

# TOXCON 2017

**Wednesday - June 21, 2017**

13.00 - 19.00     **Registration**

15.00 - 15.45     **Official Opening of TOXCON 2017**

## **Welcoming Address**

The session in honour of prof. Vladislav Eybl, doc. Jaroslav Koutenský and RNDr. Zdeněk Zídek for their lifelong scientific work

15.45 - 17.00     **Session 1: Pharmacotoxicology**

*Chairpersons: Michal Dubovický, Pavel Suchý*

L-01     TO THE TRANSPORT OF XENOBIOTIC INTO SYNOVIAL FLUID (EXPERIMENTAL MODEL: MINIPIGS)

**Květina J.<sup>1,2</sup>, Nobilis M.<sup>3</sup>**

*<sup>1</sup>Department of Human Pharmacology and Toxicology, University of Veterinary and Pharmaceutical Sciences, Brno, Czech Republic; <sup>2</sup>Department of Internal Medicine - Gastroenterology, University Hospital, Hradec Králové, Czech Republic; <sup>3</sup>Department of Pharmaceutical Chemistry, Faculty of Pharmacy, Charles University, Hradec Králové, Czech Republic*

L-02     POSSIBILITIES OF STIMULATION OF LIVER PARENCHYMA REGENERATION IN CONNECTION WITH PLANNED EXTENDED SURGICAL PROCEDURE – EXPERIMENT ON LARGE ANIMAL AND ITS IMPORTANCE FOR HUMAN SURGERY

**Liska V.<sup>1</sup>, Treska V.<sup>1</sup>, Mirka V.<sup>2</sup>, Bruha J.<sup>1</sup>, Vycital O.<sup>1</sup>, Haidingerova L.<sup>3</sup>, Palek R.<sup>1</sup>, Rosendorf J.<sup>1</sup>**

*<sup>1</sup>Department of Surgery, <sup>1</sup>Department of Radiology, <sup>3</sup>Department of Anaesthesiology and Resuscitation, Teaching Hospital and Medical School in Pilsen, Charles University*

L-03     2-(3-METHOXYPHENYL)QUINAZOLINE DERIVATIVES: A NEW CLASS OF DIRECT CONSTITUTIVE ANDROSTANE RECEPTOR (CAR) AGONISTS

**Smutny T.<sup>1</sup>, Nova A.<sup>3</sup>, Drechslerová M.<sup>2</sup>, Carazo A.<sup>1</sup>, Hyrsova L.<sup>1</sup>, Hrušková Z.R.<sup>2</sup>, Kuneš J.<sup>2</sup>, Pour M.<sup>2</sup>, Špulák M.<sup>2</sup>, Pavek P.<sup>1</sup>**

*<sup>1</sup>Department of Pharmacology and Toxicology, <sup>2</sup>Department of Inorganic and Organic Chemistry, Faculty of Pharmacy, Charles University, Heyrovského 1203, Hradec Kralove CZ-500 05, Czech Republic, <sup>3</sup>Institute of Molecular and Translation Medicine, Faculty of Medicine, Palacky University in Olomouc, Hnevotinska 5, CZ-779 00 Olomouc, Czech Republic*

L-04     THE PREGNANE X RECEPTOR DOWN-REGULATES ORGANIC CATION TRANSPORTER 1 (SLC22A1) IN HUMAN HEPATOCYTES BY COMPETING FOR ("SQUELCHING") SRC-1 COACTIVATOR

**Hyrsova L.<sup>1</sup>, Smutny T.<sup>1</sup>, Carazo A.<sup>1</sup>, Moravcik S.<sup>1</sup>, Mandikova J.<sup>1</sup>, Trejtnar F.<sup>1</sup>, Gerbal-Chaloin S.<sup>2,3</sup>, Pavek P.<sup>1</sup>**

*<sup>1</sup>Department of Pharmacology and Toxicology, Faculty of Pharmacy in Hradec Kralove, Charles University in Prague, Hradec Kralove, CZ-500 05, Czech Republic; <sup>2</sup>INSERM, U1183, Institute for Regenerative Medicine and Biotherapy, Montpellier, France; <sup>3</sup> Université de Montpellier, Montpellier, France.*

