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FACULTY OF PHARMACY
IN HRADEC KRÁLOVÉ
Charles University

1969–2019



9th Postgraduate
and
7th Postdoc Conference

dedicated to the 50th anniversary
of the founding of Faculty of Pharmacy in Hradec Králové

Program of conference

23. and 24. January 2019



EFSA-CDN

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MSMT
MINISTRY OF EDUCATION,
YOUTH AND SPORTS

Wednesday 23. January 2019

Conference Registration: **8:00 – 8:30**

Lecture hall A

Joint session: 8:30 – 12:05

Chairman: Prof. RNDr. Petr Solich, CSc.

- 8:30 - 9:00 **CONFERENCE OPENING AND INTRODUCTION OF PROJECT EFSA-CDN**
PROF. SOLICH, PROF. PÁVEK, PROF. POUR, ASSOC.PROF. NOVÁKOVÁ
- 9:00 - 9:45 **HOW TO GET YOUR ARTICLES PUBLISHED IN QUALITY INTERNATIONAL BIOCHEMICAL JOURNALS: A HITCHHIKERS GUIDE TO THE GALAXY!**
PROF. DES RICHARDSON, UNIVERSITY OF SYDNEY, AUSTRALIA
- 9:45 - 10:00 **COFFEE BREAK (S2155)**
- 10:00 - 10:40 **ANALYTICAL METHODS TO UNVEIL BIOLOGICAL PHENOMENA: BRIDGES TO DRUG DISCOVERY**
PROF. MARCELA SEGUNDO, UNIVERSITY OF PORTO, PORTUGAL
- 10:40 - 11:20 **ORGANOCATALYSIS IN ORGANIC SYNTHESIS**
PROF. PAVEL KOČOVSKÝ, CHARLES UNIVERSITY, CZECH REPUBLIC
- 11:20 – 12:05 **POTENT ANTI-CANCER AGENTS THAT SUPPRESS ONCOGENESIS THROUGH INHIBITING MULTIPLE ONCOGENIC SIGNALLING PATHWAYS: THE MIG6 CONNECTION.**
PROF. DES RICHARDSON, UNIVERSITY OF SYDNEY, AUSTRALIA

Lecture hall A

Session 1 - Bioorganic and Pharmaceutical chemistry: 13:00 – 17:00

Chairman: Prof. Pavel Kočovský, DSc, FRSE and PharmDr. Mgr. Martin Krátký, Ph.D.

- 13:00 - 13:15 **PRESENCE OF VERY LONG-CHAIN 3-KETODIHYDROSPHINGOSINE IN BOTH HEALTHY AND KDSR PATIENTS' SKIN**
OPÁLKA, L., PILZ, R., BURSZTEJN, A.-C., FISCHER, J., SANDHOFF, R.
- 13:15 - 13:30 **MICROBIAL RESISTANCE – ONE OF THE HOTTEST TOPICS OR THE PAST?!**
JANDOUREK, O., KONECNA, K.
- 13:30 - 13:45 **NEW UNALLOYED METAL NANOCONJUGATES AS CATALYSTS IN SELECTED REDUCTION OR ACETALIZATION REACTIONS FOR GREEN CHEMISTRY**
AMBROZKIEWICZ, W.
- 13:45 - 14:00 **SUPRAMOLECULAR ASSEMBLY OF TETRAPYRAZINOPORPHYRAZINES INTO J-DIMERS**
DEMUTH, J., MACHAN, M., KÁNTOR, M., ZIMČÍK, P., NOVÁKOVÁ, V.
- 14:00 - 14:15 **GOLD(I)-CATALYZED SYNTHESIS OF PIPERIDINE AMINALS AND THEIR FURTHER TRANSFORMATIONS**
MATOUŠ, P., KADANÍK, M., TIMORACKÝ, M., MAŘÍKOVÁ, J., KUNEŠ, J., POUR, M.,
- 14:15 - 14:30 **NARCOLEPSY AND COMPUTER-AIDED DRUG DESIGN APPROACHES**
DOLEŽAL, R., MELÍKOVÁ, M., JANOČKOVÁ, J.
UNIVERSITY HOSPITAL HRADEC KRALOVE
- 14:30 - 14:45 **THE STORY OF TACROXIMES; NOVEL UNIQUE COMPOUNDS FOR THE RECOVERY OF ORGANOPHOSPHORUS-INHIBITED ACETYLCHOLINESTERASE.**
GORECKI, L., JUNOVA, L., KUCERA, T., HEPNAROVA, V., PRCHAL, L., JUN, D., SOUKUP, O., KORABECNY, J.
FACULTY OF MILITARY HEALTH SCIENCES, UNIVERSITY OF DEFENCE
- 14:45 - 15:00 **COFFEE BREAK (S2155)**
- 15:00 - 15:15 **SYNTHESIS OF PHTHALOCYANINE DERIVATIVES FOR SUPRAMOLECULAR INTERACTIONS WITH CUCURBITURIL**
KOČIŠČÁKOVÁ, L., ZIMČÍK, P.
- 15:15 – 15:30 **SYNTHESIS OF ELECTRONICALLY TUNED [3]DENDRALENES**
ANTAL, R., BRŮŽA, Z., POUR, M.
- 15:30 – 15:45 **DESIGN, SYNTHESIS, AND STRUCTURE ACTIVITY RELATIONSHIPS OF HYBRID COMPOUNDS COMBINING PYRAZINAMIDE AND P-AMINOSALICYLIC ACID AS POTENTIAL ANTIMYCOBACTERIALS**
BOUZ, G., DOLEŽAL, M., ZITKO, J.
- 15:45 – 16:00 **HIGHLY SUBSTITUED PYRANONES VIA INTRAMOLECULAR TSUJI-TROST REACTION**
BRŮŽA, Z., KRATOCHVIL, J., HARVEY, J.N., RULÍŠEK, L., NOVÁKOVÁ, L., KUNEŠ, J., KOČOVSKÝ, P., POUR M.
- 16:00 – 16:15 **SYNTHESIS OF SYMMETRICAL AND UNSYMMETRICAL ANIONIC PHTHALOCYANINES FOR PHOTODYNAMIC THERAPY**
KOLLAR, J., MACHACEK, M., ZIMCIK, P.

