



## Cell challenge

novel, innovative techniques of  
manipulating and imaging live cells

ProLipids Advanced Technologies International Symposium  
December 12, 2017 Biomedicum, Haartmaninkatu 8, University of Helsinki

### Session 1

9:30 - 12:00 lecture hall 3

9:30 – 9:45

Coffee

9:45 – 10:00

Opening

**Elina Ikonen**, director of ProLipids, University of Helsinki

10:00 – 10:40

3D super-resolution imaging with structured illumination - principles and practical considerations

**Lothar Schermelleh**, University of Oxford, UK

10:40 – 11:20

Architecture and mechanics of macrophage podosomes by 3D single molecule localisation microscopy and protrusion force microscopy

**Renaud Poincloux**, Institut de Pharmacologie et de Biologie Structurale, Université de Toulouse, France

11:20 – 12:00

Visualizing endocytic recycling and trafficking in live neurons by subdiffractional tracking of internalized molecules (sdTIM) technique

**Merja Joensuu**, Queensland Brain Institute, University of Queensland, Australia

12:00 – 13:00

Break for lunch

### Session 2

13:00- 17:00 lecture hall 3

13:00 – 13:40

Three Phase-Wetting Physics Regulates the Biogenesis of Lipid Droplet Organelles

**Rachid Abdou Thiam**, Ecole Normale Supérieure de Paris, France

13:40-14:20

Quantifying lipid dynamics in living cells: Technology & mechanistic discoveries

**André Nadler**, Max Planck Institute of Molecular Cell Biology and Genetics, Dresden, Germany

14:20 – 14:50

Automation to accelerate cell biological research

**Simon Pfisterer**, University of Helsinki

14:50 – 15:20

Coffee

15:20 -16:00

Building and breaking epithelial integrity in the neural tube: an optogenetic approach

**Clare Buckley**, University of Cambridge, UK

16:00 - 16:40

In vivo two-photon imaging of spontaneous calcium activity in the rodent late embryonic brain

**Claudio Rivera**, University of Helsinki

16:40 – 17:00

Closing

**Pekka Lappalainen**, ProLipids, University of Helsinki

Organized by the ProLipids Student Council