17.00 - 17.30      **Coffee Break**

17.30 - 18.30      **Poster Presentations**

19.30 - 21.00      **Welcome Drink and Dinner**

## Thursday - June 22, 2017

### 8.45 - 10.00 **Session 2: Cytotoxicity, Carcinogenicity & Genotoxicity**

*Chairpersons:* Ingrid Brucknerová, Eva Kmoníčková

- L-05 **BISFENOL S: ENDOCRINE DISRUPTING EFFECT OF EXTREMELY LOW DOSES ON MICE OVARIES**  
**Nevorál J.<sup>1,2</sup>, Kolinko Y.<sup>1,2</sup>, Kochová K.<sup>1,2</sup>, Benešová K.<sup>1,2</sup>, Klein P.<sup>1</sup>, Tonar Z.<sup>1,2</sup>, Žalmanová T.<sup>3</sup>, Hošková K.<sup>3</sup>, Petr J.<sup>4</sup>, Králíčková M.<sup>1,2</sup>**  
*<sup>1</sup>Biomedical Center, Faculty of Medicine in Pilsen, Charles University, Pilsen, Czech Republic*  
*<sup>2</sup>Department of Histology and Embryology, Faculty of Medicine in Pilsen, Charles University, Pilsen, Czech Republic, <sup>3</sup>Department of Veterinary Sciences, Faculty of Agrobiological Sciences, Food and Natural Resources, Czech University of Life Sciences Prague, Czech Republic, <sup>4</sup>Institute of Animal Science, Prague 10-Uhrineves, Czech Republic*
- L-06 **APOFERRITIN NANOCARRIER WITH ENCAPSULATED ELLIPTICINE – ITS CONSTRUCTION AND PROPERTIES**  
**Indra R.<sup>1</sup>, Wilhelm M.<sup>1</sup>, Černá T.<sup>1</sup>, Heger Z.<sup>2</sup>, Dostálová S.<sup>2</sup>, Adam V.<sup>2</sup>, Eckschlager T.<sup>3</sup>, Stiborová M.<sup>1</sup>**  
*<sup>1</sup>Department of Biochemistry, Faculty of Science, Charles University, Albertov 2030, 128 40 Prague 2, Czech Republic; <sup>2</sup>Department of Chemistry and Biochemistry, Laboratory of Metallomics and Nanotechnology, Mendel University in Brno, Zemedelska 1, 61300 Brno, Czech Republic; <sup>3</sup> Department of Pediatric Hematology and Oncology, 2nd Faculty of Medicine, Charles University and University Hospital Motol, V Uvalu 84/1, 150 06 Prague 5, Czech Republic*
- L-07 **NOVEL TAXANES; EFFICACY AND MOLECULAR MECHANISM OF ACTION IN EXPERIMENTAL MODELS AND CANCER PATIENTS**  
**Vaclavikova R.<sup>1,2</sup>, Ehrlichova M.<sup>1,2</sup>, Mohelnikova-Duchonova B.<sup>3</sup>, Wang C.<sup>4</sup>, Su, Y.<sup>4</sup>, Ojima I.<sup>4</sup>, Brynychova V.<sup>1,2</sup>, Elsnerova K.<sup>1,2</sup>, Kristensen VN.<sup>5</sup> and Soucek P.<sup>1,2</sup>**  
*<sup>1</sup>Laboratories of Toxicogenomics, National Institute of Public Health in Prague, Czech Republic; <sup>2</sup>Biomedical Centre, Faculty of Medicine in Pilsen, Charles University, Pilsen, Czech Republic; <sup>3</sup>Department of Oncology, Palacky University Medical School and Teaching Hospital, Olomouc, Czech Republic; <sup>4</sup>Institute of Chemical Biology & Drug Discovery, State University of New York at Stony Brook, USA; <sup>5</sup>Institute of Clinical Epidemiology and Molecular Biology (EpiGen), Akershus University Hospital, Oslo, Norway*
- L-08 **TRIOORGANOTIN COMPOUNDS, COGNATE LIGANDS, OF NUCLEAR RETINOID X RECEPTORS – BIOLOGICAL EFFECTS IN HUMAN BREAST CANCER CELL LINES**  
**Brtko J.<sup>1</sup>, Toporová L.<sup>1</sup>, Macejová D.<sup>1</sup>, Hunáková L.<sup>2</sup>, Bobálová J.<sup>3</sup>**  
*<sup>1</sup>Institute of Experimental Endocrinology, BMC, SAS, Bratislava, Slovakia; <sup>2</sup>Cancer Research Institute, BMC, SAS, Bratislava, Slovakia; <sup>3</sup> Institute of Analytical Chemistry of the CAS, v. v. i., Brno, Czech Republic*