- 16:15 - 16:30 **SYNTHESIS AND OPTIMIZATION OF THE SYNTHESIS OF 32 HYDROXYDOTRIACONTANOIC ACID**
SOMMEROVÁ, V., OPÁLKA L., VÁVROVÁ, K.
- 16:30 – 16:45 **INVESTIGATION OF THE COMPOUNDS INFLUENCING THE MELTING TEMPERATURE OF OLIGONUCLEOTIDE PROBES**
KOSTELANSKY, F., HAVLINOVA, Z., MILETIN, M., ZIMCIK, P.
- 16:45 – 17:00 **STABILITY EVALUATION OF MAGNESIUM COMPLEXES OF PHTHALOCYANINES AND AZAPHTHALOCYANINES UNDER ACIDIC CONDITIONS**
BERANOVÁ, M., ZIMČÍK, P.

Lecture hall B

Session 2 - Clinical and Social Pharmacy: 13:00 – 14:45

Chairmen: doc. PharmDr. Miloslav Hronek, Ph.D. and PharmDr. Daniela Fialová, PhD.

- 13:00 - 13:15 **DEVELOPMENT AND IMPLEMENTATION OF INTERVENTIONS TO PROMOTE MEDICATION ADHERENCE IN KIDNEY TRANSPLANT PATIENTS**
VANKOVA, B., MALA-LADOVA, K., DUSILOVA-SULKOVA, S., MALY, J.
- 13:15 - 13:30 **NUTRITIONAL INTAKE OF ENERGY AND SUBSTRATES, THEIR CHANGES IN PREGNANT WOMEN DURING THE LAST DECADE**
NAJPAVEROVÁ, S., KOVAŘÍK, M., KACEROVSKÝ, M., HRONEK, M.
- 13:30 - 13:45 **NO FAULT VACCINE COMPENSATION PROGRAM OVERDUE IN CZECH REPUBLIC - SERIOUS THREAT FOR THE CZECH MEDICAL SYSTEM IN A PROSPECT OF THE NEW CIVIL CODE.**
HONEGR, J.
UNIVERSITY HOSPITAL HRADEC KRALOVE
- 13:45 - 14:00 **SPONTANEOUS ADVERSE DRUG REACTIONS REPORTING TO ORAL ANTICOAGULANTS IN THE CZECH REPUBLIC**
DVOŘÁČKOVÁ, S., ZIMČÍKOVÁ, E., MALÁ-LÁDOVÁ, K., JIRSOVÁ, E., KOLÁŘ, J., MALÝ, J.
- 14:00 - 14:15 **FACTORS INFLUENCING ANTIBIOTIC PROPHYLAXIS FOR SURGICAL SITE INFECTION PREVENTION**
DOMECKY, P., HAUSCHKE, L., PATKOVA, A., KOLAR, J., MALY, J.
- 14:15 - 14:30 **ANALYSIS AND MANAGEMENT OF NURSES' MEDICATION ERRORS DURING DRUG ADMINISTRATION**
MĚRKOVÁ, V., HOZOVÁ, M., HLOCH, K., MALÁ-LÁDOVÁ, K., MALÝ, J., DOSEDĚL, M.
- 14:30 - 14:45 **ANALYSIS OF PHARMACOTHERAPY AS A ONE OF THE MAIN FALL-RELATED RISK FACTOR – A 12-MONTH PROSPECTIVE STUDY IN HOSPITALS OF SOUTH BOHEMIA REGION**
VOSÁTKA, J., MALÝ, J., DOSEDĚL, M., BRABCOVÁ, I., HAJDUCHOVÁ, H., BÁRTLOVÁ, S., KUBĚNA, A., KOLÁŘ, J., VLČEK, J., TÓTHOVÁ, V.

