYL-TRNA SYNTHETASES IN ABIOTIC STRESS**
Jurica Baranasic, Anita Mihalak, Mario Kekez and Jasmina Rokov-Plavec
- P1-11** **RELATIVE QUANTIFICATION OF YEAST CELL WALL PROTEINS IN LOGARITHMIC AND STATIONARY GROWTH PHASE**
Marko Jurkovic, Ida Kovacevic, Ana Novacic and Igor Stuparevic
- P1-12** **THE EFFECT OF EPIGENETIC SILENCING OF HNFA GENE ON GLYCOSYLATION IN DIABETES AND PANCREATIC DUCTAL ADENOCARCINOMA**
Ivona Beccheli, Petra Korac, Gordan Lauc and Vlatka Zoldoš



- P2-01 GENE EXPRESSION PROFILES OF ABC TRANSPORTERS AS A PREDICTOR TO CHEMOTHERAPY IN BREAST CANCER**
János Tibor Fekete and Balázs Győrffy
- P2-02 POLYUNSATURATED FATTY ACIDS PHOSPHOLIPIDS PROFILES IN PLASMA AND LIVER IN WISTAR RATS OF DIFFERENT AGE**
Tamara Popović, Jasmina Debeljak Martačić, Aleksandra Arsić, Slavica Ranković, Biljana Pokimica and Maria Glibetić
- P2-03 THE ANALYSIS OF CELL-ADHESION GLYCOPROTEIN NEUROPLASTIN EXPRESSION DURING CELLULAR DIFFERENTIATION IN SH-SY5Y NEUROBLASTOMA CELLS**
Svijetlana Kalanj Bognar, Katarina Ilić and Kristina Mlinac-Jerković
- P2-04 UNDERSTANDING NLP-PLANT MEMBRANE INTERACTION**
Tea Lenarčič, Vesna Hodnik, Katja Pirc, Marjetka Podobnik and Gregor Anderluh
- P2-05 UNFOLDING THE MECHANISM OF NLP – MEMBRANE INTERACTION**
Katja Pirc, Tina Snoj and Gregor Anderluh
- P3-01 AFFINITY-BASED SPECIFICITY-MAP OF S100 PROTEINS**
Márton Simon, Gergő Gógl, Péter Ecsédi and László Nyitrai
- P3-02 APPLICATION OF SV40 LARGE T ANTIGEN-BASED *IN VITRO* REPLICATION COUPLED WITH INTERFERENCE STUDIES FOR MONITORING LESION BYPASS IN CELLULAR EXTRACTS**
Zoltán Szeltner, Dávid Szüts and Ádám Póti
- P3-03 ATBPM PROTEIN INTERACTS WITH COMPONENTS OF RNA-DIRECTED DNA METHYLATION**
Mateja Jagić, Andreja Škiljaica, Nataša Bauer and Dunja Leljak-Levanić
- P3-04 CALCIUM INDUCED FOLDING OF PERNISINE, A THERMOSTABLE SERINE PROTEASE FROM EXTREMOPHILIC ARCHAEON AEROPYRUM PERNIX**
Miha Bahun, Marko Šnajder, Kevin Hartman, Anamarija Habič and Nataša Poklar Ulrih
- P3-05 CHARACTERIZATION OF THE INTRAMOLECULAR INTERACTIONS OF THE PROTEIN TKS4**
Balázs Merő, Anna Cserkaszky, Kitti Koprivanacz, László Radnai, Bálint Szeder, Virág Vas, Metta Dülk, Gyöngyi Kudlik, Gergő Gógl and László Buday
- P3-06 CHOLESTEROL-DEPENDENT EPI TOPE MAPPING IN P-GLYCOPROTEIN WITH MASS SPECTROMETRY**
Gabriella Gellén, Eva Klement, Katalin Medzihradszky, Andrew Holding and Zsolt Bacso
- P3-07 COMPARATIVE ANALYSIS OF SYNERGISTIC FOLDING PROTEINS WITH DIFFERENT OLIGOMERIZATION**
Anikó Mentés, Erzsébet Fichó, Csaba Magyar, Miklós Cserző and István Simon
- P3-08 COMPARATIVE PROTEOMIC ANALYSIS OF 2,6-DI-TERT-BUTYLPHENOL DEGRADATION BY PSEUDOMONAS AERUGINOSE SAN AI**
Ana Medić, Sonja Šuvakov, Ksenija Stojanović and Ivanka Karadžić
- P3-09 COULD BINDING OF ANTIPSYCHOTIC CLOZAPINE TO KEY ANTIOXIDANT ENZYMES BE ONE OF THE MISSING LINKS IN CLARIFYING ITS SIDE EFFECTS?**
Tamara Vasović, Simeon Minić, Aleksandra Nikolić-Kokić, Duško Blagojević, Čedo Miljević, Mihajlo B. Spasić and Milan Nikolić

