

Discussion workshop on Eukaryotic expression

Teach-SG, SPINE2-Complexes

26th October 2009

Lecture Hall, Institute of Microbiology, Academy of Sciences of the Czech Republic

Vídeňská 1083, 142 20 Prague

Organizers: Jan Dohnálek, Institute of Macromolecular Chemistry AS CR, Prague, dohnalek007@gmail.com
Ondřej Vaněk, Institute of Microbiology AS CR, Prague, kenav3@seznam.cz

Participants must register with the organizers via e-mail (dohnalek007@gmail.com) stating their full name and affiliation and receive an e-mail confirmation of registration! Registration deadline is 19th October. There is no registration fee.

Program

- 10:00 - 10:10** Introduction (J. Dohnálek, O. Vaněk)
- 10:10 - 11:10** **Introduction to eukaryotic protein expression, development and applications of HEK transient gene expression systems**
Yves Durocher (National Research Council Canada, Biotechnology Research Institute, Montréal, Québec, Canada)
- 11:10 - 11:40** **Towards the crystal structure of a ZP domain**
Uschi Diestel (Department Biologie, Friedrich-Alexander-Universität, Erlangen-Nuernberg, Germany)
- 11:40 - 11:55** **Studies of NK cell lectin receptors using the HEK293T expression system.**
Ondřej Vaněk (Institute of Microbiology of the Academy of Sciences of the Czech Republic, Prague)
- 11:55 - 12:40** **Towards glycoprotein structural genomics: solving the glycosylation problem. Manipulation of glycosylation in eukaryots**
Veronica Chang (Weatherall Institute of Molecular Medicine, Nuffield Department of Clinical Medicine, John Radcliffe Hospital, University of Oxford, Headington, United Kingdom)
- 12:40 - 14:00** Lunch + coffee
- 14:00 - 14:45** **Protein co-expression in insect cells: smart expression vectors for protein complexes.**
Imre Berger (European Molecular Biology Laboratory, Grenoble Outstation, Grenoble, France)
- 14:45 - 15:00** **Carbonic anhydrase expression in insect cells**
Pavel Máder (Institute of molecular genetics and Institute of Organic Chemistry and Biochemistry, Academy of Sciences of the Czech Republic, Prague)
- 15:00 - 15:15** **One-step affinity purification of recombinant proteins expressed in insect cells**
Jan Tykvart (Institute of Organic Chemistry and Biochemistry, Academy of Sciences of the Czech Republic, Prague)
- 15:15 - 15:45** **LEXSY - a novel eukaryotic protein expression system based on *Leishmania tarentolae*, the whole story from scratch**
Reinhard Breitling (Jena Bioscience GmbH, Jena, Germany)
- 15:45 - 16:05** Coffee break
- 16:05 - 16:50** **Restriction-free methods for cloning and other applications. Use of the baculovirus system for expressing secreted proteins for functional and structural studies.**
Tamar Unger (Israel Structural Proteomics Center, The Weizmann Institute of Science, Rehovot, Israel)
- 16:50 - 17:20** **Use of animal cell culture at BioVendor RDP - glycosylated recombinant proteins for immunoassay development.**
Mojmír Ševčík (BioVendor)
- 17:20-17:30** Closing discussion and end of workshop