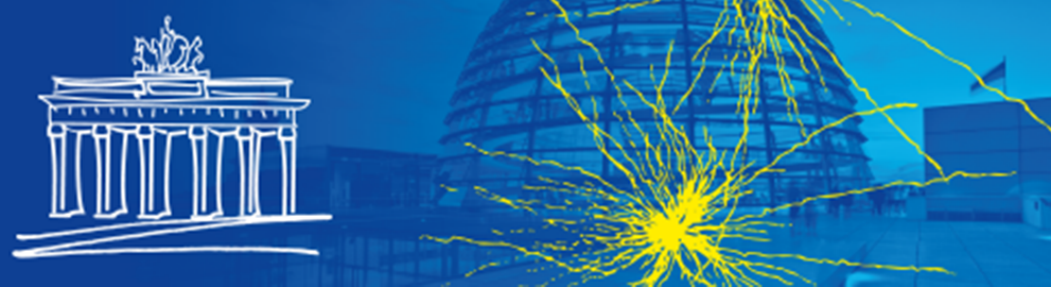




# XVI European Meeting on Glial Cells in Health and Disease

**Berlin** | July 8–11, 2023



Friday, 7 July, 2023, 10:00 a.m. - 5:00 p.m.

## **I | Introductory Course**

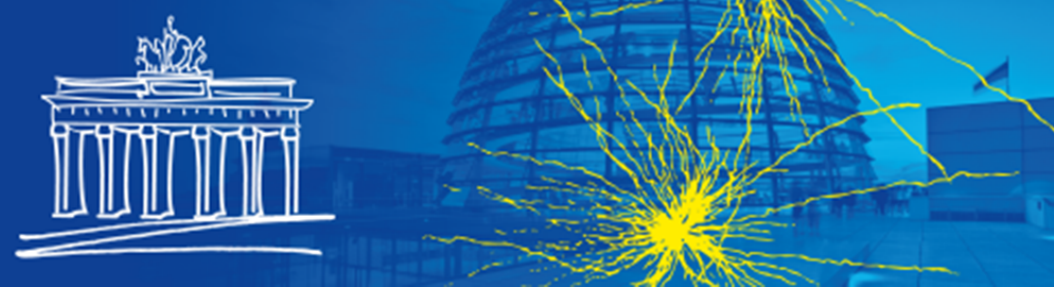
**Chairs:**

**Presentations:**



# XVI European Meeting on Glial Cells in Health and Disease

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Saturday, 8 July, 2023, 8:30 a.m. - 11:30 a.m.

## **W01 | Glial engineering and gliotechnologies: advanced materials, tools and approaches to unveil the role of glia in brain physiology, diseases and in social behavior**

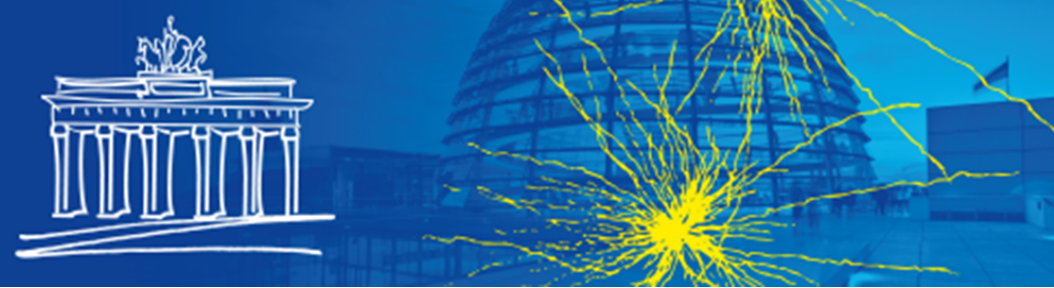
**Chairs:** **Valentina Benfenati** (Bologna, Italy); **Maria Grazia Raucci** (Napoli, Italy)