- P3-10 EFFECT OF ALTERNATIVE SPLICING ON HUMAN TRANSMEMBRANE PROTEIN TOPOLOGY**
Júlia K. Varga and Gábor E. Tusnády
- P3-11 EPITHELIAL CELL ADHESION MOLECULE DOES NOT FORM INTER-CELLULAR HOMO-OLIGOMERIC CONTACTS**
Aljaž Gaber, Seung Joong Kim, Robyn M. Kaake, Mojca Benčina, Nevan Krogan, Andrej Šali, Miha Pavšič and Brigita Lenarčič
- P3-12 EXPRESSION AND NMR INVESTIGATION OF GKAP AND OTHER POSTSYNAPTIC PROTEINS**
Bálint Péterfia, József Hegedűs, Melinda Keresztes, Anna Sánta, István Pap, Gyula Batta and Zoltán Gáspári
- P3-13 FUNCTIONAL INTERACTION BETWEEN ADENOSINE 2A RECEPTOR AND CATHEPSIN D PROTEASE IN MACROPHAGES**
Adrienn Skopál, Endre Kókai, Bence Gergely, Tamás Kéki, György Haskó and László Virág
- P3-14 IDENTIFICATION OF NOVEL MITOTIC SUBSTRATES OF THE EVOLUTIONARILY CONSERVED PP4 PHOSPHATASE**
Zoltán Kármán and Zoltán Lipinszki
- P3-15 *IN VITRO* ENZYMATIC INVESTIGATION OF A HUMAN DUTPASE MUTATION RELEVANT IN MONOGENIC SYNDROME WITH DIABETES AND BONE MARROW FAILURE**
Dániel András, Kinga Nyíri, Beáta G. Vértessy and Judit Eszter Szabó
- P3-16 ISOFORM SELECTIVE REGULATION OF NON-MUSCLE MYOSIN 2 BY C-TERMINAL PHOSPHORYLATION AND S100 PROTEIN BINDING**
Péter Ecsédi, Neil Billington, Gyula Pálffy, Gergő Gógl, Bence Kiss, Éva Bulyáki, Andrea Bodor, James R. Sellers and László Nyitrai
- P3-17 LIQUID-LIQUID PHASE SEPARATION OF INTRINSICALLY DISORDERED ERD CHAPERON PROTEIN INDUCED BY PROTEIN-RNA INTERACTION**
Nikoletta Murvai, Ágnes Tantos, Beáta Szabó, Bálint Szeder, Csaba Jobbágy, Dénes Kovács and Péter Tompa
- P3-18 LIQUID-LIQUID PHASE SEPARATION THROWS NEW LIGHT ON ONCOGENIC FUSION PROTEINS**
Rita Pancsa, Éva Schád and Péter Tompa
- P3-19 NME6 EXPRESSION AND SUBCELLULAR LOCALIZATION IN HUMAN TUMOR CELL LINES**
Bastien Proust, Martina Radić, Lucija Ačkar, Nikolina Škrobot Vidaček, Helena Četković and Maja Herak Bosnar
- P3-20 NON-CANONICAL ROLE OF THE SNARE PROTEIN YKT6 IN AUTOPHAGOSOME-LYSOSOME FUSION**
Gábor Glatz, Szabolcs Takáts and Gábor Juhász
- P3-21 SILENCING OF MIF AFFECTS MATRIX METALLOPROTEINASE 2 (MMP2) AND MMP9 EXPRESSION IN HUMAN TROPHOBLAST HTR-8/SVNEO CELL LINE**
Aleksandra Vilotić, Milica Jovanović Krivokuća and Ljiljana Vičovac



