Meeting Program

XIV European Meeting on Glial Cells in Health and Disease

Porto | July 10–13, 2019

www.gliameeting.eu

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on Glial Cells in Health and Disease
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Network Glia e.V. was founded in 2011 with the goal of enhancing public awareness and scientific exchange on glial cells.

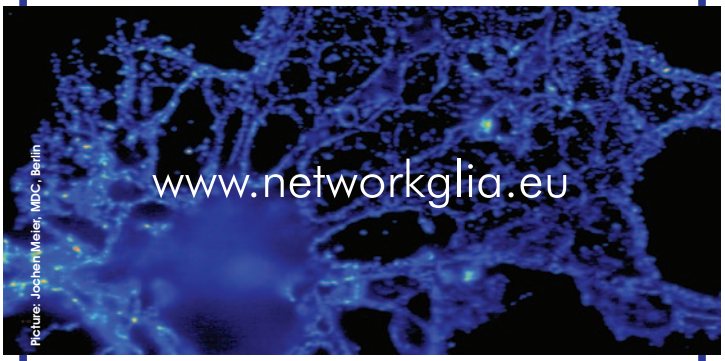
Network Glia

The association has two major activities:

1. The WEBSITE offers material both for the general public such as
   - an introduction to glial cells and for glial researchers
   - a list of animal models for glia research
   - an online library with classic glia papers
   - a list of scientific networks in glial research

2. Organizing the EUROPEAN MEETINGS ON GLIAL CELL FUNCTION IN HEALTH AND DISEASE.

Network Glia e.V.
Max Delbrück Centrum für Molekulare Medizin (MDC) Berlin-Buch
Robert-Rössle-Str. 10, 13125 Berlin, Germany
Tel.: +49 30 9406 3336, Email: gibson@mdc-berlin.de



Sponsored by GLIA

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Welcome

Dear Glia community,

The XIV European Meeting on Glial Cells in Health and Disease invites participation from neuroglia researchers from all over the world to Porto (Portugal).

More than two decades after the first meeting being held in Heidelberg, the European Glial Meeting has become the largest and most important international scientific reunion in glia biology in health and disease in the world. After the success of the 2017 meeting in Edinburgh, the conference comes for the first time to Porto, where it will be hosted by the growing local community of glial neuroscientists.

Porto, the second-largest city in Portugal, famed for its wines, and named "European best destination in 2017" on the World Travel Awards, is a thriving and pulsating city blending historic heritage, with contemporary creations, an exciting artistic and cultural agenda, and vibrant nightlife.

The Glial meeting will be held in the Alfândega Congress Center, a former customhouse located in the historical center of Porto along the bank of the Douro River facing the world-famous Port wine cellars of Vila Nova de Gaia. This large historical building, renovated by the Pritzker-winning architect Eduardo Souto de Moura, has been considered one of the best meetings and Conference Centers in Europe, and provides excellent poster and lecture facilities to accommodate all of the meeting's activities.

The Alfândega Congress center is at walking distance from hotels, cultural and historical buildings, restaurants, cafés, and bars where the meeting´s participants can continue scientific discussions while enjoying the warm south European summer evenings of this beautiful city.

We are looking forward to welcoming you to Porto in July 2019,
The Local Organizing Committee

João Bettencourt Relvas
Glial Cell Biology Lab
IBMC/i3S Instituto de investigação
e Inovação em Saúde
University of Porto

Mónica Sousa
IBMC/i3S Instituto de investigação
e Inovação em Saúde
University of Porto

João Felipe Oliveira
ICVS, School of Medicine,
University of Minho

Committees

Program Committee

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João Bettencourt Relvas (Portugal)
Peter Brophy (UK)
Magdalena Götz (Germany)
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Flavia Gomes (Brazil)
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Andrea Volterra (Switzerland)
Kaylene Young (Australia)

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Eva Sykova (Czech Republic)

Local Organizing Committee

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Monica Sousa (i3S, University of Porto), Chair
António Francisco Ambrósio (IBILI and Faculty of Medicine, University of Coimbra)
Dora Brites (iMed, University of Lisbon)
Pedro Brites (i3S, University of Porto)
Adelaide Fernandes (iMed, University of Lisbon)
João Malva (Faculty of Medicine, University of Coimbra)
João Filipe Oliveira (ICVS, School of Medicine, University of Minho)
Maria João Saraiva (i3S, University of Porto)
Teresa Summavielle (i3S, University of Porto)

Sponsors

The Network Glia e.V. and the organizers of the XIV European Meeting on Glial Cells in Health and Disease would like to thank the following sponsors and exhibitors for their generous support (in alphabetical order, as of June 2019):

Gold Sponsor

MACS
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Sponsors

brain sciences

THE DISCOVERIES CTR
The Discoveries Centre for Regenerative and Precision Medicine

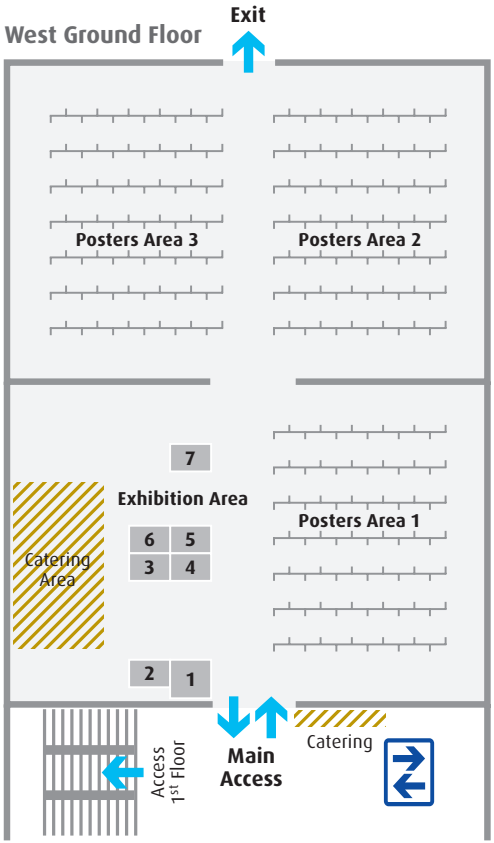
WILEY

Local sponsors

ASSOCIAÇÃO DE TURISMO DO PORTO E NORTE
CONVENTION&VISITORS BUREAU

Porto.

Exhibitors



	Booth No.
Andor-IMARIS	6
Femtonics Ltd.	5
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Jackson ImmunoResearch Europe Ltd.	3
Miltenyi Biotec GmbH	1
npi electronic GmbH	2
Panlab Harvard Apparatus	4

Profiles of Supporting Foundations, Organizations and Companies

(in alphabetical order)

Andor-IMARIS

Andor is a global leader in the development and manufacturing of high performance scientific imaging cameras, and microscopy systems to match your application needs in research and OEM. Imaris, is the world's leading scientific image analysis software for 3D/4D images it is the tool of choice for leading scientists for their applications involving large data (>1TB) visualization, animation, cell lineage, surface rendering, filament tracing of neuronal dendrites/vessels, tracking of particles, and cell division/inter-intracellular analyses. Imaris enables researchers at the cutting edge of discoveries to further expand the built-in functions of Imaris by interfacing with programming languages (MATLAB, Python, Java) and plug-ins from Fiji and ImageJ.

www.andor.com

Brain Sciences

The section Neuroglia (of the journal Brain Sciences) aims to publish research that focuses on all aspects of "non-neuronal" brain, including astrocytes, oligodendrocytes, microglia, pericytes and their interplay with neurons and blood vessels. We are looking for studies on fundamental mechanisms and technical reports, physiological and pathological processes, novel models and tools. Priority will be given to studies linking molecular and genomic events with their functions. Basic and clinical studies are welcome. We especially encourage the younger members of the scientific community to contribute their studies. Papers will not be judged on the volume of information, but only on their quality.

www.mdpi.com/journal/brainsci/sections/neuro_glia

Femtonics Ltd.

Femtonics focuses on the research and development of two-photon laser scanning microscopes for the booming area of cutting-edge brain research and pharmaceutical development. Our speciality is represented by the acousto-optical scanner-based Femto3D Atlas microscope which takes the ability to scan the three-dimensional sample with astonishing speed and thereby it is unique on the market. On the field of traditional galvanometric and resonant scanner-based systems, we present our customers the flexibility and freedom to customize their own products according to their vision and objective.

www.femtonics.eu

Hello Bio

Say hello to prices up to 50% less than other suppliers!

As experienced scientists, we aim to offer **high quality** research tools at prices so low that as many researchers as possible will be able to afford them.

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At Jackson ImmunoResearch, we manufacture secondary antibodies and related reagents, earning an outstanding reputation for quality over the past 30 years. Our products are used in Western Blotting, IHC/ICC/IF, Flow Cytometry, ELISA, Electron Microscopy and many other immunological techniques. Our range includes a wide choice of species and specificity options, enabling reliable and precise detection. All antibodies are

available conjugated to a comprehensive selection of fluorophores (including Alexa Fluors® and Brilliant Violet™), Enzymes (HRP and Alkaline Phosphatase), Colloidal Gold or Biotin.

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www.jacksonimmuno.com

MACS
Miltenyi Biotec

Miltenyi Biotec GmbH
Miltenyi Biotec is a global provider of products and services that advance biomedical research and cellular therapy. Our innovative tools support research at every level, from basic research to translational research to clinical application.

Used by scientists and clinicians around the world, our technologies cover techniques of sample preparation, cell isolation, cell sorting, flow cytometry, and cell culture. Our 30 years of expertise spans research areas including immunology, stem cell biology, neuroscience, and cancer. Today, Miltenyi Biotec has 2,500 employees in 28 countries – all dedicated to helping researchers and clinicians make a greater impact on science and health.
www.miltenyibiotec.com

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npi
Electronic Instruments for the Life Sciences
made to measure

npi electronic GmbH
Since 35 years npi electronic develops and produces equipment for basic research with main focus on neuroscience. The portfolio includes complete rigs, patch-voltage clamp, extracellular and electroporation amplifiers, stimulus isolators, voltammetric/amperometric amplifiers, miniature headstages for in vivo experiments, instrumentation for optogenetics and high resolution microscopy, filters, drug application systems and temperature controllers. Latest developments include a fiber based laser unit for optogenetic stimulation and a fiber based optical stimulation and detection unit. This FiberOptoMeter allows optogenetic activation as well as fluorescence monitoring of up to two dyes and is used e.g. for monitoring calcium of signals in awake behaving animals.
www.npielectronic.de

Panlab | HA Harvard Apparatus

Panlab Harvard Apparatus
Panlab Harvard Apparatus is a subsidiary of the Harvard Bioscience group, offering a comprehensive product line for all your need in neuroscience, physiology and pharmacology research: behaviour, microdialysis, surgery/anaesthesia, monitoring systems, molecular biology, cell biology, electrophysiology, telemetry. Highlighted in the booth: SMART video-tracking new input-output option, new CMA set-ups for microdialysis on large molecules, syringe pumps, new stereotaxic instruments.
www.panlab.com

THE DISCOVERIES CTR
The Discoveries Centre for Regenerative and Precision Medicine

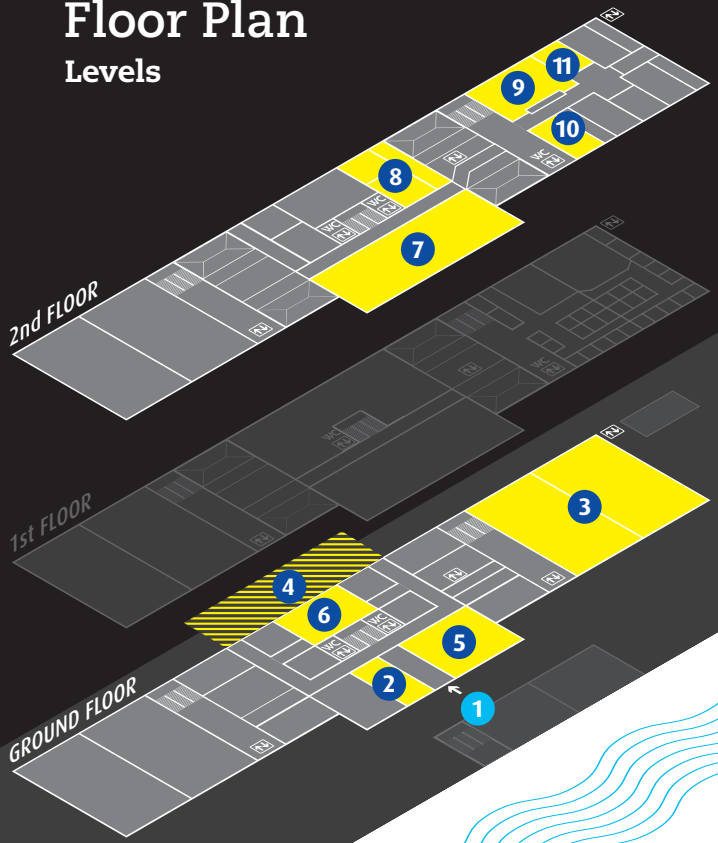
The Discoveries Centre
https://thediscoveriesctr.eu/

WILEY

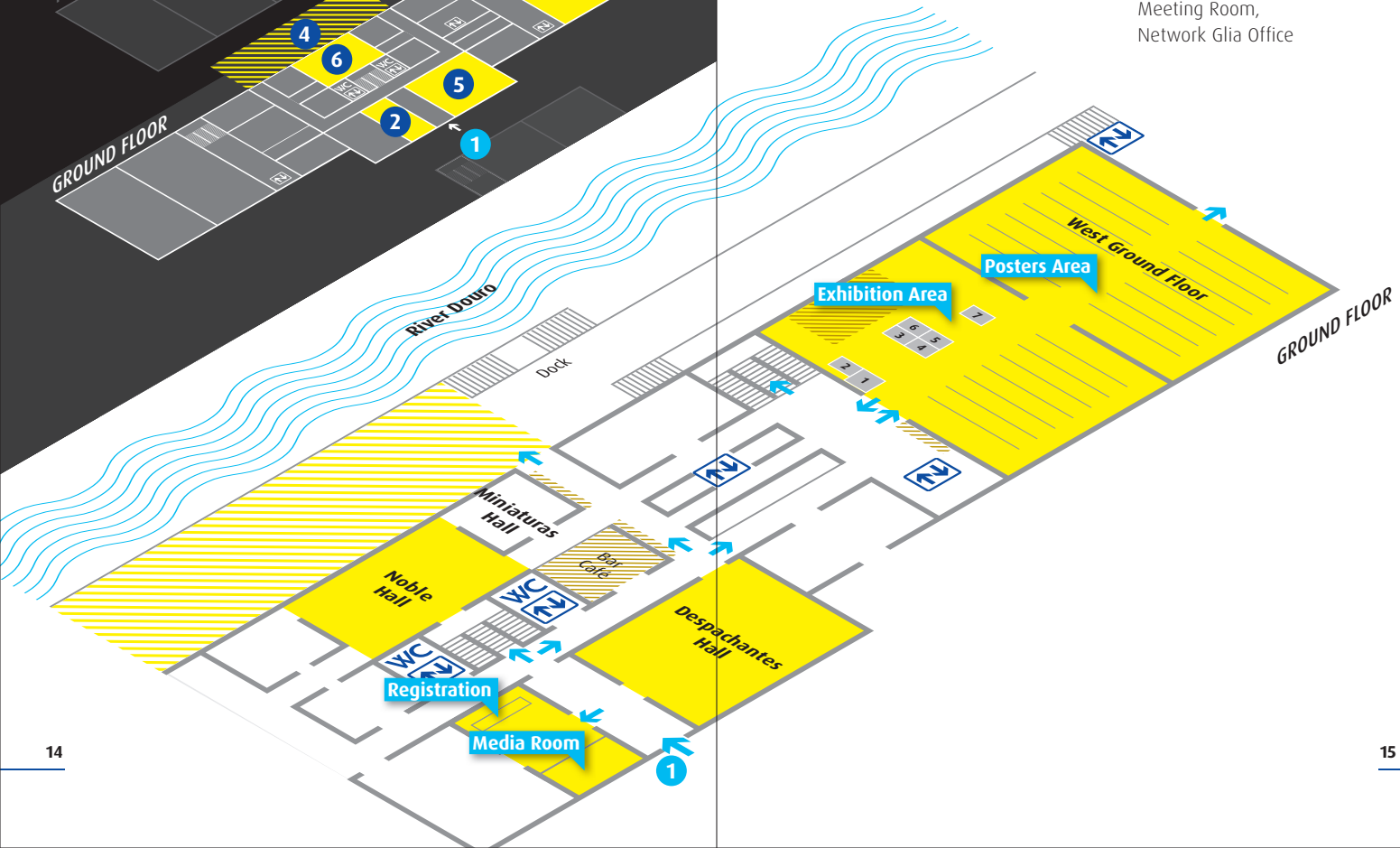
Wiley
Wiley, a global company, helps people and organizations develop the skills and knowledge they need to succeed. Our online scientific, technical, medical, and scholarly journals, combined with our digital learning, assessment and certification solutions help universities, societies, businesses, governments, and individuals increase the academic and professional impact of their work.
www.wiley.com

Floor Plan

Levels



1. **Entrance**
2. **Auditorium**
   Registration Area,
   Media Check, Cloakroom
3. **West Ground Floor**
   Poster Sessions, Exhibition
4. **Dock**
   Outside Break Area
5. **Despachantes Hall**
   Symposia
6. **Noble Hall**
   Symposia
7. **Archive Hall**
   Plenary Lectures, Symposia
8. **Ribeira Hall**
   Working Area,
   Overflow Area Archive Hall
9. **Infante Hall**
   Symposia,
   Introductory Course
10. **D. Maria Hall**
    Symposia
11. **Miragaia Hall**
    Meeting Room,
    Network Glia Office



General Information

(in alphabetical order)

ABSTRACT PUBLICATION

The meeting abstracts are published in electronic form in the Glia Journal of Wiley and will be available online for download via the meeting's website **www.gliameeting.eu**.

BADGE

Upon registration at the meeting office, attendants will receive a name badge which allows entrance to the meeting. All participants are asked to wear their badge visibly at all times. In case of loss, misplacing or forgetting of the name badge, a handling fee of € 20.00 will be charged for re-printing the badge.

CERTIFICATE OF ATTENDANCE

Certificates of attendance will be sent to every participant by e-mail after the meeting has taken place.

CONFERENCE APP

The Glia 2019 conference app lets you easily follow up on the conference, the scientific program, speakers, venue and so on. Since this is a web-based conference app, there is no download or login needed. Just follow the link and you have all the information at a glance.
https://lineupr.com/kit-group-gmbh-dresden/glia-2019

ELECTRICITY SUPPLY

230 V – 50 Hz AC;
Electrical outlets in accordance with European standards.

EXHIBITION

Exhibition opening times:

Wednesday, July 10, 2019	08:30 – 19:00 h
Thursday, July 11, 2019	08:30 – 19:00 h
Friday, July 12, 2019	08:30 – 18:00 h
Saturday, July 13, 2019	08:30 – 14:15 h

INSURANCE

The organizers do not take responsibility for individual medical, travel or personal insurance. Participants are advised to carry out their own insurance policies.

INTERNET ACCESS

Wireless internet access is available free of charge throughout the conference venue.
Login: **GLIA 2019**
Password: **Glia19Porto**

LUNCH

Lunch is being offered from Wednesday to Saturday in form of lunch bags. In addition, cash bars are available.

MEDIA CHECK / SPEAKERS' SERVICE

The media check for oral presentations is located in the Auditorium. The opening hours correspond to those of the Meeting Office.
We kindly ask you to hand in your presentation on a memory stick / CD ROM about 2 hours in advance of your talk, at the latest, or the day before. Please note, using your own laptop will not be possible.

MEETING OFFICE

Opening times:

Tuesday, July 9, 2019	08:30 – 12:00 h (Registration Introductory Course only)
	16:00 – 18:00 h
Wednesday, July 10, 2019	07:30 – 21:00 h
Thursday, July 11, 2019	07:30 – 19:00 h
Friday, July 12, 2019	07:30 – 18:00 h
Saturday, July 13, 2019	07:30 – 14:30 h

Phone: +49 176 22304757
E-mail: info@glia2019.eu

ORGANIZATION

Network Glia e.V.
Max Delbrück Center
for Molecular Medicine (MDC) Berlin-Buch
Robert-Rössle-Str. 10, 13092 Berlin, Germany
E-mail: gibson@mdc-berlin.de
www.networkglia.eu

K.I.T. Group GmbH
Bautzner Str. 117–119, 01099 Dresden, Germany
E-mail: info@kitdresden.de
www.kit-group.org

POLICE OFFICE

Rua Clube dos Fenianos, nº 11
Tel.: 222092006
prtetur@psp.pt

PORTO INFORMATION

The meeting office provides some information about Porto. The next tourist information office is located next to the Porto Cathredral Sé do Porto, 16 minutes walking distance from Alfandega.

POSTER SESSIONS

Each poster will hang for one day: poster numbers ending with an A will be displayed on Wednesday, July 10, poster numbers ending with a B will be displayed on Thursday, July 11 and poster numbers ending with a C will be displayed on Friday, July 12.

Each poster session (180 min) is divided into two parts (each 90 min): uneven and even serial numbers. In the first part of a poster session posters with uneven serial numbers will be discussed (e.g. T12-03B). In the second 90 min of a session posters with even serial numbers will be discussed (e.g. T12-02B).

Posters with serial numbers ending with A:
(Hanging of posters: Wednesday, July 10, before 10:00 h)

Uneven serial numbers (e.g. T01-03A)
Wednesday, July 10, 2019 14:15 – 15:45 h

Even serial numbers (e.g. T01-04A)
Wednesday, July 10, 2019 15:45 – 17:15 h

Posters with numbers ending with B:
(Hanging of posters: Thursday, July 11, before 10:00 h)

Uneven serial numbers (e.g. T03-03B)
Thursday, July 11, 2019
13:00 – 14:30

Even serial numbers (e.g. T03-04B)
Thursday, July 11, 2019
14:30 – 16:00 h

Posters with numbers ending with C:
(Hanging of posters: Friday, July 12, before 10:00 h)

Uneven serial numbers (e.g. T05-03C)
Friday, July 12, 2019 13:00 – 14:30 h

Even serial numbers (e.g. T05-04C)
Friday, July 12, 2019 14:30 – 16:00 h

The size of a poster is DIN A0 landscape format (85 cm height, 119 cm width).
Power strips to hang your poster are available at the poster help desk.
All posters must be removed directly after the poster session.

For more details about the poster presentations see page 59.

PRINTING COMPANY

If you need to print your poster in Porto we recommend the following company:
https://busilis.pt/
T: +351 222 080 150
M: +351 968 090 481
busilis@busilis.pt

PUBLIC TRANSPORTATION AND TRAVEL

Accessibility from Porto Airport to the city centre/venue
Francisco Sa Carneiro Airport, or Porto Airport in short, is located approximately 11 km north of Porto City Center. The airport is well served by an elaborate transport network. The easiest way to get to the venue is by metro or taxi.

By metro
Travel ticket: Z4
Catch the metro "Line E", Destination "Estádio do Dragão".
Exit at "Trindade" (duration: 24 min.)
At "Trindade" change to "Line D" – Destination "Santo Ovidio" and exit at "São Bento" (duration: 4 min.)
Exit the metro station and at the STCP bus stop, catch the "500" bus – Destination "Matosinhos (Mercado)" – Exit at "Alfândega" bus stop. (duration: 4 minutes)

By taxi
Taxis generally take about 25 minutes.

Accessibility from train stations to the city centre/venue
To travel to the Alfândega Porto Congress Centre by train, there are two possible train stations:

Campanhã Train Station
Travel ticket: Z2
Catch the train/metro to "São Bento" (duration: 4 min.)
Exit the train/metro station and at the STCP bus stop, catch the "500" bus – Destination "Matosinhos (Mercado)" – Exit at "Alfândega" bus stop. (duration: 5 min.)
or
Catch the Metro "Line A, B, C, E or F" at "Campanhã" and exit at "Trindade". (duration: 6 min.)
Change to "Line D", Destination "Santo Ovideo" and exit at "São Bento" (duration: 4 min.)

S. Bento Train Station
Travel ticket: Z2
Exit the train/metro station and at the STCP bus stop, catch the "500" bus – Destination "Matosinhos (Mercado)" – Exit at "Alfândega" bus stop. (duration: 5 min.)

More information:

Bus/Tram – STCP
https://www.stcp.pt/en/travel/
Subway – Metro
https://en.metrodoporto.pt/

REGISTRATION

On-site registration is possible on all conference days, registration fees can be paid in cash or by VISA, Mastercard or American Express.

Full registration (all days):

Scientists:	€ 595.00
Students, PhD Students:	€ 365.00
Commercials:	€ 660.00
Introductory Course on Glial Biology:	€ 50.00 (Students)
	€ 95.00 (Scientists)
Program booklet:	€ 10.00

Registration per day:

Scientists:	€ 195.00
Students:	€ 40.00
Commercials:	€ 240.00

Students must show their valid student identity card!

Registration fee includes:
Admission to all sessions, poster area and exhibition refreshments and lunch bags from Wednesday to Saturday conference program via the conference app.

STIPENDS

Network Glia e.V., the journal GLIA and the journal Brain Science provide stipends for young qualified researchers to attend the meeting.

Recipients will receive a certificate and a financial support of € 500.00 at the official awarding events, which will be held at the beginning of the plenary lectures. The recipients are asked to contact the meeting office half an hour before the relevant awarding event to ensure the attendance.

Overview awarding events

Plenary Lecture L2, July 10 at 19:15 h	Network Glia stipends
Plenary Lecture L3, July 11 at 08:30 h	Network Glia stipends
Plenary Lecture L4, July 11 at 18:00 h	Journal Brain Sciences stipends
Plenary Lecture L5, July 12 at 08:30 h	Journal Glia stipends
Plenary Lecture L6, July 13 at 08:30 h	Network Glia stipends
Plenary Lecture L7, July 13 at 13:00 h	Network Glia stipends

TAXI

The following taxi associations offer a 24-hour service in Porto:
Raditaxis
www.raditaxis.pt, phone: +351 22 507 39 00
Táxis Invicta
www.taxisinvicta.com/en/inicio, phone: +351 225 076 400
Uber is also available.

VENUE

Centro de Congressos da Alfândega do Porto
Rua nova da Alfândega
Edifício da Alfândega
4050-430 Porto
www.ccalfandegaporto.com

Meet the Speakers

To promote interactions between speakers and delegates a new session called "meet the speakers" was created this year. All speakers and delegates are invited to meet and get in contact in an informal way.

The sessions will take place during the lunch breaks from Thursday to Saturday; please find the schedule below.

Thursday, July 11, 2019

Working Area in Ribeira Hall
12:00–13:00 h

Meeting point A
- **Plenary Lecture L1**
- **Plenary Lecture L2**
- **Plenary Lecture L3**

Meeting point B
- **S01**: Role of astrocytes in sensori-motor integration in rhythm generating neuronal network
- **S03**: Mechanobiology of glial cells
- **S04**: Pericyte function in the normal and pathological brain

Meeting point C
- **S05**: Linking genetics and epigenetics to microglia biology
- **S06**: Role of GABAergic neurons in controlling oligodendroglia function and shaping their own myelination
- **S08**: From astrocyte functions to behavioural dysfunctions: searching the cellular roots of CNS disorders

Meeting point D
- **S02**: Using drosophila for investigations of glia based human diseases
- **S07**: Role of microglia in neurodegeneration
- **S09**: Glial Scars: Beneficial and negative impact on CNS repair
- **S10**: Diversity and pathological impact of the glial microenvironment in brain tumors

Friday, July 12, 2019

Working Area in Ribeira Hall
12:00–13:00 h

Meeting point A
- **Plenary Lecture L4**
- **Plenary Lecture L5**

Meeting point B
- **S11**: Ionic excitability of astroglia beyond (and towards) calcium in health and disease
- **S12**: Astrocytic phagocytosis and clearance in health and diseases
- **S14**: Peripheral NS glia – interactions within the neroimmunoaxis
- **S15**: Genetic regulation of microglia development, functions and cellular interactions in the zebrafish

Meeting point C
- **S13**: Signals regulating developmental and adaptive myelination in the CNS
- **S17**: Role of glia in risk for psychiatric disorders
- **S20**: Microglia in structural and functional circuit shaping: from physiology to pathology

Meeting point D
- **S16**: Reawakening the sleeping beauty: transgressing the lineage barrier from glia to neuron
- **S18**: Molecular, structural, and functional specialization of astrocytic domains
- **S19**: The plasticity of myelinating glia

Saturday, July 13, 2019

Working Area in Ribeira Hall
12:00–13:00 h

Meeting point A
- **Plenary Lecture L6**

Meeting point B
- **S21**: Uncovering glia function in epilepsy: from physiology to pathology
- **S22**: Oligodendrocyte diversity and dynamics in development and repair
- **S25**: Contribution of glial extracellular vesicles to neuro-degenerative diseases

Meeting point C

- **S23**: Circuit remodeling by glial cells in development and disease
- **S24**: Astrocytes and their regulation of adult neurogenesis and pathological states
- **S27**: Exploiting glutamate signaling to promote myelin remodeling and repair
- **S30**: Oligodendrocytes: Maturation, metabolism and functions beyond myelin biogenesis

Meeting point D

- **S26**: Reactive astrocytes in waste clearance and regeneration – general and disease-specific responses, opportunities for treatment
- **S28**: Metabolic dialogue between astrocytes and neurons is required for long-term memory
- **S29**: Generating and regenerating myelinating Schwann cells

Useful Information for Delegates about Porto

Please look up the conference website for insider information, tips and useful links about Porto to enjoy the most of the city:
http://glia2019.eu/

1. Must do list:

- Eat a Francesinha
- View Porto from Cais de Gaia or Serra do Pilar
- Visit Port Wine Cellar
- Visit a pastry shop (pastelaria) and eat at least one Pastel de Nata
- Walk up the Clérigos Tower

2. What to visit in Porto

- Walking tours
- Wine Cellar tours
- Casa da Música
- Parque da Cidade (city park)
- Castelo do Queijo by the sea
- Jardim de Serralves
- Ribeira do Porto
- Palácio da Bolsa
- Cadeia da Relação/Museu Fotografia

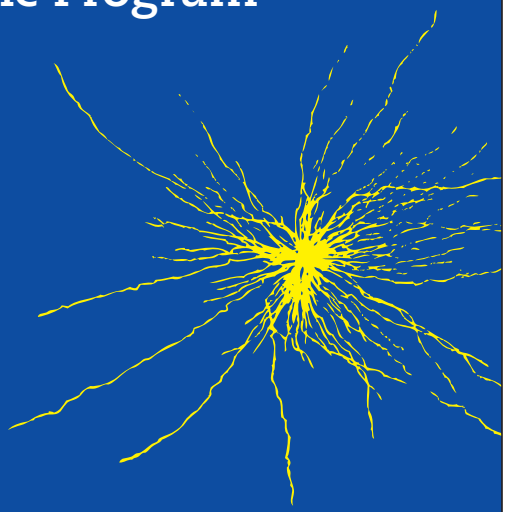
3. Social glial interactions at night

Decreased sunlight exposure should trigger motility of Glia 2019 participants, enhancing tropism to Porto's night hot spot.
From Wednesday to Friday you can meet other participants between Rua da Galeria de Paris and Rua de Cândido dos Reis. Nearby you will find multiple places to eat and drink at your choice! Everyone should wear the reporter-tag (sticker) for easy identification of peers. Stickers will be available at the Meeting Office.

4. Recommended routes

The official website of Visit Porto provides information on what to discover in the city, what events are currently happening and also recommends interesting routes through Porto.
www.visitporto.travel

Scientific Program



Monday, July 8, 2019

ICVS Satellite meeting in Braga

13:00–17:30

13:00–17:30 **Braga**

Decoding astrocyte-neuron dialogues that produce brain outputs

The main goal of this meeting is to discuss the current state-of-the-art on the involvement of astrocyte-neuron signalling in circuit function and behaviour, fostering collaborative research to drive this field forward.

The meeting will take place in Braga, at the ICVS, a leading research institute in Neuroscience in Portugal.

