

**EMBO Young Investigator Programme
Mini-Symposium on Fluorescence Microscopy
12 – 13 May 2003
EMBL, Heidelberg, Germany**

Monday, 12 May 2003

- 12:30 Registration
- 13:45 – 14:00 Welcome
Frank Gannon, Jan Ellenberg & Gerlind Wallon
- 14:00 – 15:00 **Keynote Lecture:** Susan Gasser (University of Geneva)
- Session 1 New Approaches in Fluorescence Microscopy
Chair: Ernst Stelzer
- 15:00 – 15:30 Maite Coppey-Moisan (Université Paris) – Fluorescence life time imaging
- 15:30 – 16:00 Gaudenz Danuser (ETH Zürich) – Fluorescence Speckle Microscopy
- 16:00 – 16:30 *Coffee Break*
- 16:30 – 17:00 Winfried Denk (MPI Heidelberg) – 2-Photon Fluorescence Microscopy
- 17:00 – 17:30 Ernst Stelzer (EMBL Heidelberg) – High-resolution of large samples in a widefield theta microscope
- 17:30 – 18:00 Petra Schwille (MPI Göttingen) – Fluorescence Correlation Spectroscopy
- 18:00 – 18:30 Jacques Neefjes (NKI Amsterdam) – From fixed to FRAP
- 18:30 – 19:00 Volkhard Helms (MPI Frankfurt) – Theory of single molecule motion
- 19:00 *Dinner*

Tuesday, 13 May 2003

- Session 2 Biological Applications of Fluorescence Microscopy
Chair: Jan Ellenberg
- 09:00 – 09:15 Michael Glotzer (IMP Vienna) – Introduction
- 09:15 – 09:45 Jan Ellenberg (EMBL) – 4D Confocal Life Cell Imaging
- 09:45 – 10:15 Daniel Davis (Imperial College London) – Imaging the Immunological Synapse: Application of FLIM
- 10:15 – 10:45 *Coffee Break*
- 10:45 – 11:15 Jürgen Knoblich (IMP Vienna) – Live imaging of asymmetric cell division in Drosophila using spinning disk confocal microscopy
- 11:15 – 11:45 Yves Barral (ETH Zürich) – Analysis of cytoskeletal dynamics and its control in living yeast

- cells.
- 11:45 – 12:15 Jim Haseloff (University of Cambridge) – Live cell imaging in plants.
- 12:15 – 13:45 *Lunch*
- 13:45 – 14:15 Ilan Davis (Wellcome Trust Centre, Edinburgh) – Deconvolution life cell imaging.
- 14:15 – 14:45 Nektarios Tavernarakis (IMBB-FORTH Heraklion) – Electrophysiology with laser probes?
Second Harmonic Generation microscopy in *C. elegans*.
- 14:45 – 15:15 Francis Barr (MPI Martinried) – Using fluorescence microscopy to look at Golgi structure and protein transport.
- 15:15 – 15:45 Rainer Pepperkok (EMBL Heidelberg) – Automated Microscopy
- 15:45 – 16:15 *Coffee Break*
- Session 3 Image Processing and practical aspects of fluorescence microscopy
Chair: Andrea Musacchio
- 16:15 – 16:35 Zeiss presentation
- 16:35 – 16:55 Leica presentation
- 16:55 – 17:00 Rainer Pepperkok or Jens Rietdorf (EMBL Heidelberg)
- 17:00 – 17:15 Discussion
- 17:15 – 17:30 Daniel Geerlich (EMBL Heidelberg) – Image processing II: Software packages for 3D Rendering.
- 17:30 – 17:45 Discussion
- 17:45 – 18:15 Ilan Davis and Jan Ellenberg – Deconvolution or Confocal Microscopy
- 18:15 – 18:30 Discussion
- 18:30 – 19:00 Winfried Denk and Ernst Stelzer – 2-Photon or 1-Photon Imaging
- 19:00 – 19:15 Discussion
- 19:15 *Dinner*
- 20:15 – 20:45 Coppey-Moisan, Ellenberg, Davis, Neefjes - F-Techniques: FRAP, FLIP, FLAP, iFRAP, FRET, FLIM, etc.
- 20:45 – 21:15 Discussion