- P3-22 STRUCTURAL AND CALCIUM BINDING STUDIES OF HUMAN NON-MUSCLE α -ACTININ-1**
Sara Drmota Prebil, Urška Slapšak, Miha Pavšič, Gregor Ilc, Euripedes de Almeida Ribeiro, Dorothea Anrather, Markus Hartl, Lars Backman, Janez Plavec, Brigita Lenarčič and Kristina Djinović-Carugo
- P3-23 THE DIFFERENCE OF AMYLOID FIBRIL FORMATION AFTER REDUCTION AND DENATURATION OF CRUDE PROTEIN PREPARATIONS**
Jelica Milosevic and Natalija Polovic
- P3-24 THE STRUCTURAL FEATURES OF ADAPTIVELY EVOLVING HUMAN PROTEIN REGIONS**
Éva Schád, Erzsébet Fichó, István Simon, Péter Tompa and Rita Pancsa
- P4-01 CROWN ETHERS ARE ABLE TO REVERSE MULTIDRUG RESISTANCE AND AFFECT MITOCHONDRIAL FUNCTION IN CANCER CELLS**
Marija Mioč, Marko Marjanović, Iva Guberović and Marijeta Kralj
- P4-02 CYSTATIN F AND REGULATION OF EFFECTOR FUNCTION OF CYTOTOXIC T CELLS**
Mateja Prunk, Milica Perišić Nanut, Jerica Sabotič and Janko Kos
- P4-03 ECOTIN, A SERINE PROTEINASE INHIBITOR FROM E. COLI, IS A POTENT COMPLEMENT LECTIN PATHWAY INHIBITOR**
Zoltán Attila Nagy, Dávid Szakács, Veronika Harmat, Dávid Héja, Gábor Oroszlán, Barbara Végh, József Dobó, Péter Gál and Gábor Pál
- P4-04 IGE IMMUNE RESPONSE IN DOGS AGAINST MEALWORM PROTEINS**
Blanka Premrov Bajuk, Petra Zrimšek, Tina Kotnik, Ana Lucija Škrajnar, Ana Škorjanc and Breda Jakovac Strajn
- P4-05 IMMUNOMODULATORY AND CYTOTOXIC EFFECTS OF FUNGAL LECTIN CNL**
Milica Perišić Nanut, Špela Konjar, Simon Žurga, Jerica Sabotič and Janko Kos
- P4-06 INVESTIGATING THE ROLE OF TG2 IN MUSCLE REGENERATION**
Nour Al Zaeed, Zsófia Budai and Sarang Zsolt
- P4-07 MERLOT WINE PHENOLICS AS MODULATORS OF CYCLOOXYGENASE PATHWAY**
Tatjana Majkić, Marija Lesjak, Ljilja Torović, Neda Mimica-Dukic and Ivana Beara
- P4-08 OPTIMIZED DENDRITIC CELL DIFFERENTIATION FROM PLURIPOTENT EMBRYONIC STEM CELLS BY RUNX3**
János Varga, Tamás Imre Csuth and István Szatmári
- P4-09 POTENT IMMUNOMODULATORY PINGUISANE-TYPE SESQUITERPENES FROM THE LIVERWORT PORELLA CORDAEANA (PORELLACEAE)**
Nikola M. Stojanović, Niko S. Radulović, Sonja I. Filipović, Dragan B. Zlatković, Miljana R. Đorđević, Pavle J. Randjelović, Katarina V. Mitić, Tatjana M. Jevtović-Stoimenov and Vladimir N. Randelović

