



Scientific Meeting, November 16-18, 2009

Programme

Monday, November 16, 2009

15:00-15:30 Welcome and Coffee

15:30-18:30 Progress reports of the P4L-Projects

- 15:30-15:45 In vivo hyperspectral lifetime measurements of skin cancer autofluorescence, Christopher Dunsby, IMPERIAL
- 15:45-16:00 Novel optical techniques for μ -Flow Diagnostics, Thomas Henkel, IPHT
- 16:00-16:15 Novel Bioworkstation: Optical trapping meets digital holographic microscopy, dynamic phase contrast microscopy and fluorescence lifetime imaging, Maciej Antkowiak, USTAN
- 16:15-16:30 Label free holographic and AFM imaging of human neural cells under synchronized electrical stimulation variations during action potentials, Martin Bennink, Mesa+
- 16:30-16:45 Towards identification of molecules by means of Raman spectroscopy using lab-on-a-chip micro-optical detection systems, Sara Van Overmeire, VUB

16:45-17:15 Coffee Break

- 17:15-17:30 Integrated zebrafish detector "EmbryoSort", Timo Mappes, FZK
- 17:30-17:45 Photonic control of nanocontainers to investigate interactions with cells, Martin Bennink, Mesa+
- 17:45-18:00 Morpho-chemistry characterization of collagen disorders, Ricardo Cicchi, LENS
- 18:00-18:15 Comparison between fluorescence and SPR imaging biochips for immuno-based and DNA-based assays, Aurélien Duval, IOGS
- 18:15-18:30 NIR-laser-activated gold nanoparticles: perspectives in minimally invasive diagnosis and therapy, Paolo Matteini, CNR IFAC

20:00 Workpackage leader's Dinner

Tuesday, November 17, 2009

08:45-09:00 Welcome and Coffee

09:00-10:00 Tutorial, Optical Antennas, Niek van Hulst, ICFO

10:00-12:30 2 Scientific talks (each 12' + 3' for discussion)

10:00-10:15 FTIR Imaging of Hair Follicle and Locating Mesenchymal Stem Cells, Katherine Lau, IPHT/IPC

10:15-10:30 Helical optical traps by phase conjugation of vortex beams, Mike Wördemann, UoM

10:30-11:00 Coffee Break

11:00-12:30 6 Scientific talks

11:00-11:15 Gold Nano Particles Scatter Probes for Ultrasensitive Biosensors, Dorothee Wasserberg, MESA+

11:15-11:30 Longitudinal chromatic aberration lens for filtering a supercontinuum source for FLIM-FRET measurements, Silvia Soria, CNR-IFAC

11:30-11:45 Scoring of collagen organization by pattern analysis of SHG images, Riccardo Cicchi, LENS

11:45-12:00 Optimised compact laser sources and in situ imaging for ultrashort pulse laser eye surgery, Caroline Crotti, IOGS

12:00-12:15 Micro-optical detection systems for online monitoring of oils, Sara Van Overmeire, VUB

12:15-12:30 Optical Transfection with a 405 nm laser source, Lani Torres, USTAN

12:30-13:30 Lunch

13:30-13:40 Group Picture

13:40-14:40 Tutorial, Raman Spectroscopy, Volker Deckert, IPHT

14:40-15:40 4 Scientific talks

14:40-14:55 Using Optical Trapping Methods to Investigate Membrane Localisation of Proteins in Single Cells, John Philips, IMPERIAL

14:55-15:10 Diffuse Optical Technologies for Cerebral Monitoring at the Neuro-Intensive Care, Peyman Zirak / Turgut Durduran, ICFO

15:10-15:25 Single molecule nanophotonics and cell membrane organization, Maria Garcia-Parajo, IBEC

15:25-15:40 Fluorescence excitation on an integrated optofluidic PMMA-chip, Mauno Schelb, FZK

15:40-16:00 Coffee Break

16:00-17:15 5 Scientific talks

16:00-16:15 Calculations of electromagnetic fields around nanoparticles embedded in biological media, Vera Prytkova, SSU

16:15-16:30 OCT monitoring of diffusion of agents within tooth dentin, Natalia Trunina

SSU

16:30-16:45 Novel optoelectronics components for fluorescence and X-ray imaging, Stefano Cattaneo, CSEM

16:45-17:00 Fabrication of three-dimensional scaffolds using two-photon polymerization, Maria Farsari, Forth IESL

17:00-17:15 Clinical challenges in Biophotonics: the physicians' perspective, Dr. Marzia Bedoni / Dr. Michele Casella, Don Gnocchi

17:30-20:30 Poster session

17:30-18:00 Elevator Pitch

18:00-20:30 Reception

Wednesday, November 18, 2009

09:00-10:00 Women in Biophotonics

09:00-09:30 "Womenomics", Eleni Alexandratou, National Technical University of Athens

09:30-10:00 Overview of surveys of women in photonics and biomedicine, Cornelia Denz

10:30-11:00 Coffee Break

11:00-11:15 Various

- P4L intensive training on "Entrepreneurship in Biophotonics", T. Guldemont, VUB
- Status of the Industrial User Club, T. Guldemont, VUB
- Innovation Village at Photonics Europe, T. Guldemont, VUB

11:15-13:00 Status of local clusters (8 minutes for each core partner)

13:00 End of meeting / Lunch