### **Presentations:**

- |          |       |   |
|----------|-------|---|
| 8:30 am  | W0101 | Gliotechnologies and materials interfaces to control intracellular calcium dynamics in astrocytes and their impact on neurons.<br><b>Valentina Benfenati</b> (Bologna, Italy) |
| 9:00 am  | W0102 | Dysfunctional astrocyte-neuron signaling in Major Depressive Disorder<br><b>Gertrudis Perea</b> (MADRID, Spain)   |
| 9:30 am  | W0103 | tba<br><b>Maria Rosa Antognazza</b> (Milano, Italy)   |
| 10:00 am | W0104 | A paradigm shift: Bioengineering meets glial mechanobiology to explore new therapeutic avenues in central nervous system pathology<br><b>Ana Paula Pêgo</b> (Porto, Portugal) |
| 10:30 am | W0105 | tba<br><b>Wolfgang Losert</b> (College Park, USA)   |
| 11:00 am | W0106 | Computational genomics of astrocyte mosaics in Alzheimer's progression<br><b>Maurizio de Pitta</b> (Toronto, Canada)  |



# XVI European Meeting on Glial Cells in Health and Disease **Berlin** | July 8–11, 2023



Saturday, 8 July, 2023, 12:15 p.m. - 12:30 p.m.

## **Opening | Opening**

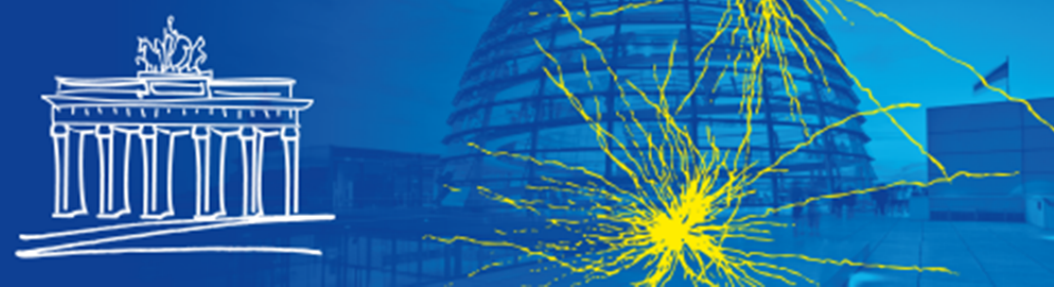
**Chairs:**

**Presentations:**



# XVI European Meeting on Glial Cells in Health and Disease

**Berlin** | July 8–11, 2023



Saturday, 8 July, 2023, 12:30 p.m. - 1:30 p.m.

## **L01 | Plenary Lecture I: Freda Miller**

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

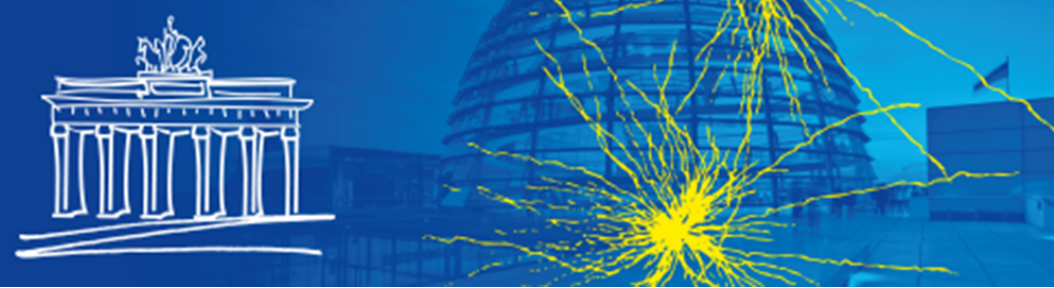
**Presentations:**

12:30 pm L0101 From Development to Repair - How Growth Factors and Stem Cells Build the Nervous System  
**Freda Miller** (Vancouver, Canada)



# XVI European Meeting on Glial Cells in Health and Disease

**Berlin** | July 8–11, 2023



Saturday, 8 July, 2023, 1:30 p.m. - 4:30 p.m.