- P4-10 TRANSCRIPTOME ANALYSIS OF HUMAN SYSTEMIC AUTOIMMUNE DISEASES COUPLED BY SINGLE CELL MASS CYTOMETRY IMMUNOPHENOTYPING**
József Ágoston Balog, Gábor János Szebeni, Attila Balog, Laszlo Kovács, Ágnes Zvara, Beata Kari and László G. Puskás
- P5-01 A SYSTEMS BIOLOGICAL ANALYSIS OF AMPK-MTOR-ULK1 MODULE VIA CONTROLLING AUTOPHAGY**
Marianna Holczer, Bence Hajdú, Gábor Bánhegyi and Orsolya Kapuy
- P5-02 ACTIVATION OF MYOSIN PHOSPHATASES INCREASES THE CHEMOSENSITIVITY OF LEUKEMIC CELLS**
Emese Tóth, Ferenc Erdódi and Andrea Kiss
- P5-03 ANNEXIN A2 IS A NEW INTERACTING PARTNER OF TIMAP IN ENDOTHELIAL CELLS**
Nikolett Király, Zsófia Thalwieser, Csilla Csontos and Anita Boratkó
- P5-04 CHARACTERIZATION OF SACML PHOSPHATASE AND PI4P IN DAMI CELL LINE AND PRIMARY MOUSE MEGAKARYOCYTES**
Ana Bura, Ivana Bertović, Julie Boscher and Antonija Jurak Begonja
- P5-05 CROSSTALK BETWEEN NOTCH AND PARP PATHWAYS IN LYMPHOCYTES**
Luka Horvat, Josipa Skelin, Mariastefania Antica and Maja Matulic
- P5-06 DYNAMIC, CELL-BASED PROTEIN-PROTEIN INTERACTION SENSORS**
Viktória Bilics, Gergő Gógl, Beáta Biri and László Nyitray
- P5-07 FLOTILLIN-1 IS A NEWLY IDENTIFIED SUBSTRATE OF PP2A-B55**
Zsófia Thalwieser, Nikolett Király, Csilla Csontos and Anita Boratkó
- P5-08 INVESTIGATION OF THE ROLE OF SMOOTHELIN-LIKE PROTEIN 1 IN HYPERTHYROIDISM**
Evelin Major, István Tamás, Dániel Horváth, Adrienn Sipos, Péter Fülöp, Ferenc Győri and Beáta Lontay
- P5-09 LUTEOLIN INDUCES CYTOTOXICITY IN HUMAN CERVICAL CANCER CELLS THROUGH ACTIVATION OF MAPK SIGNALING PATHWAY**
Iva Vukelić, Iva Potočnjak, Zlata Zaharija Čučić, Ivana Gobin and Robert Domitrović
- P5-10 LYSOPHOSPHATIDIC ACID BINDS TO THE SH2 DOMAIN OF NCK1 AND ABLE TO INHIBIT ITS BINDING TO ITS TARGET PHOSHOPEPTIDE**
Kitti Koprivanac, Balázs Besztercei, Tünde Juhász, Balázs Merő, László Buday and Károly Liliom
- P5-11 MITOGEN-ACTIVATED PROTEIN KINASE SIGNALLING IN THE MODEL UNICELLULAR MICROALGA, CHLAMYDOMONAS REINHARDTII**
Tímea V. Nádai, Balázs Kalapos, Gábor Galiba, Katerina Bisova and Róbert Dóczy
- P5-12 MOLECULAR SURVEILLANCE RESPONSES UNDERLIE BENZALDEHYDE INDUCED AVERSION IN CAENORHABDITIS ELEGANS**
Gábor Hajdú, István Taisz and Csaba Sóti