10.00 - 10.30 **Coffee Break**

10.30 - 11.50 **Session 3: Regulatory Toxicology & Legislation**

*Chairpersons: Daniela Pelclová, Mojmír Mach*

- L-09 PHARMACOVIGILANCE AND THE IMPORTANCE OF ADVERSE DRUG REACTIONS REPORTING  
**Jirsová E.**  
*Pharmacovigilance Department, State Institute for Drug Control, Prague, Czech Republic*
- L-10 PHOTOALLERGY TO KETOPROFEN: MINIMIZING A RISK OF A WELL-KNOWN ADVERSE REACTION  
**Tobolka R.**  
*Pharmacovigilance Department, State Institute for Drug Control, Prague, Czech Republic*
- L-11 ADVERSE DRUG REACTIONS TO VACCINES  
**Kaftanová P.**  
*Pharmacovigilance Department, State Institute for Drug Control, Prague, Czech Republic*
- L-12 "GOLDEN EGGS" AND DRUG ABUSE  
**Holubová A.**  
*Pharmacovigilance Department, State Institute for Drug Control, Prague, Czech Republic*

11.50 - 13.00 **Lunch**

13.00 - 14.20 **Session 4: Drug Abuse and Forensic Toxicology**

*Chairpersons: Marie Balíková, Jiří Kassa*

- L-13 DEXTROMETHORPHAN – ABUSE BY ADOLESCENS  
**Kovářová L.**  
*Pharmacovigilance Department, State Institute for Drug Control, Prague, Czech Republic*
- L-14 DXM – OVER THE COUNTER PSYCHOACTIVE SUBSTANCE, THAT ARE WELL KNOWN TO CHILDREN, BUT LESS KNOWN TO PARENTS AND MEDICAL PROFESSIONALS  
**Rábová G.<sup>1</sup>, Vevera J.<sup>1</sup>, Hudeček J.<sup>1</sup>, Podlipný J.<sup>1</sup>, Kmoch V.<sup>2</sup>, Kovářová L.<sup>3</sup>, Lacinová E.<sup>4</sup>**  
*<sup>1</sup>Psychiatrická klinika FN Plzeň a Lékařská fakulta UK v Plzni, <sup>2</sup>Klinika adiktologie 1. LF UK a VFN Praha, <sup>3</sup>Státní ústav pro kontrolu léčiv Praha<sup>4</sup> Klinika pracovního lékařství a VFN Praha, Czech Republic*
- L-15 NEW PSYCHOACTIVE SUBSTANCES IN TOXICOLOGICAL PRACTICE  
**Židková M., Balíková M.**  
*Institute of Forensic Medicine and Toxicology, 1st Medical Faculty, Charles University and General University Hospital, Ke Karlovu 2, 128 08 Prague*
- L-16 DETECTION OF PARA-FLUOROFENTANYL IN FATALITY  
**Marešová V., Sladká Z., Pilin A.**  
*Institute of Forensic Medicine and Toxicology, First Faculty of Medicine in Prague, Charles University and General University Hospital, Prague, Czech Republic*

14.20 - 14.40 **Coffee Break**

14.40 - 15.40 **Session 5: Food Toxicology and Immunotoxicology**

*Chairpersons: Govindan Dayanithi, Petr Hodek*

L-17 LEUKOTRIENE-MEDIATED NEUROINFLAMMATION IN THE MECHANISMS OF METHANOL NEUROTOXICITY

**Zacharov S.<sup>1,2</sup>, Kotikova K.<sup>1</sup>, Nurieva O.<sup>1</sup>, Kacer P.<sup>3</sup>, Navratil T.<sup>2,4</sup>, Pelclova D.<sup>1,2</sup>**

*<sup>1</sup>First Faculty of Medicine, Charles University, Department of Occupational Medicine, Prague, Czech Republic; <sup>2</sup>Toxicological Information Centre, General University Hospital, Prague, Czech Republic; <sup>3</sup>Institute of Chemical Technology, Prague, Czech Republic; <sup>4</sup>Department of Biomimetic Electrochemistry, J. Heyrovský Institute of Physical Chemistry of the AS CR, v.v.i, Prague, Czech Republic*

