



VIB
CONFERENCE
SERIES

STRUCTURAL DYNAMICS IN CELLULAR COMMUNICATION

PROGRAM

Monday 9 February, 2015

08:45 - 09:20 Registration & Welcome coffee - Silver Foyer
09:20 - 09:30 Welcome - Peter Tompa - Silver Hall

09:30 - 12:00 Macromolecular machines and assemblages - Silver Hall

09:30 - 10:05 Structure and mechanism of the anaphase-promoting complex
[David Barford](#), Cancer Research, UK

10:05 - 10:40 Using EM to investigate the dynamics of molecular machines
[Bridget Carragher](#), Scripps Research Institute & Nanomaging Services, Inc.

10:40 - 11:10 Coffee Break

11:10 - 11:30 The application of Free Electron Lasers to biology: a new age of time resolved crystallography
[Gebhard Schertler](#), Paul Scherrer Institut, ETH

11:30 - 11:50 Dynamic protein structure: from protein disorder to membrane pores
[Frank Sobott](#), University of Antwerp, Belgium

11:50 - 12:10 A comprehensive structural model of the ATPase cycle of a mitotic motor highlights molecular adaptations for force production in kinesin family
Adeline Goulet, Architecture et Fonction des Macromolécules Biologiques (AFMB) laboratory, (CNRS, AMU), France

12:10 - 12:20 Duolink using PLA Technology
Delphine Ayache, Sigma-Aldrich

12:20 - 13:20 Lunch - Silver Foyer

13:20 - 15:00 Poster Session 1 - Magritte Foyer

15:00 - 18:40 Protein network dynamics - Silver Hall

15:00 - 15:35 Predicting the mechanism how mutations and post-translational modifications affect biological networks
[Rob Russell](#), University of Heidelberg, Germany

15:35 - 16:10 Protein-lipid networks
[Anne-Claude Gavin](#), EMBL, Heidelberg

16:10 - 16:40 Coffee Break - Silver Foyer

16:40 - 17:00 Structural and chemical gymnastics of peroxiredoxins during catalysis, hyperoxidation and repair
[W. Todd Lowther](#), Wake Forest School of Medicine, US

17:00 - 17:20 AcTakines: old monkeys, new tricks
[Jan Tavernier](#), VIB Department of Medical Protein Research, UGent, Belgium

17:20 - 17:40 Mining the ROS-sensors of Arabidopsis thaliana with a sulfenomic approach
Jingjing Huang, VIB Structural Biology Research Center, VUB, Belgium

17:40 - 18:40 Species-specific antibiotics resistance
[Ada Yonath](#), Weizmann Institute of Science, Israel

19:30 - 20:00	Reception - Silver Foyer
20:00 - 22:00	Conference dinner - Rocco Forte Hotel Amigo

Tuesday 10 February, 2015

09:30 - 12:00 Protein fluctuations and function - Silver Hall

- 09:30 - 10:05 Seeing the invisible by solution NMR spectroscopy
[Lewis Kay](#), University of Toronto, Canada
- 10:05 - 10:40 The Evolutionary "Design" of Proteins.
[Rama Ranganathan](#), UT Southwestern Medical Center, US

10:40 - 11:10 Coffee break - Silver Foyer

- 11:10 - 11:30 Molecular dissection of protein folding and misfolding mechanisms
[Sheena Radford](#), University of Leeds, UK
- 11:30 - 11:50 Exposing the structural culprit: Insights into signaling assemblies mediated by TSLP in inflammatory allergic disorders
[Savvas Savvides](#), Ghent University, Belgium
- 11:50 - 12:10 Molecular basis of secondary multidrug transport: from protein dynamics to drug extrusion
Cedric Govaerts, Structure and Function of Membrane Biology Laboratory, VUB, Belgium

12:10 - 13:10 Lunch - Silver Foyer

13:10 - 15:00 Poster session 2 - Magritte Foyer

15:00 - 18:00 Membrane proteins, complexes - Silver Hall

- 15:00 - 15:35 Hybrid Methods for Defining the Structure and Function of Cellular Machines
[Brian T. Chait](#), Rockefeller University, US
- 15:35 - 16:10 Structural insight into the biogenesis of beta-barrel membrane proteins
[Susan Buchanan](#), National Institutes of Health, US

16:10 - 16:40 Coffee break - Silver Foyer

- 16:40 - 17:00 Forming amyloid fibrils - the bacterial way
[Han Remaut](#), VIB Laboratory of Structural and Molecular Microbiology, VUB, Belgium
- 17:00 - 17:20 Protein Transport across Membranes - Dynamics of the Injectisome
[Thomas Marlovits](#), Center for Structural Systems Biology, Hamburg, Germany
- 17:20 - 17:40 An effective plasma membrane proteomics approach for small tissue samples
Katrien Smolders, KU Leuven
- 17:40 - 18:00 Closing remarks