



Seminar

Multispectral Imaging in Microscopy

Multispectral Imaging in Microscopy

Multispectral Imaging (MSI) is the acquisition of a three-dimensional dataset consisting of an image collection using the same specimen field acquired at different wavelengths at each pixel. This technique has successfully provided solutions to some of the major challenges in fluorescence based imaging – like the consequences of autofluorescence and the need to easily accommodate high levels of signal multiplexing. In brightfield microscopy, multiple chromogens that spatially overlap are also difficult to separate and quantitate unless multispectral imaging techniques are used. Nuance utilizes liquid crystal tunable filter (LCTF) which offers rapid tunability (in milliseconds) with 20-40 nm bandwidths over a broad spectral range (450-950 nm) – an equivalent of having approximately 200 filters in one single wheel. Compared to techniques like confocal microscopy, multispectral imaging is more affordable, has the ability to compute pure spectra, works on any microscope and can be used for acquiring images from thin samples (both tissues and cells, fixed or live) in both brightfield and fluorescence. Simultaneous imaging and quantitation of multiple analytes even in presence of spatial and spectral overlap is made possible with MSI.

Details

Date: **16 Dec 2011 (Fri)**
Time: **2.30 pm to 3.30 pm**
Venue: **Mechanobiology Institute Singapore (MBI)**, Seminar Room, Level 5, T-Lab, 5A Engineering Drive 1

Light refreshments will be served.

Speaker

Roeswita Leono (MSc) is Applications Specialist, Bio-Imaging at Sciencewerke, Singapore. She received her degree in Life Science (Biomedical Science) and Masters (by research) from National University of Singapore (NUS). Her research experience encompasses areas of cancer biology, molecular biology and erectile physio- and patho-physiology.

Register now

<http://sciencewerke-caliper-multispectral-seminar-dec2011.eventbrite.com/>

Enquire

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