

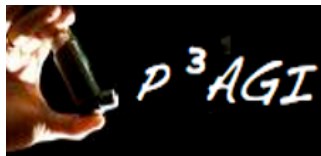
Optical Imaging Workshop

26th and 27th November 2009 – University Medical Center Göttingen

Max-Planck-Institute for Experimental Medicine, Hermann Rein Str. 3, Göttingen (<http://www.em.mpg.de>)

LIST OF SPEAKERS

- Fabian Kiessling**, Dept. of Experimental Molecular Imaging, University of Aachen (RWTH), Germany
- Stefan Hell**, Dept. of NanoBiophotonics, Max-Planck-Institute for Biophysical Chemistry, Göttingen, Germany
- Christian Dullin**, Dept. of Diagnostic Radiology, University Medical Center Göttingen, Germany
- Pia Welker**, Mivenion GmbH, Berlin, Germany
- Pauline Noack-Fraissignes**, Quidd, Saint Etienne du Rouvray, Rouen, France
- Jeannine Missbach-Güntner**, Dept. of Diagnostic Radiology, University Medical Center Göttingen, Germany
- Söhnke Bartling**, Dept. of Medical Physics in Radiology, Deutsches Krebsforschungszentrum, Heidelberg, Germany
- Katarina Wolf**, Nijmegen Centre for Molecular Life Sciences, Nijmegen, The Netherlands
- Anjelique Ale**, Inst. for Biological and Medical Imaging, Technical University of Munich & Helmholtz Munich Center, Germany
- Vasilis Ntziachristos**, Inst. for Biological and Medical Imaging, Technical University of Munich & Helmholtz Munich Center, Germany
- Vito Lorusso**, Optical Imaging Laboratory, Consorzio per il Centro di Biomedicina Molecolare, Trieste, Italy
- Kevin Dhaliwal**, Medical Research Council Centre for Inflammation Research, University of Edinburgh, United Kingdom
- Jan Larmann**, Dept. of Anesthesiology and Intensive Care, Experimental Anesthesiology, Hannover Medical School, Germany
- Ingrid Hilger**, Institute of Diagnostic Interventional Radiology, University Hospital Jena, Germany
- Samantha Blazquez-Vilarrubias**, Université Pierre et Marie Curie, Paris, France
- Antonio Rosato**, Dept. of Oncology and Surgical Sciences, University of Padova, Italy
- Jürgen Goldschmidt**, Dept. of Auditory Learning & Speech, Leibniz-Institute for Neurobiology, Magdeburg, Germany
- Emmet Mc Cormack**, Dept. of Hematology, Institute of Internal Medicine, University of Bergen, Norway
- Joanna Napp**, MPI of Experimental Medicine, Dept. of Molecular Biology of Neuronal Signals, Göttingen, Germany



LIST OF CHAIRS

Vito Lorusso, Consorzio per il Centro di Biomedicina Molecolare, Trieste, Italy

Elia Stupka, University College London Cancer Institute, United Kingdom

Michelle Epstein, Dept. of Dermatology/Immunodermatology/Experimental Allergy, Medical University of Vienna, Austria

Stefania Biffi, Optical Imaging Laboratory, Consorzio per il Centro di Biomedicina Molecolare, Trieste, Italy

Christiane Meier, Marinomed GmbH, Vienna, Austria

Stephen Kilfeather, Aeirtec, Newcastle, United Kingdom

Frauke Alves, Dept. of Hematology and Oncology, University Medical Center Göttingen, Germany

Katharina Jannasch, Dept. of Hematology and Oncology, University Medical Center Göttingen, Germany

Cordula Malz, Dept. of Cardiovascular Physiology, University Medical Center Göttingen, Germany

Walter Stühmer, MPI of Experimental Medicine, Dept. of Molecular Biology of Neuronal Signals, Göttingen, Germany

Luis Pardo, MPI of Experimental Medicine, Dept. of Molecular Biology of Neuronal Signals, Göttingen, Germany

Roser Ufartes, MPI of Experimental Medicine, Dept. of Molecular Biology of Neuronal Signals, Göttingen, Germany

Gerd-Marten Kuscher, MPI of Experimental Medicine, Dept. of Molecular Biology of Neuronal Signals, Göttingen, Germany

Stefan Andreas, Clinic for pulmonary disorders, Immenhausen, Germany

PROGRAM SCHEDULE**Wednesday 25th November 2009**

15:00 – 19:00 REGISTRATION
19:00 WELCOME RECEPTION

Thursday 26th November 2009

08:00 – 09:00 REGISTRATION
09:00 – 09:10 **N.N. (Göttingen)**
Welcome speech

09:10 – 09:20 **Vito Lorusso/ Frauke Alves** (Trieste, Italy/ Göttingen, Germany)
Introduction to P³AGI

09:20 – 10.15 KEYNOTE LECTURE: **Stefan Hell** (Göttingen, Germany)
Fluorescence microscopy without diffraction resolution limit

