



XI European Meeting  
on Glial Cells in Health and Disease  
Berlin | July 3 - 6, 2013

Tuesday, July 2, 2013

10:00-19:00 **Introductory Course**

Wednesday, July 3, 2013

9:00-13:00 **Workshops**

13:00-14:00 **Lunch Break**

14:00 – 14:15 **Opening**

14:15 – 15:15 **Plenary Lecture L1**

**Chair:** Frank Kirchhoff (Homburg, Germany)

**Philip Haydon**

*Tufts Neuroscience Institute, University School of Medicine Boston, USA*

GLIAL-BASED OPPORTUNITIES FOR THE TREATMENT OF NEUROLOGICAL AND PSYCHIATRIC DISORDERS

15:15 – 17:15 **Symposia I**

**Symposium 1**

GLIAL CELLS IN EPILEPSY: NOVEL ASPECTS ON PATHOGENESIS AND TREATMENT

**Organizers:** Asla Pitkänen, (Kuopio), Rebecca Matsas, (Athens)

*Kjell Heuser (Oslo), Rebecca Matsas (Athens), Asla Pitkanen (Kuopio), Christian Steinhäuser (Bonn)*

**Symposium 2**

AXOGLIAL INTERACTIONS IN THE ASSEMBLY AND STABILITY OF AXONAL DOMAINS ESSENTIAL FOR RAPID NERVE IMPULSE CONDUCTION

**Organizer:** Peter Brophy (Edinburgh)

*Peter Brophy (Edinburgh), Benedicte Dargent (Marseille), Elior Peles (Rehovot), Matthew Rasband (Houston)*

**Symposium 3**

GLIAL CELLS AND CHRONIC PAIN

**Organizer:** Marzia Malcangio (London)

*Sabatio Maione (Naples), Marzia Malcangio (London), Mark Suter (Lausanne), Camilla Svensson (Stockholm)*

**Symposium 4**

MICROGLIAL PHAGOCYTOSIS AND ROS IN DEVELOPMENT AND NEURODEGENERATION

**Organizers:** Guy Brown (Cambridge), Jau-Shyong Hong (Research Triangle Park)

*Guy Brown (Cambridge), Huiming Gao (China), Jonas Neher (Tübingen), Rosa Paolicelli (Monterotondo)*

**Symposium 5**

GENETIC DISSECTION OF GLIAL CELL DEVELOPMENT AND FUNCTION IN DROSOPHILA

**Organizer:** Christian Klämbt (Münster)

*Marc Freemann (Worcester), Alicia Hidalgo (Birmingham), Rob Jackson (Boston), Christian Klämbt (Münster)*

17:15 – 19:15 **Poster Session I and Coffee Break**

19:15 **Opening Reception**

Thursday, July 4, 2013

9:00 – 10:00 **Plenary Lecture L2**

**Chair:** Robin Franklin (Cambridge, UK)

**Anne Baron-Van Evercooren**

*Centre de Recherche de l'Institut du Cerveau et de la Moelle, Paris, France*

CONTRIBUTION OF ENDOGENOUS AND EXOGENOUS STEM CELLS TO REMYELINATION OF THE CENTRAL NERVOUS SYSTEM

10:00 – 10:15 **Coffee Break**

10:15 – 12:15 **Symposia II**

**Symposium 6**

IDENTITY AND PLASTICITY OF ASTROGLIAL STEM CELLS IN ADULT NEUROGENIC NICHES

**Organizers:** Masato Nakafuku (Cincinnati), Verdon Taylor (Basel)

*Francois Guillemot (Mill Hill), Sebastian Jessberger (Zürich), Masato Nakafuku (Cincinnati), Verdon Taylor (Basel)*

**Symposium 7**

CROSS-TALK BETWEEN IONS AND ENERGY METABOLISM IN ASTROCYTES: NEW INSIGHTS FROM IN VITRO AND IN VIVO STUDIES WITH OPTICAL PROBES

**Organizers:** Christine Rose (Düsseldorf), Felipe Barros (Valdivia)

*Felipe Barros (Valdivia), Jean-Yves Chatton (Lausanne), Christine Rose (Düsseldorf), Bruno Weber (Zürich)*

**Symposium 8**

MICROGLIAL PRIMING: HOW THE MICROGLIAL POPULATION BECOMES A CNS AMPLIFIER OF SYSTEMIC INFLAMMATION AND WHY IT MATTERS?

