

Agenda of the 33rd Rhine-Knee Regional Meeting on Structural Biology

Hôtel du Léman - Centre de séminaire - Jongny (Vaud)

October 14th to 16th, 2019

| Day 1: Monday 14th October | | | |
|-------------------------------|--|---------------------------------|---|
| 4:30-5:30 pm | Registration | | |
| 5:30-6:00 pm | Welcome Address- Dr. Florence Pojer, EPFL Lausanne | | |
| 6:00-7:00 pm | Keynote Lecture Prof. Martin Pilhofer | ETH Zurich | Multiscale models of bacterial cell-cell interactions |
| 7:00-8:30 pm | Dinner | | |
| 8:45-10:15 pm | Session 1: Biomolecular structure and mechanisms - Part I | | |
| 8:45 | Helgo Schmidt | Strasbourg IGBMC | The CryoEM structure of the ribosome maturation Factor Rea1 |
| 9:00 | Simone Mattei | ETH Zurich | Architecture of the royal jelly protein filaments by cryogenic electron tomography and helical reconstruction |
| 9:15 | Nils Rustmeier | University of Tuebingen | Novel Antigen-Type receptor candidates of Polyomaviruses |
| 9:30 | Volodymyr Korkhov | PSI Villigen, ETH Zurich | Structures of a membrane adenylyl cyclase-G protein complex reveal a novel mechanism of cAMP signaling pathway regulation |
| 9:45 | Heike Kropp | University of Konstanz | Structural insights into the archeal B-family KOD DNA polymerase |
| 10:00 | Camilo Perez | University of Basel, Biozentrum | Structure and mechanism of a pH sensing lipoteichoic-acid-anchor flippase |
| 10:00 pm on | Networking | | |
| Day 2: Tuesday 15th October | | | |
| 7:00-8:30 am | Breakfast | | |
| 9:00-10:00 am | Session 2: Instrumentation and methods - Part I | | |
| 9:00 | Martin Adam | Bruker AXS GmbH | Highest Resolution data with latest in-house sources and detector technology |
| 9:15 | Sacha De Carlo | DECTRIS Ltd | Fast electron crystallography of protein 3D micro-crystals |
| 9:30 | Matilde Cardoso Trabuco | LeadXpro AG | LeadXpro- Structure based drug design on membrane proteins |
| 9:45 | Fabio Spiga & Kelvin Lau | Creoptix AG & PTPSP | The importance of high-quality binding data when revealing insights light signaling |
| 10:00-10:30 am | Break | | |
| 10:30-11:30 am | Session 3: Instrumentation and methods - Part II | | |
| 10:30 | Kevin Rollet | Strasbourg IBMC | New microfluidic design for crystallization of biomolecules and their in situ analysis by serial crystallography |
| 10:45 | Natalie Bärland | University of Basel | Fast small-scale membrane protein purification and grids |
| 11:00 | Eric Ennifar | Strasbourg IBMC | Multi-approach benchmarking of macromolecular interactions |
| 11:00-12:00 | Keynote Lecture Dr. Gaia Barazzetti | University of Lausanne | Integrity and perverse incentives in scientific research |
| 12:00-12:30 | Open Discussion on Scientific Integrity | | |
| 12:30-1:30 pm | Lunch | | |
| 2:00-5:00 pm | Excursion to Chaplin's world (15 mins walking distance) | | |
| 6:00-7:00 pm | Keynote Lecture Dr. Hugues Nury | IBS Grenoble | Structures and transitions of the serotonin 5-HT3 receptor |
| 7:00-8:30 pm | Dinner | | |
| 8:45-10:15 pm | Session 4: Instrumentation and methods - Part III | | |
| 8:45 | Vincent Olieric | PSI Villigen | Evolving data collection practices at SLS MX beamlines |
| 9:00 | Isabelle Martell | PSI Villigen | Serial Macromolecular crystallography at SwissFEL |
| 9:15 | Dongchun Ni | University of Basel, C-CINA | Single particle cryoEM analysis of small protein |
| 9:30 | Andrea Thom | University of Würzburg | Automated interpretation of cryoEM density maps with convolutional neural networks |
| 9:45 | Luciano Abriata | EPF Lausanne | State of the art of protein tertiary structure prediction |
| 10:00 | Elena Buglakova | EPF Lausanne | Computational-assisted nanopore engineering for molecular sensing |
| 10:00 pm on | Networking | | |
| Day 3: Wednesday 16th October | | | |
| 7:00-8:30 am | Breakfast | | |
| 9:00-10:00 am | Session 5: Biomolecular structure and mechanisms - Part II | | |
| 9:00 | Andreas Mueller | ETH Zurich | Functional and structural investigations of transcriptional activator PatfBC regulating the mycobacterial DNA damage response |
| 9:15 | Badri NathDubey | University of Basel, Biozentrum | How does Second Messenger controls bifunctional hybrid Histidine Kinases at the molecular level? |
| 9:30 | Martin Saurer | ETH Zurich | Mitoribosomal small subunit biogenesis in trypanosomes involves an extensive assembly machinery |
| 9:45 | Robin Gierse | HIPS Saarland | Structure based drug design on the anti-infective target DXS by combining crystallography and protein templated dynamic combinatorial chemistry |
| 10:00-10:30 | Break | | |
| 10:30-12:00 am | Session 6: Biomolecular structure and mechanisms - Part III | | |
| 10:30 | José Jaramillo Ponce | Strasbourg IBMC | Biochemical and structural study of teh tRNA import machinery in Plasmodium |
| 10:45 | Niklas Bayer | University of Tuebingen | New insight into the structure-function relationships of Merkel Cell polyomavirus infection |
| 11:00 | Hugo Muñoz Hernandez | University of Basel | CryoEM of R2TP co-chaperone complex reveals a structural mechanism for regulation of the AAA-ATPases RUVBL1-RUVBL2 |
| 11:15 | Hengjun Cui | ETH Zurich | Structural basis of depupylation by deamidase of Pup (Dop) reveals an allosteric sensing mechanism |
| 11:30 | Young-MinSoh | University of Lausanne | Structural and biochemical studies on ParB loading and spreading |
| 11:45 | Ioannis Vakonakis | University of Oxford - EPFL | Symmetrical and polar: how the architectural properties of the centriole organelles are defined |
| 12:00-12:30 am | Concluding Remarks and hand-over of the "Regio bell" to the next organizer | | |
| 12:30-2:00 pm | Lunch and Departure | | |