- P5-13 NEW MECHANISMS OF GLUCOSE UPTAKE IN SKELETAL MUSCLE**
Zoltán Márton Köhler, György Trencsényi, László Dux and Anikó Keller-Pintér
- P5-14 NIX PHOSPHORYLATION AND DIMERIZATION-TWO MECHANISMS OF MITOPHAGY ACTIVATION**
Mija Marinković, Matilda Šprung, Vladimir Rogov, Volker Dötsch, Ivan Dikic and Ivana Novak
- P5-15 REGULATION OF HEME OXYGENASE-1 EXPRESSION IN MACROPHAGES DURING CLEARANCE OF APOPTOTIC CELLS**
Éva Fige and Zsuzsa Szondy
- P5-16 RETINOIC ACID DEPENDENT REPROGRAMMING IN NEURO- AND GLIOBLASTOMA CELL LINES**
Luka Horvat, Martina Grubar, Mariastefania Antica, Josip Madunić and Maja Matulić
- P5-17 STUDYING THE GENES OF PERK PATHWAY DURING ENDOPLASMIC RETICULUM STRESS**
Margita Márton, Gábor Bánhegyi and Orsolya Kapuy
- P5-18 SUPPRESSION OF AMPK BY NRF2 DOWNREGULATES AUTOPHAGY DURING PROLONGED OXIDATIVE STRESS**
Anita Kurucz, Mónika Kosztelnik, Diána Papp, Emily Jones, Tímea Sigmond, János Barna, Maria H. Traka, Tamás Lőrincz, András Szarka, Gábor Bánhegyi, Tibor Vellai, Tamás Korcsmáros and Orsolya Kapuy
- P5-19 THE BACKGROUND OF THE INTERACTION BETWEEN SCAFFOLD PROTEIN TKS4 AND SRC KINASE**
Metta Dülk, Bálint Szeder, Gábor Glatz, Balázs L. Merő, Kitti Koprivanacz, Gyöngyi Kudlik, Virág Vas, Anna Cserkaszkzy, László Radnai, and László Buday
- P5-20 THE ROLE OF ADENOSINE A3 RECEPTOR SIGNALING IN APOPTOTIC CELL-DRIVEN CHEMOTACTIC MIGRATION**
Beáta Kiss, Gergely Joós, Judit Jákim, Regina Szamosi, Gábor Nagy and Zsuzsa Szondy
- P6-01 ANALYZING THE IMPORTANCE OF UBIQUITIN-DEPENDENT SELECTIVE AUTOPHAGY IN DROSOPHILA**
Adél Ürmösi, Arindam Bhattacharjee, András Jipa and Gábor Juhász
- P6-02 APOPTOTIC AND NECROTIC THYMOCYTES ARE ENGULFED BY THE SAME PHOSPHATIDYLSERINE-DEPENDENT MECHANISMS**
Zsófia Budai, Zsolt Sarang, László Ujlaky-Nagy, Nikoletta Kis Gréta, Miklós Antal and Zsuzsa Szondy
- P6-03 EPIDIDYMAL FAT AND BEIGE CELLS OF TISSUE TRANSGLUTAMINASE KNOCK-OUT MICE POSSESS ATTENUATED RESPONSE TO ADRENERGIC AGONISTS**
Kinga Lénárt, Endre Károly Kristóf, Zsolt Bacsó, Péter Bay, László Fésüs and András Mádi
- P6-04 EPIGALLOCATECHIN-3-GALLATE MEDIATES ADIPOGENIC DIFFERENTIATION OF HUMAN MESENCHYMAL STEM CELLS BY REGULATION OF PROTEIN PHOSPHATASE-2A AND MYOSIN PHOSPHATASE**
Bálint Bécsi, Zoltán Kónya, Anita Boratkó and Ferenc Erdődi
- P6-05 IMPAIRED MYELOID DIFFERENTIATION FROM PLURIPOTENT EMBRYONIC STEM CELLS UPON ECTOPIC EXPRESSION OF ZBTB46**
Pál Botó and István Szatmári

