

Program letne konference CIPKEBIP 2011 »Biosintezni in metabolni inženiring pri razvoju zdravil in procesov v industriji«

15. september 2011

Institut Jožef Stefan, Jamova cesta 39, Ljubljana, Velika predavalnica

09:00 – 09:30 registracija

Predsedujoča: *Enej Kuščer, Hrvoje Petković*

Otvoritev konference

09:30 – 10:00 pozdravni nagovor
Dušan Turk, strokovni direktor CIPKEBIP
Jadran Lenarčič, direktor IJS
Urban Krajcar, Ministrstvo za visoko šolstvo, znanost
in tehnologijo

10:00 – 10:45 uvodno predavanje:
Oxytetracycline - from discovery to genome sequence *Iain S. Hunter*

10:45 – 11:00 *odmor za kavo*

11:00 – 13:40 **Sekcija 1 »Biosintetski inženiring in razvoj zdravil«**

- 11:00-11:30 Macrolides - more than antibiotics *Vesna Eraković Haber*

- 11:30-12:00 Towards novel modular polyketide synthases
– lessons learnt from evolution *John Cullum*

12:00-12:10 *odmor za kavo*

- 12:10-12:40 Biosynthetic Engineering Approaches to Natural
Product Lead Optimization *Steve Kendrew*

- 12:40-13:10 Genomic data analysis - "What would Google do?" *Daslav Hranueli*

- 13:10-13:40 Exploring modularity - Cooperating fungal iterative
polyketide synthases for resorcylic acid lactone
production *Istvan Molnar*

13:40 – 14:40 *kosilo*

14:40 – 15:10 **Sekcija 2 »Predstavitev centrov odličnosti CO ENFIST in CO BIK«**

- 14:40-14:55 Predstavitev dosežkov CO ENFIST *Matjaž Polak*

- 14:55-15:10 Predstavitev dosežkov CO BIK *Rebeka Koncilija*

15:10 – 18:20 **Sekcija 3 »Biologija aktinomicetes in razvoj industrijskih procesov«**

- 15:10-15:40 Manipulation of streptomycete mycelial architecture *Paul Herron*

- 15:40-16:10 Improved erythromycin A production and purity by
Modulation of the overexpression of tailoring genes
eryK and eryG in *Saccharopolyspora erythraea* and
their fermentation optimization *Ju Chu*

16:10-16:20 *odmor za kavo*

- 16:20-16:50 New insights into substrate supply and regulation of
FK506 Biosynthesis and their implications for
Bioprocess development and drug discovery *Gregor Kosec*

- 16:50-17:20 Improvement of Oxytetracycline Production by Using *Meijin Guo*

- 17:20-17:50 Different Genetic Engineering Strategies "
Streptomyces are a source of hydrolytic enzymes with potential in lipid biotransformation *Dušica Vujaklija*

Zaključek prvega dne konference: Enej Kuščer, Hrvoje Petković

16. september 2011

Institut Jožef Stefan, Jamova cesta 39, Ljubljana, Velika predavalnica

09:00 – 09:30 registracija

Predsedujoči: *Dušan Turk*

09.30 – 14.35 Predstavitve raziskovalnega dela v okviru CIPKEBIP v letu 2011

09:30 – 10:15 DS 1: Mehanizmi in poti pri imunskem odzivu

Maja Rupnik Overview

Tatjana Lejko

10:15 – 11:00 DS 2: Znotraj in zunaj celična komunikacija

10:15 – 10:24 Enej Kuščer *Development of novel bioactive compounds by biosynthetic and chemobiosynthetic approaches*

10:24 – 10:33 Marko Fonovič *Role of cathepsins in cancerogenesis*

10:33 – 10:42 Marko Kreft *Super-resolution Microscopy and Cell Physiology*

10:42 – 10:51 Marjan Slak Rupnik *Organelle mediated signaling in endocrine tissue models*

10:51 – 11:00 Jože Pungertar *Secreted Phospholipases A2 and Breast Cancer*

11:00 – 11.15 *odmor za kavo*

11:15 – 12:35 DS 3: Prilagoditveni mehanizmi ekstremofilov na okolje

Nina Gunde Cimerman, Nataša Poklar Ulrich Overview

DS 4: Proteinska banka: proizvodnja in shranjevanje proteinov in proteinskih kompleksov

Dušan Turk Protein Data Bank: Overview

12:35 – 13:20 *kosilo*

13:20 – 14:20 5 minutne predstavitve raziskovalnega dela v letu 2011

Mateja Zemljič (DS 1) Vpliv sevov bakterije Clostridium difficile s hemolitično aktivnostjo na aktinski citoskele

Mateja Štempelj (DS 2) How does a sales oriented company start its R&D activities?

Saša Trkov (DS 2) Lipid signaling molecules attenuate vesicle mobility in cultured rat astrocytes

Andraž Stožer (DS 2) Calcium Dynamics of Langerhans' Islets in Pancreas Tissue Slices

Ajda Podgoršek (predstavitev dosedanjega raziskovalnega dela) (DS2) Chemistry in alternative reaction media: Effect of physico-chemical parameters and interactions on reactivity and selectivity

Metka Lenassi (DS 3) The mechanism of HAL2 salt tolerance in fungi living in extreme saline environment

Cene Gostinčar (DS 3) Identifying genes for the improvement of plant stress tolerance

Marko Mihelič (DS 4) Technologies and methodologies behind the WP4 – Protein production and structure determination pipeline

Bernard Ženko (DS 4) Automatic protein function prediction
Toni Petan (DS 2) Ectopic expression of group X secreted phospholipase A₂ induces proliferation of highly invasive and tumorigenic breast cancer cells
*Adrijana Leonardi (DS 2) Proteomics of *Vipera a. ammodytes* and *Conus consors* venoms*
*Aleksandra Usenik (DS 1) Structural biology of *Clostridium difficile* virulence factors*

14:20 – 14:35 *odmor za kavo*

14:35 – 18:00 Predstavitve proizvajalcev opreme in njihovih slovenskih zastopnikov

14:35 – 14:50 Bia d.o.o., Petra Draškovič, Malan Štrbec

14:50 – 15:05 LKB Vertriebs GmbH, Richard Feike

15:05 – 15:20 Mikro+Polo d.o.o., Tomaž Hočevar

15:20 – 15:35 Mettler Toledo d.o.o., Keith Racman

Zaključek drugega dne konference: *Dušan Turk*