## Swiss MS Researcher Meeting 2012 – Program

**Friday, September 21st, 2012**

**Geneva University Hospital (HUG), 4 rue Gabrielle-Perret-Gentil,**

**Auditorium “Marcel Jenny”**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
</table>
| 09.30 – 09.45 | Opening and Introduction by:  
Prof. L. Kappos, University Hospital Basel  
Dr. P. Lalive, Geneva University Hospital  
and C. Lotter, Swiss Multiple Sclerosis Society |
| 09.45 – 10.30 | Invited lecture:  
“Divide and conquer - Addressing complexity in MS by integrating information into knowledge”  
Prof. Sergio Baranzini, Department of Neurology, University of California, San Francisco (UCSF), San Francisco, California, USA |
| 10.30 – 10.45 | Session I  
Chair: B. Engelhardt / T. Derfuss  
| 10.30 – 10.45* | O1 IL-2R signaling drives GM-CSF secretion by human T<sub>H</sub> cells  
Laura Codarri, Felix Hartmann, Sandra Ammann and Burkhard Becher  
Institute of Experimental Immunology, University of Zurich, Zurich, Switzerland |
| 10.45 – 11.00* | O2 Impact of genetic polymorphisms on the production of the encephalitogenic cytokine GM-CSF in multiple sclerosis  
Felix J. Hartmann, Laura Codarri, Tomas Olsson and Burkhard Becher  
Institute for Experimental Immunology, University of Zurich, Zurich, Switzerland |
| 11.00 – 11.15* | O3 Dual role of plasmacytoid dendritic cells in protecting mice from EAE  
Carla Lippens, Fernanda Duraes, Magali Irla, Walter Reith and Stéphanie Hugues  
Department of Pathology and Immunology, Geneva Faculty of Medicine, Geneva, Switzerland |
| 11.15 – 11.45 | Coffee Break and Poster Viewing |
| 11.45 – 12.00* | O4 CCR7 is critical for the control of virus-mediated inflammatory CNS disease  
Cristina Gil-Cruz, Jovana Cupovic, Christian Perez-Shibayama, Lucas Onder, Qian Chai, Elke Scandella and Burkhard Ludewig  
Institute of Immunobiology, Kantonsspital St Gallen, St Gallen, Switzerland |
12.00 – 12.15 O5 ALCAM is not required for T cell invasion into the CNS and for the development of EAE in the C57BL/6 mouse

Ruth Lyck, Christoph Wyss, Michael Abadier, Claudia Blatti, Urban Deutsch, and Britta Engelhardt

Theodor Kocher Institute, University of Bern, Bern, Switzerland

12.15 – 12.30 O6 Junctional Adhesion Molecule (JAM)-A mediates the migration of CX3CR1\textsuperscript{high} but not of CCR2\textsuperscript{high} monocytes across the blood-brain barrier influencing clinical severity of EAE

Julia Schäfer, Rémy Boscacci, Claudia Blatti, Ruth Lyck, Israel F. Charo, Richard M. Ransohoff, Elisabetta Dejana, Urban Deutsch, and Britta Engelhardt

1Theodor Kocher Institute, University of Bern, Switzerland
2Gladstone Institute of Cardiovascular Disease, San Francisco, California, USA
3Cardiovascular Research Institute, Department of Medicine, University of California San Francisco, San Francisco, California, USA
4Neuroinflammation Research Center, Department of Neurosciences, Lerner Research Institute, Cleveland Clinic, Cleveland, Ohio, USA
5IFOM-IEO Campus, Milan, Italy

12.30 – 12.45 O7 Upregulation of glucocorticoid-induced leucine zipper by hepatocyte growth factor promotes tolerogenic dendritic cells and inhibits experimental autoimmune encephalomyelitis

Nicolas Molnarfi, Mahdia Benkhoucha, Marie-Laure Santiago-Raber, Gregory Schneiter, and Patrice H. Lalive

1University Hospital of Geneva (HUG), Department of Clinical Neurosciences, Division of Neurology, Unit of Neuroimmunology and Multiple Sclerosis; 2Department of Pathology and Immunology, Geneva Faculty of Medicine, Geneva, Switzerland

12.45 – 13.00 O8 Two Novel FTY720 derivatives Induce Lymphopenia and reduce EAE in mice

Faik Imeri, Daniel Fallegger, Josef Pfeilschifter, Holger Stark, Britta Engelhardt, and Andrea Huwiler

1Institute of Pharmacology, University of Bern, Switzerland
2Pharmazentrum Frankfurt, University Hospital, Goethe University Frankfurt am Main, Germany
3Institute of Pharmaceutical Chemistry, Goethe University Frankfurt am Main, Germany
4Theodor-Kocher Institute, University of Bern, Switzerland

13.00 – 13.15 O9 Regulatory functions of microRNAs during remyelination in multiple sclerosis