## PS1 | Poster Session I

### Chairs:

### Presentations:

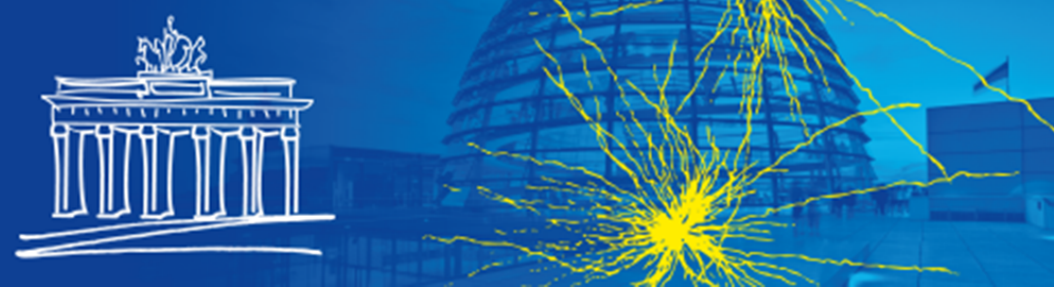
- |         |          |   |
|---------|----------|---|
| 1:30 pm | T01-001A | Role of <i>Etv5</i> in Schwann cell Development and Peripheral Nerve Injury<br><b>Lauren Belfiore</b> (Toronto, Canada)   |
| 1:31 pm | T01-002A | Jamming Transitions in Astrocytes and Glioblastoma Are Induced by Cell Density and Tension<br><b>Tim Hohmann</b> (Halle (Saale), Germany)   |
| 1:32 pm | T01-003A | AQP4 as a possible drug target in treatment of stroke- beyond edema<br><b>Negar Zohoorian</b> (Oslo, Norway)  |
| 1:33 pm | T01-004A | A synergy of laminin and strain-stiffening promotes directed migration of Schwann cells in hydrogels.<br><b>Flavia Millesi</b> (Wien, Austria)  |
| 1:34 pm | T01-005A | <i>In-Vitro</i> Timelapse Imaging and Expansion Microscopy of Mitochondria within Primary Oligodendrocyte Progenitor Cells<br><b>Annika Haak</b> (Bochum, Germany)  |
| 1:35 pm | T02-001A | The spatiotemporal dynamics of microglia during human cortical development<br><b>David A. Menassa</b> (Oxford, UK)  |
| 1:36 pm | T02-002A | Highly proliferative seeding microglia progenitors shift their developmental program to acquire a mature phenotype in the postnatal hippocampus and cerebellum<br><b>Marta Pereira Iglesias</b> (Bilbao, Spain) |
| 1:37 pm | T02-003A | Multicolor fate mapping demonstrates clonal expansion and functional heterogeneity of microglia after stroke<br><b>Majed Kikhia</b> (Berlin, Germany)   |





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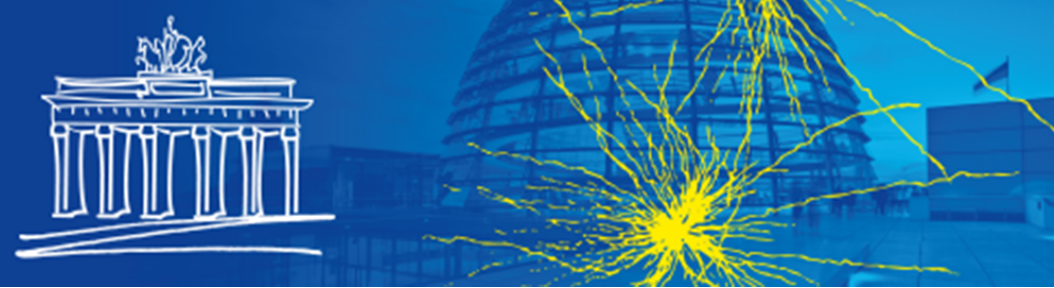