**Organizers:** Sophie Laye (Bordeaux), Colm Cunningham (Dublin)

*Colm Cunningham (Dublin), Pierre Gressens (Paris), Sophie Laye (Bordeaux), Paul Morgan (Cardiff)*

**Symposium 9**

BIOMARKERS OF GLIAL INJURY IN CSF AND BLOOD

**Organizer:** Albee Messing (Madison)

*Christian Förch (Frankfurt), Damir Janigro (Cleveland), Albee Messing (Madison), Axel Petzold (London)*

**Symposium 10**

ENDOPLASMIC RETICULUM STRESS AND NEUROLOGICAL DISORDERS

**Organizer:** Una Fitzgerald (Galway)

*Una Fitzgerald (Galway), Brian Popko (Chicago), Christopher Power (Alberta), David Ron (Cambridge)*

12:15 – 13:15 **Lunch Break**

**13:15 – 15:15 Poster Session I**

**15:15 – 17:15 Symposia III**

**Symposium 11**

THE NEURO-GLIA INTERACTIONS THAT CONTROL REPAIR IN THE NERVOUS SYSTEM

**Organizer: Kristjan Jessen (London)**

*Frank Bradke (Bonn), Tessa Gordon (Toronto), Kristjan Jessen (London), Martin Schwab (Zürich)*

**Symposium 12**

ROLE OF GLIAL GABA TRANSPORTERS IN CONTROLLING NEUROTRANSMISSION

**Organizer: László Héja (Budapest)**

*László Héja (Budapest), Sergei Kirischuk (Mainz), Istvan Mody (Los Angeles), Steve White (Salt Lake City)*

**Symposium 13**

GLIAL CELLS IN MEMORY, NEURAL PLASTICITY AND NEUROGENESIS: FOCUS ON INTERLEUKIN 1

**Organizers: Luisa Minghetti (Rome), Staci Bilbo (Durham)**

*Staci Bilbo (Durham), Luisa Minghetti (Rome), Barbara Viviani (Milan), Raz Yirmiya (Jerusalem)*

**Symposium 14**

ROLE OF MICROGLIA DURING THEIR INVASION OF THE DEVELOPING CENTRAL NERVOUS SYSTEM

**Organizers: Pascal Legendre (Paris), Michel Rigo (Diepenbeek)**

*Jose Luis Marín Teva (Granada), Etienne Audinat (Paris), Pascal Legendre (Paris), Michel Rigo (Diepenbeek)*

**Symposium 15**

ASTROCYTE NETWORK CONTRIBUTION IN NEUROIMAGING SIGNALS

**Organizers: Jerome Badaut (Loma Linda), Anne-Karine Bouzier-Sore (Bordeaux)**

*Jerome Badaut (Loma Linda), Anne-Karine Bouzier-Sore (Bordeaux), Julien Chuquet (Mont-Saint-Aignan), Olaf Jöhren (Lübeck)*

**17:15 – 17:30 Coffee Break**

**17:30 – 18:30 Plenary Lecture L3**

**Chair:** Magdalena Götz (Munich, Germany)

**Stefano Pluchino**

*Clinical Neurosciences, University of Cambridge, UK*

HOW NEURAL STEM CELLS SPEAK WITH IMMUNE CELLS

Friday, July 5, 2013

**9:00 – 10:00 Plenary Lecture L4**

**Chair:** Vittorio Gallo (Washington, USA)

**Jacqueline Trotter**

*Molecular Cell Biology, University of Mainz, Germany*

WRAPPING IT UP: FUNCTIONS OF NG2 GLIA IN MYELINATION AND AT SYNAPSES

**10:00 – 10:15 Coffee Break**

**10:15 – 12:15 Symposia IV**

**Symposium 16**

SIGNALING PATHWAYS IN MYELINATION

**Organizers: Kelly Monk (Saint Louis), Rashmi Bansal (Farmington)**

*Rashmi Bansal (Farmington), Wendy Macklin (Aurora), Kelly Monk (Saint Louis), Carla Taveggia (Milan)*

**Symposium 17**

GLIA IN THE PATHOGENESIS OF POLYGLUTAMINE NEURODEGENERATION

**Organizers: Thomas Moeller (Paramus), Gwenn Garden (Seattle)**

*Gwenn Garden (Seattle), Flaviano Girogine (Leicester), Thomas Moeller (Paramus), Paola Piccini (London)*

**Symposium 18**

THE MÜLLER CELL – THE GLIAL ALL-ROUNDER OF THE RETINA

**Organizer: Antje Grosche (Leipzig)**

*Dan Goldmann (Ann Arbor), Antje Grosche (Leipzig), Éric Newman (Minneapolis), Thomas Reh (Seattle)*

**Symposium 19**

MICROGLIAL ATP SIGNALING: A KEY REGULATOR OF SYNAPTIC TRANSMISSION AND NEURONAL DISEASES

**Organizer: Schuichi Koizumi (Yamanashi)**

*Schuichi Koizumi (Yamanashi), Olivier Pascula (Paris), Michael Salter (Toronto), Peter Illies (Leipzig)*

**Symposium 20**

NG2 CELLS IN THE INTACT AND INJURED BRAIN: A HETEROGENEOUS POPULATION?

