


CEITEC PhD Retreat II: Programme

Thursday, 20 April 2017

- 8.00  Departure from Brno
- 10.00 – 11.00  Registration and welcome coffee
- 11.00 – 11.10 **Markus Dettenhofer** (*CEITEC, Brno, CZ*) - Welcome address
- 11.10 – 13.00 **Session 1**
 **Invited: Roman Gröger** (*IPM ASCR, CZ*)
Understanding plasticity of bcc metals via computer simulations and experiments
Vojtěch Svatoš - Temperature mapping and heat balance monitoring of living cells
Jan Oppelt - The impact of choice of reference gene annotation
Jan Glos - Nelder-Mead algorithm based control strategy for CO₂ heat pump
Helena Covelo Molares - Transcriptome-wide approaches revealed m6A demethylase FTO as a regulator of nuclear mRNA processing events
Pavel Janoš - Reaction mechanism of Mycobacterial glycosyltransferase GlfT2: computational study
BioTech sponsor presentation
- 13.00 – 14.00  Lunch
- 14.00 – 16.00 **Session 2**
 **Invited: Renata Veselská** (*Masaryk University, Brno, CZ*)
Don't Panic: The Hitchhiker's Guide to the Research Ethics
Jan Špaček - Electrochemical analysis of unnatural base pair content in DNA prepared in semi-synthetic organism
Marek Zbončák - Magnetic field directed self-assembly as route for biomimetics
Petra Bencúrová - miRNA profile of mesial temporal lobe epilepsy
 **Invited: Petr Hořín** (*University of Veterinary and Pharmaceutical Sciences, Brno, CZ*)
Host genetic susceptibility to infectious diseases
Sigma-Aldrich sponsor presentation
- 16.00 – 17.30  Extended coffee break (hotel check in, time to walk around town)

17.30 – 19.00

Session 3

🏠 **Invited: Cristina Ruedell Reschke Bandero** (*Royal College of Surgeons in Dublin, Dublin, IE*)

Locked nucleic acid antagomirs as therapy for epilepsy

Václav Šeda - Regulation of B-cell receptor signalling in chronic lymphocytic leukaemia (CLL) microenvironment via modulation of GAB1 protein levels

Iris Vonderhaid - Self-assembled, superparamagnetic, nanoparticle stabilized delivery vehicles for hydrophobic compounds

Šárka Schořová - Telomere- and telomerase-associated proteins in flowering plants

Matěj Pastucha - Detection of *Salmonella* in milk using enzymatic precipitation enhanced SPR immunosensor

19.00 – 21.00

🍴 Banquet dinner

20.00 – late

Poster session - informal networking and wine

Friday, 21 April 2017

7.30 - 9.00 Breakfast

9.00 – 10.35 **Red-eye session 4**


Nikola Tom - ToTem – automated software solution for program selection and parameter optimization in the field of next generation sequencing

Petr Jelínek - Plasma deposition of antibiotics containing composite coatings

Vladimír Horský - Biomacromolecular structure quality – improvement or stagnation?

Zuzana Žufanová - Validation and analyses of biomacromolecular ligand conformations

Iva Kutilová - Antimicrobial resistance in *Enterobacteriaceae* in wild birds

 **Invited: Stefan Baudis** (*Technische Universität Wien, AT*)
Lithography-based 3D printing of biocompatible polymers

10.35 – 11.10  Coffee break (**please remove posters from stands**)

11.10 – 12.30 **Session 5**

 **Invited: Jan Černý** (*Charles University Prague, CZ*)
Chemical wars

Sorin Tanasa - Identification of genes regulating plant meiosis by supresor screening in *Arabidopsis thaliana*

Filip Ligmajer - Plasmonic hot carriers in photoelectrochemistry

Miroslav Krepl - Study of Fox-1 RRM – the molecular recognition and hydration

Ondřej Krepl - Singular stress field near the sharp material inclusion tip and crack onset assessment

12.30 – 14.00  Lunch

14.00 – 15.40

Session 6

 **Invited: H elene Robert Boisivon** (CEITEC, Brno, CZ)

The plant hormone auxin and its importance for seed and embryo development in *Arabidopsis*

Hana Hab anov a - Proteome profiling by a large-scale targeted analysis - a new approach to detect and quantify lower abundant proteins


Martin Nov ak - Encapsulation of potential ruthenium prodrugs into macrocyclic carriers

Tom ař Kastl - Nucleoside inhibitors of tick-borne encephalitis virus: structure-activity relationships and viral resistance study

TESCAN sponsor presentation

TESCAN best poster award and **TESCAN best student talk award**

15.40 – 16.30

 Group photo and departure