Meeting chairs

João Filipe Oliveira
ICVS, University of Minho, Portugal
Nuno Sousa
ICVS, University of Minho, Portugal
Alfonso Araque
University of Minnesota, USA

Organizing Committee

Diana Nascimento
ICVS, University of Minho, Portugal
Sónia Guerra-Gomes
ICVS, University of Minho, Portugal
Inês Caetano
ICVS, University of Minho, Portugal
João Filipe Viana
ICVS, University of Minho, Portugal

Tuesday, July 9, 2019

08:30–12:00	**Registration for Introductory Course only**	Auditorium
10:00–17:10	**Introductory Course**	Infante Hall
16:00–18:00	**Meeting Office open**	

Introductory Course

10:00–17:10 **Infante Hall (2nd Floor)**

10:00–10:05 **Welcome**
João Bettencourt Relvas (Porto, PT)

10:05–10:27 **How Pío del Río-Hortega sorted out the "third element" of the nervous system: the birth of oligodendroglia and microglia**
Fernando de Castro (Madrid, ES)

10:27–10:50 **Neuroglia (1859–1919): From Rudolf Virchow to Pío del Río-Hortega**
Juan del Río-Hortega (Valladolid, ES)

10:50–11:35 **Oligodendroglia in and beyond myelination of the central nervous system**
Ana Seixas (Porto, PT)
Joana Paes de Faria (Porto, PT)

11:35–12:20 **Astrocytes: what they are and what they do**
João Oliveira (Braga, PT)

12:20–13:50 Lunch

13:50–14:35 **The life of Schwann cells**
Jorge A. Pereira (Zurich, CH)

14:35–15:20 **Microglia, neuroinflammation, and neurodegeneration**
Dora Brites (Lisbon, PT)

15:20–15:40 Coffee break

15:40–16:25 **Reactive gliosis**
Frank Bradke (Bonn, DE)

16:25–17:10 **New trends in glial cell biology – insights from single-cell RNA-Seq**
Gonçalo Castelo-Branco (Stockholm, SE)

Wednesday, July 10, 2019

07:30–21:00		Meeting Office open	
8:30–12:30		**Workshops**	
	W01	**Emerging technologies to study glial cells**	Despachantes Hall
	W02	**Glia cells as drug targets: the industry view point**	Noble Hall
	W03	**Studying microglial heterogeneity and its implication in brain disorders using complementary cutting-edge technologies**	Infante Hall
	W04	**Imaging glial cells: image analysis tools to optimize data collection**	Archive Hall
	W05	**Reprogramming of glial cells into neural stem cells and neurons: mechanisms and applications**	D. Maria Hall
12:30–13:00		Lunch Break	
13:00–13:15		**Opening**	Archive Hall
13:15–14:15	L1	**Plenary Lecture** **What are the molecular mechanisms that control astrocyte development in health and disease?** Cagla Eroglu (Durham, US)	Archive Hall
14:15–17:15	PS I	**Poster Session I**	West Ground Floor
17:15–19:15		**Symposia I**	
	S01	**Role of astrocytes in sensori-motor integration in rhythm generating neuronal networks**	Noble Hall
	S02	**Using Drosophila for investigations of glia based human diseases**	D. Maria Hall
	S03	**Mechanobiology of glial cells**	Archive Hall
	S04	**Pericyte function in the normal and pathological brain**	Infante Hall
	S05	**Linking genetics and epigenetics to microglia biology**	Despachantes Hall
19:15–20:15	L2	**Plenary Lecture** **Genetic analysis of glial development and function in zebrafish** William Talbot (Stanford, US)	Archive Hall
20:15–21:00		Informal Get-together	Exhibition Area

Workshops (W01–W05)

W01

08:30–12:30 **Despachantes (Ground Floor)**

supported by NEUR ATRIS Innovation for Translational Neuroscience, Roche

Emerging technologies to study glial cells

Organizer: Carole Escartin (Fontenay-aux-Roses, FR)

08:30–09:10 **W01-01 → Utility of prospectively purified neural cells for drug development**
Lynette Foo (Basel, CH)

09:10–09:50 **W01-02 → Humanized models of microglial development to shed light on viral toxicity and neurodegenerative processes**
Julien Muffat (Toronto, CA)

09:50–10:30 **W01-03 → RNA-seq approaches to unravel the role of microglial cells in the early phase of Alzheimer disease**
Hélène Hirbec (Montpellier, FR)

10:30–11:10 **W01-04 → Studying astrocyte functions in the age of genetic engineering**
Nicole Déglon (Lausanne, CH)

11:10–11:50 **W01-05 → Novel strategies for intravital optical imaging and manipulation of glial cells**
Jaime Grutzendler (New Haven, US)

11:50–12:30 **W01-06 → Chemogenetic and optogenetic tools for astrocyte research in behaving animals**
Inbal Goshen (Jerusalem, IL)

W02

08:30–12:30 **Noble Hall (Ground Floor)**

Glia cells as drug targets: the industry view point

Organizers: Knut Biber (Ludwigshafen, DE), Thomas Möller (Cambridge, US)

08:30–09:10 **W02-01 → Are we ready for successful clinical targeting of neuroinflammation?: major challenges and how to overcome them**
Diego Gomez-Nicola (Surrey, UK)

09:10–09:50 **W02-02** → **Microglia as drug targets in AD – what does it take?**
Anna Mechling (Basel, CH)

09:50–10:30 **W02-03** → **Evolutionary divergence and the challenge of validating immune targets in Alzheimer's models**
David Hansen (San Mateo, US)

10:30–11:10 **W02-04** → **"May the force be with you"– Challenges in developing microglia-targeted therapeutics**
Stefan Lohmer (Bresso/Milan, IT)

11:10–11:50 **W02-05** → **Glial P2X7 in health & disease: a drug discovery & development perspective**

11:50–12:30 **Round table discussion**

W03

08:30–12:30 **Infante Hall (2nd Floor)**

Studying microglial heterogeneity and its implication in brain disorders using complementary cutting-edge technologies

Organizer: Marie-Eve Tremblay (Quebec, CA)

08:30–09:10 **W03-01** → **Region-specific involvement of microglia in persistent pain and opiate-induced tolerance and hyperalgesia**
Claire Gaveriaux-Ruff (Illkirch, FR)

09:10–09:50 **W03-02** → **Genomic origins of microglial cell functions**
David Gosselin (Quebec, CA)

09:50–10:30 **W03-03** → **Human trait of microglia: iPSC-derived microglia in modeling microglial functions**
Tarja Malm (Kuopio, FI)

10:30–11:10 **W03-04** → **Characterization of microglia and its heterogeneity in a chronic mild stress model**
Li Tian (Tartu, EE)

11:10–11:50 **W03-05** → **Imaging of microglial heterogeneity using correlative light and electron microscopy**
Marie-Eve Tremblay (Quebec, CA)

11:50–12:30 **W03-06** → **Differential functions of microglia in pain and memory**
Long-Jun Wu (Rochester, US)

W04

08:30–12:30 **Archive Hall (2nd Floor)**

Imaging glial cells: image analysis tools to optimize data collection

supported by frontiers in Neuroscience, Achucarro

Organizers:
João Malva (Coimbra, PT),
Jorge Valero (Leioa, ES)

08:30–09:18 **W04-01** → **Nanoscale imaging on adult myelin plasticity**
Myunghwan Choi (Suwon, KR)

09:18–10:06 **W04-02** → **Studying microglia in the retina: the eye as a window on neuro-inflammation**
Lies De Groef (Leuven, BE)

10:06–10:54 **W04-03** → **Single cell calcium imaging as a tool to identify new neural cells derived from stem cell cultures**
João Malva (Coimbra, PT)

10:54–11:42 **W04-04** → **Semi-automated analysis of microglial processes motility**
Jorge Valero (Leioa, ES)

11:42–12:30 **W04-05** → **Imaging glia *in vivo* using zebrafish**
David Lyons (Edinburgh, UK)

W05

08:30–12:30 **D. Maria Hall (2nd Floor)**

Reprogramming of glial cells into neural stem cells and neurons: mechanisms and applications

Organizer: Masato Nakafuku (Cincinnati, US)

08:30–09:10 **W05-01** → **Reprogramming of astrocytes into neural stem cells and neurons: Mechanisms and impact on brain repair**
Masato Nakafuku (Cincinnati, US)

09:10–09:50 **W05-02** → **Defined reprogramming codes for neural identity and diversity**
Kristin Baldwin (La Jolla, US)

09:50–10:30 **W05-03 → Turning glia into neurons in the adult mouse spinal cord**
Chun-Li Zhang (Dallas, US)

10:30–11:10 **W05-04 → Functional rescue by direct lineage reprogramming of astroglia into induced neurons in the diseased adult mouse brain**
Christophe Heinrich (Lyon, FR)

11:10–11:50 **W05-05 → Direct reprogramming of glia into subtype-specific neurons**
Daniella Rylander Ottosson (Lund, SE)

11:50–12:30 **W05-06 → Fast generation of human Schwann cells from stem cells and fibroblasts for disease modeling and regenerative medicine**
Vania Broccoli (Milan, IT)

Opening

13:00–13:15 Archive Hall (2nd Floor)

Plenary Lecture

L1 **13:15–14:15 Archive Hall (2nd Floor)**
Chair: Dwight Bergles (Baltimore, US)

What are the molecular mechanisms that control astrocyte development in health and disease?

Cagla Eroglu (Durham, US)

Poster Session I

PS I **14:15–17:15 West Ground Floor**

Symposia I (S01–S05)

S01 **17:15–19:15 Noble Hall (Ground Floor)**

Role of astrocytes in sensori-motor integration in rhythm generating neuronal networks

Organizers: Arlette Kolta (Montreal, CA), Jean-François Perrier (Copenhagen, DK)

17:15–17:45 **S01-01 → Astroglial control of the respiratory rhythm-generating circuits**
Alexander Gourine (London, UK)

17:45–18:15 **S01-02 → Functional rhythmogenic domains defined by astrocytic networks in trigeminal circuits controlling jaw movements**
Arlette Kolta (Montreal, CA)

18:15–18:45 **S01-03 → Neuron-astrocyte communication in the spinal cord of behaving mice**
Axel Nimmerjahn (La Jolla, US)

18:45–19:15 **S01-04 → Regulation of tremor by spinal astrocytes**
Jean-François Perrier (Copenhagen, DK)

S02 **17:15–19:15 D. Maria Hall (2nd Floor)**

Using Drosophila for investigations of glia based human diseases

Organizers: Renee Read (Atlanta, US), Lawrence Reiter (Memphis, US)

17:15–17:45 **S02-01 → A Drosophila-based approach to drug target discovery for human glioblastomas**
Renee Read (Atlanta, US)

17:45–18:15 **S02-02 → Molecular characterization and drug screening in a unique Drosophila model of gliopathic epilepsy**
Lawrence Reiter (Memphis, US)

18:15–18:45 **S02-03 → Cellular and molecular changes associated with narcolepsy and other chronic sleep/wake disorders, insights from Drosophila glia**
Laurent Seugnet (Lyon, FR)

18:45–19:15 **S02-04** → **Drosophila models to understand the function (and dysfunction) of Excitatory Amino Acid Transporters**
Donald van Meyel (Montreal, CA)

S03

17:15–19:15 **Archive Hall (2nd Floor)**

Mechanobiology of glial cells

Organizers: Helena Sofia Domingues (Braga, PT), Kristian Franze (Cambridge, UK)

17:15–17:45 **S03-01** → **Nuclear response of myelinating cells to physical forces**
Patrizia Casaccia (New York, US)

17:45–18:15 **S03-02** → **Mechanical plasticity in developing oligodendrocytes**
Helena Sofia Domingues (Braga, PT)

18:15–18:45 **S03-03** → **Mechanical signals regulate glia function in health and disease**
Kristian Franze (Cambridge, UK)

18:45–19:15 **S03-04** → **Oligodendrocyte mechanobiology: Quantifying and engineering oligodendrocyte-mediated remyelination *in vitro***
Krystyn J. van Vliet (Cambridge, US)

S04

17:15–19:15 **Infante Hall (2nd Floor)**

Pericyte function in the normal and pathological brain

Organizers: Serge Charpak (Paris, FR), Annika Keller (Zurich, CH)

17:15–17:45 **S04-01** → **Pericytes as guards at the neurovascular unit – a role in leukocyte trafficking into the CNS**
Annika Keller (Zurich, CH)

17:45–18:15 **S04-02** → **A role for brain pericytes in cerebrovascular regeneration after stroke**
Louis-Philippe Bernier (Vancouver, CA)

18:15–18:45 **S04-03** → **Calcium signaling underlying the vascular compartmentalization of functional hyperemia from the synapse to the pia**
Serge Charpak (Paris, FR)

18:45–19:15 **S04-04** → **Amyloid beta oligomers constrict human capillaries in Alzheimer's disease via signalling to pericytes**
Ross Roy Nortley (London, UK)

S05

17:15–19:15 **Despachantes Hall (Ground Floor)**

Linking genetics and epigenetics to microglia biology

Organizers: Susanne Marije Kooistra (Groningen, NL), Inge R. Holtman (La Jolla, US)

17:15–17:45 **S05-01** → **Epigenetic regulation of innate immune memory in microglia**
Susanne Marije Kooistra (Groningen, NL)

17:45–18:15 **S05-02** → **Microglia mosaicism and neurodegeneration**
Frederic Geissmann (New York, US)

18:15–18:45 **S05-03** → **Histone deacetylases in microglia development and function**
Ori Staszewski (Freiburg, DE)

18:45–19:15 **S05-04** → **Identification of human gene regulatory regions in brain cell types provides a functional insight of genetic variation in complex traits**
Inge R. Holtman (La Jolla, US)

Plenary Lecture

L2

19:15–20:15 **Archive Hall (2nd Floor)**

Chair: Rhona Mirsky (London, UK)

Genetic analysis of glial development and function in zebrafish

William Talbot (Stanford, US)

Thursday, July 11, 2019

07:30–19:00		Meeting Office open	
08:30–09:30	L3	**Plenary Lecture** **Divide and conquer: how glia separates and unites neurons in the fly brain** Christian Klämbt (Münster, DE)	Archive Hall
09:30–10:00		Break	
10:00–12:00		**Symposia II**	
	S06	**Role of GABAergic neurons in controlling oligodendroglia function and shaping their own myelination**	Infante Hall
	S07	**Role of microglia in neuro-degeneration**	Archive Hall
	S08	**From astrocyte functions to be-haviourial dysfunctions: searching the cellular roots of CNS disorders**	Despachantes Hall
	S09	**Glial scars: beneficial and negative impact on CNS repair**	Noble Hall
	S10	**Diversity and pathological impact of the glial microenvironment in brain tumors**	D. Maria Hall
12:00–13:00		Lunch Break	
12:30–14:00		**Miltenyi Biotech GmbH sponsored event**	Despachantes Hall
13:00–16:00	PS II	**Poster Session II**	West Ground Floor
16:00–18:00		**Symposia III**	
	S11	**Ionic excitability of astroglia beyond (and towards) calcium in health and disease**	Noble Hall
	S12	**Astrocytic phagocytosis and clearance in health and diseases**	Archive Hall
	S13	**Signals regulating developmental and adaptive myelination in the CNS**	Despachantes Hall
	S14	**Peripheral NS glia-interactions within the neuroimmunoaxis**	Infante Hall
	S15	**Genetic regulation of microglia development, functions and cellular interactions in the zebrafish**	D. Maria Hall
18:00–19:00	L4	**Plenary Lecture** **NG2-glia: A journey through their mystery in health and disease** Leda Dimou (Ulm, DE)	Archive Hall

Plenary Lecture

L3 — 08:30–09:30 — Archive Hall (2nd Floor)

Chair: Kelly Monk (Saint Louis, US)

Divide and conquer: how glia separates and unites neurons in the fly brain

Christian Klämbt (Münster, DE)

Symposia II (S06–S10)

S06 — 10:00–12:00 — Infante Hall (2nd Floor)

Role of GABAergic neurons in controlling oligodendroglia function and shaping their own myelination

Organizer: Maria Cecilia Angulo (Paris, FR)

10:00–10:30 **S06-01** → **The role of interneuron-secreted signals in developmental oligodendrocyte formation and implications for regeneration**
Anastassia Voronova (Edmonton, CA)

10:30–11:00 **S06-02** → **Embryonic oligodendrocyte progenitors form postnatal functional clusters with their lineage-related cortical interneurons**
Maria Cecilia Angulo (Paris, FR)

11:00–11:30 **S06-03** → **Morphological determinants of cortical GABAergic interneuron myelination**
Steven A. Kushner (Rotterdam, NL)

11:30–12:00 **S06-04** → **Adaptive cerebellar learning deficits and Purkinje cell dysfunction in a mouse model of neonatal brain injury**
Aaron Sathyanesan (Washington DC, US)

S07 — 10:00–12:00 — Archive Hall (2nd Floor)

Role of microglia in neurodegeneration

Organizers: Dora Brites (Lisbon, PT), Shane A. Liddelow (New York, US)

10:00–10:30 **S07-01** → **Deciphering neuron-microglia interactions in disease progression**
Dora Brites (Lisbon, PT)

10:30–11:00 **S07-02** → **What do reactive astrocytes (really) do?**
Shane A. Liddelow (New York, US)

11:00–11:30 **S07-03** → **RhoA signaling in microglia and the impact for neurodegeneration**
Renato Socodato (Porto, PT)

11:30–12:00 **S07-04** → **Microglia state changes and function in Alzheimer's Disease**
Beth Stevens (Boston, US)

S08

10:00–12:00 **Despachantes Hall (Ground Floor)**

From astrocyte functions to behavioural dysfunctions: searching the cellular roots of CNS disorders

Organizers: Barbara Di Benedetto (Regensburg, DE), Stéphane Oliet (Bordeaux, FR)

10:00–10:30 **S08-01** → **Bioenergetic control of synaptic plasticity by astrocytes during acute stress**
Jaideep Bains (Calgary, CA)

10:30–11:00 **S08-02** → **Signatures of astroglial dysfunctions in mood disorders**
Barbara Di Benedetto (Regensburg, DE)

11:00–11:30 **S08-03** → **Astroglial regulation of synaptic NMDA receptors**
Stéphane Oliet (Bordeaux, FR)

11:30–12:00 **S08-04** → **Serotonergic-astrocyte signaling regulates excitatory synaptic activity in PFC**
Gertrudis Perea (Madrid, ES)

S09

10:00–12:00 **Noble Hall (Ground Floor)**

Glial scars: beneficial and negative impact on CNS repair

Organizers: Frank Bradke (Bonn, DE), Dana McTigue (Columbus, US)

10:00–10:30 **S09-01** → **Modifying scar extracellular matrix to promote repair of the injured spinal cord**
Elizabeth Bradbury (London, UK)

10:30–11:00 **S09-02** → **Mechanisms of axon growth and regeneration**
Frank Bradke (Bonn, DE)

11:00–11:30 **S09-03** → **Mechanisms of fibrotic scarring and axon regeneration**
Christian Göritz (Stockholm, SE)

11:30–12:00 **S09-04** → **Depleting dividing NG2 cells after spinal cord injury alters scar formation, axon growth and functional recovery**
Dana McTigue (Columbus, US)

S10

10:00–12:00 **D. Maria Hall (2nd Floor)**

Diversity and pathological impact of the glial microenvironment in brain tumors

Organizers: Rainer Glass (Munich, DE), Michael Synowitz (Kiel, DE)

10:00–10:30 **S10-01** → **Molecular imaging provides specific information on pathological features of individual glial brain tumors to set up individualized strategies for brain tumor therapy**
Michael Synowitz (Kiel, DE)

10:30–11:00 **S10-02** → **Neuronal activity promotes proliferation of normal and neoplastic glial cells**
Michelle Monje-Deisseroth (Stanford, US)

11:00–11:30 **S10-03** → **The complex behaviour of reactive astrocytes in brain metastasis: from an excellent anti-tumour defence to a promising therapeutic target**
Manuel Valiente (Madrid, ES)

11:30–12:00 **S10-04** → **Tumor parenchymal cells shape glioma angiogenesis**
Rainer Glass (Munich, DE)

Miltenyi Biotech GmbH Sponsored Event

12:30–14:00 Despachantes Hall (Ground Floor)

Adult neural cells from healthy and diseased brain – challenges and opportunities

Chair: Hui Demuth-Zhang, Ph.D.
Product Manager Regenerative Medicine
Miltenyi Biotec GmbH, Bergisch Gladbach, Germany

Cochair: Melanie Jungblut, Ph.D.
Group Leader R&D Neuroscience
Miltenyi Biotec GmbH, Bergisch Gladbach, Germany

12:30–12:35 **Welcome & introduction**
Hui Demuth-Zhang, Ph.D.
Product Manager Regenerative Medicine
Miltenyi Biotec GmbH, Bergisch Gladbach, Germany

12:35–13:00 **Oligodendrocyte lineage cells in heath and disease**
Ana Mendanha Falcão, Ph.D.
Department of Medical Biochemistry and Biophysics, Karolinska Institutet, Stockholm, Sweden

13:00–13:25 **Microglia – key cellular modulators in brain**
Verena Claudia Haage
Max Delbrück Center for Molecular Medicine in the Helmholtz Association
Berlin, Germany

13:25–13:50 **Adult astrocyte characterization – reaching for the stars**
Pascale Eede
Charité University Hospital, Berlin, Germany

13:50–14:00 **New tools for efficient adult brain dissociation and neural cell isolation**
Melanie Jungblut, Ph.D.
Project Manager Neuroscience
Miltenyi Biotec GmbH, Bergisch Gladbach, Germany

Poster Session II

PS II 13:00–16:00 West Ground Floor

Symposia III (S11–S15)

S11

16:00–18:00 Noble Hall (Ground Floor)

Ionic excitability of astroglia beyond (and towards) calcium in health and disease

Organizer: Christine R. Rose (Duesseldorf, DE)

16:00–16:30 **S11-01** → **Astrocyte sodium: the link to calcium**
Christine R. Rose (Duesseldorf, DE)

16:30–17:00 **S11-02** → **Astrocytic Na+/H+ exchanger isoform 1 in neurovascular damage after ischemic stroke**
Dandan Sun (Pittsburgh, US)

17:00–17:30 **S11-03** → **Astroglial chloride-homeostasis in health and disease**
Verena Untiet (Copenhagen, DK)

17:30–18:00 **S11-04** → **Gliotransmitter release, intracellular chloride, and the bi-directional communication between neurons and astrocytes**
Alexander A. Mongin (Albany, US)

S12

16:00–18:00 Archive Hall (2nd Floor)

Astrocytic phagocytosis and clearance in health and diseases

Organizers: Laura Civiero (Padova, IT), Schuichi Koizumi (Yamanashi, JP)

16:00–16:30 **S12-01** → **Phagocytic roles of astrocytes in synapse elimination**
Won-Suk Chung (Daejeon, KR)

16:30–17:00 **S12-02** → **Lysosomal function and dysfunction in astrocytes**
Laura Civiero (Padova, IT)

17:00–17:30 **S12-03** → **Network remodeling by astrocytic synaptogenesis and phagocytosis**
Schuichi Koizumi (Yamanashi, JP)

17:30–18:00 **S12-04** → **Roles of Tunneling nanotubes (TNTs) and astrocytes in neurodegenerative diseases**
Chiara Zurzolo (Paris, FR)

S13

16:00–18:00 **Despachantes Hall (Ground Floor)**

Signals regulating developmental and adaptive myelination in the CNS

Organizer: Rashmi Bansal (Farmington, US)

16:00–16:30 **S13-01** → **AMPA receptor synaptic signalling in the oligodendrocyte lineage**
William David Richardson (London, UK)

16:30–17:00 **S13-02** → **Oligodendroglial responses to neuronal activity in the developing and adult CNS**
Ben Emery (Portland, US)

17:00–17:30 **S13-03** → **Axon-glial communication through the integration of growth factor signals in the regulation of myelination during development and in the adult CNS**
Rashmi Bansal (Farmington, US)

17:30–18:00 **S13-04** → **An axonal caliber-independent program that drives oligodendrocyte production and central myelination**
Junhua Xiao (Melbourne, AU)

S14

16:00–18:00 **Infante Hall (2nd Floor)**

Peripheral NS glia-interactions within the neuroimmunoaxis

Organizers: Katharine Francesca Barald (Ann Arbor, US), Lisa Cunningham (Bethesda, US)

16:00–16:30 **S14-01** → **Embryonic stem cell generated-inner ear glia and neurons facilitate studies of new therapeutic approaches to functional restoration of hearing in the inner ear; Focus on the NeuroImmuno Axis**
Katharine Francesca Barald (Ann Arbor, US)

16:30–17:00 **S14-02** → **Glia-like supporting cells in the inner ear protect sensory hair cells via release of secretory exosomes**
Lisa Cunningham (Bethesda, US)

17:00–17:30 **S14-03** → **Multicellular signaling between enteric glia, neurons, and immune cells regulates gut reflexes and intestinal neuroinflammation**
Brian D. Gulbransen (East Lansing, US)

17:30–18:00 **S14-04** → **Novel roles for enteric glia in health and chronic diseases**
Michel Neunlist (Nantes, FR)

S15

16:00–18:00 **D. Maria Hall (2nd Floor)**

Genetic regulation of microglia development, functions and cellular interactions in the zebrafish

Organizers: Tjakko Jakob van Ham (Rotterdam, NL), Valérie Wittamer (Brussels, BE)

16:00–16:30 **S15-01** → **Embryonic microglia derive from primitive macrophages and are replaced by cmyb-dependent definitive microglia in zebrafish**
Valérie Wittamer (Brussels, BE)

16:30–17:00 **S15-02** → **A cationic aminoacid exporter is vital for microglia and other tissue macrophages with sustained efferophagocytic activity**
Philippe Herbomel (Paris, FR)

17:00–17:30 **S15-03** → **Short- and long-range interactions between microglia and other systems**
Celia Shiau (Chapel Hill, US)

17:30–18:00 **S15-04** → **CSF1R mutations causing loss of microglia in the zebrafish and in human disease**
Tjakko Jakob Van Ham (Rotterdam, NL)

Plenary Lecture

L4

18:00–19:00 **Archive Hall (2nd Floor)**

Chair: João Bettencourt Relvas (Porto, PT)

NG2-glia: A journey through their mystery in health and disease

Leda Dimou (Ulm, DE)

Friday, July 12, 2019

07:30–18:00		Meeting Office open	
08:30–09:30	L5	**Plenary Lecture** **Cells that tile your brain: astrocyte roles in neural circuits and disease** Baljit S. Khakh (Los Angeles, US)	Archive Hall
09:30–10:00		Break	
10:00–12:00		**Symposia IV**	
	S16	**Reawakening the sleeping beauty: transgressing the lineage barrier from glia to neuron**	D. Maria Hall
	S17	**Role of glia in risk for psychiatric disorders**	Infante Hall
	S18	**Molecular, structural, and functional specialization of astrocytic domains**	Noble Hall
	S19	**The plasticity of myelinating glia**	Archive Hall
	S20	**Microglia in structural and functional circuit shaping: from physiology to pathology**	Despachantes Hall
12:00–13:00		Lunch Break	
13:00–16:00	PS III	**Poster Session III**	West Ground Floor
16:00–18:00		**Symposia V**	
	S21	**Uncovering glia function in epilepsy: from physiology to pathology**	D. Maria Hall
	S22	**Oligodendrocyte diversity and dynamics in development and repair**	Archive Hall
	S23	**Circuit remodeling by glial cells in development and disease**	Infante Hall
	S24	**Astrocytes and their regulation of adult neurogenesis and pathological states**	Noble Hall
	S25	**Contribution of glial extracellular vesicles to neurodegenerative diseases**	Despachantes Hall

Plenary Lecture

L5 — 08:30–09:30 — Archive Hall (2nd Floor)

Chair: David Atwell (London, UK)

Cells that tile your brain: astrocyte roles in neural circuits and disease

Baljit S. Khakh (Los Angeles, US)

Symposia IV (S16–S20)

S16 — 10:00–12:00 — D. Maria Hall (2nd Floor)

Reawakening the sleeping beauty: transgressing the lineage barrier from glia to neuron

Organizers: Benedikt Berninger (London, UK), Ana Martin-Villalba (Heidelberg, DE)

10:00–10:30 **S16-01** → **Understanding the molecular nature of glia and neuronal identity**
Ana Martin-Villalba (Heidelberg, DE)

10:30–11:00 **S16-02** → **The neurogenic potential of neocortical astrocytes in response to stab-wound injury**
Margherita Zamboni (Stockholm, SE)

11:00–11:30 **S16-03** → **Engineering neurogenesis from postnatal glia**
Benedikt Berninger (London, UK)

11:30–12:00 **S16-04** → **Clonal lineage determines the direct conversion of thalamic astrocytes into subtype-specific thalamocortical neurons**
Guillermina Lopez-Bendito (San Juan de Alicante, ES)

S17 — 10:00–12:00 — Infante Hall (2nd Floor)

Role of glia in risk for psychiatric disorders

Organizers: Staci Bilbo (Boston, US), Lawrence Stephen Wilkinson (Cardiff, UK)

10:00–10:30 **S17-01 → Modeling autism in mice: Prenatal inflammation by combined environmental stressors persistently alters microglial phenotype and behavior in male but not female mice**
Staci Bilbo (Boston, US)

10:30–11:00 **S17-02 → Neuron-microglia signaling in autism spectrum disorders**
Gaia Novarino (Klosterneuburg, AT)

11:00–11:30 **S17-03 → Role of glial cells in confereing risk for neurodevelopmental disorders**
Yasir Ahmed Syed (Cardiff, UK)

11:30–12:00 **S17-04 → Haploinsufficiency of the psychopathology risk gene candidate CYFIP1 impacts on white matter tracts, oligodendrocytes and microglia**
Lawrence Stephen Wilkinson (Cardiff, UK)

S18 — 10:00–12:00 — Noble Hall (Ground Floor)

Molecular, structural, and functional specialization of astrocytic domains

Organizer: Iaroslav Alex Savtchouk (Lausanne, CH)

10:00–10:30 **S18-01 → Local translation in astrocytes**
Joseph Dougherty (St. Louis, US)

10:30–11:00 **S18-02 → Inter- and intra-regional molecular heterogeneity of astrocytes in the adult mouse brain**
Matthew Guy Holt (Leuven, BE)

11:00–11:30 **S18-03 → 3D exploration of the ultrastructural organization of the astrocyte via HPF and FIB/SEM**
Karin Pernet Gallay (La Tronche Cedex, FR)

11:30–12:00 **S18-04 → New evidence of sub-cellular functional compartmentalization of astrocytic Ca^{2+} signals: dissecting out the synaptic activity-dependent component**
Iaroslav Alex Savtchouk (Lausanne, CH)

S19 — 10:00–12:00 — Archive Hall (2nd Floor)

The plasticity of myelinating glia

Organizer: Sarah Kucenas (Charlottesville, US)

10:00–10:30 **S19-01 → Investigating the role of new myelin formation in repair after contusion spinal cord injury in rodents**
Peggy Lee Assinck (Edinburgh, UK)

10:30–11:00 **S19-02 → How do Schwann cells invest the CNS?**
Beatriz Garcia-Diaz (Paris, FR)

11:00–11:30 **S19-03 → The origin of remyelinating Schwann cells in the CNS**
Robin Franklin (Cambridge, UK)

11:30–12:00 **S19-04 → Motor exit point (MEP) glia: Novel myelinating glia that bridge CNS and PNS myelin**
Sarah Kucenas (Charlottesville, US)

S20 — 10:00–12:00 — Despachantes Hall (Ground Floor)

Microglia in structural and functional circuit shaping: from physiology to pathology

Organizers: Michela Matteoli (Rozzano, IT), Rosa Chiara Paolicelli (Schlieren, CH)

10:00–10:30 **S20-01 → The role of the microglial innate immune receptor TREM2 in synapse elimination**
Michela Matteoli (Rozzano, IT)

10:30–11:00 **S20-02 → Loss of microglial TDP-43 induces alteration in cytokine expression, and is associated with loss of synapses and motor deficits in mice**
Rosa Chiara Paolicelli (Schlieren, CH)

11:00–11:30 **S20-03 → Key role of microglia in brain damage of preterm neonates**
Pierre Gressens (Paris, FR)

11:30–12:00 **S20-04 → Microglia attenuate the function of inhibitory synapses in epileptogenesis**
Ryuta Koyama (Tokyo, JP)

Poster Session III

PS III 13:00–16:00 West Ground Floor

Symposia V (S21–S25)

S21

16:00–18:00 D. Maria Hall (2nd Floor)

Special Trainee Symposium

Uncovering glia function in epilepsy: from physiology to pathology

Organizers: Josien Visser (Paris, FR), Till S. Zimmer (Amsterdam, NL)

16:00–16:30 **S21-01** → ***In vivo* contributions of astroglial $GABA_B$ receptors to pathological network function in temporal lobe epilepsy**
Laura Christel Caudal (Homburg, DE)

16:30–17:00 **S21-02** → **Reciprocal signaling between specific GABAergic interneurons and astrocytes**
Vanessa Henriques (Padova, IT)

17:00–17:30 **S21-03** → **A role for astrocytes on the visual properties in the superior colliculus?**
Josien Visser (Paris, FR)

17:30–18:00 **S21-04** → **MicroRNA-155 induces chronic activation of anti-oxidant signaling: implications in epilepsy**
Till S. Zimmer (Amsterdam, NL)

S22

16:00–18:00 Archive Hall (2nd Floor)

Oligodendrocyte diversity and dynamics in development and repair

Organizers: Brahim Nait Oumesmar (Paris, FR), Akiko Nishiyama (Storrs, US)

16:00–16:30 **S22-01** → **Diversity of oligodendrocyte precursor cell behaviour and function *in vivo***
Tim Czopka (Munich, DE)

16:30–17:00 **S22-02** → **Disease-specific oligodendrocyte lineage cells arise in Multiple Sclerosis**
Ana Mendanha Falcão (Stockholm, SE)

17:00–17:30 **S22-03** → **Sox17 transcription factor negatively regulates oligodendrocyte progenitor cell differentiation and myelination**
Brahim Nait Oumesmar (Paris, FR)

17:30–18:00 **S22-04** → **Regulation of PDGF-dependent OPC proliferation by microglial Neuropilin-1 in gray and white matter**
Akiko Nishiyama (Storrs, US)

S23

16:00–18:00 Infante Hall (2nd Floor)

Circuit remodeling by glial cells in development and disease

Organizer: Felipe A. Court (Santiago, CL)

16:00–16:30 **S23-01** → **Defining the diversity of neuronal remodeling events**
Yunsik Kang (Portland, US)

16:30–17:00 **S23-02** → **Schwann cells are early and active participants of axonal degeneration**
Felipe A. Court (Santiago, CL)

17:00–17:30 **S23-03** → **Midbrain microglia: unique cell phenotypes and their impact on neuronal function**
Lindsay M. De Biase (Baltimore, US)

17:30–18:00 **S23-04** → **Neuron-Glia interactions play key roles during neuronal remodeling in Drosophila**
Oren Schuldiner (Rehovot, ISR)

S24

16:00–18:00 Noble Hall (Ground Floor)

Astrocytes and their regulation of adult neurogenesis and pathological states

Organizers: Ruth Beckervordersanforth (Erlangen, DE), Chiara Rolando (Basel, CH)

16:00–16:30 **S24-01** → **Adult astrogenesis and functional astrocyte heterogeneity in the adult mouse hippocampus**
Ruth Beckervordersandforth (Erlangen, DE)

16:30–17:00 **S24-02** → **Astrocytes as active constituents of the neurogenic niche**
Nicolas Toni (Prilly-Lausanne, CH)

17:00–17:30 **S24-03** → **Post-transcriptional regulation during adult neurogenesis and brain ageing**
Chiara Rolando (Basel, CH)

17:30–18:00 **S24-04** → **Immunopanning purification of primary human astrocytes and comparison with mouse astrocytes**
Ye Zhang (Los Angeles, US)

S25

16:00–18:00 **Despachantes Hall (Ground Floor)**

Contribution of glial extracellular vesicles to neurodegenerative diseases

Organizer: Ana Raquel Santiago (Coimbra, PT)

16:00–16:30 **S25-01** → **Stress-driven sorting, degradation and secretion of protein Tau in Alzheimer's disease brain pathology**
Patrícia Gomes (Braga, PT)

16:30–17:00 **S25-02** → **Myeloid extracellular vesicles: messengers from the diseased brain**
Roberto Furlan (Milano, IT)

17:00–17:30 **S25-03** → **Exosomes derived from microglia exposed to elevated pressure code for an inflammatory response: implications for retinal degeneration**
Ana Raquel Santiago (Coimbra, PT)

17:30–18:00 **S25-04** → **Choroid-plexus derived extracellular vesicles as mediators of neuroinflammation**
Roosmarijn Vandenbroucke (Zwijnaarde, BE)

Saturday, July 13, 2019

07:30–14:30		Meeting Office open	
08:30–09:30	L6	**Plenary Lecture** **Astrocytes in brain diseases: role in synapse dysfunction and cognitive impairment** Elly Hol (Utrecht, NL)	Archive Hall
09:30–10:00		Break	
10:00–12:00		**Symposia VI**	
	S26	**Reactive astrocytes in waste clearance and regeneration – general and disease-specific responses, opportunities for treatment**	Archive Hall
	S27	**Exploiting glutamate signaling to promote myelin remodeling and repair**	D. Maria Hall
	S28	**Metabolic dialogue between astrocytes and neurons is required for long-term memory**	Noble Hall
	S29	**Generating and regenerating myelinating Schwann cells**	Infante Hall
	S30	**Oligodendrocytes: maturation, metabolism and functions beyond myelin biogenesis**	Despachantes Hall
12:00–13:00		Lunch Break	
13:00–14:00	L7	**Plenary Lecture** **Neuron-microglial communication in brain health and disease** Brian MacVicar (Vancouver, CA)	Archive Hall
14:00–14:15		**Closing**	Archive Hall
14:30–16:00		ORION Open Science Workshop	D. Maria Hall

Plenary Lecture

L6 08:30–09:30 Archive Hall (2nd Floor)

Chair: Andrea Volterra (Lausanne, CH)

Astrocytes in brain diseases: role in synapse dysfunction and cognitive impairment

Elly Hol (Utrecht, NL)

Symposia VI (S26–S30)

S26 10:00–12:00 Archive Hall (2nd Floor)

