

Microscopy Society of Ireland 40th Annual Meeting
Gleeson Theatre, Dublin Institute of Technology, Kevin St, Dublin

Wednesday 8th June

- 1300-1400** Registration
- 1400-1430** Welcome - Fiona Lyng (DIT), Alex Black (President, MSI)
Session 1: Chairs: Alex Black (NUIG), Abigail Rooney (DIT)
- 1430-1530** **FEI Keynote Lecture: John Condeelis (Albert Einstein College of Medicine, New York)**
Intravital imaging at single cell resolution reveals the mechanism of tumor cell dissemination and markers for prognosis and treatment of metastasis in breast cancer patients
- 1530-1545** **Ian Woods (University College Dublin)**
The use of aligned nanofiber fibrinogen substrates and elastogenic cues to direct extracellular matrix synthesis in smooth muscle cell cultures and tubular constructs for vascular tissue engineering
- 1545-1600** **Claire Brougham (Dublin Institute of Technology)**
A Tissue Engineered Heart Valve
- 1600-1630** **Coffee/Tea/Exhibition/Posters**
Session 1 (continued): Chairs: Sarah Martyn (DCU), Brian Gorey (DIT)
- 1630-1700** **Invited Talk: Paul Verkade (University of Bristol)**
Correlative Light Electron Microscopy: $1 + 1 = 3$
- 1700-1715** **Barbara Hughes (University College Dublin)**
Inside the human fallopian tube – A new journey in live cell imaging
- 1715-1725** **John Synnott (Bio-Sciences Ltd)**
EVOS™ Imaging Systems - Publication-quality imaging in seconds
- 1725-1740** **Jane Bryant (Dublin Institute of Technology)**
Non-target radiation induces DNA damage with potential local and systemic effects: A study on normal prostate cells, lymphocyte cell lines and primary human blood cells
- 1800-2000** **Welcome Reception / Poster Session**

Thursday 9th June

Session 2: Chairs: Martin Steer (UCD), Claire Brougham (DIT)

0930-1000 Invited Talk: Valeria Nicolosi (Trinity College Dublin)

Processing and aberration-corrected imaging of inorganic two-dimensional nanostructures

1000-1015 Ursel Bangert (University of Limerick)

Electron Energy Loss Spectroscopy in the low loss region: relating electron microscopy directly to plasmonics and optics on the nano-scale

1015-1025 Stuart Searle (Gatan)

Serial Block Face SEM (Gatan 3View): A rapidly expanding technique for large volume, high resolution imaging in life science and materials science

1025-1040 Sarah Martyn (Dublin City University)

Magnetic Nanoparticles and Their Assemblies, Multimeric Devices for Biological Applications

1040-1050 Calum Dickinson (JEOL)

F2: The Next Generation of Multi-purpose Electron Microscope

1050-1105 Jennifer McIntyre (Dublin Institute of Technology)

A comparison of catabolic pathways induced in primary macrophages by pristine single walled carbon nanotubes and pristine graphene

1105-1135 Coffee/Tea/Exhibition/Posters

Session 2 (continued): Chairs: Tiina O'Neill (UCD), Hugh Byrne (DIT)

1135-1205 Invited Talk: Chris Jones (Natural History Museum) and Caroline Cartwright (British Museum)

Using field emission scanning electron microscopy to evaluate resin dispersal in Mimosa ophthalmocentra and Mimosa tenuiflora wood and charcoal from Pernambuco, north-east Brazil

1205-1220 Alanna Stanley (National University of Ireland Galway)

Duplication at the Epidermal Basement Membrane in Mice Bearing a Keratinocyte Restricted Deletion of Rac1

1220-1230 Chris Stephens (Thermo Scientific)

Introducing full WDS quantitative mapping to the SEM

1230-1245 Christopher Hobbs (Trinity College Dublin)

Structural characterisation of Layered Double Hydroxide nanomaterials incorporated into bioengineered samples: An electron microscopy approach

1245-1300 Annaik Genson (Dublin Institute of Technology)

Microscopy for Industry

1300-1430 Lunch/Exhibition/Posters

Session 3: Chairs: Ursel Bangert (UL), Luke O'Neill (DIT)

1430-1500 Invited Talk: Alex Dazzi (Université Paris-Sud)

Resonance enhanced AFM-IR induced by Quantum Cascade Laser

1500-1515 Sabad-e-Gul (Dublin Institute of Technology)

Fabrication of photonic microscopic surface structures for copper²⁺ ion detection in fresh water by incorporation of LTLtype zeolite nanoparticles

1515-1530 Valentina Notarstefano (Polytechnic University of Marche)

Effects of parental aging on F1 oocyte quality in Nothobranchius furzeri: A micro-FTIR study

1530-1545 Catherine Grogan (Dublin Institute of Technology)

- Surface Characterisation of Silicon Microcantilever Sensors
- 1545-1600 Kerry Thompson, Alanna Stanley (MSI / National University of Ireland Galway)**
MSI Outreach - Under the Microscope
- 1600-1630 Coffee/Tea/Exhibition/Posters**
Session 3 (continued): Chairs: Dmitri Papkovsky (UCC), Gordon Chambers (DIT)
- 1630-1700 Invited Talk: Martin Leahy (National University of Ireland Galway)**
TBC
- 1700-1715 Ben Hogan (University of Exeter)**
Enhanced Raman scattering of liquid crystal – graphene oxide nano-composites: an opto-fluidic approach
- 1715-1730 Nigel Phillipson (National University of Ireland Galway)**
Biosensing of proteins using highly sensitive SERS substrates
- 1730-1800 Microscopy Society of Ireland Annual General Meeting**
- 1900-2200 Dinner, Hilton Hotel, Charlemont**
Announcement of Winners of Micrograph Competition and Exhibitor Quiz

Friday 10th June

- Session 4: Chairs: Kerry Thompson (NUIG), Suzanne Martin (DIT)*
- 1000-1030 Invited Talk: Jeremy Simpson (University College Dublin)**
Dissecting trafficking pathways in the endomembrane system of cells: a tale of four genome-wide RNAi screens
- 1030-1045 James Jenkins (University College Cork)**
Luminescence lifetime imaging microscopy of temperature and O₂ gradients in 3D tumour cell model
- 1045-1100 Laurence Fitzpatrick (University College Dublin)**
Visualizing and Tracking Single Bio-Nano Interactions In Vitro
- 1100-1130 Coffee/Tea/Exhibition/Posters**
Session 4 (continued): Chairs: Alanna Stanley (NUIG), Brendan Duffy (DIT)
- 1130-1145 Mark Pickering (University College Dublin)**
A low cost, flexible, modular microscopy system for investigating the nervous system in *Pleurobrachia pileus*
- 1145-1200 Ola Ibrahim (Dublin Institute of Technology)**
Use of Raman spectroscopy for the identification of mild, moderate and severe oral dysplasia and squamous cell carcinoma
- 1200-1230 Invited Talk: Julian Moger (University of Exeter)**
Label-free Chemically Specific Imaging In-Planta with Stimulated Raman Scattering Microscopy
- 1230-1245** Announcement of Student Prizes and Close of Meeting - Fiona Lyng (DIT), Alex Black (President, MSI)
- 1245-1400 Lunch**