



AUSBI Symposium 2024

Structural biology and biophysics from the sub-molecular to cellular scale and larger

Wednesday 1st May 2024 from 8:30-18:30

Venue:

Aarhus Institute of Advanced Studies (AIAS)
Høegh-Guldbergs Gade 6B
8000 Aarhus

Scientific programme: AIAS Auditorium (1632-201)
Refreshments and posters: AIAS Hall (1631-101)
PI lunch meeting: AIAS meeting room (1630-301 – on the 3rd floor in 1630)

Programme

- 08:30 **Coffee and registration** (AIAS Hall). Please put all posters up in the AIAS Hall
- 09:05 **Welcome by organising committee** (AIAS Auditorium)
- 09:15 **Poul Nissen** (Faculty of Natural Sciences and MBG): *Opening remarks*

SESSION I

Chair: Poul Nissen

- 09:30 **Kira Gysel** (MBG): *Structural basis of chitin perception in plants*
- 09:50 **Anastasiia Sadetskaia** (iNANO-Chem): *Mysteries of bone: spatial distribution of Zn and changes in surrounding matrix around cement lines and lacunar-canalicular network mapped by synchrotron-radiation experiments*
- 10:10 **Emil Laust Kristoffersen** (MBG-iNANO): *2'-fluoro modified RNA nanodevices for sensing, catalysis, and protein binding*
- 10:40 **Coffee break** (AIAS Hall)

SESSION II

Chair: Anna Duncan

- 11:10 **Thibault Viennet** (Chem-iNANO): *Mechanistic importance of disordered tails in enzyme regulation by phosphorylation*
- 11:30 **Malthe Kjær Bendtsen, Andreas Møllebjerg, and Samuel Peña Díaz** (iNANO-MBG): *Towards a sustainable plastic culture: developing and applying polyurethane-degrading enzymes*
- 11:50 **Ali Shahrokhtash** (iNANO-Phys): *"Nanopatterned DNA force sensors for studies of immune cell activation"*

- 12:10 **Lynette Nel** (MBG): *Conformational changes in the Niemann-Pick Type C1 protein NCR1 drive sterol translocation*
- 12:30 **Group photo in the auditorium**
- 12:35 **Lunch and networking** (AIAS Hall)
or **PI lunch meeting** (1630-301 – on the 3rd floor in 1630)
- 13:00 **Poster session and networking** (with prepared 2 min presentations)

SESSION III

Chair: Ditlev E. Brodersen

- 14:00 **Kristian Juul-Madsen** (Biomedicine): *Amyloid- β aggregates activate peripheral monocytes in mild cognitive impairment*
- 14:20 **Mads Justesen** (iNANO-MBG): *Structural and spectroscopic investigations of cable bacteria*
- 14:40 **Akriti Mishra** (Chem): *Probing the structure of human alpha synuclein on nanoplastics surface*
- 15:00 **Klara Scholtissek** (MBG): *Structural and functional characterization of the human lipid flippase ATP10A*
- 15:20 **Coffee break** (AIAS Hall)

SESSION IV

Chair: Duncan Sutherland

- 15:40 **Pablo Alcon** (incoming MBG): *FANCD2-FANCI is a sliding clamp that recognizes ss-dsDNA junctions*
- 16:00 **Frederik Henriksen** (MBG): *Biophysical exploration of complex regulatory mechanism of bacterial toxin-antitoxin systems*
- 16:20 **Laura Teodori** (iNANO-MBG): *DNA origami-mediated transfer of nanoscale molecular patterns*

SESSION V

Chair: Thomas Boesen

- 16:40 **Gregers Rom Andersen** (MBG): *HALRIC program and how to obtain funding*
- 16:50 **Jesper Karlsen and Rune Kidmose** (Faculty of Natural Sciences and MBG): *Electron microscopy and protein design computing cluster*
- 17:05 **Line Mørkholt Lund** (iNANO-Chem): *Conformation dynamics of DNA unfolding by helicase and imaging by single-molecule fluorescence*
- 17:20 **Poster prize announcement**
- Future outlook and discussion**

- 17:30-18.30 **Pizza, posters, and networking** (AIAS Hall)