

Monday, 7 July 2025, 9:00 - 17:30

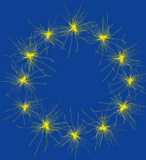
Room(s): Callelongue

I | Introductory Course organized by the French Glial Cell Club

Chairs:

Presentations:

- 9:00 Introduction
Pascale Durbec (IBDM, France) & **Olivier Pascual** (INMG-MeLiS, France)
- 9:05 Evolution and development of glial cells
Jean-Marie Mangin (Institut de Biologie Paris Seine, France)
- 9:50 Functions of astrocytes in physiology and disease
Lucile Ben Haim (Neuro-PSI, France)
- 10:35 Break
- 11:05 Oligodendrocytes functions in myelination and beyond
Sarah Moyon (Institute of Neurophysiopathology, France)
- 11:50 Microglia, partners of neurodevelopment and plasticity
Anne Roumier (Institut du Fer à Moulin, France)
- 12:35 Break
- 13:35 Peripheral Glia: Schwann cell development, roles and diversity
Yannick Poitelon (Albany Medical College, Albany, USA)
- 14:20 Neuro-glial and neuro-vascular interactions
Anne Cecile Boulay (Collège de France, France)
- 14:50 Glial cells in myelin plasticity and repair
Anne Desmazieres (Institut du Cerveau – ICM, France)
- 15:20 Break
- 15:50 Transcriptomic tools to unravel heterogeneity and functional states of glial cells in neuro-degenerative diseases
Hélène Hirbec (Institut de Génomique Fonctionnelle, France)
- 16:20 Brain borders take center stage: role of meningeal macrophages in neurocognition and neuroinflammation
Rejane Rua (Centre d'Immunologie de Marseille-Luminy, France)
- 16:50 Computational modeling of astrocytes
Audrey Denizot (INRIA, France)
- 17:20 Conclusion remarks
Brahim Nait Oumesmar (Institut du Cerveau – ICM, France)



Tuesday, 8 July 2025, 8:30 - 11:30

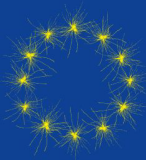
Room(s): Les Goudes 1

W01 | Systematic approaches to CNS myelin: Visualization, molecular dissection, and remyelination

Chairs: **Tallram** (Israel); **Wiebke Möbius** (Germany)

Presentations:

- | | | |
|-------|--------|--|
| 8:30 | W01-01 | Creating brain-wide maps of oligodendrocytes and myelin
Dwight Bergles (Baltimore, USA) |
| 9:00 | W01-02 | Myelin analysis by 2D and 3D electron microscopy
Anna Steyer (Heidelberg, Germany) |
| 9:30 | W01-03 | Myelin proteome analysis by quantitative mass-spectrometry
Sophie Siems (Göttingen, Germany) |
| 10:00 | W01-04 | Nascent oligodendrocyte proteome revealed by Bio-Orthogonal Non-Canonical Amino Tagging (BONCAT)
Tallram (Rehovot, Israel) |
| 10:30 | W01-05 | Viral-mediated strategies and biosensor imaging to monitor metabolite dynamics in the white matter
Zainab Faik (Zürich, Switzerland) |
| 11:00 | W01-06 | High throughput drug discovery approaches to remyelination
Luke Lairson (La Jolla, USA) |



Tuesday, 8 July 2025, 8:30 - 11:30

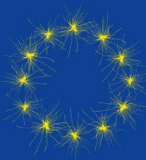
Room(s): Les Goudes 2

W02 | Modeling the role of glia cells in disease using iPS cells and CRISPR/Cas techniques

Chairs: **Karl Carlström** (Sweden); **Tanja Kuhlmann** (Germany)

Presentations:

- | | | |
|-------|--------|---|
| 8:30 | W02-01 | Exploiting oligodendrocyte-enriched 3D human brain spheroids for the study of globoid cell leukodystrophy
Angela Gritti (Milan, Italy) |
| 9:15 | W02-02 | Using human stem cell-based models to uncover non-cell autonomous astrocyte-mediated neuronal toxicity in PD
Antonella Consiglio (Barcelona, Spain) |
| 10:00 | W02-03 | iPSC-derived, directly converted oligodendrocytes and myelinating organoids to study human CNS diseases
Tanja Kuhlmann (Münster, Germany) |
| 10:45 | W02-04 | Applying CRISPR/Cas-based techniques in human iPSC-derived oligodendrocytes to address contribution of single nucleotide variants associated with Multiple sclerosis
Karl Carlström (Stockholm, Sweden) |



Tuesday, 8 July 2025, 8:30 - 11:30

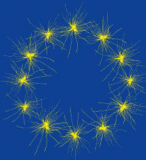
Room(s): Auditorium

W03 | Neuronal-Glial Interactions in Neurodegenerative Disorders: Exploring Human Brain Tissues, Organoids, and Chimeric Models

Chairs: **MichelaDeleidi** (France); **ChiaraZurzolo** (France)

Presentations:

- | | | |
|-------|--------|---|
| 8:30 | W03-01 | Tunneling nanotube-mediated intercellular crosstalk between neurons and microglia: reshaping connectivity and role in neurodegenerative diseases.
ChiaraZurzolo (Paris, France) |
| 9:15 | W03-02 | Human Brain Organoids with Integrated Microglia to study Parkinson's Disease Pathology
MichelaDeleidi (Paris, France) |
| 10:00 | W03-03 | Chimeric organoid-based platforms for studying human brain environment-dependent microglia phenotypes
SimonSchäfer (Munich, Germany) |
| 10:45 | W03-04 | Neuron-to-glia trafficking of alpha-synuclein fibrils in the human postmortem brain
WilmaVan de Berg (Amsterdam, Netherlands) |



Tuesday, 8 July 2025, 12:30 - 13:30

Room(s): Auditorium

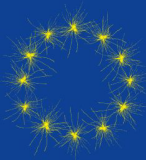
L01 | Plenary Lecture I: Bruno Weber

Chairs: ShaneLiddelow (USA)

Presentations:

Powering the Brain

Astrocytes have emerged as key regulators of brain energy metabolism. Located between the neuron and the vasculature, astrocytes exert control over the energy fluxes required for neuronal activity and plasticity. We show that astrocytes can switch between different metabolic profiles according to local demand and the nutritional state of the organism. This high degree of flexibility and plasticity of astrocytes can also be observed after acute injury. Neurons are metabolically more rigid, but we show evidence adaptation and metabolic independence under certain conditions. In this talk, we will present novel and unpublished results from high-resolution chronic in vivo imaging, to highlight the many facets of astrocyte energy metabolism with a focus on the cellular connectome and spatio-temporal dynamics and plasticity.



Tuesday, 8 July 2025, 13:30 - 16:30
Room(s): Hall Garden Level

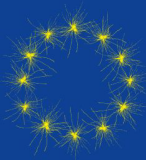
PS1 | Poster Session I

Chairs:

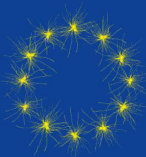
Presentations:

PS1-01

- T01-001A Investigation of hiPSC-derived microglia migration dynamics using microfluidics
MedinaKorkut-Demirba? (Klosterneuburg, Austria)
- T02-001A Deciphering the Role of Zeb1 in Oligodendrocyte Development
Maria JesusGrueso Alcantara (Erlangen, Germany)
- T02-002A LIPIDOMIC CHARACTERIZATION OF iPSC-DERIVED MICROGLIA
AikoRobert (Amsterdam, Netherlands)
- T02-003A Adult cortical oligodendrogenesis is regulated by maturation of quiescent precursors
MichaelStockton (Aurora, USA)
- T02-004A Cyclin-dependent kinase inhibitor 1A mediates mouse line- and fate-dependent cellular responses in Cx3cr1-Cre genetic tools
AyatoYamasaki (Fukuoka, Japan)
- T02-005A Modulation of mitophagy *in vitro* during oligodendrocytes differentiation
RocioBenitez-Fernandez (Fribourg, Switzerland)
- T02-006A PKD1 DEFICIENCY DISRUPTS ASTROCYTE MATURATION AND INCREASES SEIZURE SUSCEPTIBILITY
LuisSanchez-Miranda Pajuelo (Madrid, Spain)
- T02-007A Novel insights into the cellular kinetics of microglial production dynamics in distinct regions of the CNS
NehaSatish Kumar (Melbourne, Australia)
- T02-008A VeCell: A Fiji Plugin to unveil differences in spatio-temporal dynamics of macroglial cell development and proximity to blood vessels
Anne-CécileBoulay (Paris, France)
- T02-009A Histone de-methylation regulates oligodendrocyte differentiation
CarstenBerndt (Düsseldorf, Germany)
- T02-010A Myelin load dictates NG2-glia vulnerability to aging
AladdinSkaf (Ulm, Germany)
- T05-001A Deciphering the Role of a Brain Specific LncRNA in AD-related Neuroinflammation
UlrikeFuchs (Göttingen, Germany)
- T05-002A Oligodendrocytes produce amyloid- β and contribute to plaque formation alongside neurons in Alzheimer's disease model mice
Andrew OctavianSasmita (Göttingen, Germany)
- T05-003A White and Gray Matter Alterations in the Human Striatum: Astrocytic and Neuronal Perspectives on Neurodegeneration
SandraSkuja (Riga, Latvia)
- T05-004A Decoding Amyloid Beta-Induced Astrocyte Senescence: Insights from 2D and 3D Culture Models
PinkySultana (Prague, Czech Republic)
- T05-005A Amyloid- β activates human astrocytes through a TRPA1-dependent mechanism
QuentinRodriguez (La Tronche, France)
- T05-006A Extracellular vesicle-microRNAs in neuroinflammation in Parkinson's disease: from pathogenic involvement to biomarker potential
LauraRaes (Leuven, Belgium)



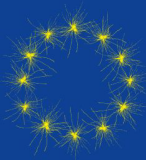
- T05-007A Reducing astrogliosis rescues early cognitive impairment in APP/PS1 mice
CristinaBoers-Escuder (Amsterdam, Netherlands)
- T05-008A The Effect of Fecal Microbiota Transplantation on the Progression of Amyotrophic Lateral Sclerosis
MonikaKubísková (Prague, Czech Republic)
- T05-009A Glial roles in Alzheimer's disease – A focus on apolipoproteins and lipid metabolism
MarcOudart (Tübingen, Germany)
- T05-010A Developing Chimeric Brain Slices with Human Astrocytes: A 3D Model for CNS Pathology Research
BakhromMuinjonov (Berlin, Germany)
- T05-011A hNPC-Exosomes Loaded with miR-124 Provide Neuroprotection in a 9-Month-Old 5xFAD⁺ Mouse Model of Alzheimer's Disease
MafaldaMigueis (Lisbon, Portugal)
- T05-013A Towards a brain organoid model for astrogliosis in Alzheimer's disease
LauraC.Pieper (Utrecht, Netherlands)
- T05-014A Therapeutic Potential of the Combination of Citicoline and Coenzyme Q10 in Modulating Glial Activation and Neuroprotection in Glaucoma Model
JoseA.Matamoros (Madrid, Spain)
- T05-015A Early changes of glia cells in the INS^{C94Y} pig model for diabetic retinopathy
StefanieM.Hauck (Neuherberg, Germany)
- T05-017A Consequences of traumatic brain injury on the initiation and progression of Parkinson's Disease pathology
AliciaGoreth (Ulm, Germany)
- T05-018A Pattern-recognition receptors mediate alpha-synuclein induced inflammation in oligodendrocytes
JamesEvans (London, UK)
- T05-019A Exosome-mediated miR-124-3p delivery modulates microglial activity and enhances synaptic integrity in 5xFAD mouse model of Alzheimer's Disease
GonçaloGarcia (Lisbon, Portugal)
- T05-020A The senescence of astrocytes in obesity contribute to cognitive decline via the PTP1B-Src-NF-κB signaling pathway
MinminHu (Xuzhou, China)
- T05-021A Spatial epigenomic and transcriptomic co-profiling of Multiple Sclerosis tissue
Fleurde Boer (Solna, Sweden)
- T05-022A Modelling SORL1-Related Alzheimer's Pathology in Glial Cells
MiriamSatkova (Brno, Czech Republic)
- T05-023A Role of neddylation in astrocytes in health and traumatic brain injury
IzaskunBuendia (Leioa (Bizkaia), Spain)
- T05-024A Impact of Kidins220 Deficiency on AQP4 Regulation and Glial Phenotypes in the Retina and Optic Nerve of Hydrocephalus Mice
Jose A.Fernández-Albarral (Madrid, Spain)
- T05-025A When Albino Wild Types Aren't What They Seem
ElenaSalobar-Garcia (Madrid, Spain)
- T05-026A *LRRK2* G2019S mutation affects lipid metabolism pathways compromising microglial functionality
ElisaNavarro (Madrid, Spain)
- T05-027A Deciphering APP-modulated endolysosomal dysfunction in microglia.
JennyLange (London, UK)
- T05-028A Investigating microglial CSF1R signaling dynamics in ALSP
HariharanMenon (Tübingen, Germany)
- T05-030A Uncovering the role of the MS4A locus in Alzheimer's Disease
AlexandraE.Munch (New York, USA)



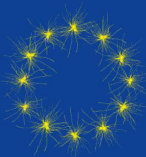
**XVII European Meeting on
Glial Cells in Health and Disease**
Marseille | 8–11 July 2025



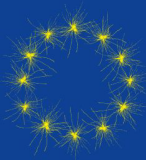
- T05-031A SOAT in the Choroid Plexus: A Potential Therapeutic Target for Alzheimer's Disease and Ageing
YumengZhang (London, UK)
- T05-032A Overexpression of uncoupling protein 4 in mitochondria of astrocytes corrects Alzheimer's disease associated dysfunction of Ca^{2+} and K^{+} conductances in neurons.
AisyluGaifullina (Lausanne, Switzerland)
- T05-033A Lipid droplets in neurodegenerative diseases
MartaMonzón (Zaragoza, Spain)
- T05-034A Interaction between intestinal bacterial and human amyloids in Parkinson's disease
FokionSpanos (Paris, France)
- T06-001A β -hydroxybutyrate improves the redox status, cytokine production, and phagocytic potency of glucose-deprived HMC3 human microglia-like cells
BabitaBhatt (mohali, India)
- T06-002A Age-Dependent Microglia Metabolism Shaped by Microbiome Interactions: A Metabolic Modeling Approach
ChristianeFrahm (Jena, Germany)
- T06-003A Mitochondrial oxidative metabolism in mouse brain cell primary cultures
CarolinaParedes-Martínez (Valdivia, Chile)
- T06-004A The pathophysiological relevance of MCUGR1 and its function in glial cells
MargaritaChudenkova (Neuherberg, Germany)
- T06-005A Microglial HIF1 α is necessary to restrict demyelination and neuroinflammatory sequelae in a mouse model of white matter degeneration
SophiaDimas (Lexington, USA)
- T06-006A Distinct Metabolic Specializations in White Matter Oligodendrocytes, Astrocytes, and Axons
ZainabFaik (Zürich, Switzerland)
- T06-007A Brain state-dependent fluctuations in extracellular pH. Insights from natural behavior in freely moving mice
ZuzannaBojarowska (Copenhagen N, Denmark)
- T06-008A The Role of Oligodendrocytes and Insulin Resistance in Alzheimer's Disease
ReyhaneEbrahimi (Göttingen, Germany)
- T06-010A Postnatal maturation of mitochondria in perivascular astrocyte processes.
BarbaraDelaunay-Piednoir (Paris, France)
- T09-001A CNS-wide engraftment of Human Monocytes, but not Microglia, induces a chronic proinflammatory state associated with demyelination, astrogliosis, synapse loss, and behavioral dysfunction
HaykDavtyan (Irvine, USA)
- T09-002A Microglial TDP-43 mediates myelin refinement and represses Tyrobp cryptic exon inclusion in mice
Anne-ClaireCompagnion (Lausanne, Switzerland)
- T09-003A D-Serine modulates glial cell- induced proliferation and inhibits maturation of OPCs/OLs during inflammatory activation
SebastianA.Beltran Castillo (Santiago, Chile)
- T09-004A Cell-surface signals on developing retinal astrocytes promote their elimination by microglia
CaitlinE.Paisley (Durham, USA)
- T09-005A Encoding and presentation of brain injury information by spatiotemporally selective astrocytic ATP dynamics
MiaoJing (beijing, China)
- T09-006A Feedback regulation of astrocytic ATP release by microglia for homeostatic injury response
PengweiLuan (Beijing, China)
- T09-007A Sex-dependent morphological complexity of microglia in young and aging WM
SelvaBaltan (Portland, USA)
- T09-008A Glia preserve their own functions while compensating for neighboring glial cell dysfunction
JaedaCoutinho-Budd (Charlottesville, USA)



