

Scientific Program

Friday May 9th 2014

15:00 – 15:15

Opening: Jiri Vondrasek IOCB AS CR

Invitation: Zdeněk Hostomsky, IOCB AS CR director

Session 1. Protein-Protein Interactions

Chairman: Chris Chipot

1.1 15:15-16:00

A. Keith Dunker

Disordered Protein and Developmental Biology

1.2 16:00-16:45

Alexander Wlodawer

Plant proteins with medically important properties: structural studies of three members of the α -trefoil family that function as serine protease inhibitors or as lectins

16:45-17:00

Coffee break

1.3 17:00 – 17:45

Torsten Schwede

Comparative protein quaternary structure modelling using evolutionary interaction fingerprints

1.4. 17:45-18:10

Moran Jerabek-Willemsen

MicroScale Thermophoresis: Interaction analysis and beyond

18:15-20:00

Welcome drink, dinner

Saturday May 10th, 2014

Session 2. Interactions within proteins and Interactions of Proteins with ligands

Chairman: Mikael Oliveberg

2.1 8:30-9:15

Nikolay Dokholyan

Controlling allosteric networks in proteins

2.2 9:15-10:00

Jacqueline Matthews

Selectivity and synergy in binding by modular linear motifs

PPS selected talk

10:00 – 10:30

Kvido Strišovský

Structural basis of rhomboid intramembrane protease specificity and mechanism revealed by X-ray crystallographic analysis of rhomboid:substrate-peptide complexes

10:30 – 11:00

Coffee break

Scientific Program

- 2.3** 11:00-11:45 Modesto Orozco
Functional aspects of protein dynamics
- 2.4** 11:45-12:30 Vladimir Sklenar
Intrinsically Disordered Proteins – Atomic Resolution Characterization of Transient Interactions
- 2.5** 12:30-13:15 *Ora Schueler-Furman*
Peptide-mediated interactions: characterization, modeling and manipulation
- 13:15-14:30 Lunch

Session 3. Protein-Protein Interactions

Chairman Jane Dyson

- 3.1** 14:30-15:15 Neil Ferguson
High resolution studies of the molecular handshake between a disordered viral protein and its human binding-partner
- 3.2** 15:15 -16:00 Peter Wright
Functional interactions of intrinsically disordered proteins in dynamic signaling networks
- 3.3** 16:00-16:45 Chris Chipot
Efficient determination of protein-protein standard binding free energies with a computational microcalorimeter
- 16:45-17:10 Coffe break
- 3.4** 17:10-17:55 Tomas Obsil
14-3-3 proteins and mechanisms of their functions
- 3.5** 17:55-18:35 Richard Stefl
Dynamic recruitment of processing factors to the site of transcription.
- 19:30 – 23:00 Poster Session

Scientific Program

Sunday May 11th, 2014

Session 4. Protein aggregates

Chairman Peter Wright

4.1 8:30-9:15 B. Montgomery Pettitt
Aggregation, collapse and disorder: Model systems

4.2 9:15-10:00 Mikael Oliveberg
In-cell thermodynamics

PPS selected talk

10:00-10:30 Lajos Kalmar
Functional evolution of intrinsically disordered proteins

10:30-10:50 Coffee break

4.3 10:50 -11:35 Michele Vendruscolo
Characterisation of Protein Dynamics by Combining NMR Spectroscopy and Molecular Dynamics Simulations

4.4 11:35- 12:20 Dana Reichmann
Unfoldomics of the cellular stress response: How do Intrinsically disordered chaperones work?

12:20-13:30 Lunch

Session 5. Protein – Nucleic Acid Interactions

Chairman Michele Vendruscolo

5.1 13:30-14:15 Edward N. Trifonov
Strong nucleosomes - towards major revision of views on chromatin.

5.2 14:15-15:00 Janusz Bujnicki
3D Modeling of protein-RNA complex structures

5.3 15:00 - 15: 45 Jane H Dyson
Dynamics and specificity in protein-nucleic acid interactions.

15:45 – 16:30 General discussion and concluding remarks

16:45 – 18:00 Villa Lanna - Prague Castle and Prague Castle Gardens Walking Tour

18:00 – 21:00 Conference dinner at Vila Richter (Prague Castle vineyard)

Speakers of the 3rd PPS 2014

Jane DYSON

(The Scripps research Institute, USA)

Peter WRIGHT

(The Scripps research Institute, USA)

A. Keith DUNKER

(Indiana University, USA)

Dana REICHMANN

(The Hebrew University, Israel)

Modesto OROZCO

(IRB Barcelona, Spain)

Jacqueline MATTHEWS

(University of Sydney, Australia)

Nikolay DOKHOLYAN

(University of NC, Chapel Hill, USA)

Chris CHIPOT

(University of Illinois, USA)

Mikael OLIVEBERG

(Stockholm University, Sweden)

Janusz BUJNICKI

(IMCBn Warsaw, Poland)

Michele VENDRUSCOLO

(Cambridge University, UK)

Alex WLODAWER

(NCI, USA)

Tomas OBSIL

(Charles University, Prague, CZ)

B. Montgomery PETTIT

(University of Texas, USA)

Edward TRIFONOV

(University of Haifa, Israel)

Richard STEFL

(Masaryk University, Brno, CZ)

Neil FERGUSON

(UCD Dublin, Ireland)

Vladimir SKLENAR

(Masaryk University, Brno, CZ)

Torsten SCHWEDE

(Universitat Basel, Switzerland)

Ora SCHUELER-FURMAN

(Hebrew University, Jerusalem, Israel)