- 1:38 pm T02-004A Stem-cell-like subpopulation of NG2 glia expands after ischemic injury  
**Tomas Knotek** (Prague, Czech Republic)
- 1:39 pm T02-006A GemC1 and MclDas have distinct roles in ependymal cell generation  
**Georgia Lokka** (Patras, Greece)
- 1:40 pm T02-007A Injury primes mutation bearing astrocytes for dedifferentiation in later life  
**Holly Simpson Ragdale** (London, UK)
- 1:41 pm T02-008A Possible rescuing effects on aberrant oligodendroglial differentiation induced by elevated C21orf91 levels via myelin repair drugs: new window of opportunity for Down syndrome white matter restoration?  
**Laura Reiche** (Düsseldorf, Germany)
- 1:42 pm T02-009A Generation of human microglia-like cells derived from peripheral mononuclear blood cells.  
**Masi Almalki** (Nottingham, UK)
- 1:43 pm T02-010A PDGF signaling in OPCs is necessary for complete oligodendroglial occupation of the CNS  
**Sonia R. Mayoral** (Providence, USA)
- 1:44 pm T03-001A IRF2 dissociated from IRF2BP2 by Agmatine mediates transcriptional signaling leading to M2 phenotype microglia.  
**Jiwon Kim** (Seoul, South Korea)
- 1:45 pm T03-002A Calcium signaling and morphological heterogeneity in astrocytes  
**Kerstin Lenk** (Graz, Austria)
- 1:46 pm T03-003A Cell type-specific labelling of newly synthesized proteins by puromycin inactivation.  
**Florencia Cabrera-Cabrera** (Tallinn, Estonia)
- 1:47 pm T03-004A Amyloid  $\beta$  modifies MYRF stability through PKC/GSK3 $\beta$  signaling to alter oligodendrocyte differentiation  
**Uxue Balantzategi** (Leioa, Spain)



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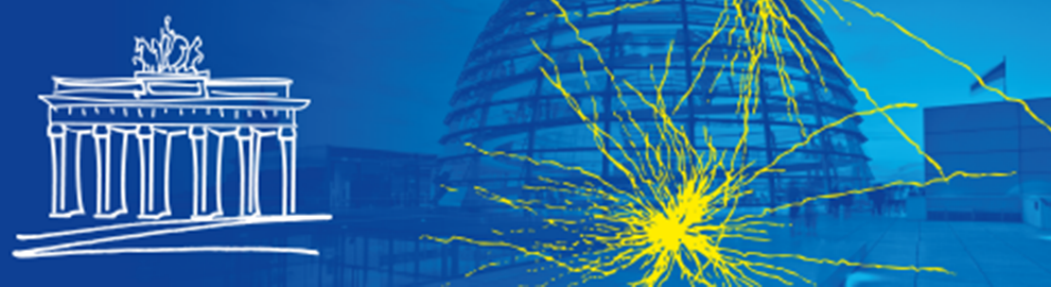


- 1:48 pm T03-005A 40 Hz Light Flicker Stimulation of Calcium Dynamics in Astrocytes  
**Aikaterini Konstantoulaki** (Bologna, Italy)
- 1:49 pm T03-006A Graphene oxide electrodes enable electrical stimulation of distinct calcium signalling in brain astrocytes  
**Roberta Fabbri** (Bologna, Italy)
- 1:50 pm T03-007A Selective extracellular miRNAs activate human microglia derived from induced pluripotent stem cells, thereby controlling their functional properties  
**Hannah Weidling** (Berlin, Germany)
- 1:51 pm T03-008A Noradrenergic and purinergic cAMP signaling in astrocytes of the murine olfactory bulb  
**Jessica Sauer** (Hamburg, Germany)
- 1:52 pm T03-009A Analysis of Local Intracellular Signaling in Astrocytes Using Two-Photon Holographic Microscopy  
**Mitsuhiko Morita** (Kobe, Japan)
- 1:53 pm T03-010A Ca<sup>2+</sup> signals mediated by P2Y<sub>2</sub> receptors in stellate Schwann-like cells are localized about the ciliary pocket and required for maintenance of the cells and their recruitment to vibrissal mechanoreceptors in young adult rats.  
**Hiromi Takahashi-Iwanaga** (Sapporo, Japan)
- 1:54 pm T05-001A Human post-mortem organotypic brain slice cultures: a tool to study glia pathology and test therapies for leukodystrophies  
**Bonnie C. Plug** (Amsterdam, Netherlands)
- 1:55 pm T05-002A Role of microglial CD22 in Alzheimer's disease  
**Marina Jendrach** (Berlin, Germany)
- 1:56 pm T05-003A CCL21-CCR7 PATHWAY INDUCE MICROGLIAL REACTIVITY AND NEURODEGENERATION IN A NOVEL 3,4-DIHYDROXYPHENYLACETOALDEHYDE INDUCED PARKINSON'S DISEASE MODEL  
**Felipe S. Leser** (Paris, France)
- 1:57 pm T05-004A The mechanisms linking amyloid- $\beta$ -driven disruption of the astrocytic endolysosomal system to the synapse loss  
**Katarzyna M. Grochowska** (Hamburg, Germany)



