

VII International Botanical Microscopy Meeting
Salzburg
Programme

Saturday 31st March

1700 – 1900 Registration and Opening Reception

Sunday 1st April

0900 – 0915 *Introduction and Welcome*
Ursula Lütz-Meindl (University of Salzburg) and Chris Hawes (Oxford Brookes University)

Cell Walls

Chair: Ursula Lütz-Meindl

0915 – 1000 Invited Talk:
The making of cell wall texture: an iterative modeling and experimentation approach
Annie-Mie Emons (Wageningen University)

1000 – 1030 *Characterization of hemicelluloses, arabinogalactan-like proteins and pectins in the green alga *Micrasterias**
Magdalena Eder (University of Salzburg)

1030 – 1050 **Coffee and Exhibition**

1050 – 1115 *Biosynthesis of plant cell walls: compartmentalization analysis of cell wall-synthesizing enzymes within endomembrane system*
Azzedine Driouich (University of Rouen)

Development

1115 – 1140 *In planta localization and dynamics of endogenously expressed MADS box transcription factors*
Susan Urbanus (Wageningen University)

1140 – 1205 *The intrinsic Stem cell factor, FEZ and its partner SOMBRERO, control oriented stem cell divisions in the root*
Viola Willemsen (Utrecht University)

1205 – 1230 *Molecular interactions between sieve-element cell biology and aphid saliva*
Art van Bel (University of Giessen)

1230 – 1345 **Lunch and Exhibition**

Cytoskeletons

Chair: Martin Steer

1345 – 1430 Invited Talk:
Microtubule dynamics and organization in Arabidopsis cells
Sid Shaw (Indiana University)

- 1430 – 1455 *The role of the actin cytoskeleton in cytoplasmic organisation in plant cells studied by combined optical tweezers and confocal microscopy*
Tijs Ketelaar (Wageningen University)
- 1455 – 1520 *Organisation and dynamics of microtubules in root hairs of the model legume *Medicago truncatula**
Ton Timmers (INRA)
- 1520 – 1545 *Photoactivation of GFP for quantification of intramembrane protein dynamics*
John Runions (Oxford Brookes University)
- 1545 – 1610 **Coffee**
- 1610 – 1635 *Functional characterization of the Microtubules Associated Protein 65 family in *Arabidopsis thaliana**
Marie-Theres Hauser (University of Vienna)
- 1635 – 1700 *Cortical microtubule organisation in tobacco BY-2 cells: Input for a systems biological approach*
Jan Vos (Wageningen University)
- 1700 – 1730 *Differential organelle movement on the actin cytoskeleton in lily pollen tubes*
Peter Hepler (University of Massachusetts)
- 1730 – 1755 *Allergenic proteins throughout pollen development and in vitro germination in the olive tree (*Olea europea* L.)*
Juan de Dios Alche (Estacion Experimental del Zaidin)
- 1800 **Walk to Beer Cellar**

Monday 2nd April

Cytoskeletons cont.

Chair: Nick Read

- 0900 – 0925 *Rotating microtubule arrays – unravelling microtubule organisation in growing hypocotyls*
Jordi Chan (John Innes Centre)
- 0925 – 0950 *Touch induced calmodulin like protein 2 (TCH2) is a putative light chain of the class VII myosin, ATM1*
Lior Golomb (Volcani Center)
- 0950 – 1015 *In vivo imaging of *Arabidopsis* myosins*
Imogen Sparkes (Oxford Brookes University)
- 1015 – 1100 **Coffee and Exhibition**

Fungi/plant pathology

- 1100 – 1145 Invited talk:
Roles for plasmodesmata and “Blast Interfacial Complexes” during biotrophic invasion of rice cells by the blast fungus

Barbara Valent (Kansas State University)

1145 – 1210 *Impacts of virus infection on the subcellular distribution of glutathione and its precursors in Cucurbita pepo (L.) plants*
Bernd Zechmann (University of Graz)

1210 – 1235 *Multicellular development in fungi*
Kathryn Lord (University of Edinburgh)

1235 – 1405 **Lunch and Exhibition**

Chair: Larry Fowke

1405 – 1430 *Self signalling and self fusion in filamentous fungi*
Nick Read (University of Edinburgh)

1430 – 1500 *Live-cell-imaging of nuclear dynamics during cell fusion in the filamentous fungus Neurospora crassa*
M. Gabriela Roca (University of Edinburgh)

1500 – 1530 **Coffee and Exhibition**

Membrane bounded
organelles

1530 – 1615 Invited talk:
Advances in imaging and intercellular communication
Karl Oparka (University of Edinburgh)

1615 – 1640 *A new family of short membrane proteins localizing to ER, plastids and mitochondria*
Einat Sadot (Volcani Center)