Reactive astrocytes in waste clearance and regeneration – general and disease-specific responses, opportunities for treatment

Organizer: Milos Pekny (Gothenburg, SE)

10:00–10:30 **S26-01** → **Complement: a modulator of astrocyte responses in the injured and diseased brain**
Marcela Pekna (Gothenburg, SE)

10:30–11:00 **S26-02** → **The glymphatic system: reactive gliosis as a negative regulator**
Maiken Nedergaard (Copenhagen, DK)

11:00–11:30 **S26-03** → **Reactive astrocytes in waste clearance and regeneration – general and disease-specific responses, opportunities for treatment**
Milos Pekny (Gothenburg, SE)

11:30–12:00 **S26-04** → **Pathological plasticity of astroglia**
Alexei Verkhratsky (Manchester, UK)

S27 10:00–12:00 D. Maria Hall (2nd Floor)

Exploiting glutamate signaling to promote myelin remodeling and repair

supported by MS Society

Organizers: Francesca Boscia (Naples, Italy), Ragnhildur Thora Karadottir (Cambridge, UK)

10:00–10:30 **S27-01** → **Emerging role of D-Aspartate in CNS myelin repair**
Francesca Boscia (Naples, IT)

10:30–11:00 **S27-02** → **Enhancing recovery from a demyelinating lesion through the actions of brain-derived neurotrophic factor (BDNF): The role of astrocytes and metabotropic glutamate receptor agonists**
Cheryl F. Dreyfus (Piscataway, US)

11:00–11:30 **S27-03** → **Axo-myelinic signaling in physiology and disease**
Peter K. Stys (Calgary, CA)

11:30–12:00 **S27-04** → **Modulating neuronal activity and glutamate signalling to promote remyelination**
Ragnhildur Thora Karadottir (Cambridge, UK)

S28 10:00–12:00 Noble Hall (2nd Floor)

Metabolic dialogue between astrocytes and neurons is required for long-term memory

Organizers: Cristina Alberini (New York, US), Gilles Bonvento (Fontenay-aux-Roses, FR)

10:00–10:30 **S28-01** → **Developmental regulation of hippocampal glucose metabolism required for long-term memory**
Cristina Alberini (New York, US)

10:30–11:00 **S28-02** → **Glycolysis-derived L-serine in astrocytes contributes to spatial memory**
Gilles Bonvento (Fontenay-aux-Roses, FR)

11:00–11:30 **S28-03** → **Neurons and neuronal activity control gene expression in astrocytes to regulate their development and metabolism**
Giles Hardingham (Edinburgh, GB)

11:30–12:00 **S28-04** → **A specific neuronal cell body-glia coupling sustains long-term memory in Drosophila**
Pierre-Yves Plaçais (Paris, FR)

S29 10:00–12:00 Infante Hall (2nd Floor)

Generating and regenerating myelinating Schwann cells

supported by PNS Peripheral Nerve Society

Organizers: Roman Chrast (Stockholm, SE), Claire Jacob (Fribourg, CH)

10:00–10:30 **S29-01** → **Three-dimensional analysis of the spatial-temporal progression of peripheral nervous system myelination in mice**
Roman Chrast (Stockholm, SE)

10:30–11:00 **S29-02** → **Cell adhesion molecules of the nodes of Ranvier: targets in inflammatory demyelinating neuropathies**
Jérôme J. Devaux (Montpellier, FR)

11:00–11:30 **S29-03** → **Functions of Schwann cells in the regeneration process after injury**
Claire Jacob (Fribourg, CH)

11:30–12:00 **S29-04** → **Therapy in demyelinating hereditary neuropathies**
Michael W. Sereda (Göttingen, DE)

S30

10:00–12:00 **Despachantes Hall (Ground Floor)**

Oligodendrocytes: maturation, metabolism and functions beyond myelin biogenesis

Organizer: Hauke Werner (Göttingen, DE)

10:00–10:30 **S30-01** → **Proteomic discovery of novel myelin proteins relevant for the structure and maintenance of healthy axon/myelin-units**
Hauke Werner (Göttingen, DE)

10:30–11:00 **S30-02** → **Shining light on the myelin sheath physiology**
Maarten H.P. Kole (Amsterdam, NL)

11:00–11:30 **S30-03** → **Novel insights into axon-oligodendrocyte interactions regulating metabolic support to myelinated axons**
Aiman S. Saab (Zürich, CH)

11:30–12:00 **S30-04** → **Endogenous metabolites modulate oligodendrocyte maturation and function**
Luke Lairson (La Jolla, US)

Plenary Lecture

L7

13:00–14:00 **Archive Hall (2nd Floor)**

Neuron-microglial communication in brain health and disease

Brian MacVicar (Vancouver, CA)

Closing

14:00–14:15 **Archive Hall (2nd Floor)**

ORION Open Science Workshop

14:30–16:00 **D. Maria Hall (2nd Floor)**

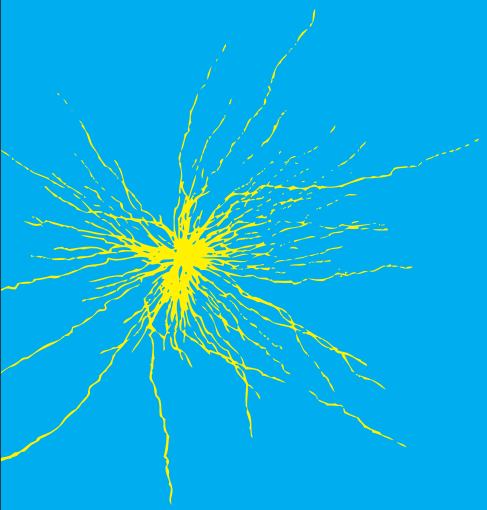
This workshop will establish what Open Science is and why it is needed. There will be an overview of the main areas of Open Science: Open Access, Open Data, Public Engagement. In addition, there will be some practical tips on changes researchers can make towards Open Science, the potential career benefits of Open Science, and information on what resources the ORION project can provide. The session is suitable for those with very little or basic knowledge of open science.

Trainers
Dr. Luiza Bentsson and Dr. Emma Harris

Agenda
- Icebreakers
- Presentation: "What is Open Science?"
- What's your opinion: interactive card activity
- Action plans: brainstorming and individual action plans
- Q&A

Registration
This workshop is free of charge, but registration is required. Please register at the Meeting Office until July 13, 2019 at 10:00.

Poster Presentations



Poster Sessions

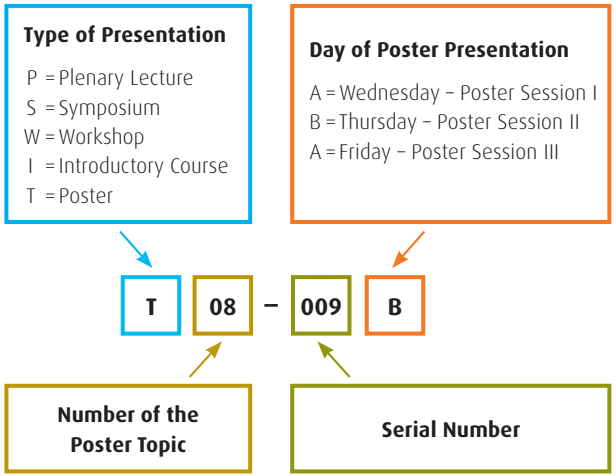
Poster Session I
Wednesday, July 10 **14:15–17:15**

Poster Session II
Thursday, July 11 **13:00–16:00**

Poster Session III
Friday, July 12 **13:00–16:00**

Explanation of poster numbers:
There is one poster session per day: poster session I on Wednesday, July 10, poster session II on Thursday, July 11 and poster session III on Friday, July 12. Posters with a serial number ending with an A are displayed on Wednesday (= poster session I). Posters with a serial number ending with a B are displayed on Thursday (= poster session II). Poster with a serial number ending with a C are displayed on Friday. Thus, every poster will be discussed on one day.

Each poster session (180 min) is divided into two parts (each 90 min): uneven and even serial numbers. In the first part of a poster session posters with uneven serial numbers will be discussed (e.g. T12-03B). In the second 90 min of a session posters with even serial numbers will be discussed (e.g. T12-02B). Posters should be mounted on the day of presentation until 10:00 h and are supposed to remain displayed until 19:15 h on Wednesday, July 10 (Poster Session I), 18:00 h on Thursday, July 11 (Poster Session II) and 18:00 h on Friday, July 12 (Poster Session III).



Division of Poster Sessions

Poster Session I
(Wednesday, July 10)

T01 – Cell migration
T02 – Cell proliferation, lineages and differentiation
T03 – Cell signaling
T04 – Cytoskeleton
T05 – Degenerative disease, toxicity and neuroprotection
T06 – (Energy) Metabolism
T07 – Extracellular matrix and cell adhesion molecules
T08 – Gene expression and transcription factors
T09 – Glial-neuronal interactions
T12 – Myelin
T14 – Neuroimmunology and neuroinflammation

Poster Session II
(Thursday, July 11)

T02 – Cell proliferation, lineages and differentiation
T05 – Degenerative disease, toxicity and neuroprotection
T09 – Glial-neuronal interactions
T11 – Memory and learning
T12 – Myelin
T13 – Neural stem/progenitor cells
T14 – Neuroimmunology and neuroinflammation
T15 – Neurovascular interactions
T16 – Regeneration and repair
T19 – Tumours

Poster Session III
(Friday, July 12)

T05 – Degenerative disease, toxicity and neuroprotection
T09 – Glial-neuronal interactions
T10 – Ischemia and hypoxia
T12 – Myelin
T14 – Neuroimmunology and neuroinflammation
T16 – Regeneration and repair
T17 – Transmitter receptors, ion channels and gap junctions
T20 – Glial diversity
T21 – Neuromodulation by Glia

T18 – Trophic factors will not be presented because there were no submissions.

Posters

T01 Cell Migration

T01-001A
Redox regulated migration of glia cells
C. Wilms, K. Lepka, L. Pudelko, L. Bräutigam, F. Häberlein, B. Odermatt, O. Aktas, C. Berndt

T01-002A
Blood vessels guide Schwann cell migration in the adult CNS towards demyelinated lesions
B. Garcia-Diaz, C. Bachelin, F. Coulpier, G. Gerschenfeld, C. Deboux, V. Zujovic, P. Charnay, P. Topilko, A. Baron-Van Evercooren

T01-003A
$p27^{Kip1}$ in microglia motility during brain development
J. Beeken, S. Kessels, B. Brône, L. Nguyen

T01-004A
SKAP2 as new regulator of oligodendroglial migration
J. Ghelman, S. Albrecht, L. Starost, M. Ehrlich, A. Zarbock, T. Kuhlmann

T01-005A
Characterization of oligodendrocyte precursor cell migration during corticogenesis
F. Lepiemme, C. G. Silva, L. Nguyen

T01-006A
Extracellular vesicles trigger ATP release and activate migration of human microglial cells
K. Kriaučiūnaitė, U. Jonavičė, T. Malm, R. Giniatulin, A. Pivoriūnas

T01-007A
Majority of spinal cerebrospinal fluid-contacting neurons in C57Bl/6N mice is present in distal ventral position unlike in other studied animal species
J. Sevc, Z. Tonelli Gombalova, J. Kosuth, A. Alexovic Matiasova, T. Giallongo, S. Carelli, Z. Daxnerova

T01-008A
A novel essential role of vitamin C in a preserving of Bergmann glia scaffold and normal neuronal migration
I.D. Capo, N.P. Hinic, D. Lalosevic, J. Markovic, N. Stilinovic, N. Vuckovic, S. Sekulic

T02 Cell proliferation, lineages and differentiation

T02-001A
Cortical interlaminar astrocytes in mammalian evolution and development
C. Falcone, M. Wolf-Ochoa, S. Amina, T. Hong, G. Vakilzadeh, W. Hopkins, P. Hof, C. Sherwood, P. Manger, S. Noctor, V. Martínez-Cerdeño

T02-002A
Deciphering the origins of repopulated microglia in the central nervous system
B. Peng

T02-003A
BMAL1 times local astrocyte proliferation in postnatal mouse cortex
O.B. Mayo, D. De Pietri Tonelli

T02-004A
Regulation of wrapping glia differentiation in Drosophila eye disc
Y.H. Sun, C.-K. Tsao, Y.-F. Huang

T02-005A
Direct *in vivo* glia-to-neuron conversion in the postnatal mouse cerebral cortex
S. Péron, N. Marichal, L. Torres-Masjoan, N. Elbaz, C. Galante, M. Karow, B. Berninger

T02-006A
Transcription regulation of gliogenesis: a play between transcription factors and chromatin remodelers
C. Marie, C. Parras

T02-007A
Tuberous Sclerosis Complex mutations affect human induced pluripotent stem cell-derived astrocytes
S. Dooves, L. Gasparotto, V.M. Heine

T02-008A
Functional integration of *in vivo* glia-derived induced neurons in the postnatal cerebral cortex
N. Marichal, S. Péron, C. Galante, M. Karow, B. Berninger

T02-009A
TGFβ mediates the differentiation of neural precursor cells from the subventricular zone
L.I. Gómez Pinto, D. Rodriguez, A. Adamo, P. Mathieu

T02-010A
Development of the astrocyte perivascular MLC1/GlialCAM complex defines a temporal window for the postnatal gliovascular unit maturation
A. Gilbert, X.E. Vidal, R. Estevez, M. Cohen-Salmon, A.-C. Boulay

T02-011A
Chromatin remodelling and extrinsic signals drive transcriptional astrocyte maturation
M. Lattke, F. Guillemot

T02-012A
Astrogenesis and dynamic of astrocytes in the adult mouse hippocampus
J. Schneider, J. Karpf, R. Beckervordersandforth

T02-013A
Duplication of the 1q21.1 locus leads to oligodendrocyte dysfunction
G.D. Chapman, T. Singh, S. Lunn, Y.A. Syed

T02-014A
Schwann cells' division and polarity in zebrafish development
A. Mikdache, J. Loisel-Duwattez, E. Lesport, C. Degerny, M. Tawk

T02-015A
Impact of the microRNA family miR-204/-211 on the oligodendroglial gene regulatory network
J. Wittstatt, M. Weider, S. Reiprich, M. Wegner

T02-016A
Regulation of Schwann cells oncotransformation by changes in *Nf2*/merlin expression, Hippo/YAP signaling and DNA methylation
V. Magnaghi, V. Bonalume, L. Castelnovo, M. Ballabio, L. Caffino, F. Fumagalli, A. Colciago

T02-017A
Functional divergence of murine iPSC-derived microglia and macrophages is driven by developmental and environmental cues
A. Quarta, D. Le Blon, T. D'Aes, Z. Pieters, S. Hamzei Taj, F. Miró-Mur, E. Luyckx, E. Van Breedam, J. Daans, H. Goossens, S. Dewilde, N. Hens, V. Pasque, A. Planas, M. Hoehn, Z. Berneman, P. Ponsaerts

T02-018A
Repurposed drugs to promote proliferation and/or maturation of induced oligodendrocyte precursors derived from adult rat mesenchymal cells
J. Pascual-Guerra, L. Vellosillo, M.P. Muñoz, C.L. Paíno

T02-019A

Early embryonic NG2 glia are exclusively gliogenic in the central nervous system

W. Huang, Q. Guo, X. Bai, A. Scheller, F. Kirchhoff

T02-020A

Proteomic profiling shows changes in proteins involved in oligodendrocyte differentiation in ceruloplasmin knockout mice

B. Villadsen, C. Thygesen, M. Grebing, S.J. Kempf, H.H. Nielsen, M. Thomassen, T.A. Kruse, M.R. Larsen, B. Finsen

T02-021A

Establishing human glial differentiation in three-dimensional (3D) culture systems

J. Giacomoni, A. Fiorenzano, S. Nolbrant, D.B. Hoban, M. Parmar

T02-022A

Ontogenesis of glial diversity in the cerebellum as revealed through quantitative *in vivo* clonal analyses

V. Cerrato, E. Parmigiani, M. Figueres-Oñate, M. Betizeau, C. Ossola, F. Luzzati, L. López-Mascaraque, A. Buffo

T02-023A

Injury signals drive lineage conversion of premalignant astrocytes: insights into tumour initiation

H. Simpson Ragdale, M. Clements, L. Zakka, L. Conde, S. Marguerat, S. Parrinello

T02-024A

BRCA1/BRCA2-containing complex subunit 3 controls oligodendrocyte differentiation by dynamically regulating lysine 63-linked ubiquitination

S.-F. Tzeng, C.-Y. Wang, B. Deneen

T02-025A

OPC-derived astrocyte formation after spinal cord injury

L.M. Milich, D.H. Lee, J. Lee

T02-026A

The ablation of primary cilia from adult oligodendrocyte progenitor cells reduces proliferation and oligodendrogenesis, and impairs fine motor control

C. Cullen, M. O'Rourke, S. Beasley, L. Auderset, Y. Zhen, R. Gasperini, K. Young

T02-027A

Expression and functional characterisation of Acetylcholine M2 muscarinic receptor in human Schwann-like cells induced from adipose mesenchymal stem cells

R. Piovesana, A. Faroni, A.M. Tata, A.J. Reid

T02-028A

Unraveling the role of the GPR17 protein and GPR17$^+$ cells in adult and young mice

A.J. Miralles Infante, L. Dimou

T02-029B

Growth adaptions of persistent radial glia in the telencephalon of fish

A.F. Mack, L. de Oliveira-Mello, U. Mattheus, P.H. Neckel

T02-030B

Molecular regulation of amphibian gliogenesis

C. Ulrich, A.K. Sater

T02-031B

Proliferation and differentiation of NG2-glia following different types of brain disorders

D. Kirdajova, D. Krocianova, D. Kolenicova, J. Kriska, L. Valihrach, M. Anderova

T02-032B

Pro-inflammatory IL-1β enhances oligodendrocyte progenitor cell proliferation and differentiation and promotes myelin protein production

S.P. Kuhn, G. Mullan, G. Mcllwaine, S. Fleville, M. Dittmer, A. Guzman de la Fuente, D. Fitzgerald, Y. Dombrowski

T02-033B

Heterogeneity of NG2-glia following focal cerebral ischemia

D. Kročianová, D. Kirdajova, D. Kolenicova, S. Benesova, L. Valihrach, D. Švec, M. Anderova

T02-034B

Characterization of the molecular mechanisms of Tns3 function in oligodendroglia

E. Merour, H. Hmidan, A. Clavairoly, C. Marie, M. Frah, P. Ravassard, S.H. Lo, C. Parras

T02-035B

Regeneration of oligodendrocyte progenitor cells following pharmogenetic ablation in the adult central nervous system

Y.L. Xing, B. Chuang, S. Mitew, T.D. Merson

T02-036B

Nanostructured interfaces enable *in vivo*-like differentiation of primary astrocytes and allow multiscale study of their functionality *in vitro*

E. Saracino, A.I. Borrachero-Conejo, L. Maiolo, V. Guarino, K. O'Neill, D. Polese, F. Formaggio, M. Caprini, M. Muccini, G. Fortunato, L. Ambrosio, R. Zamboni, W. Losert, A. Convertino, V. Benfenati

T02-037B

Developmental trajectories towards the oligodendrocyte lineage in the early human and mouse brain: insights from single-cell RNA-Seq

D. van Bruggen, E. Sundström, G. Castelo-Branco

T02-038B

Effects of physical activity in the proliferation and differentiation of NG2-glia in the adult mouse brain and its mechanism of action

J.T. Eugenin von Bernhardi, N. Unger, A. Imhof, I. Forné, L. Dimou

T02-039B

Automated brain dissociation and magnetic isolation of neurons increases efficiency and sensitivity of single cell analysis

S. Reiß, S. Tomiuk, R. Kläver, J. Soyka, M. Delso Vallejo, F. Bizouarn, A. Bosio, M. Jungblut

T02-040B

Molecular signalling pathways underlying regulatory T cell (Treg)-enhanced oligodendrocyte differentiation

M. Dittmer, R. Penalva, D.C. Fitzgerald

T02-041B

Targeted nanomedicines to stimulate the differentiation of oligodendrocyte progenitor cells in the scope of multiple sclerosis

Y. Labrak, P. Saulnier, V.E. Miron, G.G. Muccioli, A. des Rieux

T02-042B

Chemically defined medium promotes the functional differentiation of primary cultured astrocytes

F. Formaggio, M. Caprini, S. Ferroni

T02-043B

The specific expression of BMP4 in immature oligodendrocytes

A. Fudge, W.D. Richardson, H. Li

T02-044B

Rapid and efficient induction of functional astrocytes from human pluripotent stem cells

I. Canals, A. Ginisty, R. Timmerman, J. Fritze, E. Quist, G. Mikinyte, E. Monni, M.G. Hansen, D. Bryder, I. Hidalgo, J. Bengzon, H. Ahlenius

T02-045B

Generation of human astrocyte cell lines to model fragile X syndrome

U.-K. Peteri, L. Roybon, M. Castrén

T02-046B

Establishing the sphingolipid profile of oligodendrocyte differentiation

S. Cummings, T. Nguyen, S. Bennett, R. Kothary

T02-047B

***In vitro* modeling of dysfunctional glial cells in neurodegenerative diseases using human pluripotent stem cells**

J.A. Garcia Leon, K. Eggermont, K. Neyrinck, J.C. Davila, J. Vitorica, C. Verfaillie, A. Gutierrez

T02-048B

Progenitor potential and cell progeny of NG2-glia

R. Sánchez González, A. Bribián, N. Salvador-Cabos, L. López-Mascaraque

T02-049B

A proliferation-permissive role for GluA2 NG2 cells

V. Nicolas, W. Sun, A. Lamcaj, O. Thanscheidt, S. Schoch, D. Dietrich

T02-050B

Role of microglial clusters in proliferation after facial nerve axotomy in mice

G. Manich, A. Kakoulidou, N. Villacampa, B. Almolda, B. Gonzalez, B. Castellano

T02-051B

Effect of chitinase 3-like protein 1 on oligodendrocyte precursor cells proliferation and differentiation

L. du Trieu de Terdonck, R. Boitet, P. Marin, E. Thouvenot

T02-052B

This poster has been withdrawn.

T02-053B

Proliferation/differentiation dysregulation in AGC1 deficiency brain precursor cells

S. Petralla, E. Poeta, S.N. Barile, L.E. Pena Altamira, L. Celauro, S. Anderson, F.M. Lasorsa, B. Monti

T02-054B

The K_{2P}-channel TASK1 affects oligodendroglial differentiation but not remyelination

S. Albrecht, S. Korr, L. Nowack, V. Narayanan, L. Starost, F. Stortz, M.J. Araúzo-Bravo, S.G. Meuth, T. Kuhlmann, P. Hundehege

T02-055B

This poster has been withdrawn.

T03 Cell signaling

T03-001A

Involvement of endosomal signaling in gingipain-induced migration, inflammation response and phagocytosis in microglia after activation of PAR2

S. Nonaka, A. Iseki, A. Amano, Y. Nakanishi, J. Ni, Z. Wu, H. Nakanishi

T03-002A

Using mixed-species co-culture to study microglial crosstalk with neurons and astrocytes

J. Qiu, O. Dando, P. Baxter, P. Hasel, G. Hardingham

T03-003A

Extended spontaneous Na^+ fluctuations within the neonatal mouse brain

L. Felix, C.R. Rose

T03-004A

The VGF-derived peptide TLQP-21 impairs purinergic control of chemotaxis and phagocytosis in cultured microglia

N.N. Elmadany, F. de Almeida Sassi, S. Wendt, J. Visser, D. Hambardyumzan, S. Wolf, H. Kettenmann, M. Semtner

T03-005A

Oxidative metabolism of 2-AG in spinal glial cells: a potential role in pain processing?

K. Dócs, Z. Mészár, P. Szücs, Z. Hegyi

T03-006A

A novel role of signal transducers and activators of transcription 6 in mitochondria of astrocytes

H. Kim, S.J. Park, I. Jou

T03-007A

EHD1 mediates IFN-γ and IL-6 signaling by inducing membrane rafts clustering

J. Woo, I. Jou

T03-008A

A computational study on the calcium dynamics in astrocytes in different morphologies

K. Lenk, A. Tervonen, J. Hyttinen

T03-009A

Analysis of multi-modal brain signals in awake mice

G. Stopper, L. Stopper, L.C. Caudal, A. Scheller, F. Kirchhoff

T03-010A

Hippo signalling in peripheral nerve development, repair and tumourigenesis

D.B. Parkinson, L. Laraba, H. Roy, J. Whitehouse, S. Moller Gregario, X.-P. Dun

T03-011A

Invalidation of 5-HT_{2B} receptors on microglia impairs microglia processes motility

F. Etienne, G. Albertini, I. D'Andrea, I. Moutkine, N. Gervasi, L. Maroteaux, A. Roumier

T03-012A

Using 1D-to-3D high-speed two-photon imaging to characterize fast local Ca^{2+} activity in astrocytic processes

E. Bindocci, I. Savtchouk, C. Vivar-Rios, N. Liaudet, A. Volterra

T03-013A

Decoding astrocytic calcium activity: event-based and dynamical systems approaches

A. Brazhe, A. Semyanov

T03-014A

Mapping astrocyte calcium domains by light-sheet imaging and spatio-temporal correlative screening

C. Pham, D. Li

T03-015A

P2Y12 and P2Y1/13 receptors mediate differential microglial motilities in epileptic and peri-tumoral human tissue

G. Milior, M. Morin-Brureau, F. Chali, C. Le Duigou, E. Savary, G. Huberfeld, N. Rouach, J. Pallud, L. Capelle, V. Navarro, B. Mathon, S. Clemenceau, R. Miles

T03-016A

Alteration of the blood-brain barrier induced by cadmium: *In vitro* study of the signaling pathway in rat brain microvessel endothelial cells

J.J.V. Branca, M. Maresca, G. Morucci, D. Carrino, M. Becatti, L. Pazzagli, F. Paternostro, M. Gulisano, C. Ghelardini, L. Di Cesare Mannelli, A. Pacini

T03-017A

Integrin β1 signal peptide, a new molecular tool to prevent Aβ-oligomer/Integrin β1 signalling in astrocytes

C. Ortiz-Sanz, F. Llavero, T. Quintela-López, M. Luque, A. Wyssenbach, C. Matute, J.L. Zugaza, E. Alberdi

T03-018A

Altered cortico-striatal glutamatergic synapses in a mouse model for Fragile X Syndrome

D. Gastaldo, E. Fernandez, V. Mercaldo, G. Cencelli, S. Grant, T. Achsel, C. Bagni

T03-019A

Novel intensity-based approachto characterize astrocytic calcium signals

A. Zeug, V. Cherkas, F.E. Müller, E.G. Ponimaskin

T03-020A

The power of serotonergic signalling in astrocytes

F.E. Müller, S.K. Schade, V. Cherkas, A. Zeug, E. Ponimaskin

T03-021A

Restoring miR-146a levels in ALS mouse cortical astrocytes rescues their aberrant phenotype and abolishes inflammatory miRNA dysregulation in cells and derived sEVs

M. Barbosa, C. Gomes, A.R. Vaz, D. Brites

T03-022A

Modulation of astroglial vesicle interaction with the plasmalemma is not due to ketamine-induced increase in cAMP, but by ketamine-elicited changes in membrane structure

E. Lasič, M. Lisjak, A. Horvat, A. Šakanović, G. Anderluh, A. Verkhratsky, N. Vardjan, J. Jorgačevski, M. Stenovec, R. Zorec

T03-023A

The roles of adenosine and glutamate signaling in oligodendrocyte development

M. Piller, S. Kucenas

T04 Cytoskeleton

T04-001A

Silencing Iba-1 protein alters not only cytokeleton-dependent activities, but also proliferation in BV2 microglia

V.P. Ristoiu, A. Deftu, R. Gheorghe, A. Filippi, G. Chiritoiu, A. Grosu, E. Burlacu

T04-002A

Intracellular changes in viscoelasticity of astrocytes but not of microglia upon lipopolysaccharide treatment are dependent on their origin

T.A. van Wageningen, N. Antonovaite, E.J. Paardenkam, J.J. Brevé, D. Iannuzzi, A.-M. van Dam

T04-003A

Evolutionary differences in the immunoreactivity of GFAP in vertebrates

M. Kálmán, O.M. Sebők, V. Matuz, D.L. Lőrincz

T04-004A

Semi-dominant mutation in *Tubb4a* affects oligodendrocytes ability to myelinate

S. Fertuzinhos, E. Legue, D. Li, K. Liem

T04-005A

Deciphering the functions of P21 activated kinase 1 in oligodendrocyte differentiation and myelination

L. Baudouin, K. Kante, K. Duarte, S. Guyon, J.-V. Barnier, B. Nait Oumesmar, L. Bouslama-Oueghlani

T05 Degenerative disease, toxicity and neuroprotection

T05-001A

Pressure sensing and inflammatory signaling in glaucoma require TRPV4 channels

D. Krizaj, O. Yarishkin, S. Redmon, M. Lakk

T05-002A

Investigating alterations in astrocytic homeostatic capacity in amyloidopathies

M. Hooley, O. Dando, H. Stirling, T. Spires-Jones, G. Hardingham

T05-003A

Do microglia undergo premature senescence in Alzheimer's disease and does this affect disease progression?

G. Fryatt, Y. Hu, M. Cragg, D. Gomez-Nicola

T05-004A

The neurovascular unit in Alzheimer's disease

S.L. Taylor, G. Petzold

T05-005A

Pharmacological blockade of IL-34 to modulate microglial proliferation in neurodegenerative disease

M. Martin-Estebane, J. Obst, E. Simon, A. Prescott, H. Perry, D. Gomez-Nicola, Dementia Consortium Project Partners

T05-006A

Molecular chaperones in astrocyte-neuron communication in Alzheimer's disease

A. Vazquez De La Torre, S. Carrillo-Roas, W. Noble, M. Jimenez-Sanchez

T05-007A

Microglial diversity in Alzheimer's disease early stages: a key to understand the disease initiation

A.-L. Hemonnot, A. Valverde, C. Meersseman, C. Delaygue, J. Hua, N. Linck, F. Verdonk, T. Maurice, F. Rassendren, H. Hirbec

T05-008A

This poster has been withdrawn.

T05-009A

TDP-43 inclusions in astrocytes alter β-adrenergic cAMP signalling, glucose and lipid metabolism

A. Horvat, J. Velebit, S. Prpar Mihevc, B. Rogelj, R. Zorec, N. Vardjan

T05-010A

Involvement of astrocytes in synaptotoxicity in early stages of Alzheimer's disease

A. Paumier, A. Bosson, S. Boisseau, A. Buisson, M. Albrieux

T05-011A

Reducing mglur5 expression attenuates the reactive phenotype of astrocytes cultured from the spinal cord of late symptomatic SOD1G93A mice

M. Milanese, F. Provenzano, E. Gallia, C. Torazza, S. Ravera, T. Bonifacino, M. Balbi, C. Usai, G. Bonanno

T05-013A

Impaired neurotransmission in a mouse model of episodic ataxia type 6

Y. Kolobkova, J. Cremer, S. Buller, C. Fahlke, P. Kovermann

T05-014A

Methotrexate chemotherapy induces persistent tri-glial dysregulation that underlies chemotherapy-related cognitive impairment

E. Gibson, S. Nagaraja, A. Ocampo, L. Tam, L. Wood, P. Pallegar, J. Greene, A. Geraghty, A. Goldstein, L. Ni, P. Woo, B. Barres, S. Liddelow, H. Vogel, M. Monje

T05-015A

***In vivo* imaging and transcriptome analysis of astrocytes in an Alzheimer's disease mouse model**

N. Blank, L. Kaczmarczyk, S. Herresthal, W.S. Jackson, J.L. Schultze, G.C. Petzold

T05-016A

Study glia-mediated neurodegeneration in Lewy body disease

L. Chen

T05-017A

BET epigenetic protein inhibition attenuates acute inflammation after spinal cord injury

S.R. Cerqueira, M. Rudman, N. Ayad, J. Lee

T05-018A

Astrocyte-specific transcriptional profiling reveals a neuroprotective role for astrocytic Nrf2 in the P301S model of human tauopathy

Z. Jiwaji, S. Tiwari, J. McQueen, D. Hampton, M. Torvell, J. Gregory, T. Spire-Jones, S. Chandran, G. Hardingham

T05-019A

The role of microglia in amyotrophic lateral sclerosis pathogenesis

K. Takahashi, Y. Motozaki, C. Ishida, K. Komai

T05-020A

A peptide antagonist of Toll-like receptor 4 contributes to the attenuation/alleviation of neuropathic pain by prohibiting microglial activation

Y. Yin, H. Park, W.H. Lee, J. Hong, D.W. Kim

T05-021A

EBI2 receptor signaling regulates levels of myelin lipid components and cholinesterase activity in LPS challenge model

J. Klimaszewska-Lata, D. Shimshek, A. Szutowicz, A. Rutkowska

T05-022A

Effects of cinnamaldehyde, a compound derived from cinnamon, and its metabolite, NaB, on astrocytes primary culture

F.T. Fróes, J. Baú, C.A. Gonçalves, M. Leite

T05-023A

Life-long physical exercise is protective and modulates the astrocyte phenotype in Alzheimer's disease

I. Belaya, A. Sorvari, S. Loppi, H. Koivisto, A. Varricchio, T. Wilson, J. M. Polo, H. Tanila, A. Grubman, T. Malm, K. M. Kanninen

T05-024A

Spatiotemporal distribution of extracellular osteopontin and its association with neuroglial cells in the striatum of rats treated with the mitochondrial toxin 3-nitropropionic acid

T.-R. Riew, S. Kim, X. Jin, H.L. Kim, M.-Y. Lee

T05-025A

Qualitative and quantitative microglial changes in retinal whole-mount of Alzheimer's disease 3xTg-AD mouse model

E. Salobrar-Garcia, R. de Hoz, A.I. Ramirez, A.C. Rodrigues-Neves, P. Rojas, J.J. Salazar, A.F. Ambrósio, J.M. Ramirez

T05-026A

Mesenchymal stem cell-derived exosomes normalize the activated phenotype of primary astrocyte cultures prepared from late symptomatic SOD1^{G93A} mice

F. Provenzano, C. Torazza, M. Milanese, D. Giunti, C. Marini, B. Parodi, C. Usai, N. Kerlero de Rosbo, A. Uccelli, G. Bonanno

T05-027A

Region-specific features of astrocytes against dopaminergic neurotoxin-induced oxidative stress

M. Asanuma, N. Okumura-Torigoe, I. Miyazaki, S. Murakami, Y. Kitamura, T. Sendo

T05-028A

Regional differences in reaction of astrocytes against rotenone contribute to dopaminergic neurodegeneration

I. Miyazaki, M. Asanuma, S. Murakami, R. Kikuoka, N. Isooka, C. Sogawa, N. Sogawa, Y. Kitamura

T05-029A

Microglial-dependent neurodegeneration in multiple sclerosis is fueled by the pHERV-W envelope protein

D. Kremer, J. Gruchot, V. Weyers, L. Oldemeier, P. Göttle, L. Healy, J. Ho Jang, Y. Kang T Xu, C. Volsko, R. Dutta, B. Trapp, H. Perron, H.-P. Hartung, P. Küry

T05-030A

Establishing a novel rat-human chimeric model for studies of neural conversion of human glia *in vivo*

D.B. Hoban, S. Nolbrant, J. Giacomoni, S.A. Goldman, M. Parmar

T05-031A

Microglia control the formation of small vessel-associated brain calcifications via TREM2

Y. Zarb, S. Nassiri, S. Utz, M. Dilorenzi, M. Colonna, M. Greter, A. Keller

T05-032A

Mitochondrial morphology as an indicator of microglia activity in retinal degeneration

M. Maes, S. Siegert

T05-033A

Dissecting the microglial response in transgenic models of amyloidogenesis and tauopathy

R. Sanchez-Varo, J.J. Fernandez-Valenzuela, C. Romero-Molina, E. Sanchez-Mejias, A. Gomez-Arboledas, C. Nuñez-Diaz, V. Navarro, M. Vizuete, J.C. Davila, J. Vitorica, A. Gutierrez

T05-034A

Increased activity of glial glutamate transporter-associated anion channels results in episodic ataxia 6

P. Kovermann, V. Untiet, Y. Kolobkova, C. Fahlke

T05-035A

Exploring the role of astrocytic Ca^{2+} signaling in Alzheimer's disease.