Lecture hall B

Session 3 - Pharmacognosy and Toxicology of Natural Compounds: 15:00 – 17:30

Chairman: prof. RNDr. Lubomír Opletal, CSc., Ph.D. and PharmDr. Jakub Chlebek, Ph.D.

- 15:00 - 15:15 **AMARYLLIDACEAE ALKALOIDS FROM NARCISSUS PSEUDONARCISSUS CV. DUTCH MASTER AS POTENTIAL DRUGS IN TREATMENT OF ALZHEIMER'S DISEASE**
HULCOVÁ, D., MAŘÍKOVÁ, J., OPLETAL, L., CAHLÍKOVÁ, L.
- 15:15 - 15:30 **BRUNSVIGINE ISOMER AS A POTENTIAL AGENT IN THE TREATMENT OF ONCOLOGICAL DISEASES**
BREITEROVÁ, K., HOŠŤÁLKOVÁ, A., OPLETAL, L., KOUTOVÁ, D., MAŘÍKOVÁ, J., CAHLÍKOVÁ, L.
- 15:30 - 15:45 **PAPAVER RHOEAS: THE SOURCE FOR NMR ELUCIDATION**
MAŘÍKOVÁ, J., CHLEBEK, J., KUNEŠ, J.
- 15:45 - 16:00 **ONE-STEP ISOLATION OF LUTEIN FROM GREEN MICROALGAE (CHLORELLA VULGARIS) BY HIGH PERFORMANCE COUNTERCURRENT CHROMATOGRAPHY**
FÁBRYOVÁ, T., CHEEL, J., TŮMOVÁ, L., KUBÁČ, D., HROUZEK, P., KOPECKÝ, J.
- 16:00 - 16:15 **IMMUNOMODULATORY ACTIVITY OF SCUTELLARIA BAICALENSIS AND AZORELLA COMPACTA**
VRABEC, R., TŮMOVÁ, L., CHEEL, J., VOKURKOVÁ, D.
- 16:15 - 16:30 **ALKALOID PROFILING OF HIPPEASTRUM CULTIVARS BY GC-MS, ISOLATION OF AMARYLLIDACEAE ALKALOIDS, AND EVALUATION FOR THEIR CYTOTOXIC ACTIVITY**
ALSHAMMARI, L., KUNEŠ, J., HAVELEK, R., CAHLÍKOVÁ, L.
- 16:30 - 16:45 **ISOLATION OF AMARYLLIDACEAE ALKALOIDS FROM ZEPHYRANTHES CITRINA**
KOHELOVÁ, E., KUNEŠ, J., CAHLÍKOVÁ, L., OPLETAL, L.
- 16:45 - 17:00 **DERIVATIVES OF AMARYLLIDACEAE ALKALOIDS ISOLATED FROM NARCISSUS CV. CARLTON AND THEIR BIOLOGICAL ACTIVITY**
AL MAMUN, A., CAHLÍKOVÁ, L., MAŘÍKOVÁ, J.
- 17:00 - 17:15 **SEMISYNTHETIC DERIVATIVES OF AMARYLLIDACEAE ALKALOID HAEMANTHAMINE AS POTENTIAL DRUGS IN THE TREATMENT OF ALZHEIMER'S DISEASE**
PEŘINOVÁ, R., MAŘÍKOVÁ, J., HULCOVÁ, D., CAHLÍKOVÁ, L.
- 17:15 - 17:30 **DERIVATIVES OF AMARYLLIDACEAE ALKALOIDS OF MONTANINE TYPE AND THEIR BIOLOGICAL ACTIVITIES**
MAAFI, N., KUNEŠ, J., CAHLÍKOVÁ, L.

