

Symposium “Volume Microscopy of Sensitive Samples: Advantages and Drawbacks”

10-11 June 2019

The shared campus of Biology Centre and University of South Bohemia, Branisovska Street 31, Ceske Budejovice (map)

Preliminary program:

Monday, 10th June 2019

- 8:30-9:30 Registration
- 9:30 Welcome: **Libor Grubhoffer** (Biology Centre, České Budějovice)
- 9:40 Keynote 1: **Yannick Schwab** (EMBL Heidelberg): Targeting strategies for FIBSEM imaging in multicellular specimens - from brain metastasis to plankton symbionts.
- 10:10 Keynote 2: **Christel Genoud** (FMI for Biomedical Research, Basel): Optimization of SBEM for acquisition of large volume: challenges from sample preparation to segmentation.
- 10:40 Lecture: **Réza Shahidi** (University of Exeter): Resolving connectomic studies by ssSEM
- 11:00 Lecture: **Marie Vancova** (Biology Centre, České Budějovice): Applications of volume electron microscopy in research on ticks and tick-borne pathogens
- 11:20 Coffe break
- 11:40 Keynote 3: **Irina Kolotueva** (University of Lausanne): TBA
- 12:10 Joint lecture: **Gareth Griffiths** (University of Oslo): Visualising nanoparticles for drug therapy in the zebrafish embryos: by fluorescence microscopy.
Jens Wohlmann (University of Oslo): Visualising nanoparticles for drug therapy in the zebrafish embryos: by EM.
- 12: 50 Lecture: **Eva Ďurinová** (Biology Centre, České Budějovice): New approaches to SBF SEM specimen preparation.
- 13:05 Lunch

- 13:50 Keynote 4: **Miroslav Šlouf** (Institute of Macromolecular Chemistry, Prague): Synthesis and characterization of novel embedding resins for 3D-SEM microscopy applications
- 14:20 Lecture: **Markéta Dalecká** (Biocev, Prague): Bubble-assisted workflow for 3D targeting of cells in correlative confocal and FIB-SEM microscopy
- 14:40 Company Lecture: **Helmut Gnägi** (Diatome): Serial sectioning for 3D reconstruction
- 15:00 Company lecture: **Emine Korkmaz** (Thermo Fischer Scientific): 3D large volume imaging- a powerful approach for cell and tissue studies
- 15:20 Company lecture: **Jan Weert** (Leica Microsystems): Artos 3D simplify your sample preparation workflow for Array tomography.
- 15:40 Coffe break
- 16:00 Demonstration of Apreo Volume Scope (Thermo Fisher Scientific)/Artos system (Leica Microsystems)/ ATUMtome (RMC Boeckeler/ LEM tour
- 18:00 End
- 19:00 Social evening with dinner

Tuesday, 11th June:

- 9:00 Demonstration of Apreo Volume Scope (Thermo Fisher Scientific)/Artos system (Leica Microsystems)/ ATUMtome (RMC Boeckeler/ LEM tour
- 11:00 Round table discussion – Specimen preparation for 3D SEM
- 12:00 End of symposium

Registration: through e-mail to Martina Tesarova (holland@paru.cas.cz)

Questions: Martina Tesarova (holland@paru.cas.cz)/ Jana Nebesarova (nebe@paru.cas.cz)

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