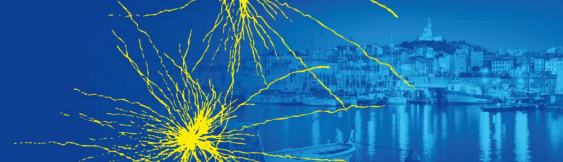
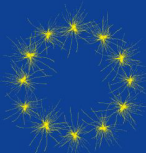
- T09-009A From acute to chronic stroke – transcriptional dynamics of microglia and astrocyte adaptation
DominikaDostalova (Prague 2, Czech Republic)
- T09-010A Complement-mediated vascular-glial interactions reduce neurotoxicity caused by non-biogenic environmental pollutants
AriOgaki (Tokyo, Japan)
- T10-001A Ischemic preconditioning and interferon responsive microglia
JonathanR.Weinstein (Seattle, USA)
- T10-002A The role of tanycytic cilia on hypothalamic functions
ManonRivagorda (Lübeck, Germany)
- T10-003A SARS-CoV-2 infection affects oligodendrocyte lineage cells in the mouse motor cortex.
RaphaelP.Ricci (Brisbane, Australia)
- T10-004A Radial glia in the turtle brain: Insights into evolution
YasserMedlej (Homburg, Germany)
- T10-005A The identification of a distinct astrocyte subtype that diminishes in Alzheimer's disease
JiaqianWu (Houston, USA)
- T10-006A Molecular diversity of adult mouse cerebellar astrocytes
GiacomoTurrini (Turin, Italy)
- T10-007A Aging alters astrocyte morphology in white matter tracts of the mouse brain, with distinct effects in males and females.
RumeCicek (Marburg, Germany)
- T10-008A Astrocyte heterogeneity – wide-spread and region-specific subtypes highlight proliferating murine and human astrocytes
MagdalenaGötz (Planegg-Martinsried, Germany)
- T10-009A Generation of morphologically distinct astrocyte subtypes from human iPSCs reveals a link between glial shape, function and reactivity
LudovicaM.Guetta (London, UK)
- T10-010A Dual lineage origins of neocortical astrocytes
JiafengZhou (Geneva, Switzerland)
- T10-011A The diversity of NMDA receptors in oligodendrocyte precursor cells
Yan TingNg (Cambridge, UK)
- T10-012A A single cell atlas to unveil the diversity of mouse cerebellar astrocytes: insights into their molecular identities, development, and functions
ValentinaCerrato (Torino, Italy)
- T11-001A Cell Autonomous and Non Cell Autonomous Regulators of the Schwann Cell Injury Response
ClaraMutschler (Cambridge, UK)
- T11-002A Astrocytes control spike propagation along myelinated axons in the white matter
JonathanLezmy (London, UK)
- T11-003A Local differences in baseline Na^+ shape astrocytic K^+ uptake by the NKA
JanMeyer (Düsseldorf, Germany)
- T11-004A Four phases and a temporal threshold of population calcium response in cortical astrocytes during locomotion.
AlexeySemyanov (Jiaxing, China)
- T11-005A Microglia-dopamine neuron contact as key regulator of dopamine neuron vulnerability and reward-based memory during aging
KeionnaA.Newton (Los Angeles, USA)
- T11-006A Sexual dimorphism in astrocyte-mediated synaptic elimination: implications for brain health and depression
Diego JulianVesga Jimenez (Regensburg, Germany)



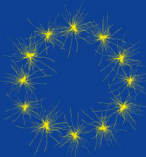
- T11-007A Dissecting the mechanisms by which the chemokine-like Orion induces axon-bundle glia infiltration and phagocytosis during developmental neurodegeneration
Clarisse Perron (Montpellier, France)
- T11-008A Development of *in vitro* models to study oligodendroglial differentiation and myelination at all ages
Naz Serifoglu (Marseille, France)
- T11-009A Oxytocin G α_i signaling-induced amygdala astrocytes processes retraction shapes behavioral stress response
Pierre Riché-Piottaix (Strasbourg, France)
- T11-010A Involvement of astrocytic TRPA1 in glutamate dyshomeostasis and disruption of neuron-astrocyte interplay involved in the initiation of Alzheimer's disease.
Apolline Pierre (Grenoble, France)
- T11-011A Mitochondria Enhances Astrocytic Ca²⁺ Oscillations and Signal Propagation by Reducing Ca²⁺-dependent IP₃ Degradation - A Computational Modelling Study
Thiago O. Bezerra (Ribeirão Preto, Brazil)
- T11-012A Prefrontal gamma oscillations and fear extinction learning require early postnatal interneuron-oligodendroglia communication
Fabrice Plaisier (PARIS, France)
- T11-013A Involvement of TRPV4 channels in astrocytic volume and ion disbalance during metabolic inhibition
Iris Álvarez-Merz (Düsseldorf, Germany)
- T11-014A How age-related dysregulation of neuronal-oligodendroglial communication affect myelination and neuronal functions?
Nicolas Vermeersch (Marseille, France)
- T11-015A Molecular mechanisms governing projection-neuron-specific myelination in the cortex
Nuria Dominguez-Iturza* (Cambridge, USA)
- T11-016A The Astroglial Protein S100 β Regulates Axon Initial Segment Plasticity
Rafael Sanz-Gálvez (Montréal, Canada)
- T11-017A Astrocytic β -catenin signaling via TCF7L2 regulates synapse development and social behavior.
Lukasz M. Szewczyk (Warsaw, Poland)
- T11-018A Astroglial TNFR2 signaling regulates hippocampal synaptic function and plasticity in a sex dependent manner
Brianna Carney (Miami, USA)
- T11-019A Midbrain PAG astrocytes modulate mouse defensive and panic-like behaviors
Sung Joong Lee (Seoul, South Korea)
- T11-020A Investigating the Effects of Prenatal Inflammation on Astrocytes and Pentraxin 3
Giuliana Fossati (Rozzano, Italy)
- T11-021A Revealing the role of oligodendrocyte senescence during neurodegeneration in a mouse model of progressive MS
Cristina Rivellini (Milano, Italy)
- T11-022A Structural and functional characteristics of microglial contacts with the axon initial segment
Viktor A. Al Naqib (Amsterdam, Netherlands)
- T11-023A Human oligodendrocyte progenitor cells mediate synapse elimination through TAM receptor signaling: insights from 2D and 3D brain models
Asimena Gkogka (Stockholm, Sweden)
- T11-024A Investigation of Region-specific Interactions Between Neural Progenitors and Microglia During Development
Kyrania Kaarina Christofi (Munich, Germany)
- T11-025A Tanycyte-derived extracellular vesicles containing Annexin A1 modulate microglia and neuronal functions to control energy balance
Rafik Dali (Lausanne, Switzerland)



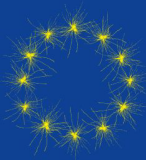
- T11-026A Uncovering the role of a novel non-myelinating Schwann cell phenotype in corneal sensory function and reinnervation
Andrés Fuentes (Alicante, Spain)
- T11-027A Astrocytic encoding of multisensory stimuli across the cortex using mesoscale two-photon imaging
Josien Visser (Genova, Italy)
- T11-029A Oligodendrocyte precursor cells facilitate neuronal lysosome release
Lipao Fang (Homburg, Germany)
- T11-030A Mechanisms of astrocytic exocytosis regulation
Piotr Michaluk (Warsaw, Poland)
- T11-031A Attraction in Action: Investigating Motor Axon Recruitment of Spinal Cord Glial Progenitors
Kelli Robbins (Jupiter, USA)
- T11-032A Impact of Developmental Glutamatergic Signaling on Oligodendrocyte Differentiation
Tessa Allen (Aurora, USA)
- T11-033A Nonapoptotic caspase-3 guides C1q-dependent synaptic phagocytosis by microglia
Megumi Andoh (Tokyo, Japan)
- T11-034A Oligodendrocyte-encoded BIN1 is required for long-term axonal integrity in the adult brain
Jianrong Li (College Station, USA)
- T11-035A The role of bile acids in microglia-dependent neurodevelopment
Hao Hu (London, UK)
- T11-036A Role of IGFBP2 derived from reactive astrocytes upregulating P2Y₁ receptor in disease
Eiji Shigetomi (Chuo, Japan)
- T12-001A Astrocytic collagen induced by H₂O₂ drives neuronal death in ischemic stroke
Jae-Hun Lee (Daejeon, South Korea)
- T12-002A TSPO in Müller cells preserves retinal function and macroglial metabolism after transient ischemia
Antje Grosche (Planegg-Martinsried, Germany)
- T12-003A Hypoxia-inducible factor 1 α promotes Schwann cell peripheral nerve myelination
Toshiyuki Araki (Kodaira, Japan)
- T12-004A Hyperosmotic mannitol mitigates cytotoxic edema, suppresses spreading depolarization and protects neuronal tissue
Rita Frank (Szeged, Hungary)
- T12-005A Wnt Signaling Modulates Plasticity of NG2-Expressing Perivascular Cells in Ischemic Cortex
Lucie Janeckova (Prague, Czech Republic)
- T12-006A Wnt Signaling Affects NG2 Glia Heterogeneity, Plasticity, and Function After Focal Cerebral Ischemia
Tomas Knotek (Prague, Czech Republic)
- T12-007A mTOR signaling modulation in glial cells following focal cerebral ischemia
Natália Sirotová (Prague, Czech Republic)
- T12-008A Deletion of TRPV4 channel in NG2 glia affects the formation of glial scar after cerebral ischemia
Valeria Marchetti (Prague, Czech Republic)
- T12-009A Novel Aquaporin-9 inhibitors to improve the effect of hyperosmotic mannitol therapy in brain oedema
Swathi Kallishetty Bhaskar (Birmingham, UK)
- T14-001A Regional white matter vulnerability associated with Alzheimer's disease pathology
Lucy Ryan (Edinburgh, UK)
- T14-002A Using human iPSC-derived organoids to model demyelination, microglial reactivity and remyelination in Multiple Sclerosis
Samantha Barton (Melbourne, Australia)
- T14-003A Analysis of Erk1/2 and mTOR signalling dynamics during CNS myelination in zebrafish
Finnbar Jones (Melbourne, Australia)



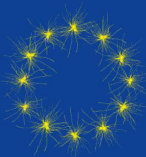
- T14-004A Splice-altering strategy in a patient-derived oligodendrocyte cell model for *PLP1*-associated hypomyelination of early myelinating structures
BiancaZardetto (Leiden, Netherlands)
- T14-005A Pharmacological Modulation Of Myelin Synthesis And Cytoskeletal Remodeling To Treat Charcot-Marie-Tooth 4B Neuropathies
SilviaCipriani (Milan, Italy)
- T14-006A Microglial Hedgehog signaling in the context of demyelination of the central nervous system
MaysounAyadi (Kremlin-Bicêtre, France)
- T14-007A A role for the Post-Synaptic Density Protein PSD-95 in CNS Myelination
Mary-AmélieMasson (Paris, France)
- T14-008A Species- and disease-specific myelin effects on myeloid cells and oligodendrocyte differentiation
LauraE.Schmitz-Gielsdorf (Muenster, Germany)
- T14-009A Neuronal Activity-Regulated Myelin Patterns in Axonal Projections Linking the Medial Prefrontal Cortex (mPFC) to Other Brain Regions May Influence Cognitive Function in Working Memory Tasks
ChenyueTao (cambridge, UK)
- T14-010A TET1 loss in oligodendrocytes: an epigenetic process involved in age-related cognitive decline?
Luciledu Trieu de Terdonck (Marseille, France)
- T14-011A Can Healthy Schwann Cells Improve Lower Motor Neuron Function and Phenotype in Amyotrophic Lateral Sclerosis?
KatherineLewis (Melbourne, Australia)
- T14-012A Biochemical and structural characteristics of myelin from non-lesioned areas in Multiple Sclerosis
GemaMuñoz Gonzalez (Amsterdam, Netherlands)
- T14-013A CNTN2/TAG-1: A Key Molecule For The Selective Myelination of Hippocampal Somatostatin Interneurons
SofiaPetsangouraki (Heraklion, Crete, Greece)
- T14-014A Role of myelination in the maturation of spatial orientation circuit.
RawanIssawi (PARIS, France)
- T14-015A TMEM63A, associated with hypomyelinating leukodystrophies, is an evolutionarily conserved regulator of myelination
AmandaJ.Senatore (Portland, USA)
- T14-016A Sweet talking Schwann cells: a mechanism for tuning maturation and myelination
SarahE.Pease-Raissi (San Francisco, USA)
- T14-017A Targeting oligodendroglia to sustain brain development in primary autosomal recessive microcephaly-17 (MCPH17) models
EnricaBoda (Turin, Italy)
- T14-018A AMPA Receptor Signalling in Oligodendrocyte Precursors is Required for Learning and Memory Consolidation
MatthewSwire (London, UK)
- T14-019A Myelin sheaths persist for weeks following axon degeneration
MeganE.Doty (Hanover, USA)
- T14-020A Investigating the Role of Myelin in the Maturation and Function of Vestibular Circuits and Behavior
FranziskaAuer (New York, USA)
- T14-021A Has Amyloid Precursor Protein (APP) a role in myelination?
AlirezaBahiraee (Göttingen, Germany)
- T14-022A HIV antiretroviral drugs trigger stress granule formation via the PERK activated integrated stress response in differentiating oligodendrocytes
EliaNavon Krusenstiern (Philadelphia, USA)
- T14-023A Disease severity in a rodent model of Charcot-Marie-Tooth disease 1a (CMT1A)
BeschanAhmad (Göttingen, Germany)



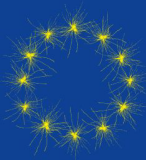
- T14-024A *Nf2* Haploinsufficiency in Oligodendrocytes Drives Sexually Dimorphic CNS Myelination Defects
JuliePilon (Paris, France)
- T14-025A Exploring Smoothed receptor modulation in oligodendrocyte differentiation for remyelination therapies.
AntonellaD.Recchia (Roma, Italy)
- T14-026A Dynamic Compensatory Interplay of Potassium Channels in Oligodendrocytes: Disrupted by TRPA1
XiangyiDu (London, UK)
- T14-027A Oligodendroglial Cdc42 regulates myelin septin assembly via Cdc42-effector proteins 1/2 to facilitate normal myelin ultrastructure
SophieHümmert (Göttingen, Germany)
- T14-028A Long-term Cell-intrinsic Disruption of Oligodendrocyte Precursors after Fetal Growth Restriction
King Hang TommyMau (London, UK)
- T14-029A 16p11.2 microdeletion impacts oligodendrocyte maturation and myelination in the hippocampus
NiniZhang (London, UK)
- T14-030A Deciphering the role of Cdk7 in Schwann cell development and myelination
NathalieSchumacher (Liège, Belgium)
- T14-031A Sleep is a common driver for interictal discharges in demyelinating neurodegenerative diseases
MohitDubey (Amsterdam, Netherlands)
- T15-001A Human and Mouse Induced Pluripotent Stem Cell (iPSC)-Based Platforms to Identify and Validate Oligodendrocyte Lineage Cell-Specific Targets
Martinavon der Bey (Ulm, Germany)
- T15-002A Possible role of NKCC1 in the proliferation of hippocampal neural stem cells during Alzheimer's disease.
SilkeKeiner (Jena, Germany)
- T15-003A Long-term functional consequences of perinatal exposure to perfluoroalkyl substances on neurogliogenic outcomes
LucileButruille (Paris, France)
- T15-004A Decoding the Gliogenic Switch: How Human Brain Organoids Reveal the Secrets of Glial Cell Fate
ClarisseBrunet Avalos (Paris, France)
- T15-005A Dynamics and regulation of intraventricular oligodendrocyte progenitors in the adult brain
AnaC.Delgado (Basel, Switzerland)
- T15-006A Cortex glia-neuroblast crosstalk through the adhesion GPCR ADGRL/*Cirl*
Lara-SophieBrodmerkel (Leipzig, Germany)
- T15-007A Protein tyrosine phosphatase receptor sigma plays a key role in adult hippocampal neurogenesis
JoshuaPeter (Cincinnati, USA)
- T16-001A Glial Phagocytosis in Viral Encephalitis Induced Seizures
QwynnLandfield (Salt Lake City, USA)
- T16-002A Chemokine CXCL12 levels are increased at the blood-brain barrier in multiple sclerosis patients and drive CD4 T cell migration
Lisannevan de Bovekamp (Amsterdam, Netherlands)
- T16-003A The Influence of Lactobacillus-Derived Metabolites on P2Y12 Receptor Expression and Neuronal Activity in Epileptic Human Brain
MariagiovannaDi Chiano (Bari, Italy)
- T16-004A Microglial activation in organoids with 16p11.2 deletion and autism
AlexRittenhouse (Baltimore, USA)
- T16-005A Early life influenza infection and altered brain function
KarenE.Malacon (Palo Alto, USA)
- T16-006A Brain slice cultures for the investigation of microglia *in vitro*
TeresaBartling (Tübingen, Germany)