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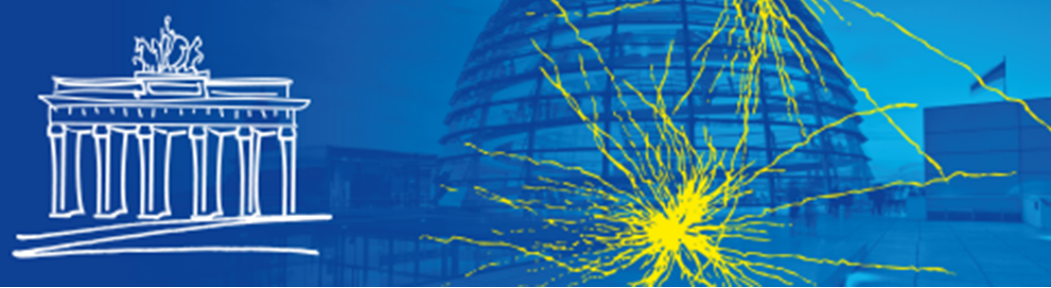
- 1:58 pm T05-005A *The role of astrocytes in Parkinson's disease pathogenesis in GBA N370S hiPSC-derived astrocyte mono-cultures and neuron-astrocyte co-cultures*  
**Naroa Ibarra-Aizpurua** (Oxford, UK)
- 1:59 pm T05-006A Silencing of phagocytic receptor MERTK in astrocytes alleviates Tau pathology in rodent models of primary Tauopathies.  
**Nathan Louvel** (Fontenay-aux-Roses, France)
- 2:00 pm T05-007A The deletion of Galectin-3 Reduces the Pro-Inflammatory Microglial Activation in the Ventral Mesencephalon in two models of peripheral inflammation.  
**Rocío M. de Pablos** (Sevilla, Spain)
- 2:01 pm T05-008A VEGF effect on microglia in Alzheimer's disease  
**Priscille de Gea** (Lyon, France)
- 2:02 pm T05-009A TREM2 agonistic antibodies boosts microglial responses to amyloid in human induced pluripotent stem cell-derived microglia  
**Elina Svensson** (London, UK)
- 2:03 pm T05-010A Cell autonomous microglial reactivity in VCP-related ALS involving lysosomal and immune dysfunction activates STAT2 signalling in motor neurons  
**Ben Clarke** (London, UK)
- 2:04 pm T05-011A Oxytocin modulates microglial activation in Alzheimer's disease models  
**Maria Clara Selles Japas** (New York, USA)
- 2:05 pm T05-012A Hydrophilic saffron extract decreases microglial activation and neuro-protects in a glaucoma model  
**Jose A Matamoros** (Madrid, Spain)
- 2:06 pm T05-013A Is vimentin an overshadowed clue for understanding Parkinson's disease pathology?  
**Abdulkhalek Dakhel** (Uppsala, Sweden)
- 2:07 pm T05-014A Amyloid- $\beta$  accumulation in human astrocytes induces mitochondrial disruption and changed energy metabolism  
**Chiara Beretta** (Uppsala, Sweden)
- 2:08 pm T05-015A Implication of neuronal and microglial P2X4 in ALS pathogenesis  
**Sara Carracedo** (Bordeaux, France)