A. Lia, M. Zonta, A. Chiavegato, C. Fasolato, G. Carmignoto

T05-036B

NADPH-oxidase of mononuclear phagocytes mediates neurodegeneration after repeated systemic challenge with lipopolysaccharides

A. Shahraz, J. Wissfeld, M. Mathews, A. Ginolhac, L. Sinkkonen, H. Neumann

T05-037B

Early calcium responses and AQP4 changes in reactive astrocytes after juvenile mild traumatic brain injury

A. Ichkova, J. Aussudre, A. Verkman, U.V. Nägerl, J. Badaut

T05-038B

Elucidating the role of Methyl-CpG-binding protein 2 phosphorylation changes in the cellular processes relevant for Alzheimer's disease

R. Wittrahm, M. Takalo, M. Marttinen, K.M.A. Paldanius, T. Natunen, A. Haapasalo, M. Hiltunen

T05-039B

Modelling effects of FTD/ALS-associated *C9orf72* repeat expansion in microglial cells

H. Rostalski, T. Hietanen, S. Sarlin, S. Leskelä, N. Huber, M. Takalo, E. Solje, A.M. Remes, T. Natunen, M. Hiltunen, A. Haapasalo

T05-040B

A mouse model carrying the dominant-intermediate neuropathy-causing Dynamin 2 K562E mutation develops characteristics of a primary myopathy

J.A. Pereira, J. Gerber, M. Ghidinelli, D. Gerber, A. Ommer, S. Bachofner, F. Santarella, E. Tinelli, K.V. Toyka, U. Suter

T05-041B

Metalloproteinase 12 is highly expressed in microglia and contributes to damage caused by pilocarpine-induced SE model

A.M. Costa, J. Vinet, M. Salinas-Navarro, G. Leo, L. Moons, L. Arckens, G. Biagini

T05-042B

Targeting the sphingosine 1-phosphate axis leads to phenotypic improvements and reduced neuropathology in a murine model of Krabbe's disease.

S. Bechet, S.G. Fagan, S. O'Sullivan, K.K. Dev

T05-043B

On the role of astrocytes upon Aβ-mediated neurotoxicity

J.I. Gomes, J.F. Gomes, H.V. Miranda, A.M. Sebastião, M.J. Diógenes, S.H. Vaz

T05-044B

Investigating oligodendrocyte dysfunction in DM1 brain disease

S.O. Braz, R. Blain, C. Chhuon, C.F. Bourgeois, A. Huguet-Lachon, A. Schmitt, D. Langui, I.C. Guerrera, D. Auboeuf, G. Gourdon, M. Gomes-Pereira

T05-045B

High glucose concentrations induce oxidative stress in retinal Müller cells by altering Nrf2

J. Albert-Garay, R. Salceda

T05-046B

Inhibitory effect of filbertone against microglia-mediated inflammatory responses in obese condition

L. Mutsnaini, J. Yang, J. Kim, C.H. Lee, T. Tong, C.-S. Kim, M.-S. Kim, T. Park, R. Yu

T05-047B

Sex-dependent changes in glial morphology and animal behavior in mouse model of hypothyroidism

M. Noda, T. Niiyama, K. Aoi

T05-048B

Alterations in astroglial patterns shared by neuro-degenerative disorder affected individuals

M. Monzón, M. Garcés, I.M. Guijarro, J.J. Badiola

T05-049B

Role of glial lipocalin-2 in experimental diabetic encephalopathy

A. Bhusal, M.H. Rahman, K. Suk

T05-050B

Later-life Alzheimer's-related tauopathy in white matter: An Electon Microscopy (EM) study of rTG4510 murine model

V.F.T. Mitchener, R. Fern

T05-051B

Microglia phagocytose extracellular tau-affected neurons

K. Pampuscenko, G. Aleksandraviciute, R. Morkuniene, V. Borutaite

T05-052B

***In vitro* modelling of human microglial alterations associated with Alzheimer's disease polygenic risk**

E. Salis, N. Allen, J. Williams

T05-053B

Agathisflavone protects neurons and drives promyelination through inducing switch of microglia M1 to a M2 profile and increasing purinoreceptors expression

M.M.A. de Almeida Carneiro, F. Pieropan, N.S. Dourado, R. Short, A. Bispo-da-Silva, A. Rivera, V.D.A. da Silva, J.M. David, J.P. David, M.D.F.D. Costa, C.D.S. Souza, A.M. Butt, S.L. Costa

T05-054B

Modeling demyelinating disease in PLP:mtPstI transgenic mice with oligodendrocyte-specific mitochondrial dysfunction

M. Plastini, H. Desu, P. Illiano, P. Madsen, C. Moraes, R. Brambilla

T05-055B

Vulnerability of NG2 glia at breaches of the blood brain barrier during secondary degeneration following neurotrauma

T. Clarke, C. Bartlett, E. Denham, M. Fitzgerald

T05-056B

Neuroimmunomodulatory and neuroprotective effects of flavonoid apigenin in *in vitro* models of neuroinflammation associated with Alzheimer's Disease.

N.S. Dourado, C.D.S. Souza, M.M.A. de Almeida Carneiro, B.L. dos Santos, A.M. de Assis, D.O. de Souza, M.D.F.D. Costa, V.D.A. da Silva, S.L. Costa

T05-057B

Potential role of amyloid β peptides in the degeneration of neurons in an animal model of Temporal Lobe Epilepsy

S. Kar, A. Kodam, D. Ourdev, M. Maulik, J. Hariharakrishnan, M. Banerjee, Y. Wang

T05-058B

Functional characterization of astrocytes during the ageing

D. Koleničová, B. Eliašová, J. Turečková, D. Kirdajová, L. Valihrach, M. Kubista, J. Kriška, M. Anděrová

T05-059B

Astrocyte volume regulation during the progression of Alzehimer´s disease

T. Filipi, D. Koleničová, D. Kirdajová, J. Turečková, J. Kriška, L. Valihrach, M. Kubista, M. Anděrová

T05-060B

Using induced Pluripotent Stem cell-based models to study neuroinflammation in Parkinson's disease

M. Pons Espinal, L. Blasco-Agell, G. Carola, C. Calatayud, I. Fernandez-Carasa, E. Tolosa, A.M. Cuervo, M. Juan-Otero, A. Raya, A. Consiglio

T05-061B

6'-Sialyllactose acts anti-inflammatory in an amino-glycoside-induced hair cell loss model

C. Klaus, A. Shahraz, H. Neumann

T05-062B

Preservation of lysosomal membrane integrity by Apolipoprotein D promotes cell survival in Niemann-Pick Type A disease

M.D. Ganfornina, R. Pascua-Maestro, M. Corraliza-Gómez, M.D. Ledesma, D. Sanchez

T05-063B

Adenosine A_{2A} receptors control amyloid-β peptides-induced alteration of Ca^{2+} dynamics and ATP release in astrocytes

D. Madeira, L. Dias, A. Tomé, P.M. Canas, R.A. Cunha, P. Agostinho

T05-064B

CMT disease 2A and demyelination decouple ATP and ROS production by axonal mitochondria

G. Van Hameren, G. Campbell, M. Deck, J. Berthelot, B. Gautier, P. Quintana, R. Chrast, N. Tricaud

T05-065B

Investigating the effects of FTY720 on the neuroinflammatory profile of Alzheimer's disease

L.R. Davison, S.G. Fagan, K.K. Dev

T05-066B

Exendin-4, a glucagon-like peptide 1 receptor agonist, reduces retinal vascular permeability and prevents microglia activation in type 1 diabetes

R.C. Fernandes, A. Gonçalves, L. Costa, M.I. Barros, C. Gomes, C. Fontes-Ribeiro, A.F. Ambrósio

T05-067B

Understanding astrocytic metabolism in condition of mitochondrial DNA deficiency

O. Ignatenko, K. Mattinen, J. Nikkanen, G.I. Dunn, A. Suomalainen

T05-068B

Exosomes from microglia under elevated pressure promote retinal neuroinflammation and degeneration

I.D. Aires, R. Boia, T. Ribeiro-Rodrigues, H. Girão, F. Ambrósio, A.R. Santiago

T05-069B

The role of astrocytes in Alzheimer's disease – focus on cholesterol and Aβ deposits

C. Beretta, D. Sehlin, A. Erlandsson

T05-070C

Astrocytic thiol supply protects neurons from proteotoxic and oxidative stress

A.-S. Spreng, S. Gutbier, M. Leist

T05-071C

The impact of LRRK2 on the uptake and accumulation of aggregated alpha-synuclein in astrocytes

L. Gallasch, E. Greggio, L. Civiero, A. Erlansson

T05-072C

Astrocytes contribute to synaptic dysfunction induced by extracellular tau oligomers

R. Piacentini, D.D. Li Puma, C. Ripoli, O. Arancio, C. Grassi

T05-073C

A drug-screening platform to assess primary microglia function across different states *in vitro*: potential for drug-screening and target validation

L. Magno, K. Costelloe, D. Lau, A. Van Ingelgom, L. Patel, L. Phadke, M. Bictash, P. Whiting

T05-074C

Morpho-functional analysis of microglia in a cell culture model of Gaucher disease

E. Brunialti, A. Villa, A. Ratti, A. Maggi, P. Ciana

T05-075C

Inducible pluripotent stem (iPS) cell-derived human astrocytes as a new disease model to shed light into the molecular pathogenesis of megalencephalic leukoencephalopathy with subcortical cysts (MLC)

A. Lanciotti, M.S. Brignone, C. Veroni, C. Aiello, L. Sforna, T.C. Petrucci, E. Bertini, M. Pessia, E. Ambrosini

T05-076C

xCT/Slc7a11 deletion accelerates functional recovery and improves histological outcomes following cervical spinal contusion in mice

L. Sprimont, P. Janssen, K. De Swert, J. Gilloteaux, L. Verbruggen, E. Bentea, A. Massie, C. Nicaise

T05-077C

Autologous transplantation of intestine-isolated glia cells improves neuropathology and restores cognitive deficits in β amyloid-induced neurodegeneration

G. Esposito, L. Seguella, G. Sarnelli

T05-078C

Microglial and astrocytic pathology in a mouse model of Machado-Joseph disease

A.B.S. de Campos, S. Duarte-Silva, A. Neves-Carvalho, G. Nogueira-Gonçalves, A. Silva-Fernandes, A. Teixeira-Castro, D. Brites, A.F. Ambrósio, P. Maciel

T05-079C

Age-related changes in diffusion parameters of brain extracellular space in Alzheimer's disease and physiological aging

M. Kamenická, D. Koleničová, M. Anděrová, L. Vargová

T05-080C

Opposite effects of astrocytic and neuronal A_{2AR} in the control of neurodegeneration after convulsions

R.A. Cunha, E. Augusto, M. Matos, J.-F. Chen

T05-081C

γ-Synuclein knockdown induces cell cycle arrest and apoptosis in human cortical astrocytes

T. Le, A.C. Silver, F. Andreo, A.O. Koob

T05-082C

Organization and functional characteristics of Bergmann glial cells in an experimental model of cortical dysplasia

C.A. Rodríguez-Arzate, D. Reyes-Haaro, I. Rocha-Mendoza, J. Licea-Rodriguez, A. Martinez-Torres

T05-083C

Structural and morphological heterogeneity of hippocampal microglia in late-onset Alzheimer's disease post-mortem samples

S. Fixemer, L. Salamanca, C. Ameli, N. Mechawar, K. Murai, M. Mittelbronn, A. Skupin, D. Bouvier

T05-084C

Overactivity of the Angiotensin/AT1 Axis modulates Sirtuin 1 and Sirtuin 3 levels in microglial cells: implications for aging and neurodegeneration

M. Diaz-Ruiz, A.I. Rodriguez-Perez, B. Villar-Cheda, P. Garrid-Gil, M.J. Guerra, J.L. Labandeira-Garcia

T05-085C

Blocking the microglial $P2Y_6$ receptor prevents neurodegeneration induced by neuroinflammation, b amyloid, TAU and ageingBlocking the microglial $P2Y_6$ receptor prevents neurodegeneration induced by neuroinflammation, β amyloid, TAU and ageing

G. Brown

T05-086C

Can we mimic prodromal Parkinson's disease in a dish? A story of the olfactory bulb and DOPAL

E. Bagnoli, J. MacMahon, U. FitzGerald

T05-087C

Role of extracellular vesicles released by microglia in early synaptic dysfunction in Alzheimer's disease

M. Gabrielli, P. Joshi, G. Rutigliano, M. Lombardi, O. Arancio, N. Origlia, C. Verderio

T05-088C

Mercumemory: the effect of methylmercury exposure in microglia-mediated neuroinflammation

B.C.R. Martins, J.P. Novo, J.O. Malva, C.F. Ribeiro, A.P. Silva, F. Pereira, R.B. Oriá

T05-089C

Do the retina and brain share similar glial patterns in an animal model of Alzheimer's disease?

A.C. Neves, R. Carecho, F.I. Baptista, P.I. Moreira, A.F. Ambrósio

T05-090C

Schwann cell p75 neurotrophic receptor modulates phagolysosomal pathways underlying diabetes-induced neurodegeneration

N.P. Gonçalves, S. Mohseni, M. Richner, S.S. Murray, T.S. Jensen, C.B. Vægter

T05-091C
Metabotropic glutamate receptor (mGlu3R) splicing variants in aging and Alzheimer´s disease
M. Lasaga, M.J. Rudi, J. Turati, D. Ramírez, L. Carniglia, J. Saba, F. López Couselo, C. Caruso, J. Beauquis, F. Saravia, D. Durand

T05-092C
Evaluation of the role of astrocytes in neurotoxicity in patients with multiple sclerosis
C. Matute Blanch, L. Midaglia, L.M. Villar, X. Montalban, M. Comabella

T05-093C
Beta-amyloid induces cellular senescence in astrocytes leading to a pro inflammatory phenotype and neurotoxicity in Alzheimer's disease
S. Amram, D. Frenkel

T05-094C
Aquaporin-4 reduces neuropathology in a mouse model of Alzheimer's disease by remodeling periplaque astrocyte structure
A.J. Smith, T. Duan, A.S. Verkman

T05-095C
Monitoring astrocytic calcium signaling in awake tg-ArcSwe mice by a genetically encoded Ca^{2+} indicator
G.H.E. Syverstad, K.S. Åbjørsbråten, O.P. Ottersen, R. Torp, R. Enger, E.A. Nagelhus

T05-096C
Impact of SVCT2 modulation in neurodegeneration: a fly based approach
A.I. Silva, J.B. Relvas, C.S. Lopes

T05-097C
Maternal omega-3 deficiency differentially alters gene expression profile in the substantia nigra and striatum of rat progeny: impact on astrocytes and neurodegeneration
R.L. Augusto, E.A.N. Da Silva, A.R. Isaac, G.M.M. Moreno, I.P. Mendonça, L.V.D.P. Gonçalves, R.J.B.D. Matos, M.C.A. Rodrigues, B.L.D.S. Andrade-da-Costa

T05-098C
Determinants of trafficking of glutamate transporters on perisynaptic astrocytic processes during preclinical stages of Alzheimer's disease
G. Bonifazi, A. Ferrero, C. Luchena, E. Capetillo-Zarate, A. Pérez-Samartín, C. Matute, S. Rodrigues, E. Alberdi, M. De Pitta

T05-099C
Expression of signaling proteins in the rat dorsal root ganglia after sciatic nerve axotomy
E. Berezhnaya, V. Dzreyan, V. Guzenko, M. Neginskaya, A. Uzdensky

T05-100C
Glial Nrg1/ErbB signaling modulates disease pathogenesis in rodent models of demyelinating peripheral neuropathy
V. Schuetza, D. Akkermann, M. Sereda, R. Stassart, R. Fledrich

T05-101C
Retinal microglia acquire a disease-associated transcriptome during neurodegeneration in chronic mouse glaucoma, which intensifies with neuroprotective complement inhibition
A. Bosco, S.R. Anderson, J.M. Roberts, C.O. Romero, M.R. Steele, M.L. Vetter

T05-102C
Selenium intake in early life affects neurodevelopment and the neuroinflammatory response
M.A. Ajmone Cat, R. De Simone, A.M. Tartaglione, G. Calamandrei, L. Ricceri, L. Attori, F. Cubadda, A. Raggi, A. Di Biase, M. D'Archivio, B. Viviani, L. Minghetti

T05-103C
Investigating the role of the delta (δ) subunit of eIF2B during stress and disease
F. Hanson, R. Hodgson, A. Cross, E. Allen, S. Campbell

T06 (Energy) Metabolism

T06-001A
Microglia in aged brain switch to a glycolytic phenotype
V. Mela, A. McGinley, M. Milner, M. Lynch

T06-002A
Impaired response to glucose starvation in eIF2B-mutant astrocytes
M. Herrero, M. Daw, O. Elroy-Stein

T06-003A
Extracellular ATP and glutamate drive pyruvate production and energy demand to regulate mitochondrial respiration in astrocytes
I. Juaristi, I. Llorente-Folch, J. Satrustegui, A. del Arco

T06-004A

The psychiatric risk gene *Cacna1c* regulates mitochondrial function in LPS-stimulated microglial cells

S. Michels, F. Picard, M. Braun, T. Kisko, R. Schwarting, M. Wöhr, H. Garn, J. Alferink, C. Culmsee

T06-005A

Detection of intracellular ATP levels in neurons and astrocytes in organotypic slice cultures of the mouse brain

W.K. Kafitz, R. Lerchundi, U. Winkler, M. Färfers, F. Beyer, J. Hirrlinger, C.R. Rose

T06-006A

The intrinsic microglial molecular clock regulates metabolism

X. Wang, Y. Gao, I. Milanova, M.J.T. Kalsbeek, N. Korpel, A. Kalsbeek, A. Boutillier, C. Yi

T06-007A

A systematic survey of glucocorticoid-dependent metabolic plasticity of astrocytes

D. Del Prete, J. Leyrer, A. Dannert, A. Petzold, B. Hengerer, M. Slezak

T06-008A

Astrocytic CREB controls the expression of monocarboxylate transporter 4

A. Eraso Pichot, C. Menacho, A. Parra-Damas, L. Pardo, J.M. Servitja, C.A. Saura, E. Galea, R. Masgrau

T06-009A

Chronic L-serine supplementation improves cognitive behavior and long-term potentiation in 3xTg-AD mice, an Alzheimer's disease mouse model.

P.-A. Vigneron, M. Maugard, M. Matos, S.H.R. Oliet, A. Panatier, G. Bonvento

T06-010A

Glycolytically impaired glial cells switch to β-oxidation to support neurons

A. Volkenhoff, S. Schirmeier

T06-011A

Regulation of carbohydrate transport in the Drosophila nervous system

E. McMullen, H. Hertenstein, S. Schirmeier

T06-012A

Stress stimuli induce lipid droplet formation in astrocytes

T. Smolič, P. Tavčar, A. Horvat, R. Zorec, N. Vardjan

T06-013A

Strain-specific changes in metabolomic profile after Lipopolysaccharide induced inflammation

M. Piirsalu, K. Lilleväli, E. Taalberg, M. Zilmer, E. Vasar

T06-014A

Interactive volumetric visual analysis of glycogen-derived energy absorption in nanometric brain structures

M. Agus, M. Hadwiger, E. Gobbetti, P. Magistretti, C. Cali'

T06-015A

Metabolic control of astrocyte maturation by mGluR5-mediated signaling

T. Zehnder, F. Petrelli, J. Romanos, M. Behrens, N. Deglon, M. Santello, P. Bezzi

T06-016A

17-beta estradiol improves mitochondrial metabolism in glioblastoma cells

L. Longhitano, C. Giallongo, M. Spampinato, G. Camiolo, A. Distefano, M. Viola, G. Li Volti, R. Avola, D. Tibullo

T06-017A

Investigating the metabolic link between astrocytes and demyelinated axons in the central nervous system

G. Campbell, N. Tricaud

T06-018A

Physioxia is necessary for HIF-1α to regulate its metabolic target genes in astrocytes

S. Idriss, K. Monsorno, S. Ziemek, A. Jass, O. Jöhren

T06-019A

Metabolic pathways in adult OPCs activation state

R. Baror, B. Neumann, R.J. Franklin, S. Fancy

T06-020A

Axon-glia metabolic coupling of peripheral nerves in a rodent model of Charcot-Marie-Tooth 1A (CMT1A)

L. Linhoff, T. Kungl, D. Hermes, J. van Dort, C. Maack, R. Fledrich, K. Willig, K. Hiller, K.A. Nave, M.W. Sereda

T06-021A

Enhancement of cortical activity triggers astrocytic lactate release

M.T. Wyss, M. Zuend, A.S. Saab, V. Kaelin, A. von Faber-Castell, F.L. Barros, B. Weber

T06-022A
Studying the impact of astrocytic glucose metabolism on brain function *in vivo*
L.V. Thieren, L. Hösli, Z.J. Looser, D. Abel, F.L. Barros, B. Weber, A.S. Saab

T06-023A
A role for translocator protein 18kDa (TSPO) in immunometabolic regulation in astrocytes
J.L. Robb, N.A. Hammad, C. Beall, K.L. Ellacott

T06-024A
Microglia mediate neonatal weight gain and early-life programming of adult glucose control
M. Valdearcos, D. Stifler, R. Cheang, S. Koliwad

T07 Extracellular matrix and cell adhesion molecules

T07-001A
Structural basis for the dominant character of *GLIALCAM* mutations found in Megalencephalic Leukoencephalopathy with subcortical Cysts type 2 (MLC2B) patients
X. Elorza-Vidal, E. Xicoy-Espaulella, A. Pla-Casillanis, T. Arnedo, M. Alonso-Gardón, H. Gaitán-Peñas, C. Engel, J. Fernández-Recio, R. Estévez

T07-002A
Astrocytes exhibit immature properties and produce a stem cell niche-like extracellular matrix after laser lesion in the mouse visual cortex
L. Roll, U.T. Eysel, A. Faissner

T07-003A
Regional heterogeneity in TLR3 agonist-induced fibronectin aggregation by astrocytes: a role of cytokine priming and fibronectin splice variants
I. Werkman, E. Sikkema, J. Versluijs, J. Qin, P. de Boer, W. Baron

T07-004A
The investigation on the connection between the central canal lining cells and extracellular matrix of postnatal rat spinal cord
A. Alexovic Matiasova, J. Zrubakova, J. Sevc, Z. Daxnerova

T07-005A
PMP22 as a link between focal adhesions and myelin growth in the peripheral nerve
D. Hermes, D. Ewers, L. Linhoff, J. van Dort, R. Fledrich, K. Willig, K.-A. Nave, M.W. Sereda

T07-006A
Proteoglycans and RhoA/ROCK/PTEN signaling pathway in astrocytes forming the surface compartment in synapses after spinal cord injury
I. Kabdesh, T. Povysheva, Y. Mukhamedshina, S. Sabirova, Y. Chelyshev

T08 Gene expression and transcription factors

T08-001A
Defining the heterogeneity of astrocytes upon spinal cord injury via *ex vivo* single-cell RNA sequencing
R. Hamel, A. Braga, B. Yu, A. Lun, L. Peruzzotti-Jametti, S. Bandiera, J. Marioni, S. Pluchino

T08-002A
Mechanism and function of lncRNAs involved in oligodendrocyte lineage development
M. Bartosovic, S. Samudyata, A. Bonetti, F. Gabriel, G. Castelo-Branco

T08-003A
Identifying the chromatin accessibility states of oligodendrocytes during development and in disease with scATAC-seq
M. Meijer, E. Agirre, X. Chen, A. Heskol, H. Gezelius, S. Linnarsson, H. Chang, G. Castelo-Branco

T08-004A
RADICL-seq identifies cell-type specific RNA-chromatin interactions in mouse oligodendrocyte progenitor cells
A. Bonetti, G. Castelo-Branco

T08-005A
Cell specific DNA methylation and gene expression changes in early epileptogenesis
T.C. Berger, K. Heuser, K. Selmer, H. Sagsveen Hjorthaug, M. Dehli Vigeland, E. Taubøll

T08-006A

Myrf as a molecular switch for target gene selection of Sox10 during oligodendroglial development

J. Aprato, M. Küspert, M. Weider, F. Fröb, M. Wegner

T08-007A

Epigenetic regulation in myelinating glia: the role of histone 2b monoubiquitination in Schwann cells

H. Wüst, A. Wegener, S. Johnson, F. Fröb, M. Wegner, E. Sock

T08-008A

Molecularly distinct astrocyte subpopulations spatially pattern the adult mouse brain

M. Batiuk, A. Martirosyan, T. Voet, C.P. Ponting, T.G. Belgard, M.G. Holt

T08-009A

Epigenetic mechanisms underlying oligodendrocyte differentiation enhanced by mechanotransduction

T. Lourenço, A. Mendanha Falcão, G. Castelo-Branco, M. Grãos

T08-010A

***Sox9*-overexpression promotes gliogenesis at the expense of neurogenesis in the embryonic mouse spinal cord**

J.K. Vogel, M. Weider, M. Wegner

T08-011A

Whole transcriptome analysis of brain tissue from Lafora disease mouse models reveals dysregulation of genes involved in neuroinflammation

M. Lahuerta, D. Gonzalez, A. Fathinajafabadi, J.L. Garcia-Gimenez, C. Aguado, M.M. Estelles, C. Romá-Mateo, E. Knecht, F.V. Pallardo, P. Sanz

T08-012A

The role of Ino80 and Smarca5 chromatin remodelling complexes in oligodendrocytes

J.L. Wright, H. Li, W. Richardson

T08-013A

A microarray analysis approach to identify mechanisms underlying the pathogenesis of age-associated periventricular white matter lesions

M.M. Fadul, P. Heath, J. Cooper-Knock, C. Brayne, F. Matthews, S. Wharton, J. Simpson

T08-014A

The role of Tcf4 in oligodendrocyte development

M.N. Wedel, M. Wegner

T08-015A

The influence of Ep400 on Schwann cell development in mice

F. Fröb, E. Sock, M. Wegner

T08-016A

Influence of chromatin remodeler Ep400 on oligodendroglial development

O. Elsesser, M. Wegner

T08-017A

Single-nucleus RNA-sequencing of glia and neurons from Alzheimer's disease-affected brain tissue

E. Gerrits, M.E. Woodbury, N. Brouwer, L. Kracht, A. Miedema, A. Wachter, S. Xi, S.M. Kooistra, T. Möller, B.J. Eggen, E.W. Boddeke

T08-018A

Microglial development in the human fetus

L. Kracht, M. Borggrewe, S. Eskandar, A. Alsema, N. Brouwer, J. Prins, S. Kooistra, S. Scherjon, B. Eggen

T08-019A

miRNAs attenuate peripheral neuropathic phenotype of Charcot-Marie-Tooth disease mouse

Y.B. Hong, J.-S. Lee, B.-O. Choi

T08-020A

The human Schwann cell transcriptome: species-specificity, long-term stability and changes with differentiation

P.V. Monje, D. Sant, N.D. Andersen, V. Camarena, G. Wang

T08-021A

Developmental expression of *IgLON* family in mouse brain

K. Lilleväli, K. Singh, T. Jagomäe, M.-A. Philips, E. Vasar

T08-022A

Transcription factor Sox10 induces the microRNAs miR-335, miR-338 and miR-155 to ensure correct timing of oligodendrocyte development

M. Küspert, S. Reiprich, M. Cantone, M. Weider, T. Baroti, J. Wittstatt, J. Vera, M. Wegner

T08-023A

Strategies for transcription-factor based lineage conversion of somatic cells to repair-like Schwann cells

A. Balakrishnan, Y. Touahri, D. Zinyk, H. Noman, M. Stykel, J. Biernaskie, C. Schuurmans

T08-024A

Satellite glial cells in neuropathic pain: A RNAseq study

S.E. Jager, F. Denk, M. Richner, L.T. Pallesen, S. McMahon, C.B. Vægter

T08-025A

Integrated mRNA and microRNA transcriptional analysis reveals altered regulatory networks following spinal cord injury

P. Androvic, S. Benesova, E. Rohlova, L. Urdzikova-Machova, N. Romanyuk, M. Kubista, L. Valihrach

T08-026A

Transcriptome analysis of tuberous sclerosis complex and vanishing white matter astrocytes upon inflammatory or oxidative stress challenge: focus on circular RNAs

J. van Scheppingen, J.D. Mills, C. van Berkel, T.S. Zimmer, C. Mijnsbergen, J.J. Anink, F.E. Jansen, W. van Hecke, W.G. Spliet, P.C. van Rijen, M.S. van der Knaap, T.E. Abbink, M. Bugiani, E. Aronica

T08-027A

Development of a predictive test of the efficacy of drugs for the treatment of multiple sclerosis

D.P. Birmpili, M. Van der Heyden, V. Jolivel, L.D. Pham-Van, D. Bagnard

T08-028A

Evaluation of promoters for use in astrocyte-specific gene delivery *in vitro*

T. Prusova, S. Zobova, D. Molotkov

T08-029A

Glia subtype-specific alternative splicing events revealed from large-scale analysis of public RNA-Seq data

W. Xin, J. Ling

T08-030A

Rapid and efficient generation of microglia from human pluripotent stem cells: a versatile human *in vitro* platform to model the role of microglia in neurological diseases

A.M. Speicher, S. Kovac, L. Gonzalez-Cano, L. Gola, H. Wiendl, S.G. Meuth, H.R. Schöler, M. Pawlowski

T08-031A

The intrinsic effects of EIF2B mutations in human vanishing white matter-derived glial progenitor cells

M.J. Osorio, M. Lassen, M. Kristine, S. Goldman

T08-032A

Phosphorylation state of ZFP24 controls oligodendrocyte differentiation

B. Elbaz, A. Kolarzyk, B. Popko

T08-033A

Activity-dependent translation of localized mRNAs in glia: NG2 cells as receivers and transducers of neuronal network signals

H. YIgit, V. Hübner, A. Müller, D. Dieterich, J. Trotter

T08-034A

Soluble Neuregulin1: A possible role in Schwann cell trans-differentiation in response to injury

M. El Soury, E. Grazio, B.E. Fornasari, M. Morano, G. Ronchi, M. Giacobini, P. Provero, S. Geuna, G. Gambarotta

T08-035A

Signaling between neurons and NG2 glia: Synaptic signal integration and local glial protein synthesis

V. Hübner, H. Yigit, T. Mittmann, J. Trotter

T08-036A

Making sense of genetic risk factors in Multiple Sclerosis

A.I. Boullerne

T09 Glial-neuronal interactions

T09-001A

Noradrenergic modulation of microglial dynamics and synaptic plasticity

R.D. Stowell, G. Sipe, A. Majewska

T09-002A

Unravelling potential mechanisms causing astrocytic death during early epileptogensis

Z. Wu, T. Deshpande, P. Bedner, C. Steinhäuser

T09-003A

Effects of APOE genotype on microglial phagocytosis of synapses in human post-mortem tissue in Alzheimer's disease

M. Tzioras, K. Popovic, C. Henstridge, C. Smith, B. McColl, T. Spires-Jones

T09-004A

Peripheral axonal ensheatment is regulated by Ral GTPase and the exocyst complex

J. Silva-Rodrigues, C. Patricio-Rodrigues, A. Fernandes, P. Augusto, V. Sousa-Xavier, B. Santos, A. Farinho, R. Teodoro

T09-005A

Heterogeneity of activity- induced sodium transients between astrocytes of the mouse hippocampus and neocortex

D. Ziemens, F. Oschmann, N.J. Gerkau, C.R. Rose

T09-006A

Unravelling the impact of seizure activity in epileptogenesis and brain damage – a correlation towards glia-mediated mechanisms

D. Vila Verde, T. S. Zimmer, A. Cattalini, E. A. van Vliet, E. Aronica, M. de Curtis

T09-007A

Astrocytes regulate cortical neuronal K_{ir} expression during development to increase cell excitability

A.C. Todd, P. Hasel, O. Dando, D. Wyllie, J. Qiu, G. Hardingham

T09-008A

Dynamic events in early node-like clustering and myelination *in vitro*

M. Thetiot, S. Freeman, T. Roux, A.-L. Dubessy, M.-S. Aigrot, Q. Rappeneau, N. Sol-Foulon, C. Lubetzki, A. Desmazieres

T09-009A

Oligodendrocytes contribute to brain glutamate homeostasis

W. Xin, H. Shen, R. Marino, A. Waisman, W. Lamers, D. Bergles, A. Bonci

T09-010A

Oral cancer derived tumor necrosis factor alpha (TNFα) activates Schwann cells to amplify pain

E. Salvo, T. Nguyen, N. Scheff, B. Schmidt, D. Albertson, J. Dolan, Y. Ye

T09-011A

Astrocytes prime an early synaptic pruning and remodelling in the prefrontal cortex upon antidepressant treatment

C. Roman, A.M. Vogl, S.A. Giusti, E. Butz, I.D. Neumann, D. Refojo, R. Rupprecht, B. Di Benedetto

T09-012A

Increased synapse elimination by microglia in schizophrenia patient-derived models of synaptic pruning

J. Gracias, B. Watmuff, J. Biag, J. Thanos, P. Whittredge, T. Fu, K. Worringer, H. Brown, J. Wang, A. Kaykas, R. Karmacharya, C. Goold, S. Sheridan, C. Sellgren, R. Perlis

T09-013A

Microglial interaction with nodes of Ranvier: a role in repair?

