

Newsletter

Edition 18 August 2019

Welcome

We are pleased to welcome Dirk-Peter Herten COMPARE Pls.

Dirk-Peter has joined as Chair in Cell Biology of Membrane Proteins at the University of Birmingham shared by the Institute of Cardiovascular Sciences and the School of Chemistry with his labs located in the Institute of Biomedical Research (IBR).

Dirk's interdisciplinary research spans from microscopy techniques over switchable fluorescent probes to biological applications, like T-cell signalling in the context of inflammation. He has specialized in single-molecule microscopy enabling quantitative studies of the composition and dynamics of cellular structures and enzymatic reactions in living cells.



Registration is open for the COMPARE Annual Research Symposium on Thursday 26th September. This year the symposium will be held at the Jubilee Conference Centre at the University of Nottingham, click here for full details and the registration link.

Abstract deadline Friday 23rd August 2019

Registration deadline Friday 5th September 2019

https://www.eventbrite.com/e/compare-annual-researchsymposium-2019-registration-56493968982

Key Dates

Annual Research Symposium 26th September 2019 Jubilee Conference Centre Nottingham

Lattice Light Sheet Discussion Group

13th November 2019 11:00-15:00 COMPARE Medical School University of Birmingham Contact: <u>Dee Kavanagh</u>

External Conferences

ELRIG Drug Discovery 2019
5th-6th November, Liverpool
https://elrig.org/portfolio/2019drug-discovery/

QBI 2020 Conference 2020 6-9th January 2020 University of Oxford https:// www.quantitativebioimaging.com/ qbi2020/

Congratulations

Congratulations to Jeanette Woolard, Deputy Director of COMPARE, Jeanette has been promoted to Professor of Cardiovascular Physiology and Pharmacology at the University of Nottingham.



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If you have any items for the next newsletter please send to:

compare@birmingham-nottingham.ac.uk

IN PARTNERSHIP:



Nikon Ti2-Eclipse Dual Camera TIRF microscope

The Nikon Ti2-Eclipse Dual Camera TIRF microscope system has now been installed in the COMPARE laboratories in Nottingham. This system has been purchased with a view to developing camerabased multipoint fluorescence correlation spectroscopy (FCS) approaches to quantify membrane protein diffusion at multiple points, but is also a powerful microscope for two-colour TIRF imaging.

The system is based on a Nikon Ti2 inverted widefield microscope with TIRF (total internal reflection fluorescence) capabilities. The system has dual Photometrics 95B sCMOS cameras which allows simultaneous capture of two emission wavelengths alongside a Retiga camera which allows imaging of the back focal plane. The microscope is equipped with a motorised stage, PFS (perfect focal system) and an auto-correction collar on the 100x 1.49NA oil objective. Other objectives include 10x 0.45NA air, 20x 0.75NA air and 60x 1.49NA oil. An opaque environmental chamber allows control over temperature and CO₂ conditions. Laser lines include 408, 488, 561 and 640nm.

Image capture and post-acquisition analysis can be performed with NIS-Elements which includes the single molecule tracking module.

If you are interested in using this system please get in contact with Joëlle Goulding at the University of Nottingham (Joelle.goulding@nottingham.ac.uk)