Andreas Junker, Linda Terry, and Doron Merkler

Department of Pathology and Immunology, Geneva Faculty of Medicine, and Department of Neuropathology, University of Göttingen, Göttingen, Germany

13.15 – 14.15 Lunch Break and Poster Viewing
Session II

Chairs: M. Schluep / M. Linnebank

14.15 – 14.30* O10  The role of micro particles in microRNA expression in circulation of MS patients

Maria Meira, Francine Hoffmann, Salima Sadallah, Claudia Sievers, Jens Kuhle, Ludwig Kappos, Raija LP Lindberg

Departments of Biomedicine and Neurology, University Hospital of Basel, Basel, Switzerland

14.30 – 14.45* O11  Lymph node homing-frequency of human T cells in patients with MS derived from peripheral blood depletion-kinetics after S1P-receptor blockade with fingolimod

Matthias Mehlung1,2, Volker Brinkmann1, Anne-Valerie Burgener1, Patrick Gubser1, Andrew D. Luster4, Ludwig Kappos2,* and Christoph Hess1,* (*equal contributors)

1Immunobiology Laboratory, Department of Biomedicine and Medical Outpatient Department, University Hospital Basel, Basel, Switzerland
2Department of Neurology and Clinical Neuroimmunology Laboratory/Department of Biomedicine, University Hospital Basel, Basel, Switzerland
3Department of Autoimmunity, Transplantation & Inflammation, Novartis Institutes for BioMedical Research, Basel, Switzerland
4Massachusetts General Hospital, Harvard Medical School, Center for Immunology and Inflammatory Diseases, Charlestown, MA, USA

14.45 – 15.00* O12  Antibodies against native Myelin Oligodendrocyte Glycoprotein in adult Multiple Sclerosis patients

N. Sanderson1, Meret Ricklin1, Cecile Pfaff1, Yvonne Naegelin1, Philip De Jager3, Till Sprenger2,4, Jens Kuhle2,4, Klaus Dornmair5, Raija Lindberg1, Ludwig Kappos1,2, Tobias Derfuss1

1Department of Biomedicine, University of Basel, Basel, Switzerland
2Department of Neurology, University Hospital Basel, Basel, Switzerland
3Brigham and Women’s Hospital, Harvard Medical School, Boston, USA
4Centre for Neuroscience and Trauma, The Blizard Institute, Barts and the London School of Medicine and Dentistry, Queen Mary University of London, London, GB;
5Institute of Clinical Neuroimmunology, Munich, Germany
6Division of Diagnostic and Interventional Neuroradiology, Department of Radiology and Nuclear Medicine, University Hospital Basel, Basel, Switzerland

15.00 – 15.15* O13  Genetic and dietary determinants of methionine metabolism may influence the course of Multiple Sclerosis

Benjamin V. Ineichen1, Salla Keskitalo5, Melinda Farkas1, Nadja Bain1, Rebecca Derungs1, Ulf Kallweit1, Nathalie Braun1, Michael Weller1, Luisa Klotz2, Michael Linnebank1

1Department of Neurology, University Hospital of Zurich, Zurich, Switzerland;
2Department of Neurology, University Hospital of Bonn, Bonn, Germany
Atorvastatin added to interferon beta for relapsing multiple sclerosis: a randomized controlled trial

Christian P. Kamm, Marwan El-Koussy, Sebastian Humpert, Oliver Findling, Ferdinand von Bredow, Yuliya Burren, Guido Schwegler, Dagmar Schött, Filippo Donati, Martin Müller, Norbert Goebels, Felix Müller, Johannes Slotboom, Barbara Tettenborn, Ludwig Kappos, Yvonne Naegelin, Heinrich Paul Mattle for the SWABIMS Study Group

University Department of Neurology, Inselspital, Bern University Hospital and University of Bern, Bern, Switzerland

Characterization of microcirculation in MS lesions by dynamic texture parameter analysis (DTPA)

Rajeev Verma1,*, Johannes Slotboom1,* (equal contributors), Mirjam R. Hildner2, Frauke Kellner-Weldon1, Raimund Kottke1, Christoph Ozdoba1, Christian Weisstanner2, Christian Kamm2 and Roland Wiest1

1Support Center for Advanced Neuroimaging, University Institute of Diagnostic and Interventional Neuroradiology, Inselspital Bern, Bern, Switzerland
2Department of Neurology, Inselspital Bern, Bern, Switzerland

Subcortical changes in MS patients as evidenced using MRI and deformation based analysis

Stefano Magon1,2, Mallar M. Chakravarty3,4, Michael Amann1,5, Katrin Weier1, Yvonne Naegelin1, M. Andelova1, Ernst-Wilhelm Radue1, Christoph Stippich1, Jason P. Lerch6,7, Ludwig Kappos1, Till Sprenger1,5

1Department of Neurology, University Hospital Basel, Switzerland
2Medical Image Analysis Center, University Hospital Basel, Switzerland
3Kimel Family Translational Imaging Genetics Laboratory, Research Imaging Centre, Centre for Addiction and Mental Health, Toronto, Canada
4Department of Psychiatry, University of Toronto
5Department of Radiology and Nuclear Medicine, Division of Diagnostic and Interventional Neuroradiology, University Hospital Basel, Switzerland
6Mouse Imaging Center, The Hospital for Sick Children, Toronto, Canada
7Department of Medical Biophysics, University of Toronto, Toronto, Canada

* Please limit your oral presentation to a maximum of 10 minutes to allow for each talk 5 minutes discussion.