Thursday 24. January 2019

Conference Registration: 8:00 – 8:15

Lecture hall A

Session 4 - Pharmaceutical Analysis and Bioanalytical Chemistry: 8:15 – 16:00

Chairmen: Prof. Marcela Segundo, Prof. Maria Montenegro, Prof. Spas Kolev, Assoc. Prof. Lucie Nováková, Assoc. Prof. Petra Štěrbová

- 8:30 - 8:45 **APPLICATION OF MONOLITHIC COLUMNS IN CLINICAL PRACTICE**
KUČEROVÁ, K., KUJOVSKÁ KRČMOVÁ, L., MATYSOVÁ, L.
- 8:45 - 9:00 **DETERMINATION OF IMPORTANT BIOMARKERS DURING TREATMENT WITH RHEOHEMAPHERESIS IN AGE-RELATED DRY FORM OF MACULAR DEGENERATION**
VERNEROVÁ, A., KUJOVSKÁ KRČMOVÁ L., BLÁHA M.
- 9:00 - 9:15 **UHPLC-MS/MS IN AN INVESTIGATION OF NOVEL CARDIOPROTECTIVE AGENT JAS-2**
BAVLOVIČ PISKÁČKOVÁ, H., BRÁZDOVÁ, P., ŠTĚRBA, M., ŠTĚRBOVÁ-KOVAŘÍKOVÁ, P.
- 9:15 - 9:30 **DETERMINATION OF SUDAN DYES IN CHILLI PRODUCTS BY MEKC-MS/MS USING A MS FRIENDLY SURFACTANT**
MORENO-GONZÁLEZ, D., JÁČ, P., NOVÁKOVÁ, L.
- 9:30 - 9:45 **PROTEOMIC ANALYSIS OF ACETYLOME**
FABRIK, I., VAJRYCHOVA, M., BENKOVA, M., PULKRABKOVA, L., STULIK, J., SOUKUP, O.
UNIVERSITY HOSPITAL HRADEC KRALOVE
- 9:45 - 10:00 **CHAOTROPIC AGENTS EFFECTING SEPARATION OF CHIRAL DRUG CANDIDATE K1277**
PRCHAL, L., NOVAK, M., DOLEZAL, R.
UNIVERSITY HOSPITAL HRADEC KRALOVE
- 10:00 - 10:15 **COFFEE BREAK (S2155)**
- 10:15 - 10:30 **ANALYSIS OF CANNABINOIDS IN DIETARY SUPPLEMENTS AND COSMETIC PRODUCTS USING SUPERCRITICAL FLUID CHROMATOGRAPHY**
SVOBODOVÁ, Z., PRAŽÁKOVÁ, K., PLACHKÁ, K., NOVÁKOVÁ, L.
- 10:30 - 10:45 **ULTRA-HIGH PERFORMANCE SUPERCRITICAL FLUID CHROMATOGRAPHY IN PHARMACEUTICAL QUALITY CONTROL: TACKLING THE METHOD VALIDATION**
PLACHKÁ, K., KHALIKOVA, M., BABIČOVÁ, B., NĚMCOVÁ, Z., ROUBÍČKOVÁ, L., JUNG, O., ŠVEC, F., NOVÁKOVÁ, L.
- 10:45 - 11:00 **TARGETED AND NONTARGETED ANALYSIS OF HUMAN URINE FOR METABOLOMIC STUDY**
MITAŠÍK, L., JOHANSSON, A., NOVÁKOVÁ, L., MORITZ, T.
- 11:00 - 11:15 **DEVELOPMENT OF HILIC UHPLC-UV METHOD FOR ANALYSIS OF PHENOLIC COMPOUNDS**
PAVLÍK, J., PILAŘOVÁ, V., ESPINOLA, E., NOVÁKOVÁ, L.
- 11:15 - 11:30 **DOPAMINE UNIVERSAL COATING – A NEW POTENTIAL MODIFICATION OF NANOFIBROUS SORBENTS FOR ON-LINE EXTRACTION SYSTEMS**
HÁKOVÁ, M., CHOCHOLOUŠOVÁ HAVLÍKOVÁ, L., ERBEN, J., CHVOJKA, J., ŠATÍNSKÝ, D.