- T16-007A Unravelling the contribution of ATP13A2 dysfunction in astrocytes
BenedettaBalbo (Padova, Italy)
- T16-008A Astrocyte-mediated clearance of protein aggregates: defining properties and regulators
GurkiratKaur (Padova, Italy)
- T16-009A Microglial TGF-beta signaling plays an important role in regulating hippocampal adult neurogenesis
YuLuo (Cincinnati, USA)
- T16-010A Lipid droplets are cogs in the antigen presentation machinery in astrocytes
ChiaraBeretta (Toronto, Canada)
- T16-011A Brain-xenotransplantation of hematopoietic progenitor cells for the study of human border-associated macrophages
Marie-FranceDorion (Jette, Belgium)
- T16-012A T-cell driven oligodendrocyte pathology in Alzheimer's disease
ShreeyaKedia (Munich, Germany)
- T16-014A The intracellular organelles of cultured microglia are altered by inhibiting colony-stimulating factor 1 receptor
Marie-KimSt-Pierre (Stockholm, Sweden)
- T16-015A Cytosolic mitochondrial RNA drives senescence and innate immunity in a patient stem cell model of Progressive Multiple Sclerosis
PranathiPrasad (Cambridge, UK)
- T16-016A Astrocytic AhR implication on morphine anti-nociceptive effect and metabolism in a neuropathic pain mouse model
Abdel-KarimBerkati (Strasbourg, France)
- T16-017A SHIP1 regulates TREM2 signalling and macrophage functions in a hiPSC-derived model
ClaireS.Martin (Oxford, UK)
- T16-018A Cellular distribution of pyruvate kinase M2 after spinal cord injury
JörgMey (Toledo, Spain)
- T16-019A Systemic inhibition of soluble TNF significantly changes glial cell populations leading to improved myelin integrity and better functional outcome after experimental stroke
KateL.Lambertsen (Odense M, Denmark)
- T16-020A Microglia activation is attenuated by N,N-dimethyltryptamine in primary microglia cultures
IstvánPesti (Szeged, Hungary)
- T16-021A The Parkinson's Disease Kinase LRRK2 Regulates DRD2 Signaling in Striatal Astrocytes: Implications for Neuroinflammation
ThomasBaratta (Padova, Italy)
- T16-022A A comparative analysis of protein interactors of Kv1.3 in Microglia and T-Cells: Implications for Neurodegenerative and Autoimmune Diseases
DilpreetKour (New Haven, USA)
- T16-023A Targeting monocyte-derived macrophages to protect the blood-brain barrier after stroke
ConnorM.Dufort (Pittsburgh, USA)
- T16-024A Soluble TNF and AT2R as therapeutic targets in progressive multiple sclerosis-like pathology
TrevorOwens (Odense M, Denmark)
- T16-025A Unraveling Glia-Associated Biomarkers: insights into pathological mechanisms in neurological diseases
PaulaKlassen (Ulm, Germany)
- T16-026A Modulating SRSF3 reprograms microglial immune genes translation and restores cognitive function in Alzheimer's Disease model
VictorCoelho (Québec, Canada)
- T16-027A Functional analysis of cholesterol 25-hydroxylase in neuroinflammatory conditions
TianhaoGao (London, UK)



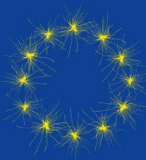
- T16-028A Butyrate modulates the Dact3/ β -catenin axis in astrocytes to ameliorate the pathogenic process in EAE mice
XiaomeiLiu (Xuzhou, China)
- T16-029A Myocardial Infarction Induces Neuroinflammatory Processes and Triggers Oligodendrocytes Proliferation and Maturation
MajedaMuluhie (Milan, Italy)
- T16-030A Influence of inflammation and fibrosis in the development of chronic retinal gliosis
VolkerEnzmann (Bern, Switzerland)
- T16-031A Forced polarisation of microglia by IL-13 is modified by microenvironmental context.
EmmanuelleD.Aiyegbusi (Dublin, Ireland)
- T16-032A Intranasal probenecid reduces the inflammatory phenotype of astrocytes ?but not microglia? in a preclinical model of multiple sclerosis
IgnacioS Pizarro (Santiago, Chile)
- T16-033A ALS-linked SOD1^{G93A} mutation disrupts microglial functions in a cell-autonomous manner in human ESC-derived microglia *in vitro*
JoanaGarcia-Garcia (Bellaterra, Spain)
- T16-034A Ceramide levels elucidated in astrocyte reactivity in Alzheimer's disease
AnitaLygeroudi (Amsterdam, Netherlands)
- T16-035A Role of Neuregulin 1 in the postnatal immune activation mouse model of autism: focus on gut-brain axis
Maria IlariaMarino (Rome, Italy)
- T16-036A Injury related focal ATP events drive microglial responses
ZsuzsannaKörnyei (Budapest, Hungary)
- T16-037A Down syndrome results in an amplified interferon response to amyloid- β that is associated with prodromal Alzheimer's disease
PaigeMumford (London, UK)
- T16-038A Investigating the implications of AD-associated polymorphisms in BIN1 on white matter physiology and inflammation
Louisa JaniceKamajaya (London, UK)
- T16-039A Highly-activated microglia promote cortical CNS remyelination via inflammatory phenotypic polarization towards regenerative states
AthenaBoutou (Athens, Greece)
- T16-040A Reactive astrocytes and astrocyte TNF signaling have essential roles in demyelination and remyelination
IliasRoufagalas (Athens, Greece)
- T16-041A Assessment of oligodendrocyte-specific cytotoxicity of peripheral blood leukocytes in patients with Multiple Sclerosis following treatment with Ofatumumab
AlexanderG.Mellor (Plymouth, UK)
- T16-042A ASTROCYTE-BASED INTERLEUKIN-2 GENE THERAPY IN TEMPORAL LOBE EPILEPSY
EvelienHendrix (Jette, Belgium)
- T16-043A Cathepsin X-Regulated γ -Enolase Activity in Microglial Polarization to M1/M2 Phenotypes
AnjaTršek (Ljubljana, Slovenia)
- T16-044A Does proteinase-activated receptor 2 (PAR2) activation impair astrocytic reactivity in human astrocytes?
AparnaMaruvada (Glasgow, UK)
- T16-045A Neuro-Immune Alterations in Cytomegalovirus-Related Neurodevelopmental Pathogenesis
SarahTarhini (Marseille, France)
- T16-046A Characterization of Maresin-1 receptors in Amyotrophic Lateral Sclerosis
MarcCaro-Cantón (Bellaterra, Spain)
- T16-047A Altered inflammatory phenotypes in microglia derived from a Parkinson's disease patient carrying the p.D620N VPS35 pathogenic mutation
IoannaBoumpourea (Luxembourg, Luxembourg)



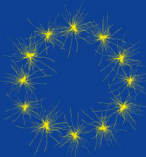
**XVII European Meeting on
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Marseille | 8–11 July 2025



- T16-048A Investigating Microglia's Role in Alzheimer's Disease Progression with a Microglia-Deficient Mouse Model
MosiLi (Edinburgh, UK)
- T16-049A Regulatory T cells play a minor role in axonal regeneration and remyelination in injured peripheral nerves
Jose A.Gomez-Sanchez (Alicante, Spain)
- T16-050A Cholesterol as a regulator of astrocyte reactivity impaired by ApoE4
SaschaJ.Koppes-den Hertog (Amsterdam, Netherlands)
- T16-051A The impact of xCT deletion on the age-related changes in the ubiquitin proteasome system in murine glial cells
OcéaneVanonckelen (Brussels, Belgium)
- T16-052A Contribution of MULT1, a NKG2D ligand, in the glial cell-immune cell deleterious interactions in experimental autoimmune encephalomyelitis, a mouse model of multiple sclerosis.
DialaEl Masri (Montréal, Canada)
- T16-053A Astrocyte sensitivity to nucleic acid agonism contributes to neurodegeneration in iPSC-derived tri-culture models of amyotrophic lateral sclerosis
DishaSood (Cambridge, USA)
- T16-054A iPSC-derived microglia as a novel tool for studying immune memory of human microglia
XidiYuan (Munich, Germany)
- T16-055A TNFR2 signaling shapes the sex-specific remyelinating features of microglia after experimental stroke
StefanoRaffaele (Milano, Italy)
- T16-056A Mouse iPSC-derived microglia replacement as a platform for elucidating microglia biology and therapeutic potential
HadisShakeri (Brussels, Belgium)
- T16-057A Spatiotemporal analysis of the dynamic interplay between oligodendrocyte precursors and reactive glia in human ischemic stroke
FrancescaC.Mannella (Milan, Italy)
- T16-058A Immunostimulatory ASOs promote monocyte-derived macrophage influx and microglia reprogramming.
LauraMeysman (Brussels, Belgium)
- T16-059A Spatial transcriptomics of repopulating microglia in adult mice
TamaraH.Ruß (Bielefeld, Germany)
- T16-060A Glial Activation and Peripheral Immune Cell Infiltration in Hypoxic-Ischaemic Encephalopathy
JessicaKingston (Dublin, Ireland)
- T17-001A Microglia-complement signaling via CR3 mediates synaptic connectivity and microglia-synapse interactions by means of schizophrenia-associated C4
NalaGockel (Bonn, Germany)
- T17-002A Reducing astrocytic reactivity as a potential novel pathway for impairing amyloid pathology.
NicoleEdwards (Glasgow, UK)
- T17-003A Decoding Glial-Neuronal Interactions: Which Method is Best for High-Quality Synaptosome Extraction?
ChiaraBordier (13005, France)
- T17-004A hM4Di-DREADD-based modulation of microglia in the intrahippocampal kainic acid mouse model of drug-resistant temporal lobe epilepsy.
JoBossuyt (Jette, Belgium)
- T17-006A Meteorin resolves nociceptive hypersensitivity by reducing connexin-mediated coupling in satellite glial cells
LoneT.Pallesen (Aarhus, Denmark)
- T17-007A Potential astrocytic targets for innovative epilepsy therapeutics through enhancing Glu/GABA exchange mechanisms
SaifQ.Salman (Budapest, Hungary)
- T18-001A Investigating dynamics of astrocyte endfoot formation during development and across species.
RajaEstes (Portland, USA)



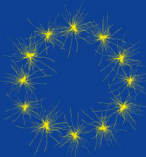
- T18-002A Role of astrocytes in compensating blood-brain barrier defects during cortical development
NaomieGuille (Paris, France)
- T18-003A The Negative Feedback Role of Astrocyte PIEZO1 in Cerebrovascular Regulation
KelseaGorzo (Calgary, Canada)
- T18-004A Morphological characterization of the cortical gliovascular interface in health and disease
NoémieDepret (Paris, France)
- T18-005A Impact of pesticides exposition on the development of the gliovascular unit
LucieLemale (Paris, France)
- T18-006A Microglia contact pericytes and endothelial cells through gaps between adjacent astrocyte endfeet
GaryP.Morris (Hobart, Australia)
- T18-007A Distribution and localisation of the water channel protein AQP4 in organotypic brain slice cultures
LaurenRoberts (Birmingham, UK)
- T18-008A Advanced *in vitro* modeling of the brain and blood-brain barrier in development and disease using human brain organoids
LoisKistemaker (Utrecht, Netherlands)
- T19-001A Astrocyte ezrin defines resilience to stress-induced depressive behaviours in mice
Si SiLin (Chengdu, China)
- T19-002A Impact of astrocyte reactivity on cocaine-induced motor hyperactivity
IsabelleArnoux (Paris, France)
- T19-003A Altered inflammatory response in iPSC-derived microglia and astrocytes from bipolar disorder patients
FranceRenard (Paris, France)
- T19-004A Role of astrocytic calcium signaling of the nucleus accumbens in vulnerability and resilience to stress
SéverineRobert (Paris, France)
- T19-005A The role of habenular astrocytes in the pathophysiology of emotions
LuciaSangroniz-Beltran (Leioa, Spain)
- T19-006A Overactivation of prefrontal astrocytes alters local neuronal activity and impairs cognition via acting on the kynurenine pathway
ViktorBeilmann (Zurich, Switzerland)
- T19-007A Astrocytes dysfunction contributes to Intellectual Disability
NoemieCresto (montpellier, France)
- T19-008A Basolateral Amygdala Astrocytes Encode Anxiety States
OssamaGhenissa (Montreal, Canada)
- T19-009A Comparative studies of microglia-like cells from patients with anorexia nervosa vs healthy controls and spatial transcriptomic profiling of microglia in the hypothalamus of anorectic mice
JingjingXu (Stockholm, Sweden)
- T19-010A Myelin pathology as a primary component of autism spectrum disorder
AnneMaguire (Bronx, USA)
- T20-001A A 3D primary cell culture system to recapitulate key features of mammalian CNS injury
JulianeSchiweck (Bonn, Germany)
- T20-002A Functions of histone demethylases in developmental myelination and remyelination after lesion
NadègeHertzog (Mainz, Germany)
- T20-003A CB₁ receptors in NG2 cells mediate cannabinoid-evoked functional myelin regeneration
TaniaAguado (Madrid, Spain)
- T20-004A A degeneration-reactive astrocyte subtype regulates white matter inflammation and repair.
SarahMcCallum (LA, USA)



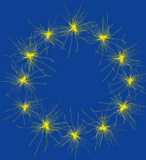
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- T20-005A Postnatal differences in Wallerian Degeneration and Their Impact on Motoneuron Recovery After Sciatic Nerve Damage
Beatriu Molina-Esteve (Bellaterra, Spain)
- T20-006A Transcriptome analysis of glial cells under specific S1PR modulation
Luisa Werner (Düsseldorf, Germany)
- T20-007A Cannabinoid CB₁ receptors modulate oligodendrocyte maturation during remyelination
Sara Ezquerro-Herce (Madrid, Spain)
- T20-008A Class IIa HDACs but not JUN are required for timing the induction of the early Schwann cell injury response.
Peter J. Arthur-Farraj (Cambridge, UK)
- T20-009A Modeling injury-specific responses of human astrocytes and their heterogeneity regarding proliferative and non-proliferative states
Swetlana Sirko (Planegg-Martinsried, Germany)
- T20-010A From Organoids to Therapeutics: Human Immune-Competent Brain Organoids as a Model for Demyelinating Diseases
Simona Lange (Basel, Switzerland)
- T20-011A Decoding injury responsive enhancers in the CNS for cell state targeting
Margherita Zamboni (Stockholm, Sweden)
- T20-012A Intracellular Ca²⁺ activity controls the microglial motility in response to a local laser injury
Sagun Tiwari (Shenzhen, China)
- T20-013A Study of the role of chronokine X35 in the spinal cord and peripheral nerve injuries
Rubén Guerrero Yagüe (Cerdanyola Del Vallès, Barcelona, Spain)
- T20-014A Inosine: A potential treatment for CMT1X
Mona Freidin (Chicago, USA)
- T20-015A Fishing in troubled water: the impact of aging on (oligodendro)glia and remyelination
Pieter-Jan Serneels (Leuven, Belgium)
- T21-001A Reprogramming of glial cells into interneurons using synthetic mRNA
Alice Foltýnová (Prague, Czech Republic)
- T21-002A Ectopic expression of *Sox10* converts astrocytes to oligodendrocytes *in vitro*, *in silico* and *in vivo*
Justine Bajohr (Toronto, Canada)
- T21-003A Direct neuronal reprogramming of Oligodendrocyte progenitor cells
Fabio Laredo (Munich, Germany)
- T21-004A Direct Conversion of Alzheimer Patient Fibroblasts to Glial Cells for AD Modelling
Alicja Krawczun-Rygmaczewska (Lund, Sweden)
- T21-005A Sox-10 mediated direct lineage reprogramming of astrocytes into oligodendrocytes is donor cell state dependent
Rachel Gibbs (Toronto, Canada)
- T21-006A Direct lineage reprogramming of human astrocytes into induced neurons
Jeronimo Jurado Arjona (London, UK)
- T21-007A Blood-derived macrophages infiltrating the injured brain induce lineage plasticity in glia
Sergio Gascón (Madrid, Spain)
- T22-001A Functional analysis of the individual LRRC8 isoforms that compose glutamate-permeable VRAC channels in mouse astrocytes
Madison L. Chandler (Albany, USA)
- T22-002A Regional and Circadian Characteristics of K⁺ Buffering in the Hippocampal Astrocytes
Nariman Kiani (Marseille, France)