**Organizers: Leda Dimou (Munich), Akiko Nishiyama (Connecticut)**

*David Attwell (London), Leda Dimou (Munich), Akiko Nishiyama (Connecticut), Brahim Nait Oumesmar (Paris)*

**12:15 – 13:15 Lunch Break**

**13:15 – 15:15 Poster Session II**

**15:15 – 17:15 Symposia V**

**Symposium 21**

(DYS-) REGULATION OF MYELIN MEMBRANE SYNTHESIS

**Organizers: Ueli Suter (Zürich), Mark Verheijen (Amsterdam)**

*Roman Chrast (Lausanne), Markus Schwab (Göttingen), Ueli Suter (Zürich), Mark Verheijen (Amsterdam)*

**Symposium 22**

FAMILY OF GP130 CYTOKINES AS PROTECTIVE MEDIATORS OF NEUROLOGICAL DISEASE

**Organizers: Niels Hellings (Diepenbeek), Trevor Kilpatrick (Melbourne)**

*Niels Hellings (Diepenbeek), Trevor Kilpatrick (Melbourne), Su Metcalfe (Cambridge), Dirk Schlüter (Magdeburg)*

**Symposium 23**

MITOCHONDRIAL CA<sup>2+</sup> SIGNALING IN LIFE AND DEATH OF GLIAL CELLS.

**Organizers: Israel Sekler (Beer Sheva), Michael Duchen (London)**

*Michael Duchen (London), James Lechleiter (San Antonio), Israel Sekler (Beer Sheva), Ding Shinguan (Columbia)*

**Symposium 24**

ROLE OF EXTRACELLULAR VESICLE SECRETION FROM GLIAL CELLS IN HEALTH AND DISEASE

**Organizer: Felipe Court (Santiago)**

*Felipe Court (Santiago), Mikael Simons (Göttingen), Johan Skog (New York), Claudia Verderio (Milan)*

**Symposium 25**

TRANSLATIONAL REGULATION IN GLIAL CELLS

**Organizer: Martin Theis (Bonn)**

*Jason Gerstner (Philadelphia), Anna Krichevski (Boston), Martin Theis (Bonn), Yongjie Yang (Boston)*

**17:15 – 17:30 Coffee Break**

**17:30 – 18:30 Plenary Lecture L5**

**Chair:** Eva Sykova (Prague, Czech Republic)

**Suzana Herculano-Houzel**

*Biomedical Sciences, University of Rio de Janeiro, Brazil*

YOU DON'T MESS WITH THE GLIA: EVOLUTION OF BRAIN SIZE WITH CONSERVED NON-NEURONAL SCALING RULES IN MAMMALS

Saturday, July 6, 2013

**9:00 – 10:00 Plenary Lecture L6**

**Chair:** Trevor Owens (Odense, Denmark)

**Alexandre Prat**

*Neuroscience Research, University of Montreal, Canada*

BRAIN MORPHOGENS ARE REGULATORS OF THE BLOOD-BRAIN BARRIER

**10:00 – 10:15 Coffee Break**

**10:15 – 12:15 Symposia VI**

**Symposium 26**

ADAMS AND MMPs DURING MYELIN DEVELOPMENT AND MYELIN REPAIR

**Organizer: Adan Aguirre (Stony Brook)**

*Adan Aguirre (Stony Brook), Stephen Crocker (Farmington), Veronica Shubayev (La Jolla), Nicola Woodroffe (Sheffield)*

**Symposium 27**

MULTIPLE ROLES OF GLIAL CELLS IN POSTSTROKE INFLAMMATION

**Organizers: Karsten Ruscher (Lund), Jasna Kriz (Quebec)**

*Karen Gertz (Berlin), Jasna Kriz (Quebec), Karsten Ruscher (Lund), Zena Vexler (San Francisco)*

**Symposium 28**

THE BRAIN'S BEST FRIEND: THE PROTECTIVE SIDE OF MICROGLIA ACTION

**Organizers: Knut Biber (Freiburg)**

*Knut Biber (Freiburg), Kate Lambertsen (Odense), Cristina Limatola (Rome), Marta Olah (Boston)*

**Symposium 29**

ASTROCYTE CONTROL OF PRE-SYNAPTIC FUNCTION VIA GLIOTRANSMISSION: MECHANISMS AND FUNCTIONAL

**Organizer: Andrea Volterra (Lausanne)**

*Marta Navarrete (Madrid), Thomas Nevian (Bern), Richard Robitaille (Montreal), Andrea Volterra (Lausanne)*

**Symposium 30**

ADVANCES IN NEUROTRANSMITTER SIGNALING IN PERIPHERAL GLIAL CELLS

**Organizers: Douglas Fields (Bethesda), Valerio Magnaghi (Milan)**

*Douglas Fields (Bethesda), Menchachem Hanani (Jerusalem), Valerio Magnaghi (Milan), Ada Maria Tata (Rome)*

**12:15 – 13:00 Lunch Break**

**13:00 – 15:00 Poster Session II**

**15:00 – Plenary Lecture L7**

**16:00 Chair: Maiken Nedergaard (Rochester, USA)**

**Michael V. Sofroniew**

*UCLA School of Medicine, Department of Neurobiology, Los Angeles, USA*

ASTROCYTE ROLES IN CNS DISORDERS

**16:00 Departure**