R. Ronzano, T. Roux, M. Thetiot, E. Mazuir, M.S. Aigrot, N. Sol-Foulon, R. Magliozzi, B. Stankoff, C. Lubetzki, A. Desmazières

T09-014A

Müller glial swelling activates TRPV4 and increases photoreceptor cell death in retinal detachment

K. Shibasaki, S. Sugio, D. Krizaj, P. Gailly, Y. Ishizaki, H. Matsumoto

T09-015A

Regulation of mitochondrial metabolism in astrocytes at the level of PDC, by glutamate, mGluR5 and PKCδ

K. Mohammad Nejad Farid, E. Maronde, A. Derouiche

T09-016A

Methotrexate chemotherapy impairs adaptive myelination through altered BDNF-TrkB signaling

A.C. Geraghty, E. Gibson, R. Ghanem, J. Greene, T. Yang, L. Ni, M. Greenberg, F. Longo, M. Monje

T09-017A

Monosynaptic tracing maps brain-wide afferent oligodendrocyte precursor cell connectivity

B. Yalcin, C. Mount, K. Cunliffe-Koehler, M. Monje

T09-018A

Toxic RNA affects astrocyte adhesion, spreading and migration in myotonic dystrophy, and impacts neuritogenesis through abnormal glial-neuronal interactions

D.M. Dinca, A. Gonzalez-Barriga, S.O. Braz, C.F. Bourgeois, G. Sicot, C. Chhuon, A. Huguet-Lachon, A. Cordier, I.C. Guerrera, D. Auboeuf, G. Gourdon, M. Gomes-Pereira

T09-019A

Neuronal activity facilitates microglia to find "eat-me" signal on synapses

M. Andoh, S. Morikawa, Y. Ikegaya, R. Koyama

T09-020A

Abnormal microglia-neuron interaction and prefrontal cortex miswiring with increased levels of C4

A. Comer, T. Jinadasa, L. Kretsge, T. Nguyen, J. Lee, E. Newmark, F. Hausmann, S. Rosenthal, K. Lui Kot, W. Yen, A. Cruz-Martin

T09-021A

Glial lipoprotein receptor LSR as potential molecular link between olfactory and memory deficits, and brain cholesterol homeostasis

A. El Hajj, F. Désor, V. Bombail, I. Denis, F.W. Pfrieger, F.T. Yen, M.-C. Lanhers, T. Claudepierre

T09-022A

Early-life stress affects the numbers and apoptosis of neurons and glia cells during postnatal development of the medial prefrontal cortex in rats

I. Majcher-Maślanka, A. Solarz, A. Chocyk

T09-023A

Assessment of the astrocytic proteome using sub-compartment specific proteomics

J. Soto, Y. Jami-Alahmadi, J. Chacon, B. Diaz-Castro, J. Wohlschlegel, B. Khakh

T09-024A

Ultrastructure of glial cells and neuron-glia interaction in the amygdala of the autistic rat model

T. Lordkipanidze, M. Zhvania, G. Lobzhanidze, N. Pochkhidze

T09-025A

Local and dynamic protein synthesis in perisynaptic processes of hippocampal astrocytes

N. Mazaré, M. Oudart, J. Moulard, G. Cheung, A.-C. Boulay, A. Bemelmans, S. Le Crom, N. Rouach, M. Cohen-Salmon

T09-026A

The role of glial monocarboxylate transporters in the peripheral nervous system

F. Bouçanova, A. Temporão, E. Domènech-Estévez, H. Baloui, J.-J. Médard, L. Pellerin, R. Chrast

T09-027A

Functional and proteomic analysis of perisynaptic astrocyte processes during memory consolidation

A. Badia Soteras, A. Smit, M. Verheijen

T09-028A

Aging axons become more vulnerable to aglycemia despite proficient regulation of ANLS by aging astrocytes

S. Baltan, C. Bastian, C. Franke, J. Quinn, B. Ransom, A. Faris, C. Doherty, S. Brunet

T09-029A

Axotomy-induced ultrastructural alterations and Ca^{2+}-dependent necrosis and apoptosis of the crayfish neuron and glial cells

A. Khaitin, M. Rudkovskii, A. Fedorenko, A. Uzdensky

T09-030A

Neurons expressing pathological Tau protein trigger dramatic changes in microglial morphology and dynamics

R. Hassan-Abdi, A. Brenet, C. Yanicostas, N. Soussi-Yanicostas

T09-031A

Astrocytes in the ventromedial hypothalamus modulate anxiety behavior through regulating SF-1 neuron activities

Y. Liu, J. Shao, L. Zhang, D. Gao, J. Tu, F. Yang

T09-032A

Astrocytes and neurons generated from induced pluripotent human stem cells derived from psychiatric patients in 3D co-culture

S. Zach, M. Ottosson, B. Hengerer

T09-033A

Impact of the life and death of embryonic oligodendrocyte progenitors and interneurons on cortical circuits

D. Ortolani, D. Orduz, N. Benamer, E. Coppola, L. Vigier, A. Pierani, M.C. Angulo

T09-034A

Non-random formation of the 'tripartite synapse' in layer 2/3 of rat barrel cortex

S. Filippova, A. Logvinov, A. Starostin, E. Kirichenko

T09-035A

How does neuronal activity regulate multiple aspects of myelination *in vivo*?

R.G. Almeida, J. Williamson, D. Lyons

T09-036A

Astrocyte-regulated mouse dominance behavior without prior winning experience and memory

K. Noh, Y. Jo, W.-H. Cho, K. Park, Y.K. Cho, Y.S. Kim, B.-E. Yoon, S.-Y. Choi, S.B. Jun, S.J. Lee

T09-037A

***In vivo* imaging of microglial-mediated synaptic pruning in the *Xenopus laevis* retinotectal circuit and modulation by the complement system**

T. Lim, E. Ruthazer

T09-038A

Astrocytic glutamate, via P38α MAPK signaling, drives NMDA receptor-dependent long-term depression and contribute memory decay

M. Navarrete, M. Cuartero, R. Palenzuela, J. Draffin, A. Konomi, S. Colié, M. Hasan, A. Nebreda, J. Esteban

T09-039A

NG2 glia-specific Kir4.1 knockout as a tool to understand the impact of neuron-glia synaptic signaling

G. Seifert, A. Timmermann, A. Boehlen, M. Skubal, A. Bilkei-Gorzo, A. Zimmer, R. Jabs, F. Kirchhoff, C. Steinhäuser

T09-040A

TNF-α induced connexin43 gap junction uncoupling in astrocytes is an early event during epileptogenesis

L. Henning, J. Müller, Z. Wu, M.T. Heneka, P. Bedner, C. Steinhaeuser

T09-041A

Targeted deletion of CD44 adhesion molecule in astrocytes hardly affects dendritic spine morphology in the mouse hippocampus

A. Chwedorowicz, V. Orian-Rousseau, J. Dzwonek

T09-042A

Over-expression of hSREBP2 in astrocytes normalized brain cholesterol biosynthesis in a mouse model of Huntington's disease

G. Birolini, G. Verlengia, L. Zentilin, M. Giacca, M. Simonato, E. Cattaneo, M. Valenza

T09-043A

A functional role of microglia in epilepsy

A. Brenet, R. Hassan-Abdi, J. Somkhit, C. Yanicostas, N. Soussi-Yanicostas

T09-044A

Neuron-glia crosstalk in homeostatic synaptic plasticity: role of connexin and pannexin channels

A. Cairus, V. Abudara, N. Vitureira

T09-045B

Regulatory role of astrocytes in a neural network model in response to different types of neuronal activity

B. Genocchi, K. Lenk, J. Hyttinen

T09-046B

SIRPα modulates microglial membrane extensions through regulation of recycling endosomes

A. Muthukumar, D.K. Vargas, A. Frouin, N.J. Scott-Hewitt, C. Kondapalli, C. Hartigan, M. Schenone, B. Stevens

T09-047B

The contribution of glia to synaptic dysfunction at the onset of Alzheimer's disease

M.S.J. Kater, A.B. Smit, M.H.G. Verheijen

T09-048B

Microglia mediated synaptic pruning is altered in the Cstb$^{-/-}$ mouse model for progressive myoclonus epilepsy, EPM1

S. Tegelberg, E. Kuosa, H. Kallo, P. Hakala, T. Joensuu, A.-E. Lehesjoki

T09-049B

Rab6A immunolabelling in mouse and human brain: Establishing an astrocyte-specific marker

L. Spieß, T.M. Freiman, A. Derouiche

T09-050B

Astrocytes can synchronize the clock of segregated neuronal populations

L. Giantomasi, O. Barca-Mayo, D. De Pietri Tonelli, L. Berdondini

T09-051B

Intracellular ion signaling influences myelin basic protein synthesis in oligodendrocyte lineage cells

S. Kirischuk, J. Hammann, D. Bassetti, R. White, H. Luhmann

T09-052B

Angiotensin AT2-receptor induced interleukin-10 attenuates neuromyelitis optica spectrum disorder-like pathology

R.M.H. Khorooshi, E.U. Tofte-Hansen, C. Tygesen, R. Montanana-Rosel, H.L. Limburg, N. Asgari, U.M. Steckelings, T. Owens

T09-053B

Sex specific microglia response to transient reduction of neuronal activity

A. Venturino, R. Schulz, G. Colombo, B. Nagy, S. Siegert

T09-054B

Influence of cholinergic signaling on radial glial progenitors in the fetal mouse spinal cord

K.H. Arulkandarajah, G. Osterstock, S. Corsini, N. Escalas, H. Le Corronc, B. Le Bras, C. Mouffle, E. Bullier, E. Hong, P. Legendre, C. Soula, J.-M. Mangin

T09-055B

Loss of L-type Ca^{2+} channels Cav1.2 and Cav1.3 in NG2 glia affects synaptic plasticity

N. Zhao, F. Kirchhoff

T09-056B

Astrocyte modulation of synaptic transmission in the reward circuitry of the mouse ventral tegmental area

L.M. Requie, M. Gòmez-Gonzalo, A. Chiavegato, M. Melone, F. Conti, G. Carmignoto

T09-057B

Independent regulation of targeting and growth orchestrates myelination by oligodendrocytes *in vivo*

A.-M. Ristoiu, A. Klingseisen, P.J. Brophy, D.A. Lyons

T09-058B

24(S)-hydroxycholesterol is a potent modulator of cholesterol metabolism in rat retinal Müller glia

E. Léger-Charnay, L. Martine, L. Bretillon, E. Masson, S. Gambert

T09-059B

Regulation of microglial phagocytosis by THIK-1 K^+ channels in health and disease

P. Izquierdo, C. Madry, L. Arancibia-Carcamo, D. Attwell

T09-060B

Astroglia-secreted factors modulate local protein synthesis in neurites

M. Gamarra García-Bermejo, M. Blanco, J. Baleriola

T09-061B

Fasting induces astroglial plasticity in the olfactory bulb glomeruli of rats: evidence for a role of astrocytes in the sensory regulation of food intake

G. Champeil-Potokar, V. Daumas-Meyer, C. Chaumontet, P. Congar, I. Denis

T09-062B

The role of astrocytic calcium signaling in development and aging

S. Guerra-Gomes, J.F. Viana, E. Loureiro-Campos, V.M. Sardinha, D.S.M. Nascimento, I. Caetano, J.S. Correia, N. Sousa, L. Pinto, J.F. Oliveira

T09-063B

The role of IP_3R2-dependent calcium signaling in neural and astrocytic morphology in the CA1 area of the hippocampus

J.F. Viana, S. Guerra-Gomes, G. Tavares, D.S.M. Nascimento, I. Caetano, N. Sousa, L. Pinto, J.F. Oliveira

T09-064B

MiniSOG: temporal and spatial control over astrocyte exocytosis

D.S.M. Nascimento, I. Caetano, J.F. Viana, S. Guerra-Gomes, J. Dunphy, P. Haydon, N. Sousa, J.F. Oliveira

T09-065B

The impact of neuron-astrocyte signaling on neural networks that support cognitive function: an electrophysiological approach

I. Caetano, V.M. Sardinha, S. Guerra-Gomes, D.S.M. Nascimento, J.F. Viana, J.F. Oliveira

T09-066B

Characterization of microglial cells subsets based on multiple parameters measurement: a live cell imaging study

V. Petegnief, A. Martinez, A. Bosch, M. Calvo, C. Tischer, J.-K. Hériché, A.M. Planas

T09-067B

Simultaneous imaging of microglia and neuronal oxidative stress around beta amyloid plaques in an animal model of Alzheimer's disease using a novel genetic redox indicator

S. Wendt, B. MacVicar

T09-068B

Involvement of astrocyte histamine H1 receptors in the regulation of behavior

A. Karpati, T. Yoshikawa, K. Yanai

T09-069B

BLA astrocytes specifically modulate one type of excitatory neurons to rescue deficiency in risk avoidance of DISC1 mice

X. Zhou, Q. Xiao, L. Xie, F. Yang, J. Tu

T09-070B

The role of myelin maintenance in neuronal preservation

G. Duncan, J.C. Cabrera, M. McCane, S. Alper, B. Emery

T09-071B

Critical contributions of astrocytes to motor learning *in vivo*

C. Delepine, K. Li, M. Sur

T09-072B

Caloric restriction enhances astrocytic coverage of synapses and synaptic plasticity in mouse hippocampus

A.F. Plata, A. Popov, P. Denisov, A. Brazhe, A. Verkhratsky, A. Semyanov

T09-073B

Encoding of spatial information in the calcium signals of hippocampal astrocytes during virtual navigation

S. Curreli, J. Bonato, S. Panzeri, T. Fellin

T09-074B

GABA tonic inhibition and astrocytes in Dravet Syndrome

R.C. Goisis, L.M. Requie, I. Marcon, M. Gomez-Gonzalo, G. Losi, G. Carmignoto

T09-075B

Astroglial TNFR2 signaling is implicated in the regulation of learning, memory and anxiety

P. Illiano, H. Desu, M. Plastini, S. Mudalegundi, M. Moosa, M. Yli-Karjanmaa, R. Brambilla

T09-076B

Astrocytic dysfunction caused by L-α-aminoadipate impairs mouse hippocampal synaptic plasticity and memory

P. Agostinho, M. Perreira, I. Amaral, C. Leitão, C. Lopes, P.M. Canas, R.A. Cunha

T09-077B

Environmental enrichment promotes oligodendrocyte production and adaptive myelination in the young adult brain

M. Nicholson, R. Wood, A. Hannan, D. Gonsalvez, S. Murray, J. Xiao

T09-078B

Astrocyte-mediated dysregulation of glial-neuronal purinergic signalling in Fragile X Syndrome

K. Reynolds, C. Wong, L. Doering, A.L. Scott

T09-079B

Astrocytes from caudal medulla contribute to central respiratory chemoreception

J.L. Eugenin, M.J.S. Olivares, S. Beltran-Castillo, R.M. von Bernhardi

T09-080B

AAV mediated trans-cellular tagging of astrocytes: A novel tool for studying neuron-astrocyte interactions

L. Georgiou, B. Kuhn

T09-081B

Structural analysis of 3D cellular models of cortical glia, neurons and vasculature from serial block-face electron microscopy of p14 rat cortex

C. Calì, K. Kare, M. Agus, H. Lehvaslaiho, D.J. Boges, M. Hadwiger, P.J. Magistretti

T09-082B

The role of synaptic communication between NG2-glia and neurons in the adult brain and in autism spectrum disorder

K. Volbracht, J. Eugenin von Bernhardi, T.M. Böckers, L. Dimou

T09-083B

PHLDA3 overexpression in astrocytes causes endoplasmic reticulum stress

M. Řehořová, J. Turečková, I. Vargová, J.C. Kwok, J. Fawcett, P. Jendelová

T09-084B

Persistent increase in ventral hippocampal long-term potentiation by juvenile stress: A role for astrocytic glutamine synthetase

S. Ivens, G. Çalışkan, U. Heinemann, O. Stork, A. Albrecht

T09-085B

ATP, astrocytes and central respiratory control in the lamprey

L. Iovino, E. Cinelli, D. Mutolo, F. Bongianni

T09-086B

Impact of Connexine 30 overexpression on astroglial and neuronal networks

E. Hardy, P. Ezan, A.-P. Bemelmans, F. Mouthon, M. Charvériat, N. Rouach, A. Rancillac

T09-087B

Astroglia distinctly regulates local translation in neurons in basal and pathological conditions

A. Batista, A. Oulad, J. Baleriola

T09-088C

The serine shuttle sustains neuronal D-serine synthesis and regulates NMDAR synaptic activity

I. Radzishevsky, S. Neame, H. Safory, J.-M. Billard, H. Wolosker

T09-089C

Axo-glial interplay in oligodendrocyte specification and myelination: role of JNK1

M. Lorenzati, E. Boda, T. Borsello, A. Buffo, A. Vercelli

T09-090C

Ultrastructural and molecular characterization of astrocyte-derived extracellular vesicles from nigrostriatal brain regions: implications for dopaminergic neuroprotection

L. Leggio, F. L'Episcopo, S. Vivarelli, C. Tirolo, N. Testa, S. Caniglia, C. Bastos, N. Faria, M.J.U. Navas, J.M.G. Verdugo, S. Pluchino, B. Marchetti, N. Iraci

T09-091C

Vesicle-mediated transfer of ribosomes from glia to axons

A. Schnatz, E.-M. Krämer-Albers, C.F. Vogelaar

T09-092C

The influence of the microglia in Aβ-induced local translation in neurons

M. Blanco, M. Gamarra, J. Baleriola

T09-093C

Neuronal activity drives microglial Ca^{2+} signaling

G. Cignitti, E. Audinat

T09-094C

Oligodendrocyte-specific deletion of HIF1α leads to dysfunctional axonal mitochondria

I.D. Tzvetanova, S. Moore, A. Trevisiol, M.-T. Weil, T. Ruhwedel, C. Nardis, W. Moebius, L. de Hoz, K.-A. Nave

T09-095C

Astrocyte glutamate transporter GLT-1 as a possible therapeutic target in Rett syndrome

E. Albizzati, L. Taiarol, A. Frasca, N. Landsberger

T09-096C

Embryonic macrophages and microglia regulate the development of dorsal root ganglion sensory neurons in mouse embryos

M.K.S.C. Angelim, H. Le Corronc, C. Mouffle, J.M. Mangin, P. Legendre

T09-097C

Novel viral vector tools selectively inhibit astrocytic L-lactate release

B. Vaccari Cardoso, V. Mosienko, A.V. Gourine, S. Kasparov, A. Teschemacher

T09-098C

Serotoninergic modulation of astrocyte-neuron signaling

C. Gonzalez-Arias, C. Sánchez-Puelles, J. Ramírez-Franco, G. Perea

T09-099C

Infrared laser photostimulation elicits calcium signaling and water transport involving TRPV4 and AQP4 in primary and differentiated rodent astrocytes

W. Adams, A.I. Borrachero-Conejo, E. Saracino, T. Posati, M.G. Mola, F. Formaggio, M. Caprini, M. De Bellis, A. Frigeri, M. Muccini, R. Zamboni, G.P. Nicchia, A. Mahadaven-Jansen, V. Benfenati

T09-100C

Targeting of miR-124 in ALS motor neurons prevents neuro-immune dysregulation

C. Sequeira, D. Vizinha, A.R. Colaço, A.R. Vaz, D. Brites

T09-101C

Neuronal activity shapes K^+ conductance in oligodendrocyte precursor cells

H. Pivonkova, S. Sitnikov, R.T. Káradóttir

T09-102C

Astrocytes are indispensable for neuronal synchronization

L. Héja, Z. Szabó, R. Vincze, M. Péter, J. Kardos

T09-103C

The lactate receptor HCAR1 modulates neuronal network activity through the activation of $G_{\alpha i}$ and $G_{\beta\gamma}$ subunits

H.C. de Castro Abrantes, S. Offermanns, J.-Y. Chatton

T09-104C

Weaving a brain, one step at a time: Glia initiate circuit assembly through molecular crosstalk with pioneers of defined identity

G. Rapti, M.E. Hatten, S. Shaham

T09-105C

The myelinic channel: a highway to the axo-glial junction

J. Edgar, M. Euston, C. Crawford, R. Smith, E. Thies, E. Brown, M. Kneussel, K.-A. Nave

T09-106C

Psychostimulant abuse and neuroinflammation: a crosstalk between glial cells and neurons

J.C. Bravo, I. Ribeiro, T. Canedo, C. Lopes, T. Summavielle

T09-107C

Inorganic polyphosphate in interaction of neurons and glial cells of crayfish stretch receptor

M. Neginskaya, E. Berezhnaya

T09-108C

Dynamic miR-124 signature on APP-SWE cells regulates paracrine-mediated microglia immunomodulation

G. Garcia, A. Fernandes, D. Brites

T09-109C

Differential communication between axons and oligodendrocyte precursor cells revealed by *in vivo* calcium imaging

R. Marisca, T. Hoche, L. Hoodless, T. Czopka

T09-110C

Tonic inhibition in thalamus

E. Cheong

T09-111C

This poster has been withdrawn.

T09-112C

Neuronal activity-dependent myelin plasticity during adulthood

J.W. Jia, K.R. Martin, R.T. Karadottir

T09-113C

Retraction of perisynaptic astrocytic leaflets after *status epilepticus* promotes glutamate spillover in the rat hippocampus

O. Nosova, E. Shishkova, A. Plata, N. Gavrilov, V. Rogachevsky, I. Kraev, D. Korzhevskii, A. Semyanov

T09-114C

The importance of the gap junction-coupled astroglial network for neuronal function and energy metabolism

L. Hösli, M. Zuend, Z. Looser, N. Binini, S. Berry, M. Cohen-Salmon, C. Giaume, B. Weber, A. Saab

T09-115C

High-fat (Western) diet induces morphofunctional remodeling of astrocytes in mouse hippocampus

A. Popov, A.F. Plata, P. Denisov, A.R. Brazhe, A.N. Verkhratsky, A.V. Semyanov

T09-116C

Investigating activity-dependent mechanisms regulating axon-oligodendrocyte metabolic coupling

Z.J. Looser, M.J. Barrett, M.J. Stobart, J. Hirrlinger, F. Barros, K.-A. Nave, B. Weber, A.S. Saab

T09-117C

Complement targets newborn retinal ganglion cells for phagocytic elimination by microglia

S.R. Anderson, J. Zhang, M.R. Steele, C.O. Romero, A.G. Kautzman, D.P. Schafer, M.L. Vetter

T09-118C

Cannabinoid receptor type-2 signalling in microglia to neuron communication

B. Basilico, M. Giustizieri, L. Latini, M.C. Marrone, D. Ragozzino, S. Marinelli

T09-119C

Astrocytes: mediators of adult visual cortex plasticity

M. Hennes, N. Lombaert, J. Wahis, M. Holt, L. Arckens

T09-120C

Pharmacological modulation of glia activation and polarization affects dopamine turnover and behavioral compensation of locomotor deficits in rat model of early Parkinson's disease

A. Jurga, M. Paleczna, B. Kosmowska, K. Kuter

T09-121C

Huntingtin and Rab27a are involved in the secretion of exosomes from astroglial cells

M.A. Castro, E. Papic, A. Covarrubias-Pinto, A. Rosas-Arellano, F. Court, A. Rojas-Fernandez

T09-122C

Single synapse indicators of impaired glutamate clearance derived from fast $iGlu_u$ imaging of cortical afferents in the striatum of normal and Huntington (Q175) mice

A. Dvorzhak, S. Hirschberg, S. Angelov, D. Schmitz, R. Grantyn

T09-123C

P2Y12 is not a global mediator of synaptic plasticity

R. Lowery, M. Mendes, G. Sipe, A. Majewska

T09-124C

ADAM proteins in the assembly of voltage-gated potassium channel complexes at the cerebellar pinceau

E. Mercer, A. Rodriguez Luis, A. De Leon Edo, D. Meijer

T09-125C

Peripheral glia induce formation of pseudounipolar morphology in dorsal root ganglion neurons

O. Tasdemir Yilmaz, S. Cayer, L. Goodrich, A. Gimelbrant, R. Segal

T09-126C

Investigating the impact of protein glycosylation on glial phagocytosis

K.H. Tiemeyer, J. Elguero, J.I. Etchegaray, M. Feany, K. McCall

T09-127C

Using Transgenic-BioID to define the *interactome* of ADAM proteins in the nervous system

D.G. Booth, N. Kozar, D. Meijer

T09-128C

Schwann cell exosomes isolated from neuropathic rodent plasma regulate neuronal sprouting

H. Romero, C. Winston, N. Hirosowa, H. Kwon, R.A. Rissman, W.M. Campana

T09-129C

Neuronal activity and proliferation of NG2 cells

O. Thanscheidt, S. Schoch, D. Dietrich

T09-130C

Investigating glia-neuron protein interactions in purified neuronal cultures using BONCAT and SILAC metabolic labelling

P. Turko, K. Groberman, J. Schiweck, C. Kroon, B. Eickholt, I. Vida

T10 Ischemia and hypoxia

T10-001C
Response of rat glial cells to temporal oxygen-glucose deprivation: *in vitro* model of perinatal asphyxia
J.M. Gargas, J. Janowska, M. Ziemka-Nalecz, K. Ziabska, T. Zalewsla, J. Sypecka

T10-002C
Hypoxia induces the expression of TRPV5 channel in astrocytes
P. Liao

T10-003C
Topical administration of a soluble TNF inhibitor reduces infarct volume after focal cerebral ischemia in mice
M. Yli-Karjanmaa, B.H. Clausen, M. Degn, H.G. Novrup, D.G. Ellman, D.E. Szymkowski, M. Meyer, R. Brambilla, K.L. Lambertsen

T10-004C
Apoptosis and changes in expression of histone deacetylases in neurons and astrocytes in the penumbra after photo-thrombotic stroke in the rat cerebral cortex
A. Uzdensky, S. Demyanenko

T10-005C
Impact of neonatal hypoxia-ischemia on endogenous IGF-1 level in regard to oligodendrocyte differentiation and CNS myelination in rat
J. Janowska, J. Gargas, M. Ziemka-Nalecz, T. Zalewska, J. Sypecka

T10-006C
Oligodendroglial cell density regulates developmental and post-hypoxic injury white matter angiogenesis
M. Chavali, D. Rowitch

T10-007C
Spatiotemporal profile and morphological changes of NG2 glia in the CA1 region of the rat hippocampus after transient forebrain ischemia
X. Jin, T.-R. Riew, S. Kim, S.-J. Oh, M.-Y. Lee

T10-008C
The oxygen-glucose deprivation induced death in oligodendrocyte precursor cells derived from the fetal mouse brain is mainly driven by glucose metabolism perturbation
V.A. Baldassarro, A. Marchesini, L. Giardino, L. Calzà

T10-009C
Inhibition of Nedd9 is associated with neuroprotection in Rose Bengal photothrombosis
J.-A. Hwang, D.W. Kim, H.-J. Song

T10-010C
Investigation on the protective effect of the adenosine A_{2B} receptor agonist, BAY60-6583, in a rat model of transient middle cerebral artery occlusion (tMCAo)
F. Ugolini, D. Lana, L. Gaviano, I. Dettori, I. Bulli, F. Pedata, M.G. Giovannini

T10-011C
The role of Aquaporin 4 and Transient receptor potential vanilloid 4 channels in astrocyte swelling
Z. Heřmanová, M. Chmelová, P. Suchá, D. Kirdajová, L. Vargová, M. Anděrová

T10-012C
Alterations in *CCL2*, *CCL7* and *CCL12* expression – studies in the model of traumatic brain injury and glial cell cultures
K. Popiolek-Barczyk, A. Ciechanowska, M. Oggioni, D. Mercurio, S. Ippati, A. Piotrowska, K. Kwiatkowski, M.-G. De Simoni, J. Mika

T10-013C
Cortical XCL1/XCR1 signaling interplay as a potential therapeutic target – evidence from a mouse traumatic brain injury model and glial cell cultures
A. Ciechanowska, K. Popiolek-Barczyk, M. Oggioni, D. Mercurio, S. Ippati, A. Piotrowska, M.-G. De Simoni, J. Mika

T10-014C
Sirt2 promotes oligodendrocyte maturation in white matter after neonatal hypoxia
B.J. Jablonska-Gierdalska, L.-J. Chew, M. Reiber, K. Kusch, K.-A. Nave, V. Gallo

T10-015C
Immunohistochemical study of apoptosis and glial activation markers in the substantia nigra of the human neonate: The effect of perinatal hypoxic/ischemic injury
C. Paschou, M. Pagida, M. Chrysanthou-Piterou, A. Konstantinidou, E. Patsouris, M. Panayotacopoulou

T10-016C
Effects of phenformin on hypoxia-induced microglia activation
S. Jankeviciute, V. Borutaite

T10-017C

Neuroprotective effects of astrocyte-specific overexpression of Nrf2 in a mouse model of stroke

M. Aimable, L. Hegarty, K. Nagassima, J.A. Johnson, G.E. Hardingham, K. Horsburgh, J.H. Fowler

T10-018C

Treadmill exercise promotes neurogenesis and functional recovery via activating CD200/CD200R signaling pathway after stroke in rat

H. Sun, T. Hou, X. Tao, M. Chen, A. Li, H. Liao

T10-019C

Mechanisms of ischaemia-induced potassium release in grey and white matter

C.D. Bulman, R. Fern

T10-020C

Molecular and morphological changes of astrocytes following a juvenile mild traumatic brain injury

T. Clément, A. Delahaye, J.B. Lee, J. Van Steenwincke, A. Ichkova, M.-L. Fournier, J. Aussudre, M. Ogier, F. Canini, A. Obenaus, P. Gressens, J. Badaut

T10-021C

Transitory prenatal hipoxia-ischemia causes selective damages in corpus callosum of male and female rats and physical conditioning during pregnancy may recover these deleterious effects

P.C. Barradas, A.P. da Costa, C.V. Lucena, L.V. Mendes, A.S. Martins, V.R. Araujo, G.C. Lopes

T10-022C

Osteopontin heptamer peptide containing RGD motif has anti-inflammatory effects and enhances the motility and phagocytic activity of microglia

J.-K. Lee, I.-D. Kim, D. Davaanyam, H.-K. Lee, S.-W. Kim

T10-023C

TRPM2 channel in microglia contributes to CNS inflammation and cognitive impairment in chronic cerebral hypoperfusion

H. Shirakawa, J. Miyanohara, M. Kakae, K. Nagayasu, S. Kaneko

T10-024C

Possible kinases participation in adaptive processes in primary hippocampal cultures to hypoxic influence

E.V. Mitroshina, M.M. Loginova, T.A. Mishchenko, M.V. Vedunova

T10-025C

Metabolic control of swelling-activated glutamate release from rat astrocytes and its implications for excitotoxicity in the ischemic brain

C.S. Wilson, Z. Ashkavand, K.R. Norman, N. Martino, A.P. Adam, A.A. Mongin

T10-026C

Potential impacts of neuroglia on oligodendrogenesis

B. Schwendele, C. Brégère, P. Bustos, R. Guzman

T11 Memory and learning

T11-001B

***Sargassum fusiforme* improves memory and reduces amyloid plaque pathology in an Alzheimer's disease mouse model**

J. Bogie, C. Hoeks, M. Schepers, A. Tiane, A. Cuypers, F. Leijten, Y. Chintapakorn, T. Suttyut, S. Pornpakakul, D. Struik, A. Kerksiek, H. Liu, N. Hellings, P. Martinez-Marinez, J. Jonker, I. Dewachter, E. Sijbrands, J. Walter, J. Hendriks, A. Groen, B. Staels, D. Lütjohann, M. Mulder, T. Vanmierlo

T11-002B

Specific deletion of neuronal MCT2 or astrocytic MCT4 prevents new long-term memory formation by disturbing the hippocampus-dependent acquisition of information

C. Netzahualcoyotzi, L. Pellerin

T11-003B

This poster has been withdrawn.