10:15 – 11:25 Session 1: In vivo imaging technologies
Chairs - Vito Lorusso/ Walter Stühmer (Trieste, Italy/ Göttingen, Germany)

10.15 – 10:50 **Fabian Kiessling** (Aachen, Germany)
Functional and molecular imaging of vessels with ultrasound

10:50 – 11:25 **Christian Dullin** (Göttingen, Germany)
Multimodal imaging: optical imaging correlated to high resolution computer tomography

11:25 – 11.45 COFFEE BREAK

11:45 – 12:55 Session 2: Novel optical imaging probes
Chairs - Elia Stupka/ Katharina Jannasch (London, United Kingdom/ Göttingen, Germany)

11:45 – 12:20 **Pia Welker** (Berlin, Germany)
Targeted imaging of inflammation and autoimmune disease with fluorescent polymer conjugates

12:20 – 12:55 **Pauline Noack-Fraissignes** (Mont Saint Aignan, France)
Innovative optical probe design for in vivo cancer imaging

13:00 – 14:00 LUNCH

- 14:00 – 15:35** **Session 3: Visualization of anatomical structures and cell migration**
Chairs – Michelle Epstein/ Cordula Malz (Wien, Austria/ Göttingen, Germany)
- 14:00 – 14:35 **Jeannine Missbach-Güntner** (Göttingen, Germany)
Uncovering tumour progression by preclinical CT technologies
- 14:35 – 15:10 **Söhnke Bartling** (Heidelberg, Germany)
Structural and functional cardiothoracic imaging through gating in small animal CT – from extrinsic-retrospective approaches to fully-automated gating
- 15:10 – 15:45 **Katharina Wolf** (Nijmegen, The Netherlands)
Dynamic imaging of pericellular proteolysis and physical limits in tumor cell migration
- 15:45 – 16:00 COFFEE BREAK
- 16:00 – 17:10** **Session 4: In vivo monitoring of lung pathology**
Chairs - Stefania Biffi/ Gerd-Marten Kuscher (Trieste, Italy/ Göttingen, Germany)
- 16:00 – 16:35 **Anjelique Ale and Vasilis Ntziachristos** (Münich, Germany)
In-vivo fluorescence tomography of lung inflammation
- 16:35 – 17:10 **Vito Lorusso** (Trieste, Italy)
Advantages and limitations of imaging technologies
- 17:10 – 17:40** **Discussion: Strengths and weaknesses of imaging technologies**
Chairs – Vito Lorusso/ Frauke Alves (Trieste, Italy/ Göttingen, Germany)
- 17:50 SOCIAL PROGRAMM
- 19:00 DINNER AND GET TOGETHER PARTY

Friday 27th November 2009

08:00 – 09:00 BREAKFAST

09:00 – 10:45 Session 5: Monitoring inflammation in vivo
Chairs - Stephen Kilfeather/ Roser Ufartes (Newcastle, United Kingdom/ Göttingen, Germany)

09:00 – 09:35 **Kevin Dhaliwal** (Edinburgh, United Kingdom)
Optical bioimaging in lung inflammation

09:35 – 10.10 **Jan Larmann** (Hannover, Germany)
Fluorescence mediated tomography for 3D in vivo optical imaging of leukocyte recruitment and egression in mouse models of inflammation

10.10 – 10:45 **Ingrid Hilger** (Jena, Germany)
Targeted and non-targeted NIRF-optical imaging of inflammation

10:45 – 11:15 COFFEE BREAK

11:15 – 12:25 Session 6: Monitoring inflammation in vivo
Chairs – Christiane Meier/ Katharina Marten (Wien, Austria/ Göttingen, Germany)

11:15 – 11:50 **Samantha Blazquez-Vilarrubias** (Paris, France)
Imaging infection

11:50 – 12:25 **Antonio Rosato** (Padova, Italy)
Tracking T cells in adoptive immunotherapy of tumors

12:25 – 12:55 Discussion: Advantages and limitations in monitoring inflammation
Chairs - Fabian Kiessling/ Kevin Dhaliwal (Aachen, Germany/ Edinburgh, United Kingdom)

13:00 – 14:00 LUNCH

14:00 – 15:45 Session 7: Preclinical imaging
Chairs - Stefan Andreas/ Luis Pardo (Immenhausen/ Göttingen, Germany)

14:00 – 14:35 **Jürgen Goldschmidt** (Magdeburg, Germany)
SPECT-imaging in rodent models of neurodegenerative diseases

14:35 – 15:10 **Emmet Mc Cormack** (Bergen, Norway)
Diagnostic and pharmaceutical imaging

15:10 – 15:45 **Joanna Napp** (Göttingen, Germany)
Design and preclinical evaluation of novel targeted therapies and diagnostic tools by time-domain near infrared fluorescence imaging

15:45 – 16:00 CLOSING REMARKS – Frauke Alves / Vito Lorusso (Göttingen, Germany/ Trieste, Italy)

16:00 COFFEE BREAK & DEPARTURE