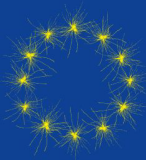
- T22-003A The therapeutic role of glial gap junction protein connexin 43 in restricting murine- β -coronavirus infectivity and virus induced demyelination.
GrishmaKasle (Mohanpur, India)
- T22-004A Cultured human microglia express inward currents only after activation and lack K_v -current in contrast to mouse microglial cells
SimoneSchilling (Berlin, Germany)
- T22-005A AER-270 and TGN-020 are not aquaporin-4 water channel blockers
LucasUnger (Birmingham, UK)
- T22-006A A New Mouse Model for Study of the Roles of Oligodendroglial Connexins Cx32 and Cx47 in the Central Nervous System. Initial Characterization of a Global Gjb1 and Oligodendrocyte Specific Gjc2 Double Knockout Mouse.
CharlesK.Abrams (Chicago, USA)
- T24-001A Investigating the Evolution of Neuron-Glioma Circuit Dynamics
KiarashShamardani (Stanford, USA)
- T24-002A SorLA drives tumor-supportive properties of glioma-associated microglia and shapes the character of brain tumor microenvironment
PaulinaKaminska (Warsaw, Poland)
- T24-003A Activated glioma-associated microglia recapitulate microglia repopulation mechanisms
PatrycjaRosa (Warsaw, Poland)
- T24-004A Horizontal transfer of mitochondria *in vivo* in a mouse model of glioblastoma
OndrejVanatko (Prague, Czech Republic)
- T24-005A Epigenetic regulators of glioma-associated microglia: identifying transcription factors orchestrating the pro-tumorigenic microglial polarization
Joao PedroA.de Araujo (Warszawa, Poland)
- T24-006A Spatio-temporal dynamics of aberrant microglial calcium homeostasis and cellular morphology in an autochthonous glioblastoma mouse model
SarahEyberg (Bonn, Germany)
- T24-007A Size-Dependent Effects of Glioblastoma-Derived Extracellular Vesicles on the Cardiovascular System
Deimant?Kulakauskien? (Kaunas, Lithuania)
- T25-001A Glycine transporter 1 located on astrocyte as a potential therapeutic target for glycine encephalopathy in a zebrafish model
- T25-002A Restoring Myelin from Within: The Apolipoprotein C-II mimetic peptide D6PV Bypasses Immune Dysfunction to Promote OPC Maturation
- T25-003A Enteric glial cell neighbourhoods in health and disease
- T25-004A The functional role of excitatory neuron argonaute2 in glia cell development
- T25-005A Apolipoprotein E Regulates Microglial Remodeling of Hypothalamic Myelin in Obesity
- T25-006A Working memory deficits triggered by A53T alpha-synuclein pathology in prefrontal cortex is regulated by astrocyte glucocorticoid receptors
- T25-007A Microglia rewire neural networks: implications for Kleefstra Syndrome
- T25-008A From genes to networks: KANSL1 mutation in microglia reshapes neuronal connectivity
- T25-009A Cerebellar radial astrocyte architecture: single cell labelling strategies to dissect Bergmann glia morphology in 3D using super-resolution STED imaging
- T25-010A Oligodendrocyte-encoded Piezo2 regulates myelin integrity in the anterior visual system
- T25-011A Arp2/3 complex controls microglia dynamics and homeostasis
- T25-012A Enteric glia: molecularly and functionally heterogenous, primed to regulate intestinal immunity and homeostasis



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- T25-013A Novel therapies to halt demyelination in progressive multiple sclerosis
- T25-039A Optimizing Axonal Myelination for Improved Neuronal Transplantation



Tuesday, 8 July 2025, 16:30 - 18:30

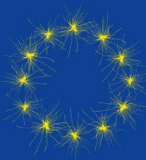
Room(s): Auditorium

S01 | Mechanisms of microglial response to neurodegenerative disease states

Chairs: **TristanLi** (USA); **XianhuaPiao** (USA)

Presentations:

- | | | |
|-------|--------|--|
| 16:30 | S01-01 | Disrupted lipid metabolism and immune signaling by glial Alzheimer risk gene APOE4
FemkeFeringa (Amsterdam, Netherlands) |
| 17:00 | S01-02 | The gut-immune-brain axis in Parkinson's disease
SebastiaanDe Schepper (Antwerp, Belgium) |
| 17:30 | S01-03 | GPCR-mediated protective microglial response to Alzheimer's pathology
XianhuaPiao (San Francisco, USA) |
| 18:00 | S01-04 | Tracking specific microglial states in neurodegenerative disease
TristanLi (St. Louis, USA) |



Tuesday, 8 July 2025, 16:30 - 18:30

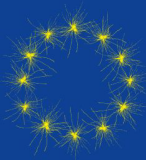
Room(s): Les Goudes 1

S02 | Understanding the roles of astrocytes in cognition and behaviour across the lifespan

Chairs: **CiaranMurphy-Royal** (Montréal, Canada); **ArnauBusquets Garcia** (Spain)

Presentations:

- | | | |
|-------|--------|---|
| 16:30 | S02-01 | Astroglial mechanisms underlying cognitive impairment in neurodegenerative diseases
ArnauBusquets Garcia (Barcelona, Spain) |
| 17:00 | S02-02 | Astrocyte dysfunction precipitates synaptic and cognitive impairments associated with early-life stress
CiaranMurphy-Royal (Montréal, Canada) |
| 17:30 | S02-03 | Astrocytes orchestrate episodic memory
AudePanatier (Bordeaux, France) |
| 18:00 | S02-04 | Astrocytic CREB Modulates Transcriptomic, Neuronal, and Behavioral Responses to Cocaine
LeanneHolt (New York, USA) |



Tuesday, 8 July 2025, 16:30 - 18:30

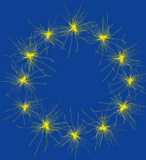
Room(s): Callelongue

S03 | Extracellular matrix regulation of glial cell function: the players, the modifiers, and the results.

Chairs: **RichardMilner** (USA); **HollyCognato** (USA)

Presentations:

- | | | |
|-------|--------|---|
| 16:30 | S03-01 | Microglial vasculo-protection in the hypoxic central nervous system; the effect of age
RichardMilner (SAN DIEGO, USA) |
| 17:00 | S03-02 | Complexes are complicated: the dystrophin-glycoprotein complex and its multifaceted regulation of oligodendrocyte development
HollyCognato (Stony Brook, New York, USA) |
| 17:30 | S03-03 | Fibronectin aggregates: an obstacle for remyelination in multiple sclerosis
WiaBaron (Groningen, Netherlands) |
| 18:00 | S03-04 | RhoGTPase signaling in the control of microglia function and brain homeostasis
JoaoRelvas (Porto, Portugal) |



Tuesday, 8 July 2025, 16:30 - 18:30

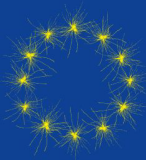
Room(s): Les Goudes 2

S04 | Understanding Human Oligodendroglia: A Lifespan Perspective

Chairs: **LuiseA.Seeker** (USA); **SarahJaekel** (Germany)

Presentations:

- | | | |
|-------|--------|---|
| 16:30 | S04-01 | Human oligodendroglia heterogeneity with CNS region and age
LuiseSeeker (Stanford, USA) |
| 17:00 | S04-02 | Exploring human oligodendroglia through single cell and spatial multi-omics
GoncaloCastelo-Branco (Stockholm, Sweden) |
| 17:30 | S04-03 | Metformin enhances human oligodendrocyte function: an in vitro study
NinaKazakou (Copenhagen, Denmark) |
| 18:00 | S04-04 | Oligodendroglia and Neurodegeneration: Where is the link?
SarahJaekel (Munich, Germany) |



Tuesday, 8 July 2025, 16:30 - 18:30

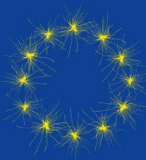
Room(s): Endoume

S05 | The modulation of neural circuits by ventricular glial cells

Chairs: **DeborahKurrasch** (Canada)

Presentations:

- | | | |
|-------|--------|--|
| 16:30 | S05-01 | Mechanisms of multiciliated ependymal cell development
NathalieSpassky (Paris, France) |
| 17:00 | S05-02 | Inflammatory Injury to the Postnatal Subventricular Zone in Neonates: Implications for Therapeutic Development
EricBenner (Durham, USA) |
| 17:30 | S05-03 | Talking Cells: Understanding Tanycyte-Synapse Interactions in the development of the Metabolic Hypothalamus
FannyLanglet (Lausanne, Switzerland) |
| 18:00 | S05-04 | The influence of proliferative tanycytes in embryonic and adult hypothalamic neurogenesis
DeborahKurrasch (Calgary, Canada) |



Tuesday, 8 July 2025, 18:45 - 19:45

Room(s): Auditorium

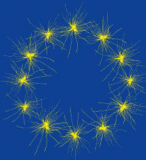
L02 | Plenary Lecture II: Kelly Monk

Chairs: **BrahimNait-Oumesmar** (France)

Presentations:

Molecular and genetic mechanisms of glial cell development

Although glial cells are critical regulators of every major aspect of nervous system biology, a mechanistic understanding of how glia perform their myriad roles remains elusive. We employ a combination of zebrafish and mouse models; in particular, we leverage our ability to perform rapid and powerful unbiased genetic screens in zebrafish to identify molecules regulating glial biology. Zebrafish are the simplest model organism to possess all classes of glia found in mammals: astrocytes, microglia, and myelinating glia (oligodendrocytes and Schwann cells) as well as a true vascular system. In addition, the optical transparency of zebrafish larvae provides the unique opportunity to image cellular morphology and behavior in an intact nervous system with single-cell resolution. Using zebrafish as a discovery platform coupled with synergistic approaches in mouse, we are exploring pressing questions in glial cell biology: How do glia acquire the complex morphologies that enable their functions? What molecules are used for proper axon-glial, glial-glial, and glial-vasculature communication? How do glia use these mechanisms to control neural circuit function and ultimately animal behavior? Illuminating the mechanisms by which glia talk to neurons and control their function will bring us much closer to a true understanding of how the brain works.



Wednesday, 9 July 2025, 8:30 - 9:30

Room(s): Auditorium

L03 | Plenary Lecture III - The EMBO Keynote Lecture: Klaus-Armin Nave

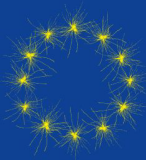
Chairs: SarahMoyon (France)

Presentations:

Oligodendrocytes in brain energy metabolism and Alzheimer's disease

Oligodendrocytes make myelin for rapid impulse propagation and provide metabolic support to spiking axons. In white matter tracts, the myelin sheath has emerged as a dynamic compartment that continuously turns over throughout adult life. When glucose is limiting, myelinating oligodendrocytes can even metabolize myelin-derived fatty acids to meet their own energy needs and to prevent irreversible axon degeneration. Interestingly, oligodendrocytes similar to neurons express and process the amyloid precursor protein (APP), but how Ab peptides that are generated within oligodendrocytes contribute to the largely cortical plaque load in Alzheimer's disease (AD) and its mouse models is still unknown. In the aging brain, there is a gradual decline of myelin structural integrity, which is likely to affect myelin turnover and the metabolic coupling between oligodendrocytes and axons. This could be a risk factor for the onset of AD, because in AD mouse models, such myelin dysfunction acts as a driver of amyloid plaque deposition, in part by inhibiting microglia functions in amyloid phagocytosis. The latter identifies a novel therapeutic target, when aiming for the delay of amyloid deposition and the onset of AD.

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Wednesday, 9 July 2025, 10:00 - 12:00

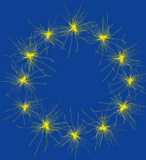
Room(s): Les Goudes 1

S06 | Determinants in Glial Energy Metabolism for Nerve Development and Disease

Chairs: **RobertFledrich** (Leipzig, Germany); **AshwinWoodhoo** (Spain)

Presentations:

- | | | |
|-------|--------|--|
| 10:00 | S06-01 | Glial metabolic adaptation in acute and chronic peripheral nerve injury.
RobertFledrich (Leipzig, Germany) |
| 10:30 | S06-02 | Mitochondrial fusion fuels the metabolic demands of Schwann cell myelination.
AshwinWoodhoo (Santiago de Compostela, Spain) |
| 11:00 | S06-03 | Glial metabolic flexibility is essential to sustain neuronal function under suboptimal conditions.
StefanieSchirmeier (Dresden, Germany) |
| 11:30 | S06-04 | The Metabolic Syndrome Disrupts the Normal Metabolic Coupling Between Schwann Cells and Axons.
StephanieEid (Ann Arbor, USA) |



Wednesday, 9 July 2025, 10:00 - 12:00

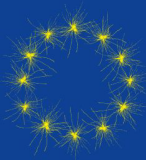
Room(s): Les Goudes 2

S07 | Glia – matrix interactions shape brain structure and function

Chairs: **Federico N. Soria** (Bilbao, Spain); **Alexander Dityatev** (Magdeburg, Germany)

Presentations:

- | | | |
|-------|--------|---|
| 10:00 | S07-01 | Orchestrated synaptic neuron-glia programs in health, aging and psychiatric disorders
Sabina Berretta (Boston, USA) |
| 10:30 | S07-02 | Microglia dynamics are affected by extracellular matrix structure and distribution
Federico N. Soria (Leioa, Spain) |
| 11:00 | S07-03 | Microglia - extracellular matrix interaction and synaptic remodeling
Alexander Dityatev (Magdeburg, Germany) |
| 11:30 | S07-04 | Effects of psychedelic drugs on microglia and extracellular matrix
Sandra Siegert (Klosterneuburg, Austria) |



Wednesday, 9 July 2025, 10:00 - 12:00

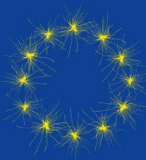
Room(s): Callelongue

S08 | Developmental origins of astrocyte diversity

Chairs: **KarineLoulier** (France); **RiccardoBocchi** (Switzerland)

Presentations:

- | | | |
|-------|--------|---|
| 10:00 | S08-01 | Cortical astrocytes are generated from multiple embryonic sources
KarineLoulier (Montpellier, France) |
| 10:30 | S08-02 | Molecular mechanisms underlying cortical astrocyte origins and diversity
RiccardoBocchi (Geneva, Switzerland) |
| 11:00 | S08-03 | Cortical astrocyte heterogeneity is influenced by time of birth from V/SVZ progenitor cells.
MaryamFaiz (Toronto, Canada) |
| 11:30 | S08-04 | Organoid-based approaches to investigate human glial development and function
StevenSloan (Atlanta, USA) |



Wednesday, 9 July 2025, 10:00 - 12:00

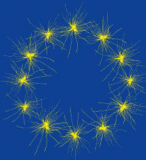
Room(s): Endoume

S09 | Special Trainee: Electrical dynamics in glia and their role in physiology and pathology

Chairs: **DariaMozheiko** (France)

Presentations:

- | | | |
|-------|--------|---|
| 10:00 | S09-01 | Interneuron-OPC crosstalk and cell homeostasis in prefrontal cortex function
HasniKhelfaoui (Paris, France) |
| 10:15 | S09-02 | Local electrical excitability in astroglial perisynaptic processes
DariaMozheiko (Paris, France) |
| 10:30 | S09-03 | Voltage-gated calcium channels regulate oligodendrocyte lineage cell development
MelaniePiller (Portland, USA) |
| 10:45 | S09-04 | Impact of microglial membrane potential on amyloid pathology in a model of Alzheimer's disease
AliRifat (Berlin, Germany) |
| 11:00 | S09-05 | GABAergic neuron-to-glioma synapses in diffuse midline glioma
TaraBarron (Palo Alto, USA) |
| 11:15 | S09-06 | OPC heterogeneity: insights into electrophysiology and molecular profiles
StavrosVagionitis (Cambridge, UK) |
| 11:30 | S09-07 | Kickstarting motor behaviour : the glial action potential
AgatheLafont (Montréal, Canada) |



Wednesday, 9 July 2025, 10:00 - 12:00

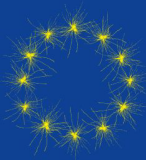
Room(s): Auditorium

S10 | Revolutionizing Neuroimmunology: Exploring Microglia and Immune Cell Replacement