T11-004B

Correlating astrocytic Ca2+ microdomain activity with motor learning

J. Shih, C. Delepine, M. Sur

T11-005B

Memory deficits and increased GFAP expression in hippocampal and hypothalamic astrocytes following a high-fat diet

C.V. Cardoso, R. Otton, M.F. Martins, E. Bondan

T11-006B

Effects of optogenetic astrocyte activation in hippocampus on mouse behavior

W.-H. Cho, K. Noh, S.J. Lee

T11-007B
Episodic memory formation is associated with changes in oligodendrocyte-specific gene expression
L.P. Barboza, K. Pandey, B. Bessières, C. Alberini

T11-008B
Metabolomic profiling reveals distinct cellular pathways altered in the rat hippocampus following episodic learning across post-natal developmental ages
B. Bessieres, E. Cruz, C.M. Alberini

T11-009B
A new tool for visualization of phagocytic activity and glial engulfment of synapses upon learning-dependent synapse elimination
Y. Morizawa, K. Matsui

T11-010B
Activity-dependent Arc accumulation in astrocytes
Y. Jiang, H.W. Leung, G. Foo, A. Van Dongen

T11-011B
72-h paradoxical sleep deprivation induces different microglial reactions in adolescent and adult mice
L.-H. Tuan, L.-J. Lee

T11-012B
Working memory training stimulates and requires new oligodendrocyte generation
T. Shimizu, M. Kaller, C. Sampaio-Baptista, D.M. Bannerman, H. Johansen-Berg, W.D. Richardson

T11-013B
Activation of gap junctions enhances memory consolidation
M. Péter, Z. Szabó, Z. Kovács, R. Vincze, L. Héja

T11-014B
The effect of chronic toluene inhalation on short-term memory and the ultrastructure of the rat hippocampus
N. Pochkhidze, M. G. Zhvania, N. Japaridze, N. Lomidze

T12 Myelin

T12-001A
Endoplasmic reticulum associated degradation is required for the myelinating function of adult mature oligodendrocytes
W. Lin

T12-002A
Protective role of fractalkine and S1P receptors in Oxidative stress induced demyelination
S.A. O'Sullivan, K.K. Dev

T12-003A
Netrin-1 regulates mitochondrial dynamics and bioenergetics in oligodendrocytes
D.S. Nakamura, Y.H. Lin, D. Khan, H.M. McBride, J.P. Antel, T.E. Kennedy

T12-004A
Pathological changes in mice with long term cuprizone administration
T. Nomura, Y. Bando, S. Yoshida

T12-005A
D–Aspartate treatment attenuates myelin damage and stimulates myelin repair
V. de Rosa, A. Secondo, A. Pannaccione, R. Ciccone, L. Formisano, N. Guida, R. Crispino, A. Fico, R. Polishchuk, A. D'Aniello, L. Annunziato, F. Boscia

T12-006A
Effect of myelin remodeling on axons and oligodendrocytes in pathological conditions
B. El-Waly, S. Brustlein, F. Debarbieux

T12-007A
Identification of a new missense variant in EGR2 that associates with Charcot Marie Tooth type 1 disease when combined with the LITAF T49M polymorphism
N. Patel, M. Blanco, S. Velasco-Avilés, A. Casillas, C. Díaz-Marin, H. Cabedo

T12-008A
A human pluripotent stem cell-derived *in vitro* model of myelination
O.G. James, B.T. Selveraj, N. Vasistha, S. Barton, D. Magnani, P. Connick, K. Burr, D. Story, C. ffrench-Constant, S. Chandran

T12-009A
Relieving the epigenetic blockade in progressive multiple sclerosis – making remyelination accessible again
A. Tiane, M. Schepers, D. Paes, J. Prickaerts, D. van den Hove, N. Hellings, T. Vanmierlo

T12-010A
YAP and TAZ regulate Cc2d1b and Purb in Schwann cells
S. Belin, Y. Park, M.L. Feltri, Y. Poitelon

T12-011A

TYRO3 is a key regulator of myelin structure and retinal function in the central nervous system

F. Blades, V. Wong, C. Nguyen, B. Bang, T. Kilpatrick, M. Binder

T12-012A

The role of novel synthetic microneurotrophin BNN20 in de-/remyelination

I. Kalafatakis, I. Charalampopoulos, A. Gravanis, D. Karagogeos

T12-013A

Contribution of reactive astrocytes to myelin repair

M.-A. Carrillo-de Sauvage, R. Pulgar-Sepúlveda, S. Vejar, J. Flament, C. Escartin, F.C. Ortiz

T12-014A

Neuregulin 1 type III improves peripheral nerve myelination in a mouse model of congenital hypomyelinating neuropathy

S. Belin, F. Ornaghi, G. Shackleford, R. Bansal, M.H. Schwab, K. Nave, P. Frattra, M. D'Antonio, Y. Poitelon, M.L. Feltri, L. Wrabetz

T12-015A

Sonic involvement in (re)myelination: New insights from SmoM2 AND Smo^{FL} mice

S. Nocera, S. Fernández, P. Sosa Gonzalez, R. Lujan, F. de Castro

T12-016A

Casting a wider net in the hunt for novel neurodegeneration genes – mutations in genes causal of white matter disease and dysregulation of lipid metabolism

J.B. Kwok, W. Kim, A. Don, H. McEwen, B. Guennewig, R. Landin-Romero, S. Chen, C. Dobson-Stone, O. Piguet, J. Hodges, G. Halliday

T12-017A

Short-chain fatty acids suppress demyelination and enhance remyelination

D. Noto, T. Chen, Y. Hoshino, M. Mizuno, S. Miyake

T12-018A

Brain region-dependent variation in myelin-related gene expression and myelin thickness in chronic psychosocial stress

M.A. Laine, K. Trontti, Z. Misiewicz, E. Sokolowska, N. Kulesskaya, A. Heikkinen, S. Saarnio, I. Balcells, P. Ameslon, D. Greco, P. Mattila, P. Ellonen, L. Paulin, P. Auvinen, E. Jokitalo, I. Hovatta

T12-019A

Role of Jun activating binding protein 1 (Jab1) in Central Nervous System (CNS) myelination

C. Rivellini, E. Porrello, G. Dina, S. Marenna, L. Leocani, G. Gullotta, M. Bacigaluppi, L. Chaabane, A. Vezzoli, S. Mrakic-Sposta, K.-A. Nave, U. Suter, A. Quattrini, S. Previtali

T12-020A

Convergent and distinct signaling pathways regulate oligodendrocyte cell maturation and myelination

J.E. Farley, K. Radzwill, G. Sheng, P. Pang, C. Garron, T. Samad, C. Pedraza

T12-021A

Complex formation of Rab35 with myotubularin-related phosphatidylinositol phosphatases implicated in myelination

L. Sawade, F. Grandi, H. Stephanowitz, E. Krause, G. Patiño-López, S. Shaw, K. Klinkert, F. Langa Vives, A. Echard, A. Bolino, V. Haucke

T12-022A

Activation of the ER stress transcription factor XBP1 modulates disease severity in CMT1B mice

T. Touvier, C. Ferri, R. Mastrangelo, C. Barkauskas, L. Glimcher, L. Wrabetz, M. D'Antonio

T12-023A

Uncovering mechanisms of environmental enrichment-induced recovery from perinatal hypoxia using the oligodendrocyte translatome

E. Goldstein, V. Gallo

T12-024A

Class IIa histone deacetylases promotes peripheral nerve regeneration by activating remyelination program

S. Velasco-Avilés, N. Patel, A. Casillas-Bajo, J.A. Gomez-Sanchez, H. Cabedo

T12-025A

The action of myelin basic protein charge isomers on methyl cycle in microglia

T. Barbakadze, E. Zhuravliova, N. Narmania, M. Sepashvili, L. Shanshiashvili, D. Mikeladze

T12-026A

MicroRNA-125a-3p fine-tunes oligodendroglial maturation and contributes to impaired re-myelination in multiple sclerosis

D. Lecca, D. Marangon, E. Boda, C. Negri, R. Parolisi, F. Montarolo, S. Perga, C. Giorgi, A. Buffo, M.P. Abbracchio

T12-027A

Proteome analysis of peripheral nerve myelin: A tool and resource to discover myelin proteins with relevance for a healthy nervous system

S. Siems, O. Jahn, M. Eichel, N. Kannaiyan, M. Rossner, K. Kusch, R. Jung, D. Hesse, D. Sherman, R. Fledrich, M. Sereda, K.-A. Nave, L.M. Wu, P. Brophy, H. Werner

T12-028A

Cdk7: role in oligodendrocyte differentiation and in myelination

V. Dion, A. Pieltain, B. Malgrange, R. Vandenbosch, R. Franzen

T12-029B

Analysing intrinsic and extrinsic factors involved in an impaired differentiation of induced pluripotent stem cell derived-oligodendrocytes in Multiple Sclerosis patients

L. Starost, M. Herold, L. Ottoboni, M. Ehrlich, M. Stehling, H.R. Schöler, L. Klotz, G. Martino, T. Kuhlmann

T12-030B

Is TRPA1 involved in fatty acid dysregulation-induced myelin disorders?

V. Giacco, N.B. Hamilton

T12-031B

Atypical myelin physiology and dynamics in a cortistatin-deficient environment

C.P. Falo, J. Castillo-González, I. Forte-Lago, A. Stucchi, F. O'Valle, M. Caro, E. González-Rey

T12-032B

A conditional mouse model and *in vitro* system to study *Gba1* in myelinating glia: novel contribution for Gaucher Disease and Parkinson's Disease

I. Gregorio, M. Chrisam, D. Bizzotto, E. Moro, M. Cescon

T12-033B

CRISPR/Cas9-mediated gene editing strategy to modulate *Plp1* expression for Pelizaeus Merzbacher disease caused by *Plp1* duplication

G.-B. Cho, H.S. Bae, H. Shin, J.M. Lee, J.Y. Lee

T12-034B

Therapeutic genome editing for Charcot-Marie-Tooth 1A

J.Y. Lee, J.-S. Lee, D.W. Song, H.S. Bae, H.S. Yu, K.J. Lee, S. Kim, Y.B. Hong, B.-O. Choi, J.M. Lee

T12-035B

Brain hypoxia in demyelination and remyelination

A.M. Rondelli, K.R. Kranc, S.R. Walmsley, A. Williams

T12-036B

G protein coupled receptor 37 (GPR37) inhibits remyelination

H.-J. Yang, A. Vainshtein, Y. Eshed-Eisenbach, E. Peles

T12-037B

Dynamic myelinogenesis is required for spatial learning and memory in mice

F. Wang, Y.S. Ren, F. Mei

T12-038B

Cell-autonomous requirement of TDP-43, an ALS/FTD signature protein, for oligodendrocyte survival and myelination

S.-C. Ling, J. Wang, W.Y. Ho, K. Lim, J. Feng, G. Tucker-Kellogg, K.-A. Nave

T12-039B

Hypoxia-inducible factor 1 alpha promotes peripheral nerve myelination

Y. Ujiie-Kobayashi, S. Wakatsuki, T. Araki

T12-040B

Requirement of TDP-43 in myelin-competent glia

S. Bachofner, J.A. Pereira, C. Fimiani, J. Keller, J. Gerber, U. Suter

T12-041B

***In vivo* study on adenosine A1 receptor functions in oligodendrocyte precursor cells**

Q. Guo, Q. Liu, L. Caudal, A. Scheller, W. Huang, F. Kirchhoff

T12-042B

The epigenetic role of vitamin C in Schwann cell myelination

T.C. Huff, D.W. Sant, V. Camarena, S. Mustafi, P.V. Monje, G. Wang

T12-043B

The role of oligodendrocyte cholesteryl esters in Alzheimer's disease

Y. Zhang, T. Gao, H. Li

T12-044B

Autotaxin, a regulator of oligodendrocyte differentiation

E. Suárez-Pozos, F.S. Afshari, K.M. Gorse, W.H. Moolenaar, J.L. Dupree, B. Fuss

T12-045B

Teneurin-4 is a positive regulator of CNS myelination through oligodendrocyte process formation

N. Suzuki, Y. Yamada

T12-046B

Molecular interaction between oligodendrocytes and axons through Teneurins for CNS myelination

C. Hayashi, N. Suzuki, N. Kikura, Y. Hosoda, Y. Mabuchi, C. Akazawa

T12-047B

Autophagy in oligodendrocytes

N. Ktena, V. Nikoletopoulou, D. Karagogeos, M. Savvaki

T12-048B

Single nuclei transcriptomics of human white matter oligodendroglia in multiple sclerosis

E. Agirre, S. Jäkel, A.M. Falcão, D. van Bruggen, I. Knuesel, D. Malhotra, K.W. Lee, C. ffrench-Constant, A. Williams, G. Castelo-Branco

T12-049B

L-prostaglandin D2 synthase regulates Schwann cells metabolism

A. Trimarco, M. Cariello, M. Audano, A. Cestaro, D. Caruso, N. Mitro, C. Taveggia

T12-050B

Toward a comprehensive understanding of promyelinating drugs molecular mechanism of action for central nervous system remyelination

A. Del Giovane, M. Tiberi, E. Nocita, F. Basoli, A. Rainer, A. Ragnini-Wilson

T12-051B

PINCH proteins regulate myelination of axons in the central nervous system

J. Paes de Faria, R.S. Silva, J.B. Relvas

T12-052B

The small GTPase RhoA regulates the onset of myelination and myelin production during PNS development

A. Seixas, M. Morais, J.A. Pereira, S. Krause, C. Brakebusch, U. Suter, J.B. Relvas

T12-053B

The adhesive properties of myelin basic protein C1/C8 charge isomers and their role in microglia plasticity

L.V. Shanshiashvili, M.V. Chikviladze, M.M. Sepashvili, I.V. Kalandadze, E. Zaalishvili, J.J. Ramsden, D.G. Mikeladze

T12-054B

Elucidating the repertoire of RNA-binding proteins associating with *Myelin Basic Protein mRNA* during oxidative stress conditions in oligodendroglial cells

P. Hoch-Kraft, C. Gonsior, F. Butter, J. Trotter

T12-055B

Activation of $GABA_B$ receptors promotes oligodendrocyte precursor cell differentiation and maturation

M.P. Serrano Regal, L. Bayón, I. Luengas, N. Ibarra, A. Pérez Sanmartín, J.C. Chara, V. Tepavcevic, F. Pérez Cerdá, C. Matute, M.V. Sánchez Gómez

T12-056C

Mechanosensing the (de)myelinating environment: development of a novel 3D tissue engineered platform

E. Carvalho, M. Araújo, H. Hubbe, E. Mendes, C. Barrias, A.P. Pêgo

T12-057C

Characterization of the onset and progression of nervous system myelination in mice

L. Bartesaghi, C. Bellardita, J.-J. Médard, O. Kiehn, R. Chrast

T12-058C

The role of CCN3 during central nervous system myelination and remyelination

N. de la Vega Gallardo, R.G. Penalva, J. Falconer, J. Moffat, M. Naughton, Z. Lin, B. Perbal, R.J. Ingram, D.C. Fitzgerald

T12-059C

Impact of antimuscarinic molecules on MAPK-mediated signal transduction in oligodendroglial myelination

L. Mészáros, A. Hoffmann, J. Wihan, S. Reiprich, J. Winkler

T12-060C

Liver X Receptor exerts a protective effect against the oxidative stress in the peripheral nerve

V.K. Sundaram, J. Grenier, C. Massaad

T12-061C

Investigating mechanisms underlying formation and remodeling of axon myelination patterns *in vivo*

F. Auer, S. Vagionitis, R. Marisca, T. Czopka

T12-062C

Insights into control of oligodendrocyte differentiation and axonal choice for developmental and regenerative myelination *in vivo*

S. Vagionitis, F. Auer, T. Czopka

T12-063C

Prohibitin 1 preserves axon and myelin integrity in the peripheral nervous system

G. Della-Flora Nunes, E.R. Wilson, Y. Poitelon, E. Hurley, B. Beirowski, B.W. O'Malley, L. Wrabetz, M.L. Feltri

T12-064C

Myelin structure alterations and glutamatergic system impairment in a rat model for non ketotic hyperglycinemia

B. Parmeggiani, C. Cecatto, M. Grings, G. Porto, B.S. Caetano, M. Wajner, G. Leipnitz

T12-065C

Transient expression of tissue-type plasminogen activator is associated to myelination processes in mice spinal cord

B. Delaunay, D. Vivien, F. Docagne, I. Bardou, E. Maubert

T12-066C

Roles for collapsin resonse mediator protein 2 in EAE and OPC maturation

K. Kowal, N. Marangoni, V. Savchenko, D.L. Feinstein

T12-067C

Ether-phospholipids are required for oligodendrocyte maturation and their intrinsic capacity to assemble myelin

B. Correia, A.R. Malheiro, T.F. Silva, D. Bessa-Neto, P. Van Veldhoven, P. Brites

T12-068C

Biomechanics in myelination: role of stretch-activated cation channels in regulation of myelin in CNS

M. Velasco-Estevez, K.E. Gadalla, S. Cobb, K.K. Dev, G.K. Sheridan

T12-069C

An investigation into the SFK-AMPK signaling axis and its role in CNS myelination

M. Narine, A. Volz, I. Tzvetanova, H. Colognato

T12-070C

Neurobiological basis of prefrontal cognitive dysfunction in a rat model of schizophrenia

D.A. Maas, V.D. Eijsink, J.A. van Hulten, L. Pavlidi, M. Vlassopoulou, P. de Weerd, J.R. Homberg, A. Vallès, B. Nait-Oumesmar, G.J. Martens

T12-071C

Two adhesive systems cooperatively regulate axon ensheathment and myelin growth in the CNS

M. Djannatian, S. Timmler, M. Schifferer, N. Elazar, M. Luckner, M.-T. Weil, I. Alexopoulos, A. Vainshtein, M. Arends, N. Snaidero, B. Schmidt, T. Misgeld, W. Möbius, E. Peles, M. Simons

T12-072C

Eating myelin debris makes microglia happy

D. Lerouet, C. Mamma, B. Palmier, S. Lebon, R. Lawson, A. Ishikawa, C. Leconte, A.-C. Novak, P. Gressens, C. Marchand-Leroux, V.C. Besson

T12-073C

Locomotor recovery following contusive spinal cord injury does not require oligodendrocyte remyelination

S. Manesh, G.J. Duncan, B.J. Hilton, P. Assinck, C.S. Chernoff, J. Liu, A. Moulson, J.R. Plemel, W. Tetzlaff

T12-074C

Remyelination leads to new myelination patterns in the cerebral cortex

C.L. Call, J.L. Orthmann-Murphy, G.C. Molina-Castro, H. Hsieh, E.G. Hughes, P.A. Calabresi, D.E. Bergles

T12-075C

Role of CD300f receptor in the demyelination cuprizone model

E. De Frutos, G. Manich, B. Almolda, R. Lopez-Vales, H. Peluffo, B. Gonzalez, B. Castellano

T12-076C

Promotion of white matter repair by treatment with Metformin in a mouse model of demyelination with cuprizone/rapamycin

W. Tetzlaff, B.S. Lashkari, W. Plunet, F.D. Miller

T12-077C

Monocarboxylate transporters and central nervous system (re)myelination

L. Izaguirre, M.P. Serrano, A. Gaminde, C. Netzahualcoyotzi, B. Nait-Oumesmar, L. Pellerin, C. Matute, V. Tepavcevic

T12-078C

Myelin basic protein displays major and sex-specific roles in sensory neuronal function and pain

A.V. Chernov, S.K. Hullugundi, A.G. Remacle, H.H. Patel, A.Y. Strongin, T.L. Yaksh, V. Shubayev

T12-079C

A novel peptide targeting demyelinating lesions

C. Abi Ghanem, A. Mann, S. Hussain, E. Ruoslahti, B. Ranscht

T12-080C

Development of an effective *ex vivo* model of myelination

L. Bouslama-Oueghlani, L. Baudouin, A. Czarnecki, K. Kanté, A. Millecamps, B. Nait-Oumesmar, B. Gurchenkov

T12-081C

Altering neuronal activity to alter remyelination

O. de Faria Jr, T. Karadottir

T12-082C

Mechanobiology of the human oligodendrocyte lineage

D.E. Espinosa-Hoyos, S. Burstein, A. Jagielska, T. Jain, V. Fossati, K.J. Van Vliet

T12-083C

Visualization of myelin turnover in the adult mouse CNS

W. Möbius, M. Meschkat, A. Steyer, M.T. Weil, K. Kusch, H.B. Werner, K.A. Nave

T13 Neural stem/progenitor cells

T13-001B

Transplantation of directly induced Neural Stem Cell (iNSCs) promotes remyelination in a mouse model of experimental focal demyelination

L. Peruzzotti-Jametti, N. Vicario, S. Rizzi, A. Braga, G. Volpe, C.-K. Kwok, M. Bergholt, G. D'Amico, M. Stevens, C. Zhao, F. Edenhofer, R. Franklin, S. Pluchino

T13-002B

Transcriptome and proteome profiling of neural stem cells in the human subventricular zone after Parkinson's disease

V. Donega, S. Burm, M. E. van Strien, E. J. van Bodegraven, I. Paliukhovic, W. van de Berg, H. Geut, K.W. Li, A.B. Smit, O. Basak, E. M. Hol

T13-003B

***In vivo* partial reprogramming of parenchymal glia into neural stem cells**

A. Platero-Luengo, B. Berninger

T13-004B

Functional analysis of mesenchymal stem cell stimulated adult neural stem cells *in vitro* and *in vivo*

I. Samper Agrelo, F. Beyer, J. Jadasz, L.-S. Spitzhorn, J. Adjaye, P. Küry

T13-005B

Single-cell RNA sequencing of neurogenic astrocytes as a tool to improve brain regeneration

J. Magnusson, G. Santopolo, M. Zamboni, J. Mold, M. Barrientos-Somarribas, C. Talavera-López, B. Andersson, J. Frisén

T13-006B

Diverse effects of canonical Wnt signaling on the differentiation potential of neural precursor cells and NG2 glia isolated from the intact and ischemic mouse brain.

T. Knotek, J. Kriska, D. Kirdajova, L. Janeckova, D. Kolenicova, M. Vojtechova, O. Butenko, D. Dzamba, P. Honsa, Z. Nahacka, Z. Kozmik, M.M. Taketo, L. Andera, V. Korinek, M. Anderova

T13-007B

Microglia actively remodels adult hippocampal neurogenesis through the phagocytosis secretome

J. Valero, I. Diaz-Aparicio, I. Paris, V. Sánchez-Zafra, V. Sierra-Torre, A. Plaza-Zabala, N. Rodríguez-Iglesias, M. Márquez-Ropero, S. Beccari, O. Abiega, E. Alberdi, C. Matute, I. Bernales, A. Schulz, L. Otrokocsi, B. Sperlagh, G. Lemke, M. Maletic-Savatic, A. Sierra

T13-008B

Connexin43 region 266-283 is involved in neural progenitor cell proliferation and differentiation through Src and β-catenin

R. Talaverón, E.R. Matarredona, A. Herrera, J.M. Medina, A. Tabernero

T13-009B

Alpha-MSH modulates hippocampal neural precursor cell proliferation and differentiation

L. Carniglia, J. Saba, D. Ramírez, J. Turati, M.J. Rudi, F. López Couselo, C. Caruso, D. Durand, M. Lasaga

T13-010B

Cellular senescence in populations of postnatal brain neural stem cells

M. Anesti, C. Dimitriou, V. Gorgoulis, I. Kazanis

T13-011B

Effect of peptides based on connexin43 in neural stem cells from the subventricular zone in an *in vivo* glioma model

A. Álvarez-Vázquez, R. Talaverón, J.M. Medina, A. Tabernero

T13-012B

The adult human and mouse spinal cord ependymal region maintains an embryonic-like dorsal-ventral regionalization with dorsal Msx1+ neural stem cells

J.-P. Hugnot, C. Ripoll, H. Ghazale, N. Leventoux, S. Azar, J.-L. Thomas, C.-F. Calvo, E. Huillard, L. Bauchet, Y. Lallemand

T13-013B

Glia isolated from adult gut generates progenitors of the enteric nervous system: an alternative source of replacement cells for regenerative strategies

C. Cirillo, S. Lionnet, A. Le Friec, L. Robert, F. Desmoulin, I. Loubinoux

T13-014B

Analysis of adult neurogenesis in transgenic mouse models for Zeb1

B. Gupta, G. Berx, S. Brabletz, T. Brabletz, M. Stemmler, F.A. Siebzehnrubl

T13-015B

SVHRP enhances neurogenesis through the PI3K/Akt pathway

S. Li, N. Li, B. Ge, X. Wu, Y. Peng, J. Zhao

T13-016B

Neurogenic potential of progenitor cells residing the central canal lining of the rat spinal cord exposed to minimal spinal cord injury at different stages of ontogenesis

F. Mochnacky, L. Slovinska, Z. Daxnerova, J. Sevc

T13-017B

Role of mitochondrial fusion dynamics in adult hippocampal NSC lineage progression

S.M.V. Wendler, G. Wani, J. Göbel, K.-K. Conzelmann, D. Chichung Lie, M. Bergami

T13-018B

A role for astrocyte alterations in Down syndrome neuropathology

M.E. Salvalai, M. Manfredi, H. Bondi, E. Xia, E. Marengo, P.L. Canonico, M. Grilli

T13-019B

Astrocyte-generated neuroblasts functionally integrate in the QA-lesioned striatum

G. Nato, M. Fogli, N. Marichal, I. Ghia, B. Berninger, P. Peretto, A. Buffo, F. Luzzati

T13-020B

Foxg1 antagonizes neocortical stem cell progression to astrogenesis

M. Santo, C. Falcone, G. Liuzzi, N. Cannizzaro, C. Grudina, E. Valencic, L. Perruzzotti-Jametti, S. Pluchino, A. Mallamaci

T13-021B

Neurogenic activation of striatal astrocytes after excitotoxic lesion: insights in the clonal dynamics of progenitor lineage progression

M. Fogli, G. Nato, P. Greulich, P. Peretto, A. Buffo, F. Luzzati

T13-022B

GPNMB is a negative regulator of Oligodendrogenesis in the adult brain

J. Samanta, D.Z. Radecki

T13-023B

The mitochondrial peptidase YME1L controls the early proliferative steps of adult neurogenesis

G.A. Wani, S. Wendler, H.G. Sprenger, J. Göbel, J. Seeger, B. Fernando, C. Frese, T. Langer, M. Bergami

T13-024B

Immunomodulatory functions of endogenous neural stem cells for myelin repair

B. Brousse, P. Durbec, M. Cayre

T13-025B

Decoding the progeny of NG2 and GFAP progenitor cells

A.C. Ojalvo Sanz, A. Bribián, R. Sánchez-González, L. López-Mascaraque

T13-026B

Novel gliogenic domains in the adult V-SVZ neural stem cell niche

A.C. Delgado, A. Maldonado-Soto, T. von Kaenel, D. Mizrak, V. Silva-Vargas, F. Doetsch

T13-027B

Fibrinogen deposition in the subventricular zone stem cell niche induces neural stem cell differentiation into astrocytes via BMP receptor signaling

L. Pous, S. Deshpande, S. Mezey, D. Pfeifer, V. Taylor, K. Akassoglou, C. Schachtrup

T13-028B

Adult enteric glial cells generate functional neurons via cognate developmental pathways dependent on persistent Foxd3 expression

S.H. Chng, A.C. Bon Frauches, F. Progatzky, S. Boeing, M.S. Castaneda, D. Bell, W. Boesmans, P.V. Berghe, S. Ultanir, V. Pachnis

T13-029B

Molecular characterization of the human and mouse adult spinal cord ependymal region reveals a conserved embryonic-like dorsal-ventral regionalization and identifies novel dorsal VEGFR3+ Msx1 + Id4+ quiescent neural stem cells

C. Ripoll, H. Ghazale, S. Azar, N. Leventoux, D. Mamaeva, P. Guigue, Y. Glasson, C.-F. Calvo, J.-L. Thomas, Y. Lallemand, V. Rigau, F. Perrin, L. Bauchet, J.-P. Hugnot

T14 Neuroimmunology and neuroinflammation

T14-001A

Hyperalgesia induced by platelet releasate increases the activities of neurons and glia cells in the dorsal horn of the spinal cord by mechanisms dependent on P2X7 purinergic receptors

R. Giorgi, K. M. Francisco, A. O. P. Bom, A. C. P. Campos, M. L. Santoro, R. L. Pagano

T14-002A

Mechanisms of myeloid cell invasion and polarization in autoimmune CNS inflammation

D. Ivan, M. Kerschensteiner, G. Locatelli

T14-003A

Lymphocyte infiltration, glial activation and neuronal loss in cerebellum of patients with different stages of chronic liver disease

T. Balzano, J. Forteza, P. Molina, J. Giner, A. Monzó, J. Sancho-Jiménez, A. Urios, C. Montoliu, V. Felipo

T14-004A

Microglia depletion in a murine model of epilepsy: effects on seizures and neuropathology

M. Di Nunzio, S. Scarpa, M. Cerovic, E. Micotti, D. Tolomeo, E. Palma, T. Ravizza, M. Bacigaluppi, A. Vezzani

T14-005A

Neuroinflammatory reactive astrocytes in acute injury and neurodegenerative disease

K. Guttenplan, M. Weigel, A. Münch, M. Bennett, S. Liddelow, A. Gitler, B. Barres

T14-006A

Astrocytic expression of Glial Fibrillary Acidic Protein (GFAP) in the frontal cortex, hypothalamus and periaqueductal gray area of rats following administration of several pain management drugs

E.F. Bondan, L. Viebig, M.C. Augusto, P. Brigo, C. Silva, P. Dossa, C. Cardoso, M.F. Martins

T14-007A

The synthetic steroid tibolone decreases reactive gliosis and neuronal death after a stab wound injury in the cerebral cortex of female mice

A. Crespo Castrillo, N. Yanguas Casás, M.A. Arévalo, I. Azcoitia, G.E. Barreto, L.M. García Segura

T14-008A

Setmelanotide, a novel, selective melanocortin receptor-4 agonist exerts anti-inflammatory actions in astrocytes and promotes an anti-inflammatory macrophage phenotype

A. Kamermans, T. Verhoeven, A.J. van het Hof, M.E. Witte, J. van Horssen, H.E. de Vries, M. Rijnsburger

T14-009A

Neuroimmunological function of osteopontin for astrocyte reactivation in stab wound mouse brain and LPS stimulated primary culture

H. Ikeshima-Kataoka, Y. Matsui, T. Uede, M. Yasui

T14-010A

Influenza A infection in a mouse model of Alzheimer's disease

S. Hosseini, K. Michaelsen-Preusse, A. Holz, K. Schughart, M. Korte

T14-011A

Exosome secretion from *TREM2* mutant iPS microglia like cells: effect on neuron-like cells

A. Mallach, T. Piers, J. Pocock

T14-012A

Oligodendroglial TNFR2 regulates neuroinflammation and remyelination following CNS disease

H.L. Desu, P. Illiano, Y. Florimon, M. Plastini, P. Madsen, R. Brambilla

T14-013A

Microglia specific deletion of miR-155 modulates inflammation and pathology in the APP/PS1 mouse model of AD

M.S. Aloi, K. Prater, R. Hu, J. Pathan, S. Davidson, B. Sopher, R. Sanchez, H. de la Iglesia, S. Jayadev, G. Garden

T14-014A

Functional analysis of phagocytes in myelin repair using *in vivo* live imaging in zebrafish

M.I. Cunha, M. Simons

T14-015A

Increased density and redistribution of multivesicular bodies into perivascular astrocytic endfeet in sepsis-associated encephalopathy

T. Shuliatnikova

T14-016A

***Crif1* deficiency in endothelial cells induces BBB disruption accompanying myelin damage**

M.J. Lee, Y. Jang, J. Han, S.J. Kim, X. Ju, Y.L. Lee, J.H. Son, J. Cui, M.J. Ryu, S.-Y. Choi, W. Chung, C. Heo, Y.H. Huh, G.R. Kweon, J.Y. Heo

T14-017A

Comprehensive gene expression meta-analysis identifies signature genes that distinguish microglia from peripheral monocytes/macrophages in health and glioma

V.C. Haage, M. Semtner, R. Oliveira Vidal, D. Perez Hernandez, W.W. Pong, Z. Chen, D. Hambardzumyan, V. Magrini, A. Li, J. Walker, E. Mardis, P. Mertins, S. Sauer, H. Kettenmann, D.H. Gutmann

T14-018A

Understanding the role of early-life inflammation on the incidence of Alzheimer's disease

M. Guerrero Carrasco, M. Vargas-Caballero, D. Gomez-Nicola

T14-019A

Early life stress causes behaviour changes and microglia dysfunction in the pre-frontal cortex of male mice

J. Costa, J. Guedes, P. Ferreira, L. Franco, J. Peça, A.L. Cardoso

T14-020A

p38 CRISPR/Cas9 PLGA nanoparticles mitigate neuropathic pain by reducing microglial activity in the spinal dorsal horn

J. Shin, N. Shin, H.J. Shin, H.H. Kwon, Y. Yin, H. Park, D.H. Gwon, J.-A. Hwang, J. Hong, D.W. Kim

T14-021A

Immunomodulatory effects of FTY720 in a mice model of social isolation

D.M. Magalhaes, M. Mampay, A. Sebastião, G. Sheridan, C. Valente

T14-022A

Exposure to parkinsonian neurotoxins inhibits glial cells anti-inflammatory response

N. Rabaneda-Lombarte, L. Blasco-Agell, J. Serratosa, J. Saura, C. Solà

T14-023A

B cell-derived IL-10 modulates the inflammatory response of microglia and astrocytes

A. Geladaris, D. Häusler, W. Brück, M.S. Weber

T14-024A

Microglia limit lesion expansion and promote functional recovery after spinal cord injury in mice

F.H. Brennan, J. Hall, Z. Guan, P. Popovich

T14-025A

Astrocytic phagocytosis as a compensated function of microglial dysfunction

H. Konishi, H. Kiyama

T14-026A

The role of platelet derived growth factors in microglia mediated responses: implications for retina degenerative diseases

M.T. Taiwo, T. Langmann

T14-027A

IL-37 reduces neuroinflammation after immune stimulation

N. Lonnemann, S. Hosseini, C. Dinarello, A. Holz, M. Korte

T14-028A

Inflammation as modulator of axonal regeneration: resolving the myeloid-neuroglial crosstalk

L. Andries, L. De Groef, I. Bollaerts, E. Lefevere, M. Salinas-Navarro, K. Movahedi, L. Moons

T14-029A

Spinal cord inflammation and locomotor adaptations in a mouse model of traumatic brain injury

S. Lemarchant, G. Courtand, L. Cardoit, G. Barrière

T14-030A

Circulating macrophages implicate a demyelination at early stage of lesion on NMO mouse model

M. Kim, K.-W. Oh, H.J. Kang, S.-M. Kim

T14-031A

Myeloid-derived suppressor cells as putative biomarker to predict the severity of the clinical course and the potential remyelination in multiple sclerosis

M.C. Ortega, R. Lebrón-Galán, I. Pérez-Molina, M.R. García-Montero, I. Machín, D. Clemente

T14-032A

The role of the mitochondrial genome in neuroinflammation in Parkinson's disease

K. Badanjak, A. Monzel, T. Heurtaux, K. Wasner, J. Ghelfi, N. Ouzren, N. Diederich, C. Klein, J. Schwamborn, S. Pereira, A. Grünewald

T14-033A

Local administration of therapeutic agents at the level of dorsal root ganglia – a new method to treat neuropathic pain

R.O. Gheorghe, C. Zbarcea, A. Tanase, M. Gherghiceanu, G. Chiritoiu, D. Sapunar, M.-L. Flonta, V. Ristoiu

T14-034A

Effects of metabolites on the crosstalk between macrophages and brain tumor cells

C. Geiß, N. Savaskan, A. Régnier-Vigouroux

T14-035A

Changes in microglial cell number at different times in a mouse model of glaucoma

R. de Hoz, J. Fernandez-Albarral, I. López-Cuenca, N. López-Villarin, A.I. Ramírez, E. Salobrar-García, J.M. Ramírez, J.J. Salazar

T14-036A

Changes in the retinal area occupied by IBA-1+ cells in the nerve fiber layer-ganglion cell layer at different times in a mouse model of glaucoma

A.I. Ramírez, E. Salobrar-García, N. López-Villarin, J. Fernandez-Albarral, I. López-Cuenca, R. de Hoz, J.M. Ramírez, J.J. Salazar

T14-037A

Tyrosine kinase inhibition with masitinib modulates Schwann cells-mediated PNS inflammation via CSF1/IL34 and SCF in an inherited model of ALS

M. Kovacs, E. Trias, S. Ibarburu, V. Varela, I.C. Moura, J. Beckman, O. Hermine, L. Barbeito

T14-038A

Autism spectrum disorder in a mouse model of perinatal neuroinflammation

C. Bokobza, P. Joshi, N. Heck, J. Van Steenwinckel, P. Gressens

T14-039A

Immunometabolism and Alzheimer's disease: Alteration of microglial metabolic function with age and cerebral amyloidosis

A. Rubio Araiz, M.V. Guillot-Sestier, M. Lynch

T14-040A

Impact of traumatic brain injury on astrocytes: role of neuropeptide Y

R.A. Leitão, J.L. Alves, A.L. Bernardo, C.A. Fontes-Ribeiro, A.P. Silva

T14-041A

Toll-like receptor antagonistic peptide 2 attenuates osteoarthritic pain induced with monoiodoacetate by reducing microglial activity of the spinal dorsal horn

H. Park, Y. Yin, J. Shin, J. Kim, J. Beom, J. Hong, D.W. Kim

T14-042A

Oxysterols prevents IFN-γ-induced inflammation in microglia through disrupting raft formation and caveolin-mediated signaling endosome

J.-H. Han, J. Lee, I. Jou

T14-043A

Region-specific microglial heterogeneity and its potential relevance for Parkinson's disease

O. Uriarte, T. Heurtaux, K. Grzyb, R. Halder, E. Glaab, M. Buttini, A. Skupin, M. Mittelbronn, A. Michelucci

T14-044A

Differential expression of alpha B-crystallin in glial cells in demyelinating lesions during autoimmune optic neuritis

A. Stojic, J. Bojcevski, R. Fairless, R. Diem

T14-045A

Examination of the oxidative stress and the tumor necrosis factor (TNF)-α-production in hepatic encephalopathy

Z. Barany, D.S. Kiss, I. Toth, G. Jocsak, T. Bartha, L.V. Frenyo, A. Zsarnovszky, A. Sterczer

T14-046A

Comparison of pharmacological modulation of glial cells by the CCR5 and CXCR3 receptor antagonists – *in vivo* and *in vitro* studies

A. Piotrowska-Murzyn, K. Kwiatkowski, E. Rojewska, K. Pawlik, A. Ciechanowska, J. Mika

T14-047A

Profiling immune response of microglia and macrophages in preclinical model of glioblastoma

K.A. Walentynowicz, N. Ochocka, P. Segit, B. Gielniewski, B. Wojtas, B. Kostkiewicz, B. Kaminska

T14-048A

Blockade of CXCR2 inhibits neuropathic pain-related behavior and modulates primary microglial and astroglial cultures

K. Pawlik, A. Piotrowska, E. Rojewska, A. Ciechanowska, W. Makuch, J. Mika

T14-049A

Cross talk between immune cells and pericytes at the blood-brain barrier: relevance for inflammatory CNS disorders

K. Koch, M. Lindner, R. Dieguez-Hurtado, R. Adams, T. Kuhlmann, H. Wiendl, L. Klotz

T14-050A

The immunomodulatory miR-146b-5p impedes pro-inflammatory activation of immature microglia and subsequent perinatal white matter injury during early inflammation exposure

J. Van Steenwinckel, C. Bokobza, P. Joshi, B. Fleiss, P. Gressens

T14-051A

Time-dependent effects of microglia/macrophages partial depletion on oligodendrocyte precursors in brain ischemia

S. Raffaele, E. Bonfanti, P. Gelosa, L. Castiglioni, L. Sironi, M. Cimino, C. Verderio, M.P. Abbracchio, M. Fumagalli

T14-052A

Microglia- myelinogenic and neuroprotective cells of the CNS

A. Wlodarczyk, A. Benmamar-Badel, K. Nolling Jensen, G. Lyszczarz, T. Owens

T14-053A

Do typical and atypical antipsychotics alter the expression of IL-6 in human astrocytes under pro-inflammatory conditions?