Please bring your presentation on an USB memory stick at least 15 minutes before the session starts.

The program of the Swiss MS Researcher Meeting can also be found on the website of the Swiss MS Society (http://www.multiplesklerose.ch). Abstracts will be available on the Swiss MS Society website www.multiplesklerose.ch from September 18th 2012 on.
<table>
<thead>
<tr>
<th>Poster</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>Endothelial ICAM-1 and ICAM-2 direct encephalitogenic T cell crawling to paracellular emigration sites across the blood-brain barrier</td>
<td>Michael Abadier, Christof Wyss, Giuseppe Cagna, Ruth Linnepe, Dietmar Vestweber, Urban Deutsch, Britta Engelhardt, Ruth Lyck</td>
</tr>
<tr>
<td>P2</td>
<td>Interest of combined quantitative gait and cognitive evaluation in patients with Multiple Sclerosis</td>
<td>Laidet M, Allali, Assal, Chofflon, Armand, Lalive PH</td>
</tr>
<tr>
<td>P3</td>
<td>Interferon-β induces Hepatocyte Growth Factor in Monocytes in Multiple Sclerosis</td>
<td>Benkhoucha, Mahdia, Molnarfi, Nicolas, Bjarnadóttir Kristbjörg, Juillard Catherine, and Lalive Patrice.</td>
</tr>
<tr>
<td>P4</td>
<td>The role of the HGF/c-met pathway in the oligodendrocyte response during autoimmune neurodegeneration</td>
<td>Mirjana Stančić, Nora Schweizer, and Tobias Suter</td>
</tr>
<tr>
<td>P5</td>
<td>Postnatal viral CNS infection results in long-lasting, virus-experienced cells – implications for CNS autoimmune disease?</td>
<td>Karin Steinbach, Mario Kreutzfeldt, Ingrid Wagner, Daniel Pinschewer, and Doron Merkler</td>
</tr>
<tr>
<td>P6</td>
<td>Antigen presenting dendritic cells protect mice from EAE by inducing tolerance of naive and effector T cells</td>
<td>Bruna de Andrade Pereira, Mathias Ackermann, Christiane Dresch, and Cornel Fraefel</td>
</tr>
<tr>
<td>P7</td>
<td>Remyelinating lesions express a distinct pattern of genes involved in oligodendrocyte differentiation and proliferation</td>
<td>T. Zeis, O. Howell, S. Brunner, R. Reynolds, N. Schaeren-Wiemers</td>
</tr>
<tr>
<td>P8</td>
<td>PSGL-1 and E/P-selectin mediated rolling of encephalitogenic T cells is not required for T cell invasion into the CNS during EAE</td>
<td>Karthik Sathiyanadan, Heidi Tardent, Caroline Coisne and Britta Engelhardt</td>
</tr>
<tr>
<td>P9</td>
<td>Defining the specific role of ICAM-1 in the pathogenesis of experimental autoimmune encephalomyelitis</td>
<td>Neda Haghayegh Jahromi and Britta Engelhardt</td>
</tr>
<tr>
<td>P10</td>
<td>Interim Results of the German ‘Study to evaluate the Responsivity and MCID of the Multiple Sclerosis Questionnaire for Physiotherapists MSQPT®’</td>
<td>N. A. van der Maas</td>
</tr>
<tr>
<td>P11</td>
<td>Using responsive Instruments in daily practice: what’s the use, if thresholds are too high</td>
<td>N. A. van der Maas</td>
</tr>
</tbody>
</table>
P13  Danielle Burger, Rakel Carpintero, Lyssia Gruaz, Isabelle Riezman, Howard Riezman  
Maintenance of chronic/sterile inflammation in MS: induction of cytokine production in human monocytes by T cell surface lipids

P14  Michael Basler, Sarah Mundt, Tony Muchamuel, Carlo Moll, Christopher J. Kirk, and Marcus Groettrup  
Inhibition of the immunoproteasome strongly ameliorates experimental autoimmune encephalomyelitis (EAE)

P15  C. Salvisberg, N. Tajouri, P.R. Burkhard, P.H. Lalive, and N. Turck  
Tear fluid quantitative proteomics biomarkers discovery of multiple sclerosis disease

We acknowledge the support of this meeting with unrestricted grants by:

[Logos of Biogen Idec, Genzyme, Merck Serono, and Novartis]