- 11:30 - 11:45 **APPLICATION OF NANOFIBROUS POLYMERS FOR A BIOLOGICAL SAMPLE EXTRACTION**
RAABOVÁ H., CHOCHOLOUŠOVÁ HAVLÍKOVÁ L., ŠATÍNSKÝ D.
- 11:45 – 12:00 **TESTING OF NANOFIBROUS POLYMERS FOR EXTRACTION ON A MAGNETIC STIRRER**
ZATROCHOVÁ, S., ŠATÍNSKÝ, D.
- LUNCH BREAK: 12:00 – 13:00**
- 13:00 - 13:15 **DESIGN OF EXPERIMENT IN SAMPLE PREPARATION FOR VITAMIN E**
PILAŘOVÁ, V., PLACHKÁ, K., JUNG, O., NOVÁKOVÁ, L.
- 13:15 - 13:30 **COMPARISON OF SAMPLE CLEAN-UP EFFICIENCY USING MOLECULARLY IMPRINTED POLYMER AND REVERSED PHASE SORBENT FOR ON-LINE EXTRACTION OF ZEARALENONE**
LHOTSKÁ, I., GAJDOŠOVÁ, B., ŠATÍNSKÝ, D.
- 13:30 - 13:45 **STUDY OF THE BIOACCESSIBILITY OF PHTHALATES AND BISPHENOL A FROM MICROPLASTICS IN SEAWATER USING AN ON-LINE SWITCHING VALVE HPLC SYSTEM**
FIKAROVÁ, K., ROSENDE, M., COCOVI SOLBERG, D. J., HORSTKOTTE, B., SKLENÁŘOVÁ, H., MIRÓ, M.
- 13:45 - 14:00 **DETECTION TECHNIQUES FOR ANALYSIS OF PHENOLIC COMPOUNDS IN APPLES**
HOLLÁ, M., SKLENÁŘOVÁ, H., ŠATÍNSKÝ, D.
- 14:00 - 14:15 **INCORPORATION OF NEUTROPHIL ELASTASE INHIBITOR INTO POLYSULFONE MEMBRANE - NEW APPROACHES TO IMPROVE HEMODIALYSIS PATIENTS OUTCOMES**
KOHLVÁ, M., AMORIM, C. G., ZELENÁ, L., SANTOS-SILVA, A., SOLICH, P., MONTENEGRO, C.
- 14:15 - 14:30 **COLUMN COUPLING IN SUPERCRITICAL FLUID CHROMATOGRAPHY**
RIASOVÁ, P., VANDER HEYDEN, Y., MANGELINGS, D.
- 14:30 - 14:45 **COFFEE BREAK (S2155)**
- 14:45 – 15:00 **THE DEVELOPMENT OF A LIQUID CHROMATOGRAPHY-QUADRUPOLE-TIME-OF-FLIGHT MASS SPECTROMETRY METHOD FOR DETERMINATION OF FLAVONOIDS, ISOFLAVONOID AND THEIR METABOLITES**
KOČOVÁ VLČKOVÁ, H., MLADĚNKA, P., SOLICH, P., NOVÁKOVÁ, L.
- 15:00 – 15:15 **BENEFITS AND RISKS OF SEPARATIONS AT ELEVATED TEMPERATURE IN PROTEOMIC ANALYSES USING A CONVENTIONAL-FLOW LIQUID CHROMATOGRAPHY-MASS SPECTROMETRY SYSTEM**
ŠEMLEJ, T., LENČO, J.
- 15:15 – 15:30 **DETERMINATION OF PHLORIDZIN AND OTHER PHENOLIC COMPOUNDS IN APPLE LEAVES, BARK AND BUDS BY HPLC**
ADAMCOVÁ, A., ŠATÍNSKÝ, D., HORNA, A.
- 15:30 – 15:45 **CITRININ-SELECTIVE MOLECULARLY IMPRINTED POLYMER AND ITS USE FOR ON-LINE SOLID PHASE EXTRACTION COUPLED TO LIQUID CHROMATOGRAPHY**
KHOLOVÁ, A., LHOTSKÁ, I., ŠATÍNSKÝ, D.
- 15:45 – 16:00 **COMPARISON OF LIPID EXTRACTION METHODS FROM MILK USING 2D LIQUID CHROMATOGRAPHY – MASS SPECTROMETRY**
JAKUBEC, P., BYRDWELL, C. W., NOVÁKOVÁ, L.