K. Sharma, T. Ang, M. Velasco, K. Doyle, K. Dev

T14-054A

Prenatal exposure to Poly I:C leads to the expression of microglia M1 phenotype: the study in the cortex of young offspring rats

K. Chamera, M. Szuster, E. Trojan, A. Basta-Kaim

T14-055A

Mesoporous silica particles are phagocytosed by microglia and induce a mild proinflammatory response

J. Sala-Jarque, E. García-Lara, P. Carreras-Domínguez, N. Rabaneda-Lombarte, C. Solà, J.M. Vidal-Taboada, C. Zhou, A. Feiler, E. Kozlova, J. Saura

T14-056B

Genetic manipulation of NEMO reveals glial cell type-specific effects of NF-κB activation following brain injury

E. Engelhardt, J. Göbel, H.M. Jahn, J. Altmüller, M. Bergami

T14-057B

The effect of insufficient sleep on microglia

S. Steffens

T14-058B

Role of the neuropeptide cortistatin in the physiology and pathophysiology of the blood-brain barrier

J. Castillo González, C.P. Falo, I. Forte-Lago, M. Caro, E. González-Rey

T14-059B

Decoding damage-associated microglia in post mortem hippocampus of Alzheimer's disease patients

E. Sanchez-Mejias, M. Mejias-Ortega, V. Navarro, A. Gomez-Arboledas, C. Nuñez-Diaz, R. Sanchez-Varo, M. Vizuete, J.C. Davila, J. Vitorica, A. Gutierrez

T14-060B

Dysfunctional astroglial phagocytosis in Alzheimer's disease

A. Gomez-Arboledas, J.C. Davila, E. Sanchez-Mejias, C. Nuñez-Diaz, R. Sanchez-Varo, V. Navarro, M.V. Sanchez-Mico, M. Vizuete, J. Vitorica, A. Gutierrez

T14-061B

Hippocampal IL-33 induces microglial-mediated neuroinflammation associated with cognitive impairments

V. De Concini, F. Reverchon, V. Larrigaldie, S. Mortaud, J.-C. Bizot, B. Ryffel, V. Quesniaux, A. Menuet

T14-062B

Role of cortistatin in neuroinflammation: regulation of brain immune cross-talk in neurodegenerative diseases

E. González-Rey, C.P. Falo, M. Pedreño, V. Ferraz-de-Paula, N. Adán, I. Forte-Lago, M. Caro

T14-063B

Alterations in microglia and myeloid cells CD300f immunoreceptor are associated with major depressive disorder in mice and humans

N. Lago, F.K. Kaufmann, L. Negro-Demontel, D. Ali-Ruiz, N. Vitureira, G. Ghisleni, N. Rego, K. Jansen, L.M. Sousa, R.A. Silva, D.R. Lara, B. Pannunzio, J.A. Abin, D.B. McGavern, H. Naya, J. Sayós, R. López-Vales, M.P. Kaster, H. Peluffo

T14-064B

Role of CD200-CD200R interaction after acute damage to the peripheral nervous system

B. Pannunzio, H. Peluffo, N. Lago

T14-065B

Reciprocal interplay between astrocytes and CD4+ T cells in Alzheimer's disease

S.F. Spampinato, S. Merlo, E. Fagone, M. Fruciano, M.A. Sortino

T14-066B

C3- and CR3-dependent microglial clearance protects photoreceptors in retinitis pigmentosa

W.T. Wong, S.M. Silverman, W. Ma, L.T. Zhao

T14-067B

Identifying a dark microglia specific marker

M.-K. St-Pierre, F. González Ibáñez, S. Belhocine, M. Carrier, D. Gosselin, M.-E. Tremblay

T14-068B

Regional specificity of microglia in hypertension

B. Wei, Q. Bi, X. Liu, P. Shi

T14-069B

Serum cytokine profile in MOG-Ds compare to MS, NMOSD-AQP4 and other inflammatory demyelinating disease of CNS

Y.N. Kwon, B. Kim, J. Seo, S. Ahn, K. Oh, H.J. Kang, Y.S. Choi, S.-M. Kim

T14-070B

Microglial and astrocyte priming in the APP/PS1 model of Alzheimer's disease: increased vulnerability to acute inflammation and cognitive deficits

A.B. Lopez-Rodriguez, E. Hennessy, C. Murray, A. Lewis, N. de Barra, S. Fagan, M. Rooney, A. Nazmi, C. Cunningham

T14-071B

Dietary carnosine intake improves outcomes in Experimental Autoimmune Encephalomyelitis

J. Spaas, W. Franssen, T. Vanmierlo, J. Bogie, W. Derave, B. O Eijnde

T14-072B

Upregulation of cathepsins in the spinal cord of mice with experimental autoimmune encephalomyelitis

Y. Choi, J. Kim, M. Ahn, P. Ekanayake, T. Shin

T14-073B

Evaluation of microglial morphology in Alzheimer's disease and after amyloid-beta-immunotherapy

D.K. Franco Bocanegra, C. Mcauley, Y. Gourari, C. Holmes, J. Nicoll, D. Boche

T14-074B

Alleviation of neuropathic pain by AAV9 mediated expression of a soluble colony stimulating factor-1 receptor

S. Gushchina, P.K. Yip, G.G. Parry, H. Sivakumar, M. Liu, X. Bo

T14-075B

Immunophenotyping microglia and macrophages on schizophrenia brain tissue

G. Mendez Victoriano, S. Lyons, G. Buckland, T. Tofani, L. De Picker, J. Nicoll, D. Boche

T14-076B

Downregulation of GABAergic transmission in the olfactory bulb of mice with experimental autoimmune encephalomyelitis

J. Kim, M. Ahn, Y. Choi, P. Ekanayake, T. Shin

T14-077B

Genetically perturbed myelin as a risk factor for neuroinflammation-induced axon degeneration

J. Groh, T. Abdelwahab, R. Martini

T14-078B

AC-YVAD-CMK prevents NLRP3 inflammasome activation and pyroptosis in animal model of depression

E. Trojan, A. Kurek, K. Chamera, N. Bryniarska, M. Szuster, M. Strzelec, A. Basta-Kaim

T14-079B

Investigation of microglia modulation after spinal cord injury of varying severity

Y.O. Mukhamedshina, E.R. Akhmetzyanova, A.A. Rizvanov

T14-080B

Microglial phenotypes are determined by variable intracellular hydrogen peroxide concentrations

K.U. Tufekci, I. Ercan, B.I. Eltutan, S. Genc

T14-081B

Alterations in the mechanisms of control of microglial activation in Parkinson's disease: the CD200-CD200R1 system

N. Rabaneda-Lombarte, J.M. Vidal-Taboada, J. Saura, C. Solà

T14-082B

Impaired microglial autophagy in experimental Alzheimer's disease

F.E. Saravia, C. Pomilio, A. Vinuesa, R. Gorojod, S. Porte-Alcon, J. Presa, A. Gregosa, J. Bonifacino, M. Kotler, J. Beauquis

T14-083B

Dissecting the infection cycle of *Listeria monocytogenes* in microglia

L.T. Gomes, C. Monney, A. Oevermann

T14-084B

Divergence in ATP-induced calcium transient responses from naïve and activated microglia expressing GCaMP5G in brain slices obtained from a mouse viral-induced model of temporal lobe epilepsy

G.J. Wallis, J.N. Wagner, K.S. Wilcox

T14-085B

Phenotypic profiles of microglia in the CNS of transgenic mice with astrocyte-targeted production of interleukin-6 or interferon-alpha

P.K. West, A.N. McCorkindale, B. Guennewig, S.R. Jung, M. Janitz, O. Butovsky, M.J. Hofer, I.L. Campbell

T14-086B

The effects of maternal immune activation on microglial fraktalkine pathway modulated neurodevelopment

L. Fernandez de Cossio Gomez, C. Lacabanne, G. Castino

T14-087B

Age-related changes in Smad- and non-Smad TGFβ signaling in neuroinflammation

R. von Bernhardi, E. Ponce, P. Muñoz, V. Rodríguez, C. Zuñiga, S. Beltrán, J.J. Triviño

T14-088B

Medium-chain fatty acids attenuate neuroinflammatory responses by activated microglia

Y. Nakamura, Y. Nishimura, K. Takano, M. Moriyama

T14-089B

Temporal activation of glial cells and cellular distribution of chemokine CCL2 and its receptor CCR2 in the trigeminal subnucleus caudalis of rat trigeminal neuropathy model

L. Kubíčková, P. Dubový

T14-090B

The role of T cell in Neuromyelitis optica disease pathogenesis

M. Lindner, U. Bhatia, A. Schulte-Mecklenbeck, T. Wirth, T. Schmidt, C. Gross, M. Korsen, N. Schwab, T. Kümpfel, I. Kleiter, S. Barman, N. Goebels, A. Winkler, C. Stadelmann, W. Brück, H. Wiendl, T. Kuhlmann, M. Ringelstein, L. Klotz

T14-091B

VISTA expression by microglia decreases during inflammation and is differentially regulated in CNS diseases

M. Borggrewe, C. Grit, T. Otto, T. Medeiros Furquim Mendonça, W. den Dunnen, R. Noelle, B. Eggen, J. Laman

T14-092B

***In vitro* model for inflammatory activation of human iPSC-derived astrocytes**

T. Hyvärinen, S. Hagman, K. Veijula, L. Sukki, M. Ristola, P. Kallio, S. Narkilahti

T14-093B

Brain specific foreign body reactions of neuro implant materials in different *in vitro* models

C. Schmitt, F. Rasch, A. Lechanteur, K. Siemsen, R. Lucius, C. Selhuber-Unkel, J. Held-Feindt, G. Piel, R. Adelung, K. Hattermann

T14-094B

Differential immunomodulatory properties of oligodendrocyte progenitor cells and immature oligodendrocytes in response to neuroinflammation-induced demyelination: focus on the role of TLR3 activation

M. Boccazzi, J. Van Steenwinckel, A.-L. Schang, C. Verderio, M. Fumagalli, S. Mani, P. Gressens

T14-095B

Probing functional contributions of microglia and non-parenchyma CNS macrophages in physiology and pathophysiology

J.-S. Kim, Y. Xia, Z. Haimon, A. Shemer, L. Chappell-Maor, S. Boura-Halfon, S. Jung

T14-096B

Targeting SHIP1 for therapeutic intervention in Alzheimer's disease

E. Mead, J. Obst, H. Hall-Roberts, S. Cowley, W. Bradshaw, C. Jimenez-Antunez, O. Gileadi, E. Di Daniel, P. Brennan, J. Davis

T14-097B

Blocking of CSFR1 impairs oligodendrocyte differentiation

A. Quiroga, H. Li

T14-098B

Perinatal inflammation perturbs glial network development of the cerebellum

L.S. Klein, B. Fleiss, J. Van Steenwinckel, L. Schwendimann, C. Bührer, T. Scheuer, P. Gressens, T. Schmitz

T14-099B

Understanding the impact of microglial proliferation on phenotypic specification in APP/PS1 mice

Y. Hu, G. Fryatt, J. Obst, T. Muntslag, D. Gomez-Nicola

T14-100B

Microglial Mertk is crucial for appropriate myelination and its loss leaves axons vulnerable to demyelination

M.D. Binder, L. Nguyen, F. Blades, A. Aprico, L. Johnson, T.J. Kilpatrick

T14-101B

Encephalitogenicity of the first extracellular loop of KIR4.1 in mice

F. Guillot, J. Harb, A. Garcia, C. Mathé, S. Brouard, L. Berthelot, D.A. Laplaud, A.B. Nicot

T14-102B

Dissecting heterogeneity and functional phenotypes of microglia and macrophages in the rat brain after transient cerebral ischemia

B. Kaminska, W.D. Rajan, B. Wojtas, B. Gielniewski, A. Gieryng, M. Zawadzka

T14-103B

Anti-inflammatory effect of carbon monoxide on the neuron-microglia communication

N.L. Soares, C.S.F. Queiroga, H.L.A. Vieira

T14-104B

Analysis the expression of different cytokines/myokines by retinal Glial cells at different time points in glaucoma mice experimental model

J.A. Fernández-Albarral, A.I. Ramírez, R. de Hoz, M. López-Gallardo, M. Moya, E. Marco, M. Avilés-Trigueros, M. Vidal-Sanz, J.J. Salazar, J.M. Ramírez

T14-105B

Chemogenetic manipulation of microglia *in vivo* and *in vitro*: a novel mouse model

Z. Környei, N. Lénárt, E. Császár, E. Mikics, C. Miskolczi, C. Cserép, B. Pósfai, A. Dénes

T14-106B

Adenosine A_3 receptor activation reduces microglia reactivity triggered by elevated hydrostatic pressure

R. Boia, J. Ferreira-Silva, I.D. Aires, A.F. Ambrósio, A.R. Santiago

T14-107B

Oral gut microbiota manipulation by antibiotics and probiotics influences neuroimmune responses in a progressive model of multiple sclerosis

L. Mestre, F.J. Carrillo-Salinas, M. Mecha, C. Espejo, L.M. Villar, A. Feliú, C. Guaza

T14-108B

Immune-mediated damage of myelinated axons in an animal model for multiple sclerosis

E. Schaeffner, J. Edgar, W. Moebius, R. Stassart, K.-A. Nave

T14-109B

Profilin-1 deficiency specifically in microglia leads to microglial disfunction, blood-brain barrier dysfunction and changes in mice behavior

C.C. Portugal, R. Socodato, T. Canedo, J.F. Henriques, C.M. Silva, M. Ferreira, J. Magalhães, V. Coelho-Santos, F.I. Baptista, A.P. Silva, A. Magalhães, A.F. Ambrósio, T. Summavielle, J.B. Relvas

T14-110B

This poster has been withdrawn.

T14-111C

Microglial responses in the human Alzheimer's disease frontal cortex

M. Mejias-Ortega, E. Sanchez-Mejias, V. Navarro, C. Nuñez-Diaz, A. Gomez-Arboledas, R. Sanchez-Varo, M. Vizuete, J.C. Davila, J. Vitorica, A. Gutierrez

T14-112C

Role of insulin degrading enzyme (IDE) in microglial cells challenged with pathological conditions at the confluence of Alzheimer's disease and type 2 diabetes

M. Corraliza, D. Sanchez, E. Arranz, I. Cozar, M.D. Ganfornina

T14-113C

Unraveling the gene regulatory networks that drive microglia and immune cell activation in Alzheimer's disease at single-cell resolution

I. Scheyltjens, D. Kancheva, H. Van Hove, K. De Vlaminck, A.R.P. Antunes, L. Martens, N. Vandamme, S. De Prijck, J. Aerts, Y. Saeys, J. Reumers, D. Moechars, J.A. Van Ginderachter, K. Movahedi

T14-114C

Role of the NKCC1 co-transporter in microglial function and inflammatory responses

K. Tóth, R. Fekete, N. Lénárt, C.A. Hübner, K. Kaila, Z. Környei, A. Dénes

T14-115C

IFN-β expression of astrocytes and neurons is essential for the protection against HSV-1 CNS infection

A. Pavlou, C. Chhatbar, L. Ghita, C. Detje, H. Sauer, I. Gerhauser, C.K. Prajeeth, A. Buch, B. Sodeik, U. Kalinke, M. Stangel

T14-116C

Proinflammatory T cells drive distinct inflammatory astrocyte profiles

S. Schmaul, N. Hanuscheck, B. Wasser, F. Zipp, S. Bittner

T14-117C

Depletion of T helper 17 T-cells ameliorates Alzheimer's disease like pathology

K.W. Im, M. Uchoa, O. Finucane, M. Guillot-Sestier, M. Lynch, K. Mills, T. Town

T14-118C

Nose-to-brain delivery of prostaglandin D2 glycerol ester-loaded lipid nanocapsules to reduce neuro-inflammation

A. Mwema, A. des Rieux, G. Muccioli

T14-119C

Dynamic responses of enteric glia cells following intestinal helminth infection

F. Progatzky, E.-M. Amaniti, S.-H. Chng, B. Stockinger, V. Pachnis

T14-120C

Dimethyl Fumarate ameliorates NLRP3 inflammasome activation in murine microglia

B. Tastan, B.I. Arioz, K.U. Tufekci, S. Genc

T14-121C

Altered glycolysis contributes to dysfunctional macrophages in a murine model of Alzheimer's disease

O. Finucane, M. Milner, M.A. Lynch

T14-122C

Astrocyte activation in Alzheimer's disease: Role of protein kinase C

A. Muraleedharan, N. Rotem-Dai, A. Monsonego, E. Livneh

T14-123C

The effect of Cannabidiol (CBD) on microglial roles in a model of epilepsy

T.R. Victor, J.C. Nissen, M.W. Elmes, D.G. Deutsch, S.E. Tsirka

T14-124C

Live-cell analysis of engulfment of neuropathology-associated peptides by human iPSC-derived microglia

G. Lovell, M. Bowe, S. Lopez Alcantara, J. Rauch, L. Oupicka, A. Overland, C. Schramm, T. Dale, D. Trezise

T14-125C

The cytokine IL-27 shapes the properties of human astrocytes and neurons and impacts on their interactions with human T lymphocytes in the context of multiple sclerosis

F. Lemaître, A.C. Moratalla, N. Farzamkia, E. Haddad, N. Arbour

T14-126C

Developing and mature grey matter oligodendrocytes are more sensitive to pro-inflammatory cytokines than white matter oligodendrocytes

J.M. Jongsma, W. Baron

T14-127C

S100B plays an active role in the pathogenesis of the *in vivo* model of Multiple Sclerosis

C. Barros, A. Barateiro, R. Freitas, D. Brites, L. Graça, A. Fernandes

T14-128C

Reboxetine treatment reduces neuroinflammation and neurodegeneration in the 5xFAD mouse model of Alzheimer's disease: role of CCL2

I. Lopez Gutierrez, J.L. Muñoz Madrigal, M. Gonzalez Prieto, J.R. Caso, B. García Bueno, A. Gonzalez Bris, C. Ulecia Morón, D. Martin Hernandez, J.C. Leza, K. McDowell

T14-129C

Effects of specific α7nAChR agonists AR-R17779 and PHA 568487 on pro-inflammatory cytokine release in LPS activated microglia

M.E. Hammarlund, S. Hua, F. Albabily, M.E. Johansson

T14-130C

Generation of human microglia-like cells from PD patient-specific iPS cells

L. Blasco-Agell, M. Pons-Espinal, G. Carloa, C. Calatayud, I. Fernández-Carasa, E. Tolosa, A. Raya, A. Consiglio

T14-131C

Defective cholesterol clearance limits remyelination in the aged central nervous system

L. Cantuti-Castelvetri, D. Fitzner, M. Bosch-Queralt, M.-T. Weil, M. Su, P. Sen, T. Ruhwedel, M. Mitkovski, G. Trendelenburg, D. Lütjohann, W. Möbius, M. Simons

T14-132C

Defining molecular mechanisms of regulatory T cell-mediated oligodendrocyte differentiation and remyelination

F.L. Evans, M. Dittmer, R. Penalva, R.J. Ingram, F.J. Sim, D.C. Fitzgerald

T14-133C

Decreased CCL20 in V30M related familial amyloid polyneuropathy: a possible impairment in immune cells chemoattraction in FAP nerves

J. Moreira, M. Saraiva, M.J. Saraiva

T14-134C

Methamphetamine induced neuroimmune response: an interaction between astrocytes and microglia

T. Canedo, C.C. Portugal, R. Socodato, J.D. Magalhães, J. Bravo, A. Magalhães, J.B. Relvas, T. Summavielle

T14-135C

Regulation of neuroinflammation through control of macrophage and microglial polarization dynamics

L. Weinstock, J. Forsmo, A. Wilkinson, H. Xiao, T. Gao, S. Ramesha, S. Rangaraju, L. Wood

T14-136C

Sexual differentiation of microglia and neurodegenerative diseases

E. Vegeto, A. Villa, F. Mornata, G. Pepe, A. Maggi

T14-137C

Experimental autoimmune encephalomyelitis induction in a model of impaired IP_3-dependent astrocytic Ca^{2+} signaling

S.P. das Neves, S. Guerra-Gomes, N. Sousa, J.F. Oliveira, J.A. Palha, J.J. Cerqueira, F. Marques

T14-138C

Protein profiling of $CD11b^+$ CNS myeloid cells from aged $APP_{SWE}/PS1_{DE9}$ and wildtype mice points to the involvement of cathepsin Z in Alzheimer's disease

C. Thygesen, A.L. Hemdrup, L. Ilkjær, S.S. Kempf, C.U. von Linstow, A.A. Babcock, S. Darvesh, M.R. Larsen, B. Finsen

T14-139C

Neuroprotective cross-talk of neonatal rat microglia and astrocytes

R. Edan, S. Alexander, A. Bennett

T14-140C

CCL2 induces the production of β2 adrenergic receptors and modifies astrocytic responses to noradrenaline

M.G. Prieto, I.L. Gutierrez, B.G. Bueno, J.R. Caso, D.L. Feinstein, J.L.M. Madrigal

T14-141C

Temporal PET imaging of TSPO in a mice model of mild traumatic brain injury

C. Delage, N. Vignal, T. Taib, C. Mamma, K. Khacef, I. Margaill, L. Sarda-Mantel, N. Rizzo-Padoin, F. Hontonnou, B. Saubaméa, C. Marchand-Leroux, D. Lerouet, B. Hosten, V. Besson

T14-142C

Regulation of immune regulatory gene expression in cultured mouse brain glial cells by Gas6

S.E. Gilchrist, S. Goudarzi, S. Hafizi

T14-143C

Activation of NLRP3 inflammasome in A1 astrocytes

C.A. Valente, A.F. Ribeiro, C.C. Almeida, A.M. Sebastião

T14-144C

Carbon monoxide-neuroglobin axis on cytoprotection

D. Dias-Pedroso, H.L.A. Vieira

T14-145C

Zika virus infection of glia leads to secondary injury to axons and dendrites, *in vitro*

V. Schultz, J. Barrie, S. Cumberworth, C. Donald, A. Kohl, H. Willison, J. Edgar

T14-146C

Effects of astrocyte targeted IL-6 overproduction after peripheral nerve injury in old mice

B. Almolda, G. Manich, R. Barbanti, B. González, B. Castellano

T14-147C

Microglia versus macrophage effects on oligodendrocyte precursor cells: role of extracellular vesicles

F. Scaroni, M. Lombardi, E. Bonfanti, M. Gabrielli, F. Filipello, M. Fumagalli, C. Verderio

T14-148C

After TBI, astrocyte-targeted production of IL-10 has an effect on microglia/macrophage population and reduces neuronal death

M. Shanaki Bavarsad, B. Almolda, B. Gonzalez, B. Castellano

T14-149C

Cellular stress alters NKG2D ligand expression by human astrocytes and neurons: impact on neural cell recognition by immune cells involved in multiple sclerosis

A. Carmena Moratalla, L. Legroux, F. Lemaitre, N. Farzam-kia, E. Haddad, A. Prat, N. Arbour

T14-150C

This poster has been withdrawn.

T14-151C

Aryl hydrocarbon receptor ligands for the modulation of retinal microglia homeostasis

A.S. Khan, T. Langmann

T14-152C

Investigating the role of innate immunity in phagocytic defect-driven neurodegeneration

J. Elguero, J. Park, K. Tiemeyer, J.I. Etchegaray, M. Feany, K. McCall

T14-153C

Chronic IL-10 overexpression induces alterations in microglia-neuron communication and neurogenesis during aging

P. Sanchez-Molina, B. Almolda, L. Giménez-Llort, B. González, B. Castellano

T14-154C

Early sexual differences in infiltrating cells and microglia after neonatal ischemia

S. Villapol, P. Joshi, V. Faivre, R. Moretti, C. Charriaut-Marlangue, V.C. Besson

T14-155C

Glial cells shape the complement homeostasis the healthy and diseased murine retina

D. Pauly, D. Agarwal, N. Dana, N. Schäfer, F. Grassmann, N.R. Zhang, A.K. Gautam, B.H.F. Weber, S.M. Hauck, M. Kim, C. Curcio, D. Stambolian, M. Li, A. Grosche

T14-156C

Effects of the overproduction of IL-6 on "Do-not-eat-me" signalling after facial nerve axotomy in mice

A.R. Gómez-López, G. Manich, B. González, B. Castellano

T14-157C

Studying uptake of disease-associated protein aggregates in human microglia

A. Nölle, T. Morrema, P. Ferrer Raventos, J. Hoozemans

T14-158C

Expression of genes of the vitamin K cycle in the mouse brain

N. Aydin, S. Goudarzi, S. Hafizi

T14-159C

Influence of microglia PPARγ activation in the control of purinergic-mediated astroglial proliferation

C. Quintas, R. Silva, J. Gonçalves, G. Queiroz

T14-160C

Human Alzheimer's disease microglial activation is not fully captured by existing mouse models

B. Friedman, K. Srinivasan, H. David

T14-161C

A scaffolding protein Gab2 is involved in postnatal development and lipopolysaccharide-induced activation of brain microglia of the mice

H.-S. Park, J.W. Byeon, J.H. Kim, H.R. Kim, H. Go, H.T. Park

T14-162C

MyD88 inhibition rescues anxiety-like behavior induced by LPS and skews microglia polarization in the medial prefrontal cortex of mice

F. Kuang, H.-H. Lu, Z. Fan, Z. Liu, S.-X. Wu

T14-163C

Microglia as a potential link between pathological myelination and stereotypic behavior after exposure to a maternal high-fat diet

M. Bordeleau, G. Luheshi, M.-E. Tremblay

T14-164C

An autophagy–lysosomal pathway orchestrates the intracellular transfer of *Plasmodium berghei* microvesicles to Astrocytes

I. Leleu, D. Delcroix-Genete, S. Salomé-Desnoulez, S. Pied

T14-165C

Study of microglia epigenetic post-traumatic brain injury changes using the ATAC-seq method

A. Jacquens, A.-L. Schang, J. Van Steenwinckel, V. Chhor, D. Saberan-Djoneidi, V. Mezger, V. Degos, P. Gressens

T15 Neurovascular interactions

T15-001B

Drug repositioning for new CNS injury treatment: Targeting on protection of blood-brain barrier

Y. Suzuki, K. Kadoya, T. Endo, Y. Matsui, Y. Rufei, T. Asano, S. Nakagawa, N. Iwasaki, None

T15-002B

Early-life stress alters the expression of genes related to glial and neurovascular functions in juvenile rat brain

A. Solarz, I. Majcher-Maślanka, A. Chocyk

T15-003B

Glial and vascular morphology in mouse model of Ataxia telangiectasia

Y. Mitiagin, I. Herman, H. Levi, D. Kalmanson, S. Cohen-Adiv, R. Galron, P. Blinder, A. Barzilai

T15-004B

Characterization of local translation mechanisms in astrocyte perivascular endfeet

M.F. Oudart, B. Lombard, D. Loew, M. Cohen-Salmon

T15-005B

MMP-3 suppresses neuroinflammatory processes by tightening the glia limitans upon optic nerve injury

E. Lefevere, M. Salinas-Navarro, L. Andries, I. Van Hove, K. Movahedi, R. Vandenbroucke, L. De Groef, L. Moons

T15-006B

What are the mechanisms of white matter damage in CADASIL?

R.M. Rajani, V. Domenga-Denier, J. Ratelade, A. Joutel

T15-007B

A role for PDGF-B in the stimulatory effect of exosomes from cerebral microvascular endothelial cells on proliferation of oligodendrocyte precursor cells

Y. Ishizaki, M. Kurachi, B. Xu, T. Matsuzaki

T15-008B

Biphasic morphological and physiological responses, including the change of paravascular space, during formation of cerebral edema *in vivo*

T. Ishikawa, M. Unekawa, Y. Tomita, J. Nakahara, M. Yasui

T15-009B

LPS-induced systemic inflammation affects the interactions of astrocytes and microglia in the neurovascular unit of the mouse brain cortex

K. Aravantinou-Fatorou, P. Koutsoudaki, E. Xingi, I. Giaglissi, I. Tsioti, B. Catalin, A. Scheller, F. Kirchhoff, D. Thomaidou

T15-010B

Glutaric acid effects on capillary contractility and pericyte migration: implications for GA-I pathogenesis

E.E. Isasi, N. Korte, V. Abudara, D. Attwell, S. Olivera

T15-011B

Activated microglia disrupt the blood-brain barrier and induce chemokines and cytokines in a rat *in vitro* model

Y. Shigemoto-Mogami, K. Hoshikawa, Y. Kanda, K. Sato

T15-012B

Study of functional interactions at the astrocyte-vascular interface with fast 3D two-photon Ca^{2+} imaging in awake mice

B.L. Lind, C. Laperchia, A. Volterra

T15-013B

Neuron-glia interactions in neurovascular coupling

M. Majnaric

T15-014B

Platelets as novel regulators of postnatal brain Neural Stem Cells

C. Dimitriou, K. Papadimitriou, K. Roussis, J. Guerrero, C. Ghevaert, R. Franklin, A. Symeonidis, I. Kazanis

T15-015B

Reactive oxygen species mediate amyloid β-evoked brain pericyte constriction and capillary blood flow compromise in Alzheimer's disease

C. Hirunpattarasilp, P. Izquierdo, R. Nortley, D. Attwell

T15-016B

The Ca^{2+}-gated Cl^- channel TMEM16A is a crucial mediator of pericyte contraction in the CNS microvasculature

N. Korte, P. Singhal, C. Pearson, D. Attwell, P. Tammaro

T15-017B

Capillary endothelial cells respond to neural activity

L. Khennouf, T. Pfeiffer, R. Nortley, D. Attwell

T15-018B
Blood vessels regulate oligodendrocyte precursor specification via a bidirectional crosstalk
I. Paredes Ugarte, J.R. da Cruz Vieira, H. Adler, E. Giannakouri, H.G. Augustin, C. Ruiz de Almodóvar

T15-019B
Caveolin-1 in neovaccularization and astrogliosis after stroke and effects of cavtratin as a neuroprotectant
L. Buscemi, C. Blochet, T. Clément, J. Badaut, L. Hirt

T16 Regeneration and repair

T16-001B
Low sulfated heparins target multiple proteins for central nervous system repair
S.C. Barnett, G. Mcanney, M. Mcgrath, C. Bavington, J. Turnbull

T16-002B
Gene expression in rejuvenated repair Schwann cells in aged mice or in chronic injured nerves
J.A. Gomez-Sanchez, L. Wagstaff, G. Otto, R. Mirsky, K.R. Jessen

T16-003B
Repair Schwann cells but not Schwann cell precursors have axon regeneration effects after peripheral nerve injury
T. Endo, K. Kadoya, T. Suzuki, Y. Suzuki, Y. Matsui, Y. Rufei, D. Kawamura, N. Iwasaki

T16-004B
Hybrid electrospun PHBV/Aloe vera and PHBV/Honey nanofibers are scaffolds for rat dorsal root ganglion neurite outgrowth and guidance as well as for the regeneration of mouse skin after wounding
M.-D.-M. Romero-Alemán, J.-E. Hernández-Rodríguez, J.-M. Pérez-Galván, M. Monzón-Mayor

T16-005B
Investigating oligodendrocytes plasticity after nerve lesion
G. Nocera, C. Jacob

T16-006B
Control chromatin remodelling enzymes in Schwann cells to improve peripheral nerve regeneration
H. Nadège

T16-007B
Phosphodiesterase 4D inhibition boosts remyelination in multiple sclerosis
M. Schepers, D. Paes, A. Tiane, E. Houben, O. Bruno, C. Brullo, N. Hellings, J. Prickaerts, T. Vanmierlo

T16-008B
Characterization of the cellular and molecular mechanisms that mediate perineurial glial bridging following peripheral nerve injury in zebrafish
K. Arena, S. Kucenas

T16-009B
Impaired myelin repair in the brain of young adult mice following repeat-insult demyelination
J.L. Fletcher, R. Wood, H. Nguyen, O. Ehrlich, A. Govier-Cole, J. Xiao, S. Murray

T16-010B
Retinal microglia signaling affects Müller cell behavior in the zebrafish following laser injury induction
A.M. Quintela Pousa, F.M. Conedera, N. Mercader, M. Tschopp, V. Enzmann

T16-011B
One neural stem cell at the time: enhancing adult oligodendrogenesis as a putative target for MS therapy
J.M. Mateus, M.A. Gomes, R. Soares, S.L. Paulo, A.F. Chora, A.M. Sebastião, S. Xapelli

T16-012B
High-throughput screening for pharmacological compounds promoting p57kip2 nuclear shuttling in oligodendroglial precursor cells
A. Manousi, P. Göttle, P. Küry

T16-013B
The peripheral blood content of myeloid-derived suppressor cells is a bioindicator of a greater capacity for spontaneous remyelination in multiple sclerosis
I. Sánchez-de Lara, R. Lebrón-Galán, I. Machín, C. Camacho, M.C. Ortega, D. Clemente

T16-014B
Soluble Neuregulin1 switches on the expression of genes strongly involved in the early response to peripheral nerve damage
G. Gambarotta, M. El Soury, B.E. Fornasari, I. Lombardo, G. Ronchi, S. Raimondo, S. Geuna

T16-015B

Direct conversion of hESC-derived glial progenitors into midbrain dopaminergic neurons

S. Nolbrant, D. Hoban, J. Giacomoni, D. Rylander Ottosson, S. Goldman, M. Parmar

T16-016B

Validation of the new remyelinating drug VP 3.15 in experimental autoimmune encephalomielitis using optical coherence tomography (OCT)

R. Benítez Fernández, C. Melero Jerez, E. de la Rosa Cano, F. de Castro Soubriet, A. Martínez Gil

T16-017B

EGF and HB-EGF infusion into the demyelinated adult mouse brain potentiates the regeneration of oligodendrocytes from neural precursor cells originating in the subventricular zone

K. Moradi, S. Mitew, Y.L. Xing, T.D. Merson

T16-018B

Novel insight into the phagocytic potential of human repair Schwann cells

T. Weiss, V. Brandel, S. Taschner-Mandl, R. Oehler, C. Radtke

T16-019B

Novel therapeutic strategy for brain neurodegenerative disease using de-differentiated Schwann cell transplantation

H.S. Kim, N.Y. Jeong

T16-020B

Enhancing remyelination with CRISPR/Cas9 edited human oligodendrocyte precursor cells

L.J. Wagstaff, A. Fidanza, R.J.M. Franklin, A.C. Williams

T16-021B

Direct reprogramming of human olfactory ensheathing glia (OEG) into neurons

M. Portela-Lomba, D. Simón, D. Fernández de Sevilla, V. García-Escudero, M.T. Moreno-Flores, J. Sierra

T16-022B

Microglia-derived extracellular vesicles modulate the response of oligodendrocyte progenitors to brain ischemia

E. Bonfanti, S. Raffaele, M. Lombardi, P. Gelosa, L. Castiglioni, M. Cimino, L. Sironi, M.P. Abbracchio, C. Verderio, M. Fumagalli

T16-023B

S1P receptor stimulation leads to the adaptation of a repair Schwann cell phenotype

J. Schira-Heinen, A. Heinen, L. Wang, B. Ziegler, G. Poschmann, K. Stuehler, H.-P. Hartung, P. Kuery

T16-024B

Role of Wnt pathway in the neuroregenerative properties of olfactory ensheathing glia (OEG)

M.T. Moreno-Flores, M. Portela-Lomba, J. Sierra, D. Simón

T16-025B

Deacetylation of HDAC2 target enhances transcriptional activation of remyelination

M. Duman, C. Jacob

T16-026B

Spatiotemporal investigation and transplantation analysis show an association of M2 macrophage with regenerating axons after peripheral nerve injury

Y. Matsui, K. Kadoya, T. Endo, Y. Nagano, M.A. Terkawi, N. Iwasaki

T16-027B

Neuronal injury induces connective tissue growth factor expression to support peripheral neuroregeneration

S. Negro, M. Stazi, G. D'Este, P. Aretini, G. Sales, C.M. Mazzanti, C. Romualdi, C. Montecucco, M. Rigoni

T16-028B

Melatonin promotes functional recovery of degenerated motor axons through Schwann cells activation via MT1 receptor

M. Stazi, S. Negro, G. D'este, O. Rossetto, C. Montecucco, M. Rigoni

T16-029B

Temporal pattern of microglia proliferation in a multiple lesion model

N. Jaff, P. Mannstrom, L. Brundin, M. Svensson

T16-030B

Extracellular vesicles mediate detrimental and protective action of microglia on myelin lesion

R. Parolisi, M. Lombardi, F. Scaroni, N. Kerlero de Rosbo, A. Uccelli, C. Verderio, A. Buffo

T16-031B

Inflammasome product IL-1β enhances myelination and remyelination of organotypic brain slices

D. Crooks, P. Bankhead, D. Fitzgerald, Y. Dombrowski

T16-032C

Inflammasomes: novel players in OPC proliferation and myelin regeneration

L. Gritti, E. McKay, D. Crooks, A.-L. Boinet, S. Fleville, D.C. Fitzgerald, P. Bankhead, Y. Dombrowski

T16-033C

Re-defining the Glia limitans layer of the olfactory nervous system

L. Nazareth, M. Chen, T. Shelper, M. Shah, J. Tello Velasquez, I. Beacham, M. Batzloff, H. Walkden, K. Beagley, J. St John, J. Ekberg

T16-034C

Neural cell membrane-coated nanoparticles for targeted and enhanced drug delivery to cells of the nervous system

S.Y. Chew, N. Zhang, J. Lin, K. Wang, M. Wang

T16-035C

Contactin-2 role in axon regeneration

M. Savvaki, G. Kafetzis, C. Theodorakis, D. Karagogeos

T16-036C

Intrinsic DNA damage repair deficiency results in progressive microglia loss and replacement

Y. Heng, X. Zhang, S.M. Kooistra, H.V. Weering, M. Dubbelaar, E. Gerrits, E. Wesseling, N. Brouwer, E.W. Boddeke, B.J. Eggen

T16-037C

iPS-derived neural precursors integrate in the pan glial network after transplantation in animal models of myelin disorders

S. Mozafari, B. Manot, L. Starost, C. Laterza, M. Ehrlich, L. Ottoboni, G. Martino, T. Kuhlmann, M.-C. Angulo, A. Baron-Van Evercooren

T16-038C

Acute Δ9-tetrahydrocannabinol administration accelerates oligodendrocyte development and regeneration

T. Aguado, A. Huerga-Gómez, A. Sánchez-De la Torre, A. Martínez-Cortés, S. Mato, I. Galve-Roperh, M. Guzmán, J. Palazuelos

T16-039C

Chi3l3 delays disease onset and ameliorates severity in experimental autoimmune encephalomyelitis

J. Campo Garcia, N. Asselborn, F. Paul, C. Infante-Duarte, S.C. Starossom

T16-040C

How does MIF regulate CNS glia?