Chairs: **DeborahKronenberg-Versteeg** (Tübingen, Germany); **ChrisBennett** (USA)

Presentations:

- | | | |
|-------|--------|---|
| 10:00 | S10-01 | Deciphering microglial function in proteopathies with brain slice cultures
DeborahKronenberg-Versteeg (Tübingen, Germany) |
| 10:30 | S10-02 | Microglia replacement to understand and treat neurodegenerative disorders
FrederickC.Bennett (Philadelphia, USA) |
| 11:00 | S10-03 | From progenitors to microglia: charting the path to microglia replacement therapy
KiavashMovahedi (Brussels, Belgium) |
| 11:30 | S10-04 | Macrophage transplantation rescues RNASET2-deficient leukodystrophy by replacing deficient microglia in a zebrafish model
NoemieHamilton (York, UK) |



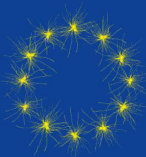
Wednesday, 9 July 2025, 12:15 - 13:15

Room(s): Callelongue

W04 | Student Lecture: Successful Scientific Publishing

Chairs:

Presentations:



Wednesday, 9 July 2025, 13:00 - 16:00

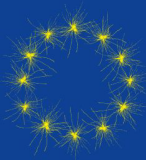
Room(s): Hall Garden Level

PS2 | Poster Session II

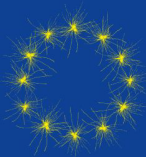
Chairs:

Presentations:

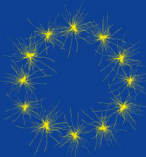
- T02-011B Rapid and efficient generation of oligodendrocytes from iPSCs
IsabellaBienjonetti (Quebec, Canada)
- T02-012B Transcriptional Landscape of THAP9 across Oligodendrocyte Developmental Stages: Molecular Mechanisms and Network Analysis
TanujaBhardwaj (Gandhinagar, India)
- T02-013B Development of brain organoids from human induced pluripotent stem cells for studying the rare leukodystrophy megalencephalic leukoencephalopathy with subcortical cysts
Elena SofiaCaprini (Rome, Italy)
- T02-014B Temporal and spatial regulation of microglial colonization
JoelMaldonado-Teixido (Leioa, Spain)
- T02-015B Primary Cultures of Human Choroid Plexus Epithelial Cells
RonjaBihlmaier (Tübingen, Germany)
- T02-016B Generation of a human retinal organoid system to model the cholesterol storage disorder Niemann-Pick type C
PatriciaHoffelner (Planegg-Martinsried, Germany)
- T02-017B Molecular Determinants of Human Astrogenesis
UrielA.Rufen-Blanchette (Atlanta, USA)
- T02-018B Cell cycle regulators in oligodendrocyte lineage progression
CodyCall (Portland, USA)
- T02-019B Prenatal stress has long-term disruptive effects on oligodendrocyte maturation and myelination.
SebastianOyarce-Pezoa (Helsinki, Finland)
- T02-020B A methodology to measure glial cell production rates in development and disease
SamuelA.Mills (Melbourne, Australia)
- T03-001B Tanycytes and Sweet Taste Receptors as Key Players in Brain Glucose Regulation
JuanB.Villalobos (valdivia, Chile)
- T03-002B Computational Modeling Reveals Morphological Heterogeneity Influences Calcium Signaling in Mouse Hippocampal Astrocytes
KerstinLenk (Graz, Austria)
- T03-003B Glial cells exhibit greater Ca^{2+} excitability to neuromodulator octopamine than neurons in *Drosophila* living brain
AnemariHorvat (Ljubljana, Slovenia)
- T03-004B Uncovering microglia adaptations prior to depletion in response to PLX5622 treatment
GuillermoVázquez Cabrera (Solna, Sweden)
- T03-005B A non-canonical Hedgehog-like pathway drives *C. elegans* embryonic brain assembly
FrancescaCaroti (Heidelberg, Germany)
- T04-001B The lysosomal cation channel TRPML1 regulates oligodendrocyte morphology
LindsayK.Festa (Philadelphia, USA)
- T04-002B Manipulation of the microglial cytoskeleton by ADF/Cfl1 knockout modulates microglial states and induces sterile neuroinflammation
Marie DeniseRoggan (Bonn, Germany)



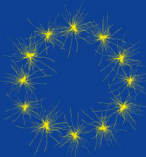
- T04-003B The role of actin depolymerizing factors ADF/cofilin1 in microglia morphology and function
SophieCrux (Bonn, Germany)
- T05-035B Modeling lipid metabolism in familial Alzheimer's disease using iPSC-derived astrocytes
MarinaShiryaeva (Amsterdam, Netherlands)
- T05-036B Galectin-3 promotes clearance of A β oligomers *in vitro* but promotes A β deposition *in vivo*
JunOng (Oxford, UK)
- T05-037B Assessing TAGLN3 therapeutic effects in Alzheimer's disease mouse models
KarounaBascarane (Saclay, France)
- T05-038B Microglial dysregulation in a TDP-43 related frontotemporal dementia mouse model
RaquelMartín-Baquero (Madrid, Spain)
- T05-039B The Integrated Stress Response in Microglia Regulates Synaptic Alterations in Multiple Sclerosis
SebastianWerneburg (Ann Arbor, USA)
- T05-040B Disease Stage specific role of Microglial TGF- β Signaling in Amyloid Pathology and Cognitive deficits in Alzheimer's Disease
JacobYazell (Cincinnati, USA)
- T05-041B Establishing a neuroprotective microglia population by repopulation and siponimod treatment in models for progressive Multiple Sclerosis - implication for neuroprotection
NeeleHeitmann (Bochum, Germany)
- T05-042B Endocannabinoid system as a modulator of neuroinflammation: Effects of FAAH inhibition in the 5XFAD model
LauraMartín Pérez (Pozuelo de Alarcón, Madrid, Spain)
- T05-043B Genetic ablation of GFAP and vimentin aggravates post-stroke secondary neurodegeneration
MalgorzataMichalowska (Gothenburg, Sweden)
- T05-044B Nemo-like kinase regulation of microglial protein quality control in neurodegenerative diseases
BenjaminSanders (New Haven, USA)
- T05-045B Chronic A β treatment in a 3D human iPSC-derived neurosphere system models cellular responses and neuron-glia interaction in Alzheimer's Disease
StefanWendt (Vancouver, Canada)
- T05-046B Understanding the influence of ageing and sex on astrocytes in the context of Alzheimer's Disease
FergusWoods (Dublin, Ireland)
- T05-047B Nigral astrocyte function and dysfunction in a 6-OHDA model of neurodegeneration
JessicaMcNeill (Ottawa, Canada)
- T05-048B Investigating a novel the role of p62 in astrocytes and its implications for ALS/FTD
NereaBlanes Ruiz (London, UK)
- T05-049B Modulation of Metabotropic Glutamate Receptors 3 and 5 mitigates the senescence-associated secretory phenotype in human microglial HMC3 cells
Giorgia SerenaGullotta (Troina, Italy)
- T05-050B Exploring the role of Clec7a/Dectin-1 in microglia functions: Implications as an early molecular target in Alzheimer's Disease
HeleneHirbec (Montpellier, France)
- T05-051B Developmental Changes in Cerebellar Glia in a Spastic Rat Model
MariaE.de Bellard (NORTHBRIDGE, USA)
- T05-052B Loss of endothelial CD2AP causes sex-dependent cerebrovascular dysfunction
MileneVandal (Calgary, Canada)
- T05-053B Microglia mediate synapse reduction loss in early stages of Alzheimer's disease
ZhongtianGuo (Okazaki, Japan)



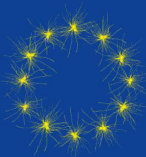
- T05-054B Astrocytic μ -crystallin (*Crym*) is reduced in Huntington's disease (HD) and its restoration in HD model mice is phenotypically beneficial
MatthiasOllivier (Los Angeles, USA)
- T05-055B The expression of Cellular Prion Protein (PrP^C) increases Parkinson's Disease neurodegeneration in mice
Flaviode Souza Júnyor (Rio de Janeiro, Brazil)
- T05-056B Microglia dynamics in P301S tauopathy mouse model of Alzheimer's disease
Eun JeongLee (Suwon, South Korea)
- T05-057B Mitochondrial fission regulates neuronal and glial Integrity and brain function
Ji-youngKim (Daegu, South Korea)
- T05-058B Dystrophin mutations affect human neural progenitors, astrocytes and neurones.
ReemAlkharji (London, UK)
- T05-059B SIRT2 and ALDH1A1 as critical enzymes for astrocytic GABA production in Alzheimer's Disease
MridulaBhalla (Daejeon, South Korea)
- T05-060B Rare Multiple Sclerosis-Associated Genetic Variants Impact Behavioural Outcomes Following Inflammatory Demyelination
RoisinA.Moloney (Hobart, Australia)
- T05-061B Impact of Microglial Depletion on Neuroinflammation and Cognitive Function in a mouse model Frontotemporal Dementia
CarmenRodríguez-Cueto (Madrid, Spain)
- T05-062B Transcriptomic and functional alterations in human iPSC-derived Microglia cells from Alzheimer's disease patients: a role for genetic background?
CoralieClua Provost (Montpellier, France)
- T05-063B Hypoxia modifies mitochondrial function and accelerates microglial switch from a defensive to a proinflammatory phenotype in an in vitro model of Alzheimer's disease
Cristiana Lucia RitaLipari (Catania, Italy)
- T05-064B Blunted desaturation and elongation of long-chain fatty acids drive neurotoxicity of human astrocytes
IsabelleWeinhofer (Vienna, Austria)
- T05-065B Unifying Image Analysis Tools for Comprehensive 4D Mitochondrial Network Analysis in Alzheimer's disease Astrocytes
LuanaNaia (Stockholm, Sweden)
- T05-066B Extracellular alpha synuclein species induce neuronal loss and microglial metabolic changes
DanieliusUmbrasas (Kaunas, Lithuania)
- T05-067B Modeling Astrocyte Dysfunction in GLD Using hiPSC-Derived 3D Brain Spheroids
ClarissaRosato (Milan, Italy)
- T05-068B In Vitro Modeling of Niemann-Pick Type C Disease in Human iPSC-Derived Oligodendrocytes
DavideMarangon (Milan, Italy)
- T06-011B FGFR3 in Astrocytes of the Arcuate Nucleus: A Key Regulator of Energy Homeostasis and Body Weight
MirandaBueno-Arribas (Paris, France)
- T06-012B System x_c^- deletion alters the metabolic phenotype of murine astrocytes
GamzeAtes (Brussels, Belgium)
- T06-013B Glia-neuron metabolic interaction promotes *Drosophila melanogaster* chill tolerance
NinaSurina (Dresden, Germany)
- T06-014B Computer-Aided Drug Design (CADD) of Novel AQP4 Modulators to Reduce CNS Oedema
MinaKassim (Birmingham, UK)
- T06-015B Microglia govern the acute effect of caloric overload on energy balance in a sex-dependent manner
GiuliaCutugno (Bordeaux, France)



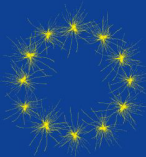
- T06-016B Microglial mTORC1 regulates metabolic adaptation to calorie surfeit in a sex-dependent manner
EvangeliaKyriakidou (Bordeaux, France)
- T06-017B Investigating Sex Differences in Microglial Mitochondrial Dynamics Under Acute High-Fat Diet
EvangeliaArchontoulaki (Bordeaux, France)
- T06-018B Monitoring Neuronal and Axonal Health In Vivo Using Two-Photon FLIM
HenriS.Zanker (Zurich, Switzerland)
- T06-020B Altered Sphingolipid Metabolism in Microglia Underlies Smouldering Inflammation in Progressive Multiple Sclerosis
MonicaEmili Garcia-Segura (Cambridge, UK)
- T06-021B PHGDH, the key enzyme of the phosphorylated pathway, is upregulated in aging astrocytes.
AnkeMüller (Magdeburg, Germany)
- T06-022B Sexually dimorphic glial neutral lipid processing promotes sleep
ElanaPyfrom (Philadelphia, USA)
- T06-023B Time-restricted feeding provides limited microglial immunometabolic improvements in diet-induced obese rats
HanJiao (Amsterdam, Netherlands)
- T06-024B Norepinephrine stimulates protein synthesis in astrocytes
FlorenciaCabrera-Cabrera (Tallinn, Estonia)
- T06-25B Lactate fuels TCA cycle flux and mitochondrial respiration in microglia
KatiaMonsorno (Lausanne, Switzerland)
- T07-001B How do astrocytic extracellular vesicles regulate brain development in an evolutionary context?
KatarzynaCiuba (Warsaw, Poland)
- T07-002B The role of the YAP pathway in mediating mechanosensitivity of oligodendrocytes
MadhumathiGnanaprakash (New York, USA)
- T07-003B Its painfully clear: the basal lamina is required for the form and function of Schwann cells
MoniqueLillis (San Francisco, USA)
- T07-004B NimA promotes cell adhesion at the blood brain barrier of *Drosophila* nervous system
SaraMonticelli (Illkirch, France)
- T07-005B Substrate stiffness influences the Hippo/YAP axis in conjunction with morphological changes in astrocytes
VarshiniPadmanabhan (Magdeburg, Germany)
- T08-001B Unlocking microglia gene function with a novel *in vivo* CRISPR screening approach
BeatriceP.Festa (Brussels, Belgium)
- T08-002B Distinct transcriptomic and epigenomic responses of mature oligodendrocytes during disease progression in a mouse model of multiple sclerosis
BastienHervé (Stockholm, Sweden)
- T08-003B *Park7* deletion drives sex- and age- specific transcriptome changes in mouse midbrain astrocytes: insights into the NRF2-CYP1B1 axis
TonyHeurtaux (Esch/Alzette, Luxembourg)
- T08-004B Unveiling astrocyte local translation—a fundamental mechanism for astrocyte functional compartmentalization
MartineCohen Salmon (Paris, France)
- T08-005B Characterizing the cis and trans regulatory factors mediating local translation regulation in astrocytes
SarahKoester (St. Louis, USA)
- T08-006B Understanding the role of middle ear macrophages in profoundly deaf children; the potential to improve hearing with cochlear implants
KateHough (Southampton, UK)
- T08-007B Application of CRISPR-screens, high-throughput reporter assays and genome engineering to identify function of Multiple sclerosis-associated SNPs in oligodendrocytes
KarlCarlström (Stockholm, Sweden)



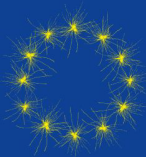
- T08-008B 4E-BP1-dependent translation in microglia controls mechanical hypersensitivity
VolodyaHovhannisyan (Montreal, Canada)
- T08-009B Epigenetic regulation in myelinating glia: The role of Rnf40 in mouse oligodendrocyte lineage cells during embryonic development
VerenaDehm (Erlangen, Germany)
- T08-010B USP18 as a key regulator of IFN signalling and microglia function in health and disease
LisaG.M.Huis in 't Veld (Berlin, Germany)
- T09-011B Microglia influence astrocyte maturation in the developing hippocampus
LeaDennaoui (Lausanne, Switzerland)
- T09-012B Microglia coordinate OPC-synapse interactions and promote oligodendrocyte lineage progression
AustinFerro (Cold Spring Harbor, USA)
- T09-013B Uncovering the contribution of astrocyte-microglial interactions to postnatal neurodevelopment and the effects of early life stress
MeganS.Chappell (Los Angeles, USA)
- T09-014B What regulates the morphogenesis of astrocytes?
DongunHeo (Portland, USA)
- T09-015B Visualization of P2Y₁₂ Receptor for Microglial Process Dynamics in health and disease
HatsumiNakagawa (Nagoya, Japan)
- T09-016B In vivo study of the cell- and non-cell autonomous effect of microglial BIN1 deletion on mouse brain under homeostatic and neuroinflammatory conditions
DimitraThomaidou (Athens, Greece)
- T09-017B Myelin development and endocannabinoid-dependent remyelination in cortical slice cultures
KieranHiggins (Amsterdam, Netherlands)
- T09-018B Dysfunction of OPCs-Microglia Interaction Triggers Neurodegeneration in Alzheimer's Disease
Quan-HongMa (Suzhou, China)
- T09-019B Deciphering the molecular mechanisms involved in ATP release by astrocytes using biosensors
NegarAhmadi (Montpellier, France)
- T09-020B *Eif2b5* Conditional Mice Provide Novel Insights into Glial Involvement in Vanishing White Matter
JavierTriñanes-Ramos (Amsterdam, Netherlands)
- T10-013B Human hippocampal astrocytic characterization in healthy ageing and neurodegeneration: heterogeneity, distribution and association with disease markers
MonicaMiranda de la Maza (Esch sur Alzette, Luxembourg)
- T10-014B Characterization of a peculiar astrocyte subtype, the Olig2-AS
ClemenceDebacq (Toulouse, France)
- T10-015B MorphoGlia: Morphological Profiling and Mapping
JuanP.Maya-Arteaga (Klosterneuburg, Austria)
- T10-016B The gut-microbiota-astrocyte axis in the healthy brain
EmersonDaniele (Toronto, Canada)
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- T10-018B Characterization of Reactive Astrocyte Heterogeneity in a Mouse Model of Acute Perinatal White Matter Injury
MarelSteinfort (Bern, Switzerland)
- T10-019B Analysis of Microglial Transcriptomes in Substantia Nigra and Basal Ganglia during Early Postnatal Development
Phani SankarPotru (Bielefeld, Germany)