Lecture hall B

Session 5 - Pathobiochemistry and Xenobiochemistry: 8:15 – 11:15

Chairmen: prof. Ing. Barbora Szotáková, Ph.D. and prof. RNDr. Lenka Skálová, Ph.D.

- 8:15 – 8:30 **ANTHELMINTICS IN PLANTS**
SYSLOVÁ E., PODLIPNÁ R., LANDA P., SZOTÁKOVÁ B.
- 8:30 - 8:45 **SELECTION AND VALIDATION OF REFERENCE GENES FOR MRNA AND MIRNA GENE EXPRESSION STUDIES IN HUMAN LIVER SLICES USING RT-QPCR**
ZÁRYBNICKÝ, T., AMBROŽ, M., ŠUBRT, Z., MATOUŠKOVÁ, P., SKÁLOVÁ, L., BOUŠOVÁ, I.
- 8:45 - 9:00 **PHENOTYPIC SCREENING OF A CHEMICALLY DIVERSE COMPOUND LIBRARY IDENTIFIED TWO COMPOUNDS WITH ANTHELMINTIC ACTIVITY AGAINST HAEMONCHUS CONTORTUS**
NGUYEN, L.T., HERATH, H.M.P.D., PRESTON, S., KURZ, T., SKALOVA, L., GASSER, B.R.
- 9:00 - 9:15 **THE ROLE OF THE UDP-GLYCOSYLTRANSFERASES IN THE METABOLISM OF ANTHELMINTICS IN HAEMONCHUS CONTORTUS**
DIMUNOVÁ, D., RAISOVÁ STUHLÍKOVÁ, L., MATOUŠKOVÁ, P.
- 9:15 - 9:30 **BUPARLISIB IS A NOVEL INHIBITOR OF DAUNORUBICIN REDUCTION MEDIATED BY ALDO KETO REDUCTASE 1C3.**
BUKUM, N., NOVOTNA, E., MORELL, A., HOFMAN, J., WSOL, V.
- 9:30 - 9:45 **CYTOCHROME P450 IN HAEMONCHUS CONTORTUS**
KELLEROVÁ, P., MATOUŠKOVÁ, P.
- 9:45 - 10:00 **17B-HSD10 INHIBITORS AS A POTENTIAL THERAPY IN NEURODEGENERATIVE DISORDERS**
VINKLAROVA, L., SCHMIDT, M., BENEK O., ZEMANOVA, L., MUSILEK, K.
UNIVERSITY OF HRADEC KRALOVE
- 10:00 - 10:15 **COFFEE BREAK (S2155)**
- 10:15 - 10:30 **EVALUATION OF PROTECTIVE PROPERTIES OF DEXRAZOXANE AND OTHER CATALYTIC INHIBITORS OF TOPOISOMERASE II AGAINST ANTHRACYCLINE CARDIOTOXICITY IN VITRO**
JANSOVA, H., KUBES, J., SIMUNEK, T.
- 10:30 - 10:45 **SYNERGISTIC EFFECT BETWEEN MIDOSTAURIN AND DAUNORUBICIN IS RELATED TO ALDO-KETO REDUCTASE 1C3 INHIBITION**
MORELL, A., NOVOTNÁ, E., BUKUM, N., WSÓL, V.
- 10:45 - 11:00 **THE EFFECT OF SESQUITERPENES ON ENZYMES INVOLVED IN DETOXIFICATION PROCESSES IN HUMANS**
ŠADIBOLOVÁ, M., ZÁRYBNICKÝ, T., TRNČÁKOVÁ, V., DEINGRUBEROVÁ, K., AMBROŽ, M., ŠUBRT, Z., SKÁLOVÁ, L., BOUŠOVÁ, I.
- 11:00 - 11:15 **INVESTIGATION OF DNA DAMAGE IN ANTHRACYCLINE-INDUCED CARDIOTOXICITY USING THE COMET ASSAY AND H2AX PHOSPHORYLATION**
SKALICKA, V., JIRKOVSKA, A., JIRKOVSKY, E., KUBES, J., SIMUNEK, T.