1640 – 1705 *AtKREPPPEL2 as a connector between the ER, microtubules and plasmodesmata*
Marcella Pott (Heidelberg Institute for Plant Science)

1705 – 1730 *Fluorescent reporters for the tonoplast and the vacuolar lumen identify a single vacuole in tobacco and Arabidopsis tissues*
Lorenzo Frigerio (University of Warwick)

1745 – 1945 **Posters, wine reception and exhibition**

Tuesday 3rd April

Techniques

Chair: Karl Oparka

0900 – 0925 *Introduction to energy filtering TEM*
Markus Boese (Carl Zeiss SMT)

0925 – 0950 *Energy filtering transmission electron microscopy (EFTEM) for image generation and element analysis in plant cells*
Ursula Lütz-Meindl (University of Salzburg)

- 0950 – 1015 *Effects of different fixation and freeze substitution methods on the ultrastructural preservation of plant leaves*
Günther Zellnig (University of Graz)
- 1015 – 1040 *Cryofixation and freeze-substitution combined with cryo-section immunolabelling according to Tokuyasu: Improved preservation of ultrastructure and antigenicity of plant tissue*
York Stierhof (ZMBP)
- 1040 – 1110 **Coffee**
- 1110 – 1155 Invited talk: The British Mycological Society Lecture
Long distance transport in fungal hyphae
Mark Fricker (Oxford University)
- 1155 – 1220 *Development of a novel fluorescent reporter protein. GFP-Lite reaches the parts other GFPs cannot reach.*
Sean Chapman (Scottish Crop Research Institute)
- 1220 – 1400 **Lunch and exhibition**
Free afternoon or Coach Trip
- 1330 **Coach leaves from University**

Wednesday 4th April

Membrane bounded organelles cont.

Chair: Annie-Mie Emons

- 0900 – 0945 Invited talk:
Polar endocytic recycling of PIN auxin efflux carriers
Jiri Friml (Tübingen University)
- 0945 – 1010 *The dilysine (KK) motif in the cytosolic tail of plant p24 proteins is sufficient to cause their localization to the ER*
David Robinson (Heidelberg Institute for Plant Sciences)
- 1010 – 1035 *Dynamic behaviour of Golgi apparatus in plant cells revealed by the photo-convertible fluorescent protein Kaede*
Susanne Bolte (CNRS)
- 1035 – 1100 **Coffee**
- 1100 – 1125 *Deconstructing the plant Golgi: an inducible system to study Golgi matrix protein dynamics*
Anne Osterrieder (Oxford Brookes University)
- 1125 – 1150 *Potato mop-top virus; complex movement strategies involve interactions with many cellular components*
Alison Roberts (Scottish Crop Research Institute)
- 1150 - 1215 *Golgi Biogenesis in plant cells after BFA washout*
Eric Hummel (Oxford Brookes University)

- 1215 – 1240 *RMR but not AtVSR1 colocalize with cruziferin in DV and in the Golgi apparatus of developing Arabidopsis embryos*
Giselbert Hinz (University of Heidelberg)
- 1240 – 1350 **Lunch**
- Chair: Chris Hawes
- 1350 – 1415 *Interaction and functional characterization of ESCRT-III complex components of Arabidopsis*
Verena Winter (University of Vienna)
- 1415 – 1440 *Live imaging of sterol-enriched plasma membrane domains in characean algae*
Ilse Foissner (University of Salzburg)
- 1440 – 1505 *Compartmentation of glutathione biosynthesis in Arabidopsis thaliana*
Maciej Pasternak (University of Heidelberg)
- 1505 – 1525 **Coffee**
- 1525 – 1550 *Imaging the glutathione redox potential in living cells*
Andreas Meyer (University of Heidelberg)
- 1550 – 1615 *Locating Manganese transporters in plant cells*
Rosemary White (CSIRO Plant Industry)
- 1615 – 1700 Invited talk:
Plant Mitochondrial Dynamics
David Logan (University of St Andrews)
- 1830 **Concert and Conference Banquet at the Castel of Salzburg**

Thursday 5th April

The Nucleus

Chair: Brian Gunning

- 0915 – 1000 Invited talk:
A novel transmembrane nucleoporin that anchors RanGAP1 to the nuclear envelope in plants
Iris Meier (Ohio State University)
- 1000 – 1025 *How are CDK inhibitors localized to nuclei in plant cells?*
Larry Fowke (University of Saskatchewan)
- 1025 – 1050 **Coffee**
- 1050 – 1115 *Proteomic and RNomic analysis show the nucleolus is involved in mRNA processing*
Peter Shaw (John Innes Centre)
- 1115 – 1140 *The formation and breakdown of trans-nuclear membrane channels and intranuclear vesicles in cell culture and intact plants.*
Lawrence Griffing (Texas A&M University)

1140 – 1200 *Farewell*
The organisers