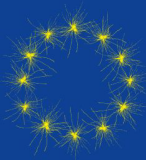
- T10-020B Cortical astrocytes form functional subpopulations defined by intrinsic signaling cascades in wildtype and Alzheimer disease mice
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- T10-021B Astrocytic heterogeneity in the ventrolateral preoptic nucleus – VLPO–
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Athénaïs Genin (Montpellier, France)



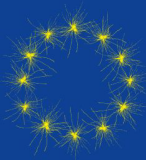
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AshleyS.de Witte (Toronto, Canada)



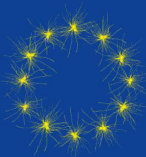
- T12-011B Microglial specific TGF- β 1 signaling deletion after cerebral ischemia worsens the lesion and impairs recovery
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Bara'aAbu-Diab (Jerusalem, Israel)



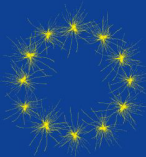
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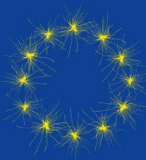
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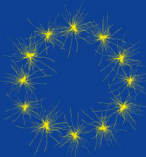
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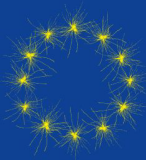
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- T18-010B Cerebral blood flow is modulated by astrocytic cAMP elevation independently from IP₃-mediated Ca²⁺ signaling in mice
MartaVittani (Copenhagen, Denmark)



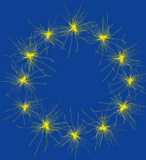
**XVII European Meeting on
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AliceLaurence (Paris, France)
- T24-010B Unravelling the crosstalk between glioma and oligodendrocytes in the human brain
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ViolaDonati (Padova, Italy)
- T24-012B Metabolic adaptations in post-phagocytic microglia: implications in glioblastoma
XabierCuesta (Leioa, Spain)
- T24-013B An iPSC Model of Pilocytic Astrocytoma Reveals Altered Lineage Specification and Gliosis in Cerebellar Organoids
EnricoPracucci (Lund, Sweden)
- T24-015B Role of AQP4ex in low-and high-grade brain tumor-associated edema
OnofrioValente (Bari, Italy)
- T25-014B Modulation of YAP and TAZ in peripheral neuropathies
- T25-015B A phenotypic high-content cell painting screen to identify novel compounds for macrophage and microglia (re)-polarization
- T25-016B Impact of AKAP11 haploinsufficiency in human neurons
- T25-017B Prefrontal astrocyte-neuron lactate shuttling in adaptive behavior



- T25-018B Understanding Astrocyte Metabolic Reprogramming During Amyloid- β Propagation in Early Alzheimer's Disease
- T25-019B Local electrical excitability in astroglial perisynaptic processes
- T25-020B Chemogenetic activation of Gq in microglia leads to deficits in synaptic plasticity and neuronal communication
- T25-021B Glioblastoma secretome as a primary driver of reactive astrogliosis and glutamate dysregulation
- T25-022B Apolipoprotein E aggregation in microglia initiates Alzheimer's disease pathology by seeding b-amyloidosis
- T25-023B Estradiol-Pretreated Astrocytes Cultures Treated With Competence and Progression Growth Factors Modulate Extracellular Signal-Related Kinases, Cyclin D1, Glial Fibrillary Acid Protein and Vimentin Expression
- T25-024B Neuron-astrocyte coupled lipid clearance dysfunction in synucleinopathies
- T25-025B How do various components of the enriched environment affect transcriptomic responses in microglia?
- T25-026B Fatty acid binding protein-8 (FABP8/VPMP2) defines molecular heterogeneity of human CNS myelin sheaths



Wednesday, 9 July 2025, 16:00 - 18:00

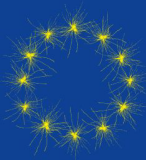
Room(s): Les Goudes 2

S11 | Impaired communication between astrocytes and neurons contributes to early symptoms of neurodegenerative dementia

Chairs: **GillesBonvento** (France); **DavidBlum** (France)

Presentations:

- | | | |
|-------|--------|---|
| 16:00 | S11-01 | Adenosine signaling, a switch controlling neuro-glial communication in neurodegeneration
DavidBlum (Lille, France) |
| 16:30 | S11-02 | The astrocyte-to-neuron L-serine shuttle contributes to synaptic plasticity and is altered in Alzheimer's Disease
GillesBonvento (Fontenay-aux-Roses, France) |
| 17:00 | S11-03 | Astrocytic receptor dysregulation and proteinopathy induce context-specific effects on behavior
AnnaOrr (New York, USA) |
| 17:30 | S11-04 | Unraveling the Role of Neuron-Glia Interrelation in Tau-Mediated Synaptic Degeneration in Alzheimer's Disease
MaudGratuze (Marseille, France) |



Wednesday, 9 July 2025, 16:00 - 18:00

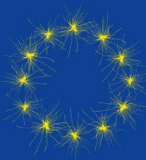
Room(s): Callelongue

S12 | Astrocytes control brain circuits underlying behavior

Chairs: **JoãoF.Oliveira** (Portugal); **InbalGoshen** (Israel)

Presentations:

- | | | |
|-------|--------|--|
| 16:00 | S12-01 | The involvement of astrocyte calcium-dependent signaling in fear memory
João FilipeOliveira (Braga, Portugal) |
| 16:30 | S12-02 | Astrocyte Networks Facilitate Sensory Neuronal Integration during Tactile Encoding
JulianaRosa (Toledo, Spain) |
| 17:00 | S12-03 | <i>Crym</i> -positive striatal astrocytes in health and disease
MatthiasOllivier (Los Angeles, USA) |
| 17:30 | S12-04 | Astrocytes in High Brain Function
InbalGoshen (Jerusalem, Israel) |



Wednesday, 9 July 2025, 16:00 - 18:00

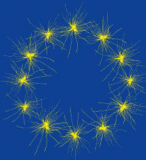
Room(s): Les Goudes 1

S13 | Microglial metabolism in the spotlight: From behavioral regulation to neuropsychiatric disorders

Chairs: **AgnesNadjar** (France); **AliJawaid** (Poland)

Presentations:

- | | | |
|-------|--------|--|
| 16:00 | S13-01 | Targeting microglial mitochondrial metabolism to halt chronic central nervous system inflammation
LucaPeruzzotti-Jametti (Cambridge, UK) |
| 16:30 | S13-02 | Understanding metabolic reprogramming to mitigate neurodegeneration.
AmaliaDolga (Groningen, Netherlands) |
| 17:00 | S13-03 | Harnessing the resilient effects of microglia across the lifespan via metabolism
AliJawaid (Warsow, Poland) |
| 17:30 | S13-04 | Nutrient-driven microglial metabolic reprogramming and its impact on mouse behavior
AgnesNadjar (Bordeaux, France) |



Wednesday, 9 July 2025, 16:00 - 18:00

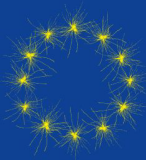
Room(s): Auditorium

S14 | Mechanisms underlying oligodendrocyte and myelin development and dynamics

Chairs: **SoniaR.Mayoral** (USA); **TaraDeSilva** (USA)

Presentations:

- | | | |
|-------|--------|--|
| 16:00 | S14-01 | Neuronal Activity Modulates Microglial Engulfment of Oligodendrocyte Progenitor Cells
TaraDeSilva (Cleveland, USA) |
| 16:30 | S14-02 | Oligodendrocytes facilitate myelin biogenesis and maintain myelin homeostasis via AP2-dependent endocytosis
HaukeB.Werner (Göttingen, Germany) |
| 17:00 | S14-03 | Studying the cell biology of myelin sheath remodeling in vivo using zebrafish
DavidLyons (Edinburgh, UK) |
| 17:30 | S14-04 | Signals regulating oligodendrocyte generation in early development
SoniaMayoral (Providence, USA) |



Wednesday, 9 July 2025, 16:00 - 18:00

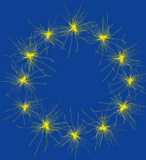
Room(s): Endoume

S15 | Glial cells as guardians of brain proteostasis

Chairs: **MariaJimenez-Sanchez** (London, UK); **AinhuaPlaza-Zabala** (Leioa, Spain)

Presentations:

- | | | |
|-------|--------|--|
| 16:00 | S15-01 | Non-cell autonomous roles of astrocyte chaperones in neurodegeneration
MariaJimenez-Sanchez (London, UK) |
| 16:30 | S15-02 | Mitophagy at the crossroads of neuroinflammation.
PatriciaBoya (Fribourg, Switzerland) |
| 17:00 | S15-03 | Regulation of Autophagic Networks in Glia in Health and Neurovascular Disease.
AinhuaPlaza-Zabala (Leioa, Spain) |
| 17:30 | S15-04 | Glial control of peripheral mitochondrial form and function to regulate longevity.
AndrewDillin (Berkeley, USA) |



Wednesday, 9 July 2025, 18:15 - 19:15

Room(s): Auditorium

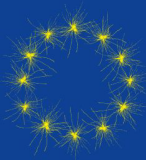
L04 | Plenary Lecture IV: Nathalie Rouach

Chairs: Tamara Weiss (Austria)

Presentations:

Astroglia: from stars to brain plasticity

Our laboratory investigates the contribution of astrocytes to brain information processing. Notably, we explore the molecular modalities and functional outcomes of astrocyte-neuron interactions in various physiological and pathological contexts focusing on neuronal excitability, synaptic transmission, plasticity and behavior. To do so, we use a multidisciplinary approach combining electrophysiology, imaging, behavioral testing, mathematical modeling and molecular tools targeting selectively astrocytes in situ and in vivo in mice and in human tissues. In this talk, I will review our contribution to the identification of several major astroglial properties regulating physiological and pathological neuronal activities and behavior, notably in the context of critical period development, sociability or intellectual disability.



Thursday, 10 July 2025, 8:30 - 9:30

Room(s): Auditorium

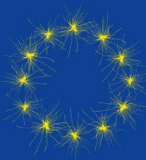
L05 | Plenary Lecture V: Anna Molofsky

Chairs: Olivier Pascual

Presentations:

Formation and remodeling of the extracellular matrix in brain development and plasticity

Up to 20% of the brain is extracellular, filled with an intricate lattice of glycoproteins and sugars known as the extracellular matrix (ECM). ECM proteins are produced by astrocytes, oligodendrocytes, and some neurons and are dynamically remodeled by microglia. In this talk, I will present data from our group demonstrating that microglial remodeling of the ECM is a key mechanism regulating synapse plasticity both in the developing nervous system and during adult learning and memory. I will also present data mapping the 'matrisome' of the brain and defining the role of structural ECM molecules that regulate hippocampal-dependent learning. These data reveal the ECM as a compelling candidate for a stable yet adaptable substrate for memory storage.



Thursday, 10 July 2025, 10:00 - 12:00

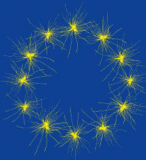
Room(s): Endoume

S16 | Epigenetic control of microglial identity and function

Chairs: **JonasJ.Neher**; **SarahMarzi** (UK)

Presentations:

- | | | |
|-------|--------|--|
| 10:00 | S16-01 | Epigenetic mechanisms in microglial immune responses to peripheral immune stimulation and Alzheimer pathology
JonasNeher (Munich, Germany) |
| 10:30 | S16-02 | Identifying gene regulatory networks driving microglial phenotypes in neurodegenerative disease
SarahMarzi (London, UK) |
| 11:00 | S16-03 | Epigenetic regulation of innate immune memory in microglia
SusanneKoistra (Antwerpen, Netherlands) |
| 11:30 | S16-04 | Decoding the impact of genetics and epigenetics on the biology of human microglia in dementia
RenzoMancuso (Groningen, Belgium) |



Thursday, 10 July 2025, 10:00 - 12:00

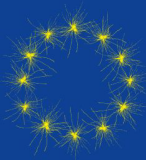
Room(s): Les Goudes 2

S17 | Special Trainee: Myelinating glia: dynamic behaviours in health, disease, and injury

Chairs: **YasmineKamen** (USA); **ClaraMutschler** (UK)

Presentations:

- | | | |
|-------|--------|---|
| 10:00 | S17-01 | Regional white matter vulnerability associated with Alzheimer's disease pathology
LucyRyan (Edinburgh, UK) |
| 10:20 | S17-02 | How do oligodendrocytes die?
YasmineKamen (Hanover, USA) |
| 10:40 | S17-03 | Defining the transcriptional profile, <i>in vivo</i> dynamics, and spatial distribution of newly formed oligodendrocytes
AnyaKim (Baltimore, USA) |
| 11:00 | S17-04 | More than Stress: Elucidating the Role of the Neuropeptide CRH in Oligodendrogenesis
ClemensRies (Munich, Germany) |
| 11:20 | S17-05 | Optimizing axonal myelination for improved neuronal transplantation
Maria FernandaMartinez Reza (Munich, Germany) |
| 11:40 | S17-06 | Cell Autonomous and Non Cell Autonomous Regulators of the Schwann Cell Injury Response
ClaraMutschler (Cambridge, UK) |



Thursday, 10 July 2025, 10:00 - 12:00

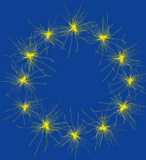
Room(s): Auditorium

S18 | Glia cells in brain development – an integrative view on the role of distinct glial cells in neurodevelopmental disorders

Chairs: VeredKellner (Austria); AmitAgarwal

Presentations:

- | | | |
|-------|--------|---|
| 10:00 | S18-01 | Neural-glial interactions in development: a critical role for IL34
BenjaminDevlin (Durham, USA) |
| 10:30 | S18-02 | Developmental neuron-astrocyte interactions in neurodevelopmental disorders
VeredKellner (Vienna, Austria) |
| 11:00 | S18-03 | Astrocytes dysfunctions in Phelan McDermid syndrome
PaolaBezzi (Lausanne, Switzerland) |
| 11:30 | S18-04 | Oligodendrocyte development and myelination in the genetic mosaic brain of female mouse model of Fragile X Syndrome
AmitAgarwal (Heidelberg, Germany) |



Thursday, 10 July 2025, 10:00 - 12:00

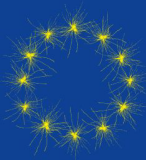
Room(s): Les Goudes 1

S19 | Clearance and propagation of protein aggregates: focus on astrocytes

Chairs: **LauraCiviero** (Italy)

Presentations:

- | | | |
|-------|--------|---|
| 10:00 | S19-01 | Implication of astrocytes in Tauopathies
KarineCambon (Fontenay-aux-roses, France) |
| 10:30 | S19-02 | Phagocytic astrocytes: identifying the molecular features
LauraCiviero (Padova, Italy) |
| 11:00 | S19-03 | Astrocytes: a potential target to reduce cell-to-cell spreading in neurodegenerative diseases
AbdulkhalekDakhel (Uppsala, Sweden) |
| 11:30 | S19-04 | Investigating the fate of human brain-derived seeding-competent tau in astrocytes
AurelienLathuiliere (Geneva, Switzerland) |



Thursday, 10 July 2025, 10:00 - 12:00

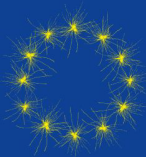
Room(s): Callelongue

S20 | Human microglial activities in brain physio-pathological contexts

Chairs: **GiampaoloMili**or (France); **Marie-ÈveTremblay** (Canada)

Presentations:

- | | | |
|-------|--------|--|
| 10:00 | S20-01 | Ion channel control of NLRP3 inflammasome activation in human brain microglia
ChristianMadry (Berlin, Germany) |
| 10:30 | S20-02 | Intersection of ontogeny and environment on human brain myeloid fates
NicoleCoufal (San Diego, USA) |
| 11:00 | S20-03 | Disease and age-dependent effects on microglia in the subventricular zone of the human brain
VanessaDonega (Amsterdam, Netherlands) |
| 11:30 | S20-04 | Microglial Cells in the Human Brain: Distinct Motilities, Phenotypes, and Neuronal Interactions in Development and Epilepsy
GiampaoloMili or (Paris, France) |



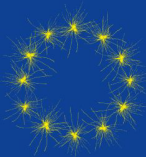
Thursday, 10 July 2025, 13:00 - 16:00
Room(s): Hall Garden Level

PS3 | Poster Session III

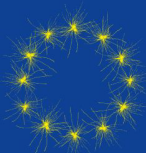
Chairs:

Presentations:

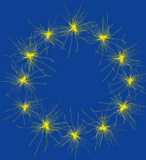
- T02-021C Unveiling the dynamic link between proliferation and phagocytic efficiency in brain development: the role of IKAROS
MarcoGonzález-Domínguez (Leioa, Spain)
- T02-022C Human oligodendrocyte production dynamics: cortical white matter oligodendrocyte genesis continues into adulthood
DavidG.Gonsalvez (Clayton, Australia)
- T02-023C Unexpected modulation of oligodendrocyte differentiation by the Cre DNA recombinase fusion protein CreERT2 in CX3CR1-CreERT2 knock-in mice
RheaSeth (Homburg, Germany)
- T02-024C An optimized protocol to culture primary rodent astroglia in vitro
FrancescoFormaggio (Bologna, Italy)
- T02-025C Oligodendrocyte Dynamics in the mouse Adult Hippocampus
YingjieZhen (LONDON, UK)
- T02-026C Piezo1 regulates the maturation of oligodendrocytes and dorsal root ganglion (DRG) cells
NewshanBehrangi (Rostock, Germany)
- T05-069C Inflammation-induced lysosomal dysfunction in human iPSC-derived microglia is exacerbated by APOE 4/4 genotype
TaisiaRolova (Helsinki, Finland)
- T05-070C Interplay of lysosomal (dys)-function and alpha-synuclein in oligodendrocyte models
AnishVarghese (Erlangen, Germany)
- T05-071C Dysfunctional myelin exacerbates tau pathology and behaviour in a mouse model for tauopathy
LinaKomarek (Göttingen, Germany)
- T05-072C Understanding glial contribution to Multiple Sclerosis lesions: lessons from the zebrafish model
RosaManzoli (Padova, Italy)
- T05-073C Astrocytic regulation (transcriptome/epigenome) during memory formation: impact of Tau pathology
JohanneGambi (Strasbourg, France)
- T05-074C TDP43-mediated Mitophagy prevents protein aggregation and neurodegeneration
JichuanLiu (??, China)
- T05-075C Age-related myelin defects cause brain acidification sufficient to impair A β clearance by microglial cells
VeronikaHantakova (Göttingen, Germany)
- T05-076C Assessing the impact of APOE genotype and LRP1 on tau uptake in primary astrocytes and microglia.
MatthewP.Lennol (Marseille, France)
- T05-077C Astrocyte-mediated demyelination in primary astrocyte disease
SchuichiKoizumi (Chuo, Japan)
- T05-078C Human iPSC-derived cortical organoids and astrocytes as modeling platforms to study the impact of multiple pro-inflammatory events on astrocytes and on the development of Neurodegenerative Diseases.
RaphaelTouron (Marseille, France)
- T05-079C Molecular expression profiling analysis of microglial subpopulations associated with Alexander disease
KozoSaito (Chuo, Japan)



- T05-080C Disease-associated committed OPCs emerge as secretory cells shaping the fate of astrocytes in early stages of Alzheimer's disease
AnnaK.Schmidtner (Jerusalem, Israel)
- T05-081C Impact of astroglial GABAB receptor deletion on L-DOPA-induced dyskinesia in a mouse model of Parkinson's disease
MarizaBortolanza (Homburg, Germany)
- T05-082C Investigating astrocytic changes in subtypes of frontotemporal lobar degeneration
YazeadBuhidma (London, UK)
- T05-083C Sex-dimorphic glial profile in an aging mouse model of Alzheimer's disease with CYP46A1 overexpression
LjerkaDelac (Solna, Sweden)
- T05-084C Glial cytoskeletal alterations in Alzheimer's disease: Linking structural changes to reactive gliosis
ElenaDaoutsali (Utrecht, Netherlands)
- T05-085C Study of the cellular and molecular effects of SARS-CoV-2 viral proteins on human models of Parkinson's Disease
NereaUrrestizala Arenaza (Leioa, Spain)
- T05-086C Sex differences in olfactory bulb astroglial cell transcriptome in acute response to vesicular stomatitis virus
StephanieSimard (Ottawa, Canada)
- T05-087C Deciphering how alpha-synuclein aggregation contributes to disease pathogenesis and progression within microglia.
JoanneLachica (London, UK)
- T05-088C Exploring the Impact of White Matter Lesions on Neurodegeneration
SabrinaGhosh (Cambridge, UK)
- T05-089C Lysosome status as a key driver of microglial aging and cognitive decline
FannyEtienne (Los Angeles, USA)
- T05-090C Consequences and implications of astrocytic TAGLN3 modulations in health and disease
SarahPyrttek (Marseille, France)
- T05-091C Role of Oxidative Stress in the Pathogenesis of Megalencephalic Leukoencephalopathy with Subcortical Cysts (MLC): exploring new molecular mechanisms using astrocytoma cell lines and iPSC-derived human astrocytes.
SaraSposito (Rome, Italy)
- T05-092C Investigating lipid-induced changes in iPSC-derived microglia: transcriptomic and functional consequences
YashviBhat (Paris, France)
- T05-093C Complement C3a treatment ameliorates stroke-induced neurodegeneration
MariaMode (Gothenburg, Sweden)
- T05-094C A new in vivo model using zebrafish to study sex differences in glia during aging and in the context of Alzheimer's disease
CuongM.Vu (Dublin, Ireland)
- T05-095C Contribution of astrocyte metabolic defects to Duchenne Muscular Dystrophy neural pathology
PatriziaFerretti (London, UK)
- T05-096C Myelin restricts the release of axonally derived amyloid- β and plaque accumulation in the white matter of 5XFAD mice
ShuyingMao (Goettingen, Germany)
- T05-097C Microglia Dysfunction in Parkinson's Disease: Unravelling the Crosstalk Between TLRs and Lipid Droplets
ChristinaE.Toomey (London, UK)
- T05-098C A coordinated glial response shapes neuronal survival in an ex-vivo adult human brain model
MiriamAdam (Jerusalem, Israel)
- T05-099C iPSC-derived astrocytes to study glial contribution to neurodegeneration
LaureVerlin (London, UK)



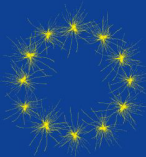
- T05-100C Spatially Resolved Transcriptomics to Uncover Molecular Mechanisms of Neurodegeneration in Human Substantia Nigra of Parkinson's Disease
AraksMartirosyan (Heverlee, Belgium)
- T05-101C Impact of Alzheimer-associated amyloid-beta and tau lesion transmission on the transcriptome expression in a primate.
LéoDupuis (Fontenay aux Roses, France)
- T05-102C Microglial ferroptotic stress causes non-cell autonomous neuronal death
JeffreyR.Liddell (Parkville, Australia)
- T06-025C Mitochondrial dynamics function in Schwann cell biology
AlejandroSánchez Rueda (Santiago de Compostela, Spain)
- T06-026C A flexible hypothalamic astrocyte network adapts to high-energy diet in a sex-dependent manner
ClaraFranco (Paris, France)
- T06-027C Virus-Associated Airway Extracellular Vesicles as Mediators of Microglial Mitochondrial Dysfunction and Neuroinflammation
Deimant?Narauskait? (Kaunas, Lithuania)
- T06-028C Differentiation-state dependent metabolic profiles of oligodendrocytes: modulation by cannabinoid CB₁ receptors
AnaBernal-Chico (Leioa, Spain)
- T06-029C Glutamate reduces fatty-acid mitochondrial oxidation in cortical human astrocytes
FrancinaBagur-Llufriu (Cerdanyola del Vallès, Spain)
- T06-030C Microglial electron transport chain sustains brain development with different roles for each complex
BellaMora-Romero (Seville, Spain)
- T06-031C Monocarboxylate transporter 2 in oligodendroglia contributes to myelin maintenance and regeneration and is downregulated in multiple sclerosis
VanjaTepavcevic (Paterna (Valencia), Spain)
- T06-032C Microglia coordinate activity-dependent protein synthesis in neurons through metabolic coupling
DrewAdler (New York, USA)
- T06-033C The relationship between mitochondrial ROS in oligodendrocytes and axonal health
UrvashiDalvi (Zurich, Switzerland)
- T06-034C HUMAN iPSC-DERIVED APOE4/4 ALZHEIMER'S DISEASE ASTROCYTES EXHIBIT A PRO-INFLAMMATORY AND SENESCENT STATE THAT COMPROMISE NEURONAL SUPPORT
Juan AntonioGarcia Leon (Malaga, Spain)
- T06-035C Elevated Extracellular K⁺ Alters Brain Cell Metabolism and Morphology
NinaVardjan (Ljubljana, Slovenia)
- T06-036C Cholesterol ester accumulation in APOE4/4 microglia leads to lysosomal and mitochondrial dysfunction
JasminS.Revanna (La Jolla, USA)
- T06-037C Microglia as a potential regulator of hypothalamic metabolism.
ChiaraMazzola (Rozzano, Italy)
- T06-038C Maternal high fructose diet impaired butyrate-associated glycogen synthesis by PPAR α -regulated MCT4
Kay LHWu (Kaohsiung, Taiwan)
- T07-006C Impact of matrix viscosity on astrocyte morphology and reactivity in 3D tissue models.
Norah JanePrendergast (Bristol, UK)
- T07-007C Dissecting mechanisms of astroglial cell development in the model *C. elegans*
JolitaCibulskait? (Heidelberg, Germany)
- T07-008C *An in vitro study on the induction of astrocytes adhesion molecules by vascular cells*
IlariaRossetti (Edinburgh, UK)



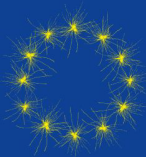
**XVII European Meeting on
Glial Cells in Health and Disease**
Marseille | 8–11 July 2025



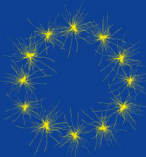
- T07-009C Microglia and extracellular matrix contributions to cognitive aging in mice
LindsayDe Biase (Los Angeles, USA)
- T07-010C Effects of Different 3D Biomaterial Hydrogel Environments on Human iPSC-derived Astrocyte Morphology and Transcriptome
ThomasDistler (Planegg-Martinsried, Germany)
- T08-011C Activity-dependent capture of mouse hippocampal astrocytes after acute stress
CamilleFalconnier (Saclay, France)
- T08-012C RNA binding protein IMP1/ZBP1 drives mRNA localization and local translation in microglial peripheral processes and mediates morphological changes, motility and phagocytosis in response to inflammation.
Josunelmaz-Iruretagoyena (Leioa, Spain)
- T08-013C The role of Dusp15 as a regulator of oligodendrocyte differentiation and developmental CNS myelination in mice
JanaWallberg (Erlangen, Germany)
- T08-014C Comprehensive Characterization of Plasma and Spinal Tissue MicroRNA Signatures in Spinal Cord Injury
RuslanKlassen (Vestec, Czech Republic)
- T08-015C Decoding Spatiotemporal Glial Responses in Acute Stroke and Progressive MS Through Scalable Re-Analysis of Spatial Transcriptomics
DanielZucha (Vestec, Czech Republic)
- T08-016C The role of oligodendrocytes in Western diet-induced pain
MartaA.Mazurkiewicz (Zurich, Switzerland)
- T08-017C Identifying regulators of human oligodendrocyte lineage specification and differentiation using CRISPRi/a screens
NeematMahmud (Solna, Sweden)
- T08-019C Exploring glial functions of the transcription factor Zfh2 in central nervous system development and motor control
AdelaRalbovska (Montreal, Canada)
- T08-020C Regulation and Function of Transcription Factor ST18 During Oligodendrocyte Development
AdrienM.Vaquié (Cambridge, UK)
- T08-021C Characterisation of recent evolutionary changes in astrocyte regulome
ErykDunski (Warszawa, Poland)
- T10-025C Pregnancy-Induced Remodeling of Fibrous Astrocytes and White Matter Composition in Mice.
MirjamA.R.Bertoune (Marburg, Germany)
- T10-026C Bridging Morphology and Function: An Automated Pipeline for Microglial Image Analysis
VanessaDrevenakova (London, UK)
- T10-027C Birth timing and lineage origin interact to establish cortical astrocyte diversity from VZ/SVZ progenitors.
DanielaA.Lozano Casasbuenas (Toronto, Canada)
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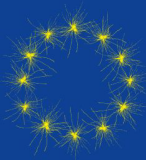
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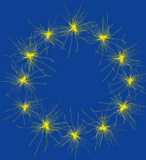
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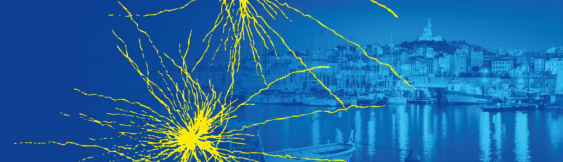
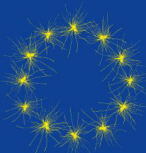
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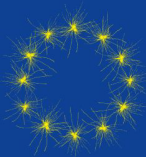
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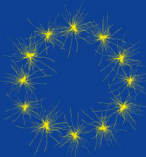
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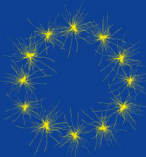
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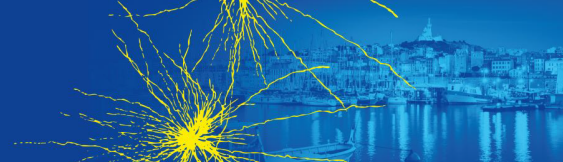
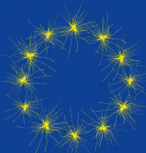
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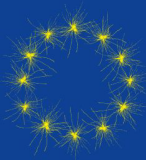
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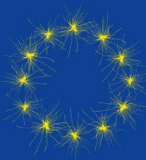
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- T19-011C Impaired mitochondrial biogenesis in the developing astrocytes contributes to the pathophysiology of 22q11 deletion syndrome
IvaCantando (Lausanne, Switzerland)
- T19-012C Sex differences in a stress-induced depressive phenotype: a time course of behavioural and central effects
MajaRamljak (Ottawa, Canada)
- T19-013C Neural circuit and molecular basis of pathology in mouse model of psychiatric disorder
NanaTakahashi (Nagoya city, Japan)
- T19-014C Interplay of serum lipids and microglia in the susceptibility to the long-term behavioral effects of adverse childhood experiences
WeronikaTomaszewska (Wroc?aw, Poland)
- T19-015C Cytoskeletal control in adult microglia is essential to restore neurodevelopmental synaptic and cognitive deficits
SofieKessels (Diepenbeek, Belgium)
- T19-016C INTERFERING with meningeal immune-regulation in Methamphetamine addiction
JoãoRodrigues (Porto, Portugal)
- T19-017C The therapeutic potential of TUDCA in stress-related depression
RitaNóbrega-Martins (Braga, Portugal)
- T19-018C A novel heterozygous mutation in the ATP13A2 gene is associated with leukoencephalopathy, neuropathy and uncoupling of cerebrospinal fluid markers from severity of dementia
CasparStephani (Göttingen, Germany)
- T19-019C Rac1 as a critical Rho GTPase in striatal microglia under methamphetamine exposure
TeresaSummavielle (Porto, Portugal)
- T20-023C Semaphorin3fa as a proliferation brake for Müller Glia of the zebrafish retina
KatelynL.Shewchuk (Calgary, Canada)
- T20-024C Soluble Factors Derived from Inflammatory Macrophages Modulate CNS Fibroblasts Function – Consequences for Remyelination?
CarlosA.Valenzuela (Helsinki, Finland)
- T20-025C PDGFR β -expressing Cells Give Rise to a Transient Population of Infiltrating Col1a1+ Fibroblasts During Remyelination
CarolinaR.Reyes (Helsinki, Finland)
- T20-026C Molecular and biological function of AP-1 family of transcription factors in Schwann cell demyelination and peripheral nerve repair
PaulaAyuso-García (Santiago de Compostela (A Coruña), Spain)