S. Hjæresen, H. Kronborg, S.K.S. Mortensen, Z. Illés, A.F. Svenningsen

T16-041C

Role of the alpha-secretase tace during PNS regeneration and remyelination

M. Pellegatta, P. Canevazzi, M.G. Forese, P. Podini, A. Quattrini, C. Taveggia

T16-042C

Innovative pre-clinical research developing a cell-based therapy for spinal cord injury

M.-L. Vial, T. Shelper, A. Rayfield, J. Ekberg, J. St John

T16-043C

Glial leptin signalling in peripheral nerve repair

A.M. Backhaus, V. Schütza, D. Akkermann, C. Paul, R. Stassart, R. Fledrich

T16-044C

***MIN-102*, a brain-penetrating PPAR gamma agonist for the treatment of X-linked adrenoleukodystrophy (X-ALD)**

A. Vilalta, L. Rodríguez-Pascau, M. Cerrada, J. Berger, S. Forss-Petter, I. Weinhofer, P.L. Musolino, M. Martinell, P. Pizcueta

T16-045C

Targeting the LINGO1, p75, AMIGO3 and TROY receptor platform to favour remyelination using transmembrane domain interfering peptides

L.D. Pham-Van, F. Biname, M. Van der Heyden, D. Bagnard

T16-046C

Soluble factors derived from brain pericytes promote neural stem cells to generate oligodendrocytes

F.J. Rivera, M.E. Silva, S. Lange, B. Hinrichsen, A.R. Philp, C.R. Reyes, D. Halabi, J. Mansilla, P. Rotheneichner, A. Guzman de la Fuente, S. Couillard-Despres, L.F. Bátiz, R.J. Franklin, L. Aigner

T16-047C

Loss of miR-145a expression promotes extensive remyelination in a mouse model of chronic toxic demyelination

S.F. Kornfeld, Y. De Repentigny, S.E. Cummings, S.R. Bonin, S. Gagnon, R. Yaworski, R. Kothary

T16-048C

Therapeutic potential of peptide-based inhibition of Plexin-A1 in demyelination disease

F. Binamé, L.D. Pham-Van, C. Spenlé, L.A. Meyer, L. Jacob, L. Meyer, A.G. Mensah-Nyagan, C. Po, M. Van der Heyden, G. Roussel, D. Bagnard

T16-049C
Mechanical properties of the injured CNS: Implications for remyelination and axonal repair
M. Urbanski, M. Brendel, C. Melendez-Vasquez

T16-050C
Pharmacogenomic identification of key genes and small bioactive molecules promoting oligodendrogenesis in the model of neonatal brain injury
J.-B. Huré, C. Marie, L. Foucault, O. Raineteau, B. Hassan, C. Parras

T16-051C
Tlr2 and Cxcr3 pathways modulate scar formation after traumatic brain injury
C. Koupourtidou, V. Schwarz, R. Sanchez-Gonzalez, C.T. Breunig, J. Fischer, S. Sirko, M. Götz, S. Hauck, S.H. Stricker, J. Ninkovic

T16-052C
Direct macrophage to ependymo-radial glial progenitor cell signalling via Tnf-a promotes regenerative neurogenesis in the zebrafish spinal cord
T. Becker, L. Cavone, T. McCann, S. Sandi, E. Aguzzi, J. Selvarajah, T. Tsarouchas, C.G. Becker

T16-053C
Conditional Rac1 knockout attenuates motor neuron dendritic spine remodeling and H-reflex hyperexcitability after SCI
C. Benson, M. Hill, E.J. Akin, S. Liu, S. Patwa, S.G. Waxman, A.M. Tan

T16-054C
Organic and inorganic-based microreactors as artificial astrocytes: a therapeutic approach against excitotoxicity
A. Armada-Moreira, E. Taipaleenmäki, M. Baekgaard-Laursen, P.S. Schattling, B. Thingholm, K. Andreassen, A.M. Sebastião, B. Städler, S.H. Vaz

T16-055C
Lentiviral vector transduction of *ex vivo* transected rat spinal cord
S. McMahon, P. Dockery, L. Howard, A. Patar

T16-056C
Injury-induced plasticity of parenchymal astrocytes in the human cerebral cortex
S. Sirko, C. Schichor, J.-C. Tonn, M. Götz

T16-057C
Proliferative activity of reactive astrocytes has a significant impact on post-traumatic behavior
M. Chen, O. Sommerfeld, B. Popper, S. Sirko

T16-058C
Striking differences in the localization of the AQPs 1 and 7 between rat and mouse sciatic nerve
E. Segura, M. Dent, A. Martinez-Gomez

T16-059C
Modelling *in vitro* lineage reprogramming of human glia into induced neurons
J. Jurado-Arjona, A. Gamir-Morralla, B. Berninger

T16-060C
Drug like retinoic acid receptor β agonist to treat nerve injuries
M. Goncalves, J. Corcoran

T16-061C
Human herpesvirus 6A latency gene U94A impairs human oligodendrocyte precursor cell migration and maturation
J. Hogestyn, D. Mock, C. Pröschel, M. Mayer-Pröschel

T16-062C
The role of platelets in remyelination of the central nervous system
A. Philp, M.E. Silva, L. Aigner, F.J. Rivera

T17 Transmitter receptors, ion channels and gap junctions

T17-001C
The impact of acute astroglial uncoupling on hippocampal potassium buffering
B. Breithausen, S. Kautzmann, A. Boehlen, C. Steinhäuser, C. Henneberger

T17-002C
The putative $GABA_A$ receptor expressed in oligodendroglial cells
R.P. Ordaz Ramos, E. Garay, C. Matute, R. Arellano

T17-003C
Role of astrocytic $GABA_B$ receptors on γ-hydroxybutyric acid induce absence seizures
D. Gobbo, A. Scheller, F. Kirchhoff

T17-004C
Role of Kv1.4 during remyelination and neuroinflammation
M.N. González Alvarado, S. Hasse, S. Seubert, K. Kuhbandner, D.-H. Lee, R. Linker

T17-005C

Complexity of Ca^{2+} signals in astrocytes – contribution of astroglial $GABA_B$ receptors –

L. Stopper, C.V. Kasakow, G. Stopper, L.C. Caudal, X. Bai, A. Scheller, F. Kirchhoff

T17-006C

Gap junction intercellular communication (GJIC) is regulated by plasmalogens in retinal macroglial cells

R. Karadayi, L. Leclère, M. Koudsi, P. Bessard, B. Buteau, S. Grégoire, C. Fenech, X. Fioramonti, J. Mazzocco, A.M. Bron, N. Acar

T17-007C

AQP4 deletion on TRPV4 and Cx43 expression pattern during development

A. Cibelli, M.G. Mola, P. Abbrescia, M. De Bellis, E. Saracino, V. Benfenati, A. Frigeri, M. Svelto, G.P. Nicchia

T17-008C

New insights into the assembly and maintenance of the juxtaparanodal Kv1 complex

N.A. Kozar, D. Meijer

T17-009C

$GABA_B$ receptors of NG2 glia promote myelination in health and disease

X. Bai, L. Fang, W. Huang, A. Scheller, F. Kirchhoff

T17-010C

Membrane properties of olfactory ensheathing cells harvested from rats and humans

K. Smith, K. Whitcroft, S. Law, P. Andrews, D. Choi, D. Jagger

T17-011C

Oligodendrocyte precursor cells are regionally and temporally diverse

Y. Kamen, S.O. Spitzer, S. Sitnikov, K.A. Evans, D. Kronenberg-Versteeg, O. de Faria Jr., S. Agathou, R.T. Káradóttir

T17-012C

Ultrastructural changes in Connexin 43 gap junctions in primary astrocytes after oxygen-glucose deprivation and upon stimulation with hyperosmolar sucrose

A. Beckmann, J. Recktenwald, S. Wolf, A. Grissmer, C. Meier

T17-013C

Peripheral nervous system glia modulates excitability of nociceptive axons *via* $GABA_A$ receptor

V. Bonalume, R.W. Carr, L. Caffino, A. Faroni, L.F. Castelnovo, J. Hu, S. Liu, F. Fumagalli, M. Schmelz, V. Magnaghi

T17-014C

Biochemical and biophysical evidence for the A2A-D2 heteroreceptors in striatal astrocytes

C. Cervetto, A. Venturini, S. Pelassa, L. Campanini, M. Averna, D. Guidolin, G. Maura, L.F. Agnati, M. Marcoli

T17-015C

Astrocyte morphology determines properties of astroglial networks

A. Pauletti, C. Henneberger

T17-016C

AMPA receptor mediated calcium signalling in olfactory ensheathing cells

A. Beiersdorfer, C. Lohr

T17-017C

Astrocytic GABA transporter dysfunction in childhood absence epilepsy

C. Pina, T.P. Morais, A.M. Sebastião, V. Crunelli, S.H. Vaz

T17-018C

Astrocytic gap junctions differentially affect seizures in absence and temporal lobe epilepsy models

R. Vincze, M. Péter, Z. Szabó, J. Kardos, Z. Kovács, L. Héja

T17-019C

Lysophosphatidic acid activates peripheral glial cells

L. Gebhardt, J. Robering, C. Ciotu, K. Wolf, H. Kühn, A. Kremer, M. Fischer

T17-020C

Involvement of purinergic P2X4 receptors in Alzheimer's disease

J. Hua, E. Garcia de Paco, T. Maurice, L. Crouzier, F. Rassendren, L. Ulmann

T17-021C

Control of microglial membrane voltage by THIK-1 K+ channels in a model of neurodegeneration

A. Rifat, J.R.P. Geiger, C. Madry

T17-022C

Dopamine induces Ca^{2+}-signals in olfactory bulb astrocytes

T. Fischer, P. Scheffler, C. Lohr

T17-023C

Role of cholesterol and cytokines on Pannexin1 cell plasma membrane mobility

A. Cibelli, E. Scemes, D.C. Spray

T18 Trophic factors

will not be presented because there were no submissions.

T19 Tumours

T19-001B
Chemoresistance in cerebral metastases: The role of tumor dormancy and nkg2d ligand expression
R. Hufnagel, M. Synowitz, J. Held-Feindt, C. Flueh

T19-002B
Function of the transcription factor Cic in oligodendrocyte development and gliomagenesis
Y. Khenniche, J. Lerond, S. Poggioli-Meimoun, P. Dal-Col, C. Parras, M. Sanson, E. Huillard

T19-003B
The patient derived material obtained during tumor resection with used block Blue E400 of microscope OmniPainter™ and 5-aminolevulinic acid (5ALA) proved to be a reliable source of low-differentiated astrocytic tumors primary cell culture
S.N. Ignatov, O. Kit, A. Sitkovskaya, E. Rastorguev, N. Kuznetsova, I. Mezhevova, N. Karnaukhov, O. Nistratova, S. Filippova

T19-004B
Tumor necrosis factor (TNF)-related apoptosis-inducing ligand (TRAIL) mediates DNA methyl transferase inhibitors (DNMTis)-induced immune gene activation in glioma cells
S. Park, I. Jou

T19-005B
Reactive astrocytes in glioma models: Effect of cell-penetrating peptides based on connexin43
L. García-Vicente, M. Jaraíz-Rodríguez, S.G. Pelaz, J.M. Medina, A. Tabernero

T19-006B
AMP-activated protein kinase as a regulator of glutamate transport in astrocytes and glial tumours
I. Belo Do Nascimento Osorio de Castro, V. Joris, E. Hermans

T19-007B
The RNA-binding protein HuR/Elavl1 controls a core gene regulatory circuitry essential for MPNST growth and metastasis
M. Tamayo Caro, M. Palomo Irigoyen, E. Pérez Andrés, M. Iruarrizaga Lejarreta, M. Varela Rey, A. Woodhoo

T19-008B
Glucose metabolism in astrocytes and glioma stem cells: Effects of a peptide based on connexin43
S.G. Pelaz, M. Gómez de Cedrón, M. Tabernero, A. Ramírez de Molina, J.M. Medina, A. Tabernero

T19-009B
In search of alternative therapies for glioblastoma multiforme
R. Sofi, A. Vasilev, A.G. Teschemacher, S. Kasparov

T19-010B
Brain stem cells escape tumorigenic transformation by SOX21-induced activation of antitumorigenic programs
M. Bergsland, D. Topcic, J. Muhr

T19-011B
Development of novel models of IDH1- and CIC-double mutant oligodendrogliomas
S.E. Joppe, E. Huillard

T19-012B
Functional impact of *TCF12* mutation in oligodendrogliomas
S. Archontidi, M. Sanson, E. Huillard

T19-013B
Distinguishing between tumor, infiltrated and normal cortex regions in glioma patients with Raman spectroscopy
N.A. Brazhe, A.V. Popov, E.Y. Parshina, I.A. Medyanik, K.S. Yashin, A.R. Brazhe, A.V. Semyanov

T19-014B
Microglia-derived microvesicles affect microglia phenotype in glioma
M. Catalano, A. Grimaldi, C. Serpe, C. Limatola

T20 Glial diversity

T20-001C
Spatial preference and differential susceptibility of distinct mature oligodendrocyte subtypes
E. Floriddia, S. Zhang, J. Gonçalves dos Santos, M. Altınkök, D. van Bruggen, S. Förster, S. Mulinyawe, L. Sun, R. Franklin, G. Castelo-Branco

T20-002C
Brain region-specific gene signatures revealed by distinct astrocyte subpopulations unveil links to glioma and neurodegenerative diseases
R. Cuevas-Diaz Duran1, C.-Y. Wang, H. Zheng, B. Deneen, J. Wu

T20-003C

Understanding the dynamics and diversity of microglia in the developing brain

L. Barry-Carroll, D.A. Menassa, D. Gomez-Nicola

T20-004C

Microglial dynamics across the human lifespan

D.A. Menassa, L. Barry-Carroll, M. Chapman, I. Adorjan, Z. Krsnik, I. Kostovic, J. Nicoll, T. Jacques, O. Ansorge, D. Gomez-Nicola

T20-005C

Astrocyte heterogeneity in Huntington disease through the lens of single cell nuclear RNA sequencing

O. Al Dalahmah, I. Adorjan, J.E. Goldman

T20-006C

Single-cell profiling of mouse and human microglia during development, homeostasis and perturbation

T. Masuda, R. Sankowski, O. Staszewski, C. Böttcher, L. Amann, C. Scheiwe, S. Nessler, P. Kunz, G. van Loo, V.A. Coenen, P.C. Reinacher, A. Michel, U. Sure, R. Gold, J. Priller, C. Stadelmann, M. Prinz

T20-007C

A physiological 3D culture model for neonatal cortical astrocytes permits the study of quiescent function and morphology

Z.H. Smith, G. Hathway, F. Dajas-Bailador, T. Bellamy

T20-008C

Light responses of the non-visual opsin Opn3 in avian Müller cells

N.A. Marchese, M. Rios, M. Guido

T20-009C

The voltage gated calcium channel CaV1.2 promotes adult oligodendrocyte progenitor cell survival in the mouse corpus callosum but not motor cortex

R.P. Ricci, K.A. Pitman, R. Gasperini, J. Charlesworth, L. Foa, K.M. Young

T20-010C

Expression of Sox2 in the visual system of fish

L. de Oliveira-Mello, J.M. Lara, R. Arevalo, A. Velasco, A.F. Mack

T20-011C

Topological classification of microglia topological classification of microglia

G. Colombo, A. Venturino, R. Schulz, L. Kanari, K. Hess, S. Siegert

T20-012C

Optic nerve glial cell culture of three fish species

J.M. Lara, L. De Oliveira-Mello, A.F. Mack, A. Velasco, R. Borza, R. Arévalo

T20-013C

Overexpression of wild-type and mutant SOD1 in N9 microglia upon steady-state, inflammatory and immunomodulatory conditions leads to distinct phenotypes

A.R. Vaz, S. Pinto, C. Ezequiel, C. Cunha, L. Carvalho, R. Moreira, D. Brites

T20-014C

***In vivo* characterization of physiological and pathophysiological Ca^{2+} signals in glial cells of the spinal cord**

P. Rieder, G. Stopper, F. Kirchhoff, A. Scheller

T20-015C

Motor Exit Point (MEP) glia: Centrally-derived myelinating glia in the peripheral nervous system

L. Fontenas, S. Kucenas

T20-016C

Molecularly defined cortical astroglia subpopulation modulates neurons via secretion of Norrin

T.R. Westergard, S.J. Miller, T. Philips, N. Kim, R. Dastgheyb, Z. Chen, J.G. Daigle, M. Datta, J.T. Pham, S. Vidensky, E.G. Hughes, M.B. Robinson, R. Sattler, R. Tomer, J.S. Suk, D.E. Bergles, N. Haughey, M. Pletnikov, J. Hanes, J.D. Rothstein

T20-017C

Expression, distribution and functional significance of bone morphogenetic proteins in adult murine brain

N. Skauli, E. Savchenko, L. Roybon, M. Amiry-Moghaddam

T20-018C

Meta-analysis of proteomic and RNA-Seq studies of astrocytes reveals specific gene enrichment profiles of astroglial compartments

R. Pielot, A. Müller, F. Kirchhoff, E.D. Gundelfinger, D.C. Dieterich

T20-019C

GFAP- and vimentin-immunoreactive astrocytes of the human pineal gland

I. Grigorev, E. Fedorova, D. Sufieva, D. Korzhevskii

T20-020C

Developmental apoptosis drives a disease-like microglial functional state in the developing retina that is resistant to CSF1R loss

S.R. Anderson, J.M. Roberts, J. Zhang, M.R. Steele, C.O. Romero, A. Bosco, M.L. Vetter

T20-021C
Potential of astrocytes as tools for stratification of patients with amyotrophic lateral sclerosis
D. Brites, C. Gomes, C. Cunha, M. Barbosa, S. Likhite, C.N. Dennys, B. Kaspar, K. Meyer, A.R. Vaz

T20-022C
Unravelling microglial heterogeneity in the developing CNS
T. Muntslag, J.J. West, M.J. Rose-Zerilli, D. Gomez-Nicola

T20-023C
A unique microglia subpopulation mediates CD8 T cell infiltration into brain parenchyma and aggravates radiation induced brain injury
Y. Tang, Z. Shi, P. Yu, F. Xie, W.-J. Lin, J. Cheng, X. Hu, M. Wu, J. Xie

T20-024C
IPSCS-derived astrocytes with the PSEN1EΔ9 mutation show aberrant activation and dysregulated exosomal cargo in small non-coding RNAs after A1 stimulation
A. Fernandes, S. Ferreira, S. Pinto, G. Garcia, F. Moreira, M. Oksanen, J. Koistinaho, D. Brites

T20-025C
Sheeding light on the history of female neuroscientists at the Cajal School: Laura Forster, Manuela Serra, Soledad Ruiz-Capillas and María-Luisa Herrero
F. de Castro, E. Giné, C. Martínez, C. Sanz, C. Nombela

T20-026C
Glial heterogeneity in the human cortex and striatum revealed by immunohistochemistry, qPCR and single cell RNA sequencing
C.K. Finszter, T. Tyler, E. Frank, K. Szmetana, V. Fehér, D.A. Menassa, O. Al-Dalahmah, J.E. Goldman, I. Adorjan

T20-027C
Investigating the role of oligodendrocyte precursor cells in the visual system of zebrafish
Y. Xiao, R. Marisca, T. Czopka

T20-028C
Connexin 43 in tanycytes of the third ventricle floor in early postnatal development
D.A. Sufieva

T20-029C
Neuroglia in the autistic brain: evidence from a preclinical model
M.R. Bronzuoli, R. Facchinetti, V. Trezza, A. Verkhratsky, L. Steardo, C. Scuderi

T20-030C
Heterogeneity in oligodendrocyte progenitor cells derived from cortex and corpus callosum
D.H. Lentferink, M.L. Dubbelaar, I. Werkman, B.J. Eggen, W. Baron

T20-031C
Aging in microglia at single-cell resolution
A. Alsema, Q. Jiang, A. Wachter, L. Kracht, E. Gerrits, M. Woodbury, N. Brouwer, S. Kooistra, A. Miedema, M. Dubbelaar, Y. Heng, S. Xi, M. Kummer, K. Biber, T. Moeller, B. Eggen, E. Boddeke

T20-032C
Prenatal glucocorticoid exposure alters microglia in a sex-specific manner and blunts stress-induced behavioral changes in adulthood
R. Gaspar, C. Soares-Cunha, B. Coimbra, A.V. Domingues, F. Baptista, C.A. Fontes-Ribeiro, N. Sousa, A.F. Ambrósio, A.J. Rodrigues, C.A. Gomes

T20-033C
Identifying new genes that regulate glial development and function
A.J. Latimer, S. Kucenas

T20-034C
Diversity of oligodendrocyte precursor cells with differential contribution to myelination revealed by *in vivo* imaging
T. Hoche, T. Czopka

T21 Neuromodulation by Glia

T21-001C
Gabapentin decreases microglial and astrocytes cells in rats with chronic myositis
M. Chacur, A. Santanta Rosa, D. Martins, I. Rocha

T21-002C
Impact of oligodendroglial secreted factors on hippocampal neurons physiology and connectivity: an electrophysiological and transcriptomic study
E. Mazuir, L. Richevaux, N. Robil, M. Nassar, P. De la Grange, C. Lubetzki, D. Fricker, N. Sol-Foulon

T21-003C
Loss or gain of 1q21.1 locus diminishes neurotrophic function of human iPSC-derived astrocytes
T. Singh, Y.A. Syed

T21-004C

Modulation of GLAST transporters by CB1R in cortical astrocytes

J.F. Gonçalves-Ribeiro, T.P. Morais, O. Savchak, C. Meneses, A.M. Sebastião, S.H. Vaz

T21-005C

Comparing the efficiency of microglia depletion strategies during adulthood and development

B. Nagy, S. Siegert

T21-006C

Effects of repetitive transcranial magnetic stimulation on brain metabolism and on glial cells

C. Zorzo, S.G. Higarza, M. Méndez, A.M. Pernía, J.A. Martínez-Esteban, J.L. Arias

T21-007C

Partial deletion of mGluR5 affects M1 and M2 phenotypes in microglia acutely isolated from SOD1^{G93A} mice during disease progression

M. Balbi, T. Bonifacino, M. Milanese, G. Bonanno

T21-008C

Lrp1 loss in radial glia and their progeny – astrocytic dysfunctions contribute to spontaneous epileptogenesis

E.E. Bres, D. Safina, J. Müller, A. Esser, H. Yang, P. Bedner, X. Helluy, S. Jansen, D. Manahan-Vaughan, C. Steinhäuser, C.U. Pietrzik, M. Götz, A. Faissner

T21-009C

Priming of microglia with interferon-g slows neuronal gamma-band oscillations in situ

B. Chausse, T.-T. Ta, H.O. Dikmen, S. Schilling, A. Lewen, J.-O. Hollnagel, O. Kann

T21-010C

Astrocyte-dependent changes of neuronal excitability in cellular mechanisms of sleep homeostasis

B. Pal

T21-011C

Astrocyte VGLUTs are involved in the control of kainate-induced epileptic seizures

R. de Ceglia, G. Carriero, H. Stubbe, M. Batiuk, M. Holt, A. Volterra

T21-012C

Chronic stress induces microglial-mediated inflammatory responses and compromises the NG2-glial homeostasis during depression

A.G. Kokkosis, M. Mullahy, K. Valais, A. Aguirre, S.E. Tsirka

T21-013C

AQP4-dependent increase of extracellular ATP/Adenosine derived from astrocytes regulates dopaminergic neurotransmission in the striatum

M. Morita, M. Kobayashi, S. Okada

T21-014C

Astrocytes of the parabrachial nucleus: involvement in pain modulation

L. Micheli, C. Ghelardini, A. Pacini, A. Ilari, G. Mannaioni, A. Masi, G. D'Agostino, L. Di Cesare Mannelli

T21-015C

Role of the brain RAS in the effects of dopamine on the glial inflammatory responses

A.I. Rodríguez Perez, A. Domínguez Meijide, C. Diaz Ruíz, C.M. Labandeira, M.A. Pedrosa, J.L. Labandeira Garcia

T21-016C

Astrocyte modulation of sleep

R. Jackson

T21-017C

Microglia are required for synaptic function in the hippocampus

D. Ragozzino, B. Basilico, P. Ratano, F. Pagani, A. Grimaldi, S. Di Angelantonio, L. Ferrucci, V. De Turris, M.T. Golia, L. Maggi, M.C. Marrone, S. Marinelli, C. Limatola, D. Caprioli

T21-018C

Functional and transcriptomic characterization of human microglia maturation around cortical neurons

B. Varga, C. Lee, P. Charlesworth, D. Kronenberg-Versteeg, E. Pankotai, K. Evans, F. Ginhoux, R.T. Karadottir

T21-019C

Regional heterogeneity of cholecystokinin sensing by enteric glia

L. Seguella, G. Esposito, B.D. Gulbransen

Author Index

Notes

Surrounding Map

Venue

Centro de Congressos da Alfândega do Porto
Rua nova da Alfândega
Edifício da Alfândega
4050-430 Porto

ATMs and Banks

1 **ATM (Euronet)**
Largo São Domingos 80
4050-416 Porto

2 **Millenium BCP – Infante 53**
R. de Mouzinho da Silveira 53
4050-250 Porto

3 **Banco Credito Agricola**
R. de Mouzinho da Silveira 153
4050-420 Porto

4 **Santander**
Praça de Almeida Garrett 35
4000-069 Porto

5 **ATM (Millennium)**
Porto São Bento (train station)
Praça Almeida Garrett
4000-069 Porto

Supermarkets

6 **Supermecado 3 Desejos Sheila & Gonçalves Lda**
Largo de S. Pedro de Miragaia 5
4050-431 Porto

7 **Alexandre Gomes & Lopes Lda**
R. Nova da Alfândega 72
4050-431 Porto

8 **Mercearia BeloSabor**
R. de Belomonte 44
4050-093 Porto

9 **Spar**
R. de São João 44
4150-678 Porto

10 **Minipreço Express**
Largo dos Lóios 46
4050-338 Porto

Restaurants and Bars

11 **Taberna do barqueiro**
Rua de Miragaia 123
4050-064 Porto

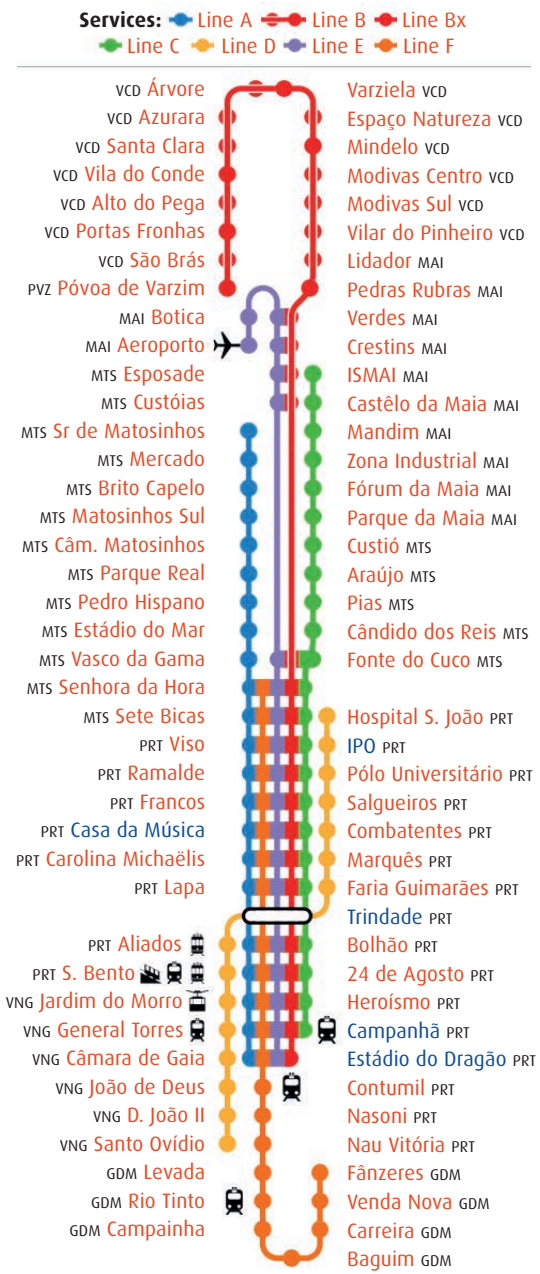
12 **Alfândega D'ouro**
Rua de Miragaia 106
4050-386 Porto

13 **Intrigo**
R. de Tomás Gonzaga 90
4050-431 Porto

14 **Tasca Caseira**
Rua das Taipas 8
4050-597 Porto

15 **AlmaAtPorto**
Rua de Miragaia 93
4050-387 Porto

Metro in Porto



Sources: Official timetable 2012–2013 and UrbanRail.NET

Program at a Glance

Monday, July 8	
13:00–17:30	ICVS Satellite meeting in Braga

Tuesday, July 9					
08:30–12:00	Registration for introductory course only				
10:00–17:10	**Introductory Course**				
16:00–18:00	Meeting Office open				

Wednesday, July 10					
07:30–21:00	Meeting Office open				
08:30–12:30	**W01**	**W02**	**W03**	**W04**	**W05**
12:30–13:00	Lunch Break				
13:00–13:15	**Opening**				
13:15–14:15	**Plenary Lecture L1**				
14:15–17:15	**Poster Session I**				
17:15–19:15	**S01**	**S02**	**S03**	**S04**	**S05**
19:15–20:15	**Plenary Lecture L2**				
20:15–21:00	Welcome reception in exhibition area				

Thursday, July 11					
07:30–19:00	Meeting Office open				
08:30–09:30	**Plenary Lecture L3**				
09:30–10:00	Break				
10:00–12:00	**S06**	**S07**	**S08**	**S09**	**S10**
12:00–13:00	Lunch Break				
12:30–14:00	Miltenyi Biotec GmbH sponsored event				
13:00–16:00	**Poster Session II**				
16:00–18:00	**S11**	**S12**	**S13**	**S14**	**S15**
18:00–19:00	**Plenary Lecture L4**				

Friday, July 12					
07:30–18:00	Meeting Office open				
08:30–09:30	**Plenary Lecture L5**				
09:30–10:00	Break				
10:00–12:00	**S16**	**S17**	**S18**	**S19**	**S20**
12:00–13:00	Lunch Break				
13:00–16:00	**Poster Session III**				
16:00–18:00	**S21**	**S22**	**S23**	**S24**	**S25**

Saturday, July 13					
07:30–14:30	Meeting Office open				
08:30–09:30	**Plenary Lecture L6**				
09:30–10:00	Break				
10:00–12:00	**S26**	**S27**	**S28**	**S29**	**S30**
12:00–13:00	Lunch Break				
13:00–14:00	**Plenary Lecture L7**				
14:00–14:15	**Closing**				
14:30–16:00	ORION Open Science Workshop				

Symposia Workshops Poster Sessions Plenary Lectures