P6-06 INFLUENCE OF EPIGENETIC AGENTS ON MOUSE TERATOMA DEVELOPMENT *IN VITRO*

Jure Krasic, Robert Buljubasic, Maja Buljubasic, Maja Vlahovic, Ana Katusic, Florijana Bulic-Jakus and Nino Sincic

P6-07 MYOBLAST DIFFERENTIATION AND FUSION ARE INFLUENCED BY THE SYNDECAN-4-MEDIATED ACTIVATION OF RAC1 GTPASE

Kitti Szabó, László Dux and Anikó Keller-Pintér

POSTER SESSION 2. - TUESDAY, SEPTEMBER 4, 2018**11:30 – 13:00****Poster mounting:** September 2, 12:00-; **Removal:** September 5, 12:00**P7-01 A COMPARATIVE STUDY OF THE MUTAGENIC EFFECT OF PLATINUM-BASED CHEMOTHERAPEUTIC AGENTS IN CELL LINE BASED MODEL SYSTEM**

Bernadett Szikriszt, Ádám Póti and Dávid Szüts

P7-02 ATRX PROMOTES DNA REPAIR SYNTHESIS AND SISTER CHROMATID EXCHANGE DURING HOMOLOGOUS RECOMBINATION

Szilvia Juhász, Amira Elbakry, Arthur Mathes and Markus Löbrich

P7-03 CYTOCHROME C OXIDASE ACTIVITY AND THE EXPRESSION OF RELATED COPPER CHAPERONES IN SCLEROTIC HIPPOCAMPI OF MTLT PATIENTS

Miloš Opačić, Maja Zorović, Danijela Savić, Marko Živin, Savo Raičević, Vladimir Baščarević, Aleksandar Ristić, Dragoslav Sokić and Ivan Spasojević

P7-04 DETERMINATION OF GENOMIC URACIL LEVELS IN ZEBRAFISH DURING EMBRYONIC DEVELOPMENT

Kinga Nagy, Kornélia Kulcsár, Dorottya Magyari, Máté Varga and Beáta G. Vértessy

P7-05 INVESTIGATION OF THE NUCLEOTIDE METABOLISM OF MYCOBACTERIUM SMEGMATIS UNDER DIFFERENT GENOTOXIC STRESS CONDITIONS

Éva Viola Surányi, Tamás Trombitás, Nikoletta Gálik, Rita Hirmondó, Judit Eszter Szabó, Beáta G. Vértessy and Judit Tóth

P7-06 AN IMPROVED AND WIDELY ACCESSIBLE dNTP QUANTITATION TOOL

Judit Eszter Szabó, Bence Mébold, Viola Surányi, Beáta Vértessy, Mihály Cserepes, Gergely Szakács, Orsolya Dobay, Dóra Szabó and Judit Tóth

P7-07 POLY(ADP-RIBOSYL)ATION-INDUCED CHROMATIN RELAXATION ACCELERATES CHD4 RECRUITMENT FACILITATING FURTHER REMODELING AT DNA BREAKS

Rebecca Smith, Hafida Sellou, Catherine Chapuis, Sébastien Huet and Gyula Timinszky

P7-08 PROTEIN INTERACTIONS OF WILD-TYPE P53 IN HUMAN MELANOMA

Martina Radić, Nikolina Hanžić, Maja Herak Bosnar and Neda Slade



- P7-09 SCHEDULE OF METASTASIS FORMATION AS REVEALED BY THE GENOMIC IMPRINTS OF MUTAGENIC CISPLATIN CHEMOTHERAPY AND THE SELECTION FOR GEFITINIB RESISTANCE**
Eszter Németh, Marcin Krzystanek, Lilla Reiniger, Zoltán Szállási, Judit Moldvay and Dávid Szüts
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