Lecture hall B

Session 6 - Pharmacology and Toxicology: 12:30 – 17:00

Chairmen: Prof. Des Richardson, Prof. František Štaud, Assoc. Prof. Přemysl Mladěnka

- 12:30 - 12:45 **INSIGHT INTO A REGULATORY NETWORK OF PREGNANE X RECEPTOR EXPRESSION**
SMUTNY, T., PAVEK, P.
- 12:45 - 13:00 **NOVEL OBETICHOLIC ACID KETODERIVATIVES AND ISOMERS AS POTENTIAL LIGANDS OF BILE ACID RECEPTORS**
HORVATOVA, A., KUDOVA, E., KASPAR, P., PAVEK, P.
- 13:00 - 13:15 **ACTIVATION OF HUMAN CONSTITUTIVE ANDROSTANE RECEPTOR (CAR) AGONIST BY BENZODIAZEPINES WITHOUT PROLIFERATIVE EFFECT AND LIVER TUMORIGENIC EFFECTS IN HUMAN CELLS**
SKODA, J., DUSEK, J., HORVATOVA, A., DOSEDEL, M., PAVEK, P.
- 13:15 - 13:30 **INTERPLAY OF ABCB1, ABCC1 AND OATPS TRANSPORTERS IN TRANSFER OF MARAVIROC ACROSS THE HUMAN PLACENTA**
TUPOVA, L., HIRSCHMUGL, B., PILAROVA, V., SZEKELY, V., LACZKA, C., NOVAKOVA, L., WADSACK, C., STAUD, F., CECKOVA, M.
- 13:30 - 13:45 **PLACENTAL TRANSPORT AND METABOLISM OF SEROTONIN AND TRYPTOPHAN**
KARAHODA, R., KASTNER, P., HORÁČKOVÁ, H., ČERVENÝ, L., KUČERA, R., ABAD, C., ŠTAUD, F.
- 13:45 - 14:00 **INTERACTIONS OF ABC TRANSPORTERS AND CYTOCHROME P450 ISOFORMS WITH THE TYROSINE KINASE INHIBITOR ENSARTINIB**
VAGIANNIS, D., STAUD, F., HOFMAN, J.
- 14:00 - 14:15 **INTERACTION OF PROTEIN KINASE INHIBITORS WITH ABC TRANSPORTERS IN ACUTE MYELOID LEUKEMIA, POTENTIAL ROLE IN DRUG RESISTANCE**
SORF, A., SUCHA, S., STEFANIKOVA, S., SVOREN, M., HOFMAN, J., STAUD, F., VISEK, B., ZAVRELOVA, A., CECKOVA, M.
- 14:15 - 14:30 **DISCOVERY OF A NOVEL MOUSE CONSTITUTIVE ANDROSTANE (CAR) RECEPTOR AGONIST THAT DOES NOT POSSESS PROLIFERATIVE ACTIVITY CONNECTED WITH NON-GENOTOXIC HEPATOCARCINOGENESIS IN MICE**
DUŠEK, J., ŠKODA, J., HOLAS, O., HORVATOVA, A., SMUTNÝ, T., LINHARTOVÁ, L., HIRŠOVÁ, P., KUČERA, O., MIČUDA, S., BRAUENING, A., PÁVEK, P.
- 14:30 - 14:45 **COFFEE BREAK**
- 14:45 - 15:00 **RADIOACTIVELY LABELED RAMUCIRUMAB: IN VITRO BINDING AND INTERNALIZATION STUDIES IN VEGFR-2 POSITIVE CELLS**
JANOUSEK, J., BARTA, P., TREJTNAR, F.
- 15:00 - 15:15 **STRESS-INDUCED SENESCENCE IN THE HEART– OPTIMALIZATION OF METHODOLOGY**
JIRKOVSKÝ, E., TVRDÝ, V., NAJMANOVÁ, I., POUROVÁ, J., KARLÍČKOVÁ, J., JIRKOVSKÁ, A., MLADĚNKA, P.
- 15:15 - 15:30 **MEMBRANE AND SOLUBLE ENDOGLIN ROLE IN EARLY DEVELOPMENT OF ENDOTHELIAL DYSFUNCTION IN MICE**
VITVEROVA, B., BLAZICKOVA, K., RATHOUSKA, J., VICEN, M., NACHTIGAL, P.