- T20-027C Angiotensin II type 2 receptor stimulation promotes axonal regeneration and myelin recovery after severe spinal cord injury
JanaSnopkova (Kosice, Slovakia)
- T20-028C Developing a model of focal myelin regeneration in the mouse caudal cerebellar peduncle
MichaelPerry (Cambridge, UK)
- T20-029C Reconstructing the Spinal Cord Injury Microenvironment Using a 3D Fibrotic Neuro-Immune Organoid Model
MartynaLukoseviciute (Solna, Sweden)
- T20-030C Investigation of the Effects of Functionalised Fiber Scaffolds on *in vitro* Demyelination Model
ZehraG.Morçimen (Izmir, Turkey)
- T20-032C Temelimab rescues neuroinflammatory effects in HERV-W ENV transgenic mice
LauraReiche (Düsseldorf, Germany)
- T20-033C The effect of modulating the blood-brain barrier with focused ultrasound on oligodendrogenesis in a mouse model of Alzheimer disease
KateNoseworthy (Toronto, Canada)
- T20-034C Engineering relay circuits from resident neural stem cells
LeiWang (Stockholm, Sweden)
- T20-035C Adult Human Organotypic Spinal Cord Slices: A Novel Model for Spinal Cord Injury
SophieSteinwenter (Vienna, Austria)
- T20-036C Early microgliogenesis following unilateral vestibular neurectomy: a key player in vestibular compensation?
JessicaTrico (Marseille, France)
- T20-037C A Pharmacogenomic Approach Identifies Leucovorin and Dyclonine as Promising Pro-Oligodendrogenic Compounds for Myelin Repair
Litsa MariaGhayad (Paris, France)
- T22-007C Modulation of astrocytic gap junctional coupling under energy deprivation in murine hippocampus
ViolaBornemann (Duesseldorf, Germany)
- T22-008C Circadian regulation of endoplasmic reticulum calcium response in astrocytes and its implications on brain function
Eun YoungKim (Suwon, South Korea)
- T22-009C Screening of Aquaporin-4 Modulators to Treat Central Nervous System Oedema.
OphélieLanglois (Birmingham, UK)
- T22-010C Astrocytic intracellular chloride levels in the regulation of the active brain environment
KatharinaF.Baumgart (Copenhagen, Denmark)
- T22-011C A leak in sodium bicarbonate cotransporter NBCe1 causes chronic brain oedema
QuintyBisseling (Amsterdam, Netherlands)
- T22-012C The chloride intracellular channel 1 (CLIC1) is essential for microglial morphodynamics and neuroinflammation
AliRifat (Berlin, Germany)
- T22-013C Serotonergic Modulation of Astrocyte Function: Insights from Morphological Analysis, Ca²⁺ Imaging, and Quantification Strategies
AndreZeug (Hannover, Germany)
- T23-001C γ -Enolase in oligodendrocyte differentiation: Trophic function and regulation
SelenaHorvat (Ljubljana, Slovenia)
- T24-016C Unexpected, Glioma-induced Expression of Heat Shock Protein 27 in Glioma-Associated Reactive Astrocytes and its Relation to Glioma Progression and Overall Patient Survival
LaurenDain (Richmond, USA)
- T24-017C Exploring multicellular dynamics in glioblastoma: a 3D open-top chip model with integrated neurovascular networks for drug testing
Lottalsosaari (Tampere, Finland)



- T24-018C Aquaporin-4 Loss Drives Glioblastoma-associated Cerebral Edema and Alters the Tumor Microenvironment
Tanvi Joshi (New York, USA)
- T24-019C BDNF modulates the mechanical properties of neural tissue and glioma cells in vitro
Vladimir Chekhonin (Moscow, Russia)
- T25-027C Revealing the heterogeneity of human central canal : a novel approach for oligodendrocyte production through exploring new sub-population in the niche
- T25-028C Immunomodulatory effect of 1,4-Naphthoquinones in SimA9 microglial cells
- T25-029C Microglia-neuron crosstalk in the remodelling of peritumoral circuits
- T25-030C Non-pharmacological interventions to prevent tau propagation in R3m4 tau transgenic mice
- T25-031C An in vitro and in vivo pharmacodynamic model of a STING inhibitor relevant to the treatment of neurodegenerative disorders
- T25-032C A neuroglial circuit for maternal behavior
- T25-033C A microglial subpopulation protecting the aged brain from lethal neuroinflammation
- T25-034C Investigating Oligodendrocyte Pathology in Familial Alzheimer's Disease
- T25-035C Autophagy dependent microglia protect the aged brain
- T25-036C Shaping the neuroinflammatory environment to promote retinal regeneration
- T25-037C Interplay between pro-inflammatory cytokines and chromatin-remodeling enzymes in CNS demyelination and repair
- T25-038C Npc1 deficiency impairs microglia function via Trem2-mTOR signaling in Niemann-Pick disease type C
- T25-40C Function of glia in the nervous system. Future of the research in brain.



Thursday, 10 July 2025, 16:00 - 18:00

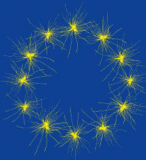
Room(s): Auditorium

S21 | From states to functions: making sense of microglial biology in health and disease

Chairs: **SoniaGAREL** (France); **FlorentGinhoux** (France)

Presentations:

- | | | |
|-------|--------|--|
| 16:00 | S21-01 | Microglial states in brain integrity: from development and damage to repair
SoniaGarel (Paris, France) |
| 16:30 | S21-02 | Decoding microglial functions using iPSC-based approaches
FlorentGinhoux (Villejuif, France) |
| 17:00 | S21-03 | Developmental programming of microglia by maternal obesity
ElviraMass (Bonn, Germany) |
| 17:30 | S21-04 | Leveraging the Retina To Trace Microglial Fates in Disease
DanSaban (Durham, USA) |



Thursday, 10 July 2025, 16:00 - 18:00

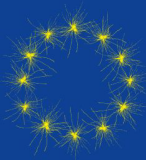
Room(s): Callelongue

S22 | Glia-vasculature interactions in brain homeostasis and pathology

Chairs: **UkpongB.Eyo** (Canada); **BlancaDíaz Castro** (UK)

Presentations:

- | | | |
|-------|--------|--|
| 16:00 | S22-01 | Capillary associated microglia regulate basalcapillarystructure
UkpongEyo (Charlottesville, Canada) |
| 16:30 | S22-02 | Astrocyte endfoot dysfunction in neurodegenerative disease
BlancaDíaz Castro (Edinburgh, UK) |
| 17:00 | S22-03 | Microglia as key regulators of intercellular communication in the neurovascular unit
ÁdámDénes (Budapest, Hungary) |
| 17:30 | S22-04 | How genetic defects in astrocyte endfoot proteins disrupt brain ion and water homeostasis
RogierMin (Amsterdam, Netherlands) |



Thursday, 10 July 2025, 16:00 - 18:00

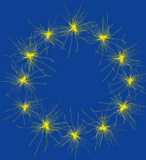
Room(s): Endoume

S23 | Glial cell diversity and functions across evolution: from worms to mammals

Chairs: **AleksandraPekowska** (Poland); **CarmenFalcone** (Italy)

Presentations:

- | | | |
|-------|--------|---|
| 16:00 | S23-01 | A human-specific modifier of microglial maturation and function
CarlosDiaz-Salazar (New York, USA) |
| 16:30 | S23-02 | Glial Control of <i>C. elegans</i> Behavior
ShaiShaham (New York, USA) |
| 17:00 | S23-03 | Astrocyte diversity across mammals: varicose-projection astrocytes from evolution to neuroinflammation
CarmenFalcone (Trieste, Italy) |
| 17:30 | S23-04 | Evolution of foetal astrocytes in primates
AleksandraPekowska (Warszawa, Poland) |



Thursday, 10 July 2025, 16:00 - 18:00

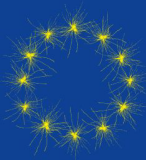
Room(s): Les Goudes 2

S24 | Astrocyte Heterogeneity: Bridging Synaptic Signals to Behavioral Outcomes via Interactions with Local Neural Circuit

Chairs: **SandraVaz** (Portugal); **MartaNavarrete** (Spain)

Presentations:

- | | | |
|-------|--------|--|
| 16:00 | S24-01 | Astrocyte heterogeneity and the consequences for differential synapse formation
MatthewHolt (Oporto, Portugal) |
| 16:30 | S24-02 | Catching Astrocyte Ensembles: Their Role in Memory Formation and Expression
MartaNavarrete (Madrid, Spain) |
| 17:00 | S24-03 | Astrocytes are “excited” in the healthy and aging brain
ChristopherDulla (Boston, USA) |
| 17:30 | S24-04 | Role of Astrocytic CB1R in mPFC Plasticity
SandraVaz (Lisboa, Portugal) |



Thursday, 10 July 2025, 16:00 - 18:00

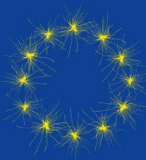
Room(s): Les Goudes 1

S25 | New preclinical and clinical advances on oligodendrocyte and myelin regeneration in multiple sclerosis

Chairs: **SoheilaKarimi** (Canada)

Presentations:

- | | | |
|-------|--------|--|
| 16:00 | S25-01 | "Myelin repair in the white and grey matter of people with multiple sclerosis and its role in neuroprotection"
BenedettaBodini (Paris, France) |
| 16:30 | S25-02 | Role and therapeutic potential of Neuregulin-1 signaling for repair and remyelination in progressive multiple sclerosis
SoheilaKarimi (Winnipeg, Canada) |
| 17:00 | S25-03 | Early-stage brain cellular therapy for treating progressive multiple sclerosis
StefanoPluchino (Cambridge, UK) |
| 17:30 | S25-04 | Translating neurodevelopmental discoveries to mechanisms of remyelination: lessons from CX3CR1 signalling
AdrianneWatson (Edmonton, Canada) |



Friday, 11 July 2025, 8:30 - 9:30

Room(s): Auditorium

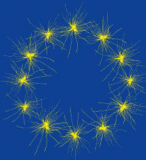
L06 | Plenary Lecture VI: Bart Eggen

Chairs: SarahAckerman (USA)

Presentations:

The shapes and states of microglia in the healthy and diseased human CNS

Microglia can adopt a range of shapes and transcriptional states dependent on their location, environment, state of the CNS and both internal and external cues. In recent years, changes that occur in microglia in the context of development and CNS disease have been extensively documented. The emergence of advanced single cell/nucleus and spatial profiling technologies facilitated deep phenotyping of microglia states in the context of the healthy and diseased CNS. The heterogeneity and role of microglia states in human CNS development, homeostasis, and disease will be discussed



Friday, 11 July 2025, 10:00 - 12:00

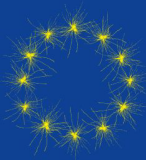
Room(s): Les Goudes 1

S26 | Exploring glial diversity using single cell and spatial genomics

Chairs: **Michael-JohnDolan** (Ireland); **PhilipHasel** (UK)

Presentations:

- | | | |
|-------|--------|--|
| 10:00 | S26-01 | Multi-omic definition of astrocyte diversity in the healthy and inflamed brain
MichaelR.O'Dea (New York, USA) |
| 10:30 | S26-02 | Unraveling the Spatial and Transcriptomic Characteristics of Resilient Oligodendroglia in Multiple Sclerosis
TingSun (Stockholm, Sweden) |
| 11:00 | S26-03 | Glial state diversity, formation and function during white matter repair
Michael-JohnDolan (Dublin, UK) |
| 11:30 | S26-04 | Revisiting the <i>glia limitans</i> in the age of single cell and spatial transcriptomics
PhilipHasel (Edinburgh, UK) |



Friday, 11 July 2025, 10:00 - 12:00

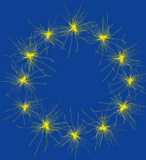
Room(s): Auditorium

S27 | Neuro-glia-immune crosstalk in neuroinflammation and neurodegeneration

Chairs: **Rikvan der Kant** (Netherlands); **SoyonHong** (UK)

Presentations:

- | | | |
|-------|--------|--|
| 10:00 | S27-01 | Neuro-glia-immune interactions modulating synaptic fate in neurodegeneration
SoyonHong (London, UK) |
| 10:30 | S27-02 | Lipid regulation of antigen presentation in human iPSC-derived astrocytes
Rikvan der Kant (Amsterdam, Netherlands) |
| 11:00 | S27-03 | Examining the interactions between neuronal and glial populations with human stem cells and chimeric models
MatthewBlurton-Jones (Irvine, USA) |
| 11:30 | S27-04 | Harnessing the therapeutic potential of brain resident T cells to reduce neuroinflammation
EmanuelaPasciuto (Antwerp, Belgium) |



Friday, 11 July 2025, 10:00 - 12:00

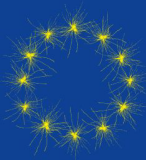
Room(s): Callelongue

S28 | Disease-specific function of reactive gliosis – from concepts and molecular signatures to opportunities for intervention

Chairs: **MilosPekny** (Sweden); **FlorenceE.Perrin** (France)

Presentations:

- | | | |
|-------|--------|--|
| 10:00 | S28-01 | Modulation of reactive gliosis slows down ALS progression
MilosPekny (Gothenburg, Sweden) |
| 10:30 | S28-02 | Decoding astrocyte molecular signatures for modulation of astrocyte responses in spinal cord injury
FlorencePerrin (Montpellier, France) |
| 11:00 | S28-03 | Targeting complement C3aR to modulate reactive gliosis and improve long-term outcome after stroke
MarcelaPekna (Gothenburg, Sweden) |
| 11:30 | S28-04 | Diverse regulation of astrocyte reactivity across disorders and in wound repair
MichaelV.Sofroniew (Los Angeles, USA) |



Friday, 11 July 2025, 10:00 - 12:00

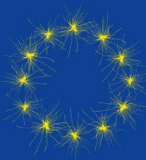
Room(s): Les Goudes 2

S29 | Understanding the role of glial cells in the pathogenesis of childhood neurological and developmental disorders

Chairs: **JennyLange** (UK); **JonathanCooper** (USA)

Presentations:

- | | | |
|-------|--------|---|
| 10:00 | S29-01 | Elucidating the role of astrocytes in childhood neurological disorders
JennyLange (London, UK) |
| 10:30 | S29-02 | Apolipoprotein E dysregulation in Down syndrome and Alzheimer's disease is associated with altered glial cells
ClionaFarrell (London, UK) |
| 11:00 | S29-03 | New roles for glia within and outside the CNS in lysosomal storage disorders
EwaZiółkowska (St Louis, USA) |
| 11:30 | S29-04 | Molecular and environmental regulation of enteric glia plasticity
WerendBoesmans (Diepenbeek, Belgium) |



Friday, 11 July 2025, 10:00 - 12:00

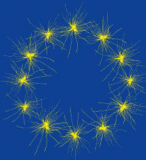
Room(s): Endoume

S30 | Immunometabolism of Glial Cells in Cancer and Neurodegeneration

Chairs: **GauravChopra** (West Lafayette, USA); **DoloresHambardzumyan**

Presentations:

- | | | |
|-------|--------|---|
| 10:00 | S30-01 | Metabolic Reprogramming of Microglia in Glioblastoma
DoloresHambardzumyan (New York, USA) |
| 10:30 | S30-02 | Metabolic vulnerability reshapes the spatial landscape of genomic alterations in Glioblastoma
DieterHeiland (Erlangen, Germany) |
| 11:00 | S30-03 | Mitochondrial on the road: neuron-astrocyte communication through mitovesicles in Alzheimer's disease
LuanaNaia (Stockholm, Sweden) |
| 11:30 | S30-04 | Time to face the fats: How do lipids induce glial cell dysfunction in Alzheimer's disease?
GauravChopra (West Lafayette, USA) |



Friday, 11 July 2025, 12:45 - 13:45

Room(s): Auditorium

L07 | Plenary Lecture VII: Maiken Nedergaard

Chairs: **Mikael Simons** (Germany)

Presentations:

Astrocytes are electrically non-excitabile glial cells that closely interact with neurons throughout the central nervous system (CNS). Although they do not generate action potentials, astrocytes contribute critically to higher-order cognitive functions and are increasingly recognized as key players in the pathophysiology of neurological disorders. This seminar will explore emerging concepts in astrocyte biology, with a particular emphasis on their roles in norepinephrine signaling and the glymphatic system - a brain-wide clearance mechanism responsible for the removal of metabolic waste. Understanding these functions provides new insights into how astrocytes support neural activity and maintain brain homeostasis, as well as how their dysfunction may contribute to disease.