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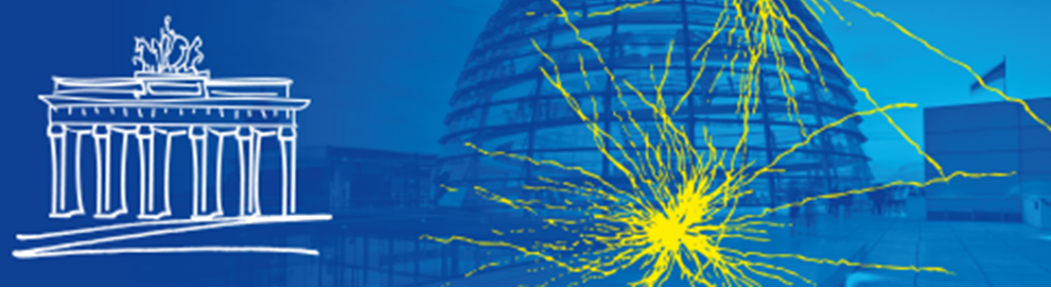


- 2:09 pm T05-016A Transgenic expression of the human endogenous retrovirus type-W envelope protein leads to activated and differentially polarized glial cell populations  
**Joel Gruchot** (Düsseldorf, Germany)
- 2:10 pm T05-017A The neurovascular unit repair process in an animal model of Alzheimer's Disease  
**Stephanie L. Taylor** (Bonn, Germany)
- 2:11 pm T05-018A Interplay between pro-inflammatory cytokines and chromatin-remodeling enzymes in CNS demyelination and repair  
**Xinda Zhao** (Mainz, Germany)
- 2:12 pm T05-019A Mitochondrial networks reveal sex-specific microglial response to stress and injury  
**Margaret Maes** (Klosterneuburg, Austria)
- 2:13 pm T05-020A SORCS2 protects the brain from stress imposed by amyloid burden in mouse model of Alzheimer disease  
**Vanessa Schmidt** (Berlin, Germany)
- 2:14 pm T05-021A Impact of iPSC-derived microglial exosomes on neurons: role of TREM2 and implication in Alzheimer's Disease  
**Foteini Vasilopoulou** (London, UK)
- 2:15 pm T05-022A A human(ized) *in vitro* model to study microglia in neurodegeneration  
**Lena Erlebach** (Tuebingen, Germany)
- 2:16 pm T05-023A 6'-Sialyllactose ameliorates inflammation-induced hearing loss in neomycin hearing loss mouse model  
**Tawfik Abou Assale** (Bonn, Germany)
- 2:17 pm T05-024A In-vitro and in-vivo evidence supporting the therapeutic effect of extracellular vesicles derived from mesenchymal stem cells in amyotrophic lateral sclerosis  
**Marco Milanese** (Genova, Italy)
- 2:18 pm T05-025A Elucidating the neuroprotective mechanisms of the APOE3 Christchurch mutation in Alzheimer's Disease  
**Sarah A. Naguib** (New York, USA)
- 2:19 pm T05-026A Lysosome status as a key driver of microglial phenotype and responses to aging  
**Fanny Etienne** (Los Angeles, USA)



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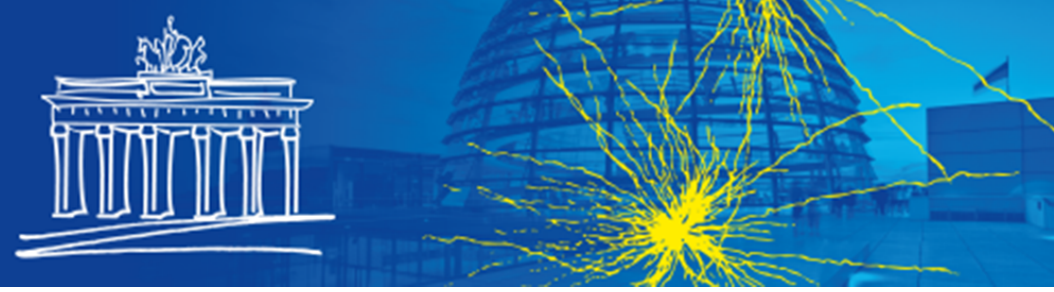


