

Programme for the 45th Scottish Microscopy Symposium

22nd November 2017, The Beatson Institute

Theme of meeting: Resolution

- 09.00 – 09.45** **ATRIUM**
Registration and coffee
Trade exhibition and poster hanging/display
Book your place for lunchtime workshops
- LECTURE THEATRE**
- 09.45 – 09.50** **Welcome and outline of the day and workshops**
- SESSION 1 Better resolution from imaging to light microscopy**
Chair: Gail McConnell, University of Strathclyde
- 09.50 – 10.05** **FACILITY TALK**
Leo Carlin, Beatson Institute
“Microscopy at the Beatson LM Facility”
- 10.05 – 10.35** **Sandy Cochran and Holly Lay, School of Engineering, University of Glasgow**
“Microultrasound imaging and other techniques as a route to increased spatial resolution”
- 10.35 – 10.55** **Katie Hughes, Wellcome Centre for Molecular Parasitology, University of Glasgow**
“Flow cytometry with imaging: using the Imagestream in parasitology”
- 10.55 – 11.40** **KEYNOTE** *Chair: Leo Carlin, Beatson Institute*
Ricardo Henriques, MRC Laboratory for Molecular Cell Biology, UCL, London “From TIRF to SRRF using NanoJ”
- 11.40 – 12.00** **PUBLIC ENGAGEMENT LECTURE** *Chair Alan Prescott, University of Dundee*
Mhairi Towler, Vivomotion, Dundee
“Making your presentations more animated: the experience of Vivomotion”
- 12.00 – 14.00** **Lunch and Tradeshow in Atrium** (11 trade stands)/ **Poster session in lecture theatre** / **Photo competition in lecture theatre** (judge Mhairi Towler) / **Tour of facilities** by Beatson staff and students (escort required) / **Workshops in facility labs** (signing up and escort required)
- Workshops:**
Carl Zeiss (Mark Montgomery and Nicolas Sargent): “Fast and Gentle Confocal Imaging with Airyscan, featuring the Airyscan 88”.
Leica Microsystems (Alain Stewart and Tracey Williams), featuring their new TIRF system: “Just one of the many options available on the new DMI8-S live-cell platform”.
OMERO (Will Moore) held in the boardroom off the Atrium “Introduction to OME, OMERO and OMERO-figure.

SESSION 2 Ultrastructural imaging of biological structures: pushing the limits

Chair: Leandro Lemgruber, University of Glasgow

14.00 – 14.45

KEYNOTE

Gaia Pigino, Max Planck Institute, Dresden

“Structural and functional studies of cilia and intraflagellar transport by 3D cryoEM”

14.45 – 15.00

FACILITY TALK

David Bhella, MRC Centre for Virus Research, University of Glasgow

“New National CryoEM Facility at the Sir Michael Stoker Building, University of Glasgow”

SESSION 3 Selected short orals

Chair David Bhella, University of Glasgow

15.00 – 15.10

Nikolaos Panagiotou, Colin Selman and Paul G. Shiels

Wolfson Wohl Cancer Research Centre, Institute of Cancer Sciences, MVLS, University of Glasgow, Glasgow, UK

“Cellular ageing impacts on microvesicle-mediated tissue regeneration”

15.10 – 15.20

Liam M. Rooney¹, Lee McCann², Paul A. Hoskisson¹ and Gail McConnell²

¹Strathclyde Institute of Pharmacy and Biomedical Sciences, University of Strathclyde, Glasgow², Department of Physics, SUPA, University of Strathclyde, Glasgow

“Applying the Mesolens to Microbiology; Visualising Biofilm Architecture and Substructure”

15.20 – 15.30

Vytautas Zickus, Jonathan M. Taylor School of Physics and Astronomy University of Glasgow

“3D + time blood flow mapping using SPIM-microPIV in the developing zebrafish heart”

15.30 – 15.50

Coffee/tea

SESSION 4 Imaging of materials at the highest resolution

Chair Miep Helfrich, University of Aberdeen

15.50 – 16.05

FACILITY TALK

Ian MacLaren, Kelvin Nanocharacterisation Centre, University of Glasgow

“Nanoscale imaging and spectroscopy in the electron microscope”

16.05 – 16.35

Fabio Nudelman, School of Chemistry, University of Edinburgh

“Characterizing the structure and functionality of organic matrices of mineralized tissues”

16.35 – 16.45

Prize giving and close *Chairs, Alan Prescott and Paul Appleton*