- 15:30 - 15:45 **ENDOGLIN IS INVOLVED IN CHOLESTEROL-INDUCED ENDOTHELIAL DYSFUNCTION AND MONOCYTE ADHESION IN HUMAN AORTIC ENDOTHELIAL CELLS**
VICEN, M., HAVELEK, R., MACHÁČEK, M., TRIPSKÁ, K., VITVEROVÁ, B., NACHTIGAL, P.
- 15:45 – 16:00 **THE ANTIPLATELET EFFECT OF 4-METHYLCATECHOL WAS CONFIRMED ON IN VIVO (EX OVO) HEN'S EGG TEST ON THE CHICK AREA VASCULOSA**
APPLOVÁ, L., WARNCKE, P., KARLÍČKOVÁ, J., FISCHER, D., MLADĚNKA, P.
- 16:00 – 16:15 **DEVELOPMENT OF NOVEL DISINFECTANTS AGAINST PATHOGENS OCCURING IN THE HOSPITAL ENVIRONMENT**
BENKOVÁ, M., SOUKUP, O., PRCHAL, L., SLEHA, R., ELERŠEK, T., RYŠKOVÁ, L., MAREK, J.
UNIVERSITY HOSPITAL HRADEC KRÁLOVÉ
- 16:15 - 16:30 **EFFECT OF 4-METHYLCATECHOL ON THE RELEASE OF SEROTONIN AND THROMBOXANE IN HUMAN PLATELETS**
HRUBŠA, M., APPLOVÁ, L., MACÁKOVÁ, K., KARLÍČKOVÁ, J., MLADĚNKA, P.
- 16:30 - 16:45 **BIOCHANIN A AND GLYCITEIN INDUCE AN ENDOTHELIUM-INDEPENDENT DILATION OF RAT AORTA AND PORCINE CORONARY ARTERY.**
MIGKOS, T., POUROVÁ, J., VOPRŠALOVÁ, M., AUGER, C., SCHINI-KERTH, V., MLADĚNKA, P.
- 16:45 - 17:00 **COPPER CHELATORS AND THEIR ABILITY TO BIND ZINC**
TVRDÝ, V., KARLÍČKOVÁ, J., MLADĚNKA, P.

Lecture hall 2463

Session 7 - Pharmaceutical Technology: 8:15 – 10:00

Chairman: Doc. PharmDr. Zdeňka Šklubalová, Ph.D.

- 8:15 - 8:30 **THE USE OF GRAVITATIONAL CONSOLIDATION FOR THE PREDICTION OF ANGLE OF INTERNAL FRICTION**
TRPĚLKOVÁ, Ž., ŠKLUBALOVÁ, Z.
- 8:30 - 8:45 **BIODEGRADABLE POLYMERIC NANOPARTICLES FOR MEDICAL APPLICATIONS**
MARTISKA, J., SNEJDROVA, E., DRASTIK, M., DITTRICH, M.
- 8:45 - 9:00 **THE PROPERTIES OF CHITOSAN AS A DRUG CARRIER**
BROKEŠOVÁ, J., TRPĚLKOVÁ, Ž., PECIAR, P., ŠKLUBALOVÁ, Z.
- 9:00 - 9:15 **A STUDY OF THE DRUG RELEASE FROM MATRIX TABLETS WITH POLYVINYL ALCOHOL**
DOUBKOVÁ, B., KOMERSOVÁ, A., MUŽÍKOVÁ, J.
- 9:15 - 9:30 **ORAL DELIVERY OF OLIGONUCLEOTIDES FOR LOCAL TREATMENT OF INFLAMMATORY BOWEL DISEASE**
KUBAČKOVÁ, J., HOLAS, O., ZBYTOVSKÁ, J., PÁVEK, P., MÜLLERTZ, A.
- 9:30 – 9:45 **NOVEL FORMULATIONS FOR TOPICAL APPLICATION OF IMIQUIMOD**
NOVÁČKOVÁ, A., ŠVECOVÁ, B., VÁVROVÁ, K., HLADKÝ, P., TIRALA, P., RUDECKÁ, K., ZBYTOVSKÁ, J.
- 9:45 – 10:00 **LIPOSOMES FOR DERMAL DRUG DELIVERY**
PANOUSOPOULOU, E., PARASKEVOPOULOS, G., VÁVROVÁ, K., ZBYTOVSKÁ, J.

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