- 2:20 pm T05-027A Safflower Leaf Exerts Neuroprotective Effect Through Inhibiting Excessive Astrocyte Activation in APP/PS1 Mice  
**Tiantian Zhang** (Xi'an, Shaanxi, China)
- 2:21 pm T05-028A Glial p15INK4B in ocular pressure injury: marker of senescence?  
**Gayathri Karthik** (Singapore, Singapore)
- 2:22 pm T05-029A The role of Nedd4 ubiquitin protein ligases in the dopaminergic system and their crosstalk with  $\alpha$ -synuclein *in vivo*  
**James A. Conway** (Plymouth, UK)
- 2:23 pm T05-030A Functional bias and divergent signaling cascades of amyloid beta variants for formyl peptide receptors in glia and immune cells  
**Lukas Busch** (Zweibrücken, Germany)
- 2:24 pm T06-001A Role of microglial metabolic reprogramming in obesity  
**Agnes Nadjar** (Bordeaux, France)
- 2:25 pm T06-002A Metabolic control of neural stem cells from people with progressive multiple sclerosis  
**Rosana-Bristena Ionescu** (Cambridge, UK)
- 2:26 pm T06-003A Astrocytic lactate in the lateral hypothalamus sustains orexinergic neuronal activity and promotes sleep/wake cycle  
**Alice Braga** (London, UK)
- 2:27 pm T06-004A Investigation of cell-specific cerebral glucose uptake combining fluorescence lifetime imaging and kinetic modelling  
**Afroditi Eleftheriou** (Zurich, Switzerland)
- 2:28 pm T06-005A Astrocyte-specific knockout of proglycolytic enzyme PFKFB3 causes metabolic remodeling and behavioral alterations in mouse  
**Paula Alonso-Batán** (Salamanca, Spain)
- 2:29 pm T06-006A Metabolic and behavioral alterations in astrocyte-specific CPT1A knockout mice  
**Marina Garcia-Macia** (Salamanca, Spain)
- 2:30 pm T06-007A Metabolic interactions in the nervous system under suboptimal conditions  
**Stefanie Schirmeier** (Dresden, Germany)



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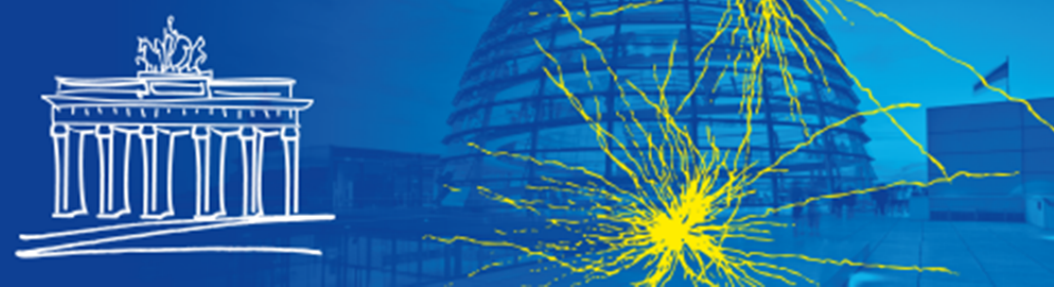


- 2:31 pm T06-008A Rewiring of fatty acid synthesis in phagocytes and oligodendrocytes regulates central nervous system remyelination  
**Sanne G. Verberk** (Diepenbeek, Belgium)
- 2:32 pm T06-009A Developmental programming of obesity in a mouse model of encephalopathy of prematurity  
**Sihao Diao** (Paris, France)
- 2:33 pm T06-010A Astrocytic GLUT1 ablation improves systemic glucose metabolism and memory resilience through enhanced insulin-stimulated ATP release  
**Maite Solas** (Pamplona, Spain)
- 2:34 pm T06-011A Metabolic interplay between neuroblasts and their glial niche in the growing *Drosophila* larva  
**Ioannis Nellas** (Dresden, Germany)
- 2:35 pm T06-012A Endocannabinoid signaling to astrocytes in the hypothalamus modulates feeding behavior and energy metabolism.  
**Daniela Herrera Moro Chao** (Minneapolis, USA)
- 2:36 pm T08-001A Mbp translocates to the nucleus in oligodendroglia to interact with DNA  
**Karl Carlström** (Stockholm, Sