

The COST Action NanoNet and Sahlgrenska Academy at the University of Gothenburg

Training School and International Research Conference **Astrocyte Intermediate Filaments (Nanofilaments) and Astrocyte Function in Health and Disease**

Gothenburg, Sweden, 18-21 March 2014

Organizers: **Milos Pekny, Ulrika Wilhelmsson and Elly Hol**

More information and registration at www.astrocyte2014.eu - the direct link is
<https://www.delegia.com/app/attendee/default.asp?projectId=4228>

Tuesday, March 18

17.00 – 17.15 Opening and introduction

17.15 – 17.55 *A special Peter Eriksson lecture*

David Lane, A*STAR, Singapore:

Translating exciting research findings into therapeutic products

17.55 – 18.15 Discussion

18.30 – 19.45 Dinner

19.45 – 21.30 Poster session

Wednesday, March 19

9.00-9.40 **Milos Pekny, University of Gothenburg, Sweden:**

Astrocytes and their intermediate filament system in health and disease

9.40-10.00 Discussion

10.00-10.20 Break

10.20-11.00 **John Eriksson, Åbo Akademi University, Finland:**

Intermediate filaments – integrators of cell responses in times of stress

11.00-11.20 Discussion

11.20-11.40 Break

11.40-12.20 **Alex Verkhratsky, University of Manchester, UK:**

Neuron-glia interactions in health and disease: what we know and would like to know

12.20-12.40 Discussion

12.40-13.50 Lunch

14.00-14.40 **Michael Sofroniew, University of California in Los Angeles, USA:**
Molecular understanding of reactive gliosis and glial scar formation

14.40-15.00 Discussion

15.00-15.20 Break

15.20-16.00 **Michal Schwartz, University of Rehovot, Israel:**
The bright side of the glial scar in CNS repair

16.00-16.20 Discussion

16.20-16.40 Break

16.40-17.20 **Birgit Lane, A* STAR, Singapore:**
Intermediate filaments, stress response and signaling

17.20-17.40 Discussion

17.40-17.50 Break

17.50-18.50 *Discussion panel 1 –*
Astrocyte intermediate filament system as a signaling platform in stress
Birgit Lane, John Eriksson, Michal Schwartz, Albee Messing

19.00-20.15 Dinner

20.15 – 21.30 Poster session

Thursday, March 20

9.00-9.40 **Christian Steinhäuser, Bonn University, Germany:**
The role of reactive astrocytes in epilepsy

9.40-10.00 Discussion

10.00-10.20 Break

10.20-11.00 **Vlad Parpura, University of Alabama, Birmingham, USA:**
Vesicle trafficking in astrocytes and cell-cell communication: relevance for disease pathogenesis

11.00-11.20 Discussion

11.20-11.40 Break

11.40-12.20 *Discussion panel 2 –*

The talk between astroglia and neurons – what we have learnt in the past 10 years
Alex Verkhratsky, Michael Sofroniew, Christian Steinhäuser, Yang (Ted) Teng

12.30-13.40 Lunch

13.50-14.30 **Ole Petter Ottersen, Oslo University, Norway:**

Astrocytes and the astro-vascular unit in neurotrauma, stroke and neurodegenerative diseases

14.30-14.50 Discussion

14.50-15.10 Break

15.10-15.50 **Yang (Ted) Teng, Harvard Medical School, USA:**

Reactive gliosis as a double edge sword in spinal cord trauma: post-traumatic regeneration and future plasticity-promoting strategies for improved functional recovery

15.50-16.10 Discussion

16.10-16.30 Break

16.30-17.30 *Discussion panel 3 –*

The talk between astrocytes and blood vessels; the ying/yang of astrocyte response in stroke and post-stroke recovery

Ole Petter Ottersen, Michael Norenberg, Milos Pekny

17.40-18.55 Dinner

19.30-20.30 Concert

Friday, March 21

9.00-9.40 **Michael Norenberg, University of Miami, USA:**

Astrocyte activation and responses in diseases originating outside CNS

9.40-10.00 Discussion

10.00-10.20 Break

10.20-11.00 **Elly Hol, University of Amsterdam, the Netherlands:**

Astrocyte-neuron interactions in neurodegenerative diseases

11.00-11.20 Discussion

11.20-11.40 Break

11.40-12.20 **Yosef Gruenbaum, The Hebrew University of Jerusalem, Israel:**
Intermediate filaments in the cell nucleus – numerous partners, functions and diseases

12.20-12.40 Discussion

12.40-13.50 Lunch

14.00-14.40 **Albee Messing, University of Wisconsin-Madison, USA:**
Astrocytes, Alexander disease and beyond: when the disease pathogenesis starts in astrocytes

14.40-15.00 Discussion

15.00-15.20 Break

15.20-16.00 **Jin-Moo Lee, Washington University, St. Louis, USA:**
Astrocyte intermediate filaments, reactive gliosis and neuroinflammation in Alzheimer's disease

16.00 -16.20 Discussion

16.20-17.20 *Discussion panel 4 –*
Astrocyte intermediate filaments, reactive gliosis and neuroinflammation in neurodegenerative diseases

Jin-Moo Lee, Elly Hol, Vlad Parpura, Ulrika Wilhelmsson, Marcela Pekna

17.30-18.30 Future collaborative initiatives aiming at better understanding of the role of astrocytes in disease pathogenesis - the best way to synergize and join forces

18.30-20.30 Farewell dinner

20.30-21.30 Poster session