L-18 EFFECT OF ETHANOL ON THE HYPOTHALAMIC VASOPRESSIN AND OXYTOCIN RELEASE AND ON THE SPONTANEOUS CALCIUM OSCILLATIONS IN THE SUPRAOPTIC NUCLEUS NEURONS AND NERVE TERMINALS

**Dayanithi G.<sup>1,2,3</sup>**

*<sup>1</sup>Department of Molecular Neurophysiology, Institute of Experimental Medicine, Czech Academy of Sciences, Videnska 1083, CZ-14220 Prague, Czech Republic; <sup>2</sup>Department of Pharmacology and Toxicology, Faculty of Medicine in Plzen, Charles University, Czech Republic; <sup>3</sup>Institut National de la Santé et de la Recherche Médicale-U1198, Ecole Pratique des Hautes Etudes, Université de Montpellier, F-34095Montpellier, France*

L-19 ANTIBODY PROPHYLAXIS OF CF LUNG MICROBIAL INFECTIONS

**Hodek P.<sup>1</sup>, Vašková L.<sup>1</sup>, Rychnová J.<sup>1</sup>, Kubíčková B.<sup>1</sup>, Dostálová K.<sup>1</sup>, Wimmerová M.<sup>2</sup>, Stiborová M.<sup>1</sup>**

*<sup>1</sup>Department of Biochemistry, Faculty of Science, Charles University, Albertov 2030, 128 40 Prague 2, Czech Republic; <sup>2</sup>Department of Biochemistry, Faculty of Science, Masaryk University, Kamenice 753/5, 625 00 Brno, Czech Republic*

15.40 - 16.00 **Coffee Break**

16.00 - 17.00 **Poster Presentations**

17.15 - 19.00 **Pilsner Urquell Brewery Tour** (facultative)

19.30 **Social Evening: Pilsner Restaurant "Na Spilce"**

## Friday - June 23, 2017

09.00 - 11.00 **Session 6: Metabolism of Xenobiotics, Occupational Toxicology**

*Chairpersons: Pavel Anzenbacher, Stanislav Yanev*

L-20 TOXICOLOGICAL IMPORTANCE OF IMMUNE SYSTEM/DRUG METABOLISM INTERACTIONS

**Yanev S. G.**

*Department Drug Toxicology, Institute of Neurobiology, Bulgarian Academy of Sciences, Sofia, Bulgaria*

L-21 CHRONIC HEALTH IMPAIRMENT AND ELIMINATION HALF-LIFE 50 YEARS FOLLOWING 2,3,7,8-TETRACHLORO-DIBENZO-P-DIOXIN EXPOSURE

**Pelclova D., Fenclova Z., Navratil T., Vlckova S., Urban P., Ridzon P., Zakharov S.**

*Charles University, First Faculty of Medicine and General University Hospital, Department of Occupational Medicine, Prague, Czech Republic*

L-22 3-NITROBENZANTHRONE, A POTENT ENVIRONMENTAL MUTAGEN AND CARCINOGEN, FORMS A NEW TYPE OF ADDUCT WITH CYSTEINE IN GLOBIN AND PLASMA PROTEINS

**Linhart I.<sup>1</sup>, Hanzlíková I.<sup>2</sup>, Mráz J.<sup>2</sup>, Dušková Š.<sup>2</sup>, Dabrowská L.<sup>2</sup>, Chrástecká H.<sup>2</sup>, Vajtrová R.<sup>2</sup>, Tvrdíková M.<sup>2</sup>**

*<sup>1</sup>Department of Organic Chemistry, University of Chemistry and Technology, Prague;*

*<sup>2</sup>National Institute of Public Health, Prague*

L-23 THE POTENTIAL TOXICITY OF THE DENTAL AMALGAM

**Bučková L.**

*Department of Pharmacology and Toxicology, Faculty of Medicine in Pilsen, Charles University, Pilsen, Czech Republic*

L-24 ARSENIC COMPOUNDS: THEIR TOXICITY AND CLINICAL IMPLICATIONS

**Kmoníčková E., Kotyzová D., Bludovská M., Eybl V.**

*Department of Pharmacology and Toxicology, Faculty of Medicine in Pilsen, Charles University, Pilsen, Czech Republic*

11.00 - 11.20 **Closing of the Conference**

11.20 - 12.00 **Lunch**