

Protein Science Day 2019 – Measuring interactions: from molecules to cells

15th October 2019

Lund University, Sweden

Hosted by Molecular Recognition in Life (MoReLife), HALOS, ESS, and MAX IV

Co-sponsored by Dynamic Biosensors, Xtal, NanoTemper and GE Healthcare Life Sciences

Location: Belfragesalen, BMC

09.00 Welcome

09.10 “The Correlative Image Processing and Analysis platform”, Jonas Ahlstedt

09.20 “Lund Institute of Advanced Neutron and X-ray Science (LINXS)”, Jens Lagerstedt

09.30 “Hanseatic League of Sciences - HALOS”, Kajsa Paulson

09.40 "In situ Dynamic Light Scattering: A time and sample efficient method to qualify samples for Crystallization, SAXS, NMR, SPR and Cryo-EM", Xtal-concept (Sponsor)

10.00 “The switchSENSE® biosensor platform for the analysis of molecular interactions”, Dynamic Biosensors (Sponsor)

10.20-11.05 Coffee and tea +

Instruments demo (room 1 and 2) at D15 or

HALOS speed-dating (meet representatives from HALOS e.g., MAX IV, ESS, the Lund University HALOS reference group and others, present your science case and get suggestions on techniques and/or who to contact for applying synchrotron, neutron and FEL methods. Sign up for this part and we will match you with one or more HALOS representative for a 5-15 minutes discussion), Dora Jacobsson or Bengt Borgström at D15 or conference room at D14 or C14.

11.05 “The nitty-gritty of molecular interactions”, Mikael Akke (confirmed)

11.25 “New synchrotron-based tools to study time-resolved protein-protein and protein-ligand interactions”, Arwen Pearson, Hamburg (confirmed)

11.45 “Challenges and opportunities in biologics”, Marie Wahlgren (confirmed)

12.05 “Let’s hear from the young researchers” (postdocs/PhD students give short presentations)

“Modelling the core of lipid nanoparticles encapsulating messenger RNA”, Giulio Tesei (confirmed)

“FragMAX: Fragment Screening platform at BioMAX”, Gustavo Lima, MAX IV (confirmed)

12.25 “Live cell interfaces with nanomaterials”, Christelle Prinz (confirmed)

12.45-13.30 Joint lunch + (Instrument try)

13.30 “Structural mass spectrometry”, Sven Kjellström (confirmed)

13.50 “Resolving protein-nucleic acid interactions during viral capsid assembly using small-angle scattering and cryoEM”, Ryan Oliver (confirmed)

- 14.10 “Multi-molecular organisation and architecture: How cells encode information as they move”,
Vinay Swaminathan (confirmed)
- 14.30 “Let’s hear from the young researchers” (postdocs/PhD students give short presentations)
“How ligand densities and ligand mixtures can affect protein affinities within a cell contact”,
Victoria Junghans (confirmed)
“*In vivo* engineering of human hematopoietic niches as advanced screening platform”, Ani
Grygorian (confirmed)
“TBA”, Jörg Schwenke, MAX IV (TBC)

15.00-15.30 Coffee and tea + (Instrument try)

- 15.30 " Methods for structural characterization in 3D within QIM", Anders BJORHOLM DAHL, DTU
(confirmed)
- 15.50 “A bacterial virulence factor that hijacks plasma proteins to modulate host cell function”, Oonagh
Shannon, (confirmed)
- 16.20 Discussion in smaller groups
- 16.40 Sum up and concluding remarks

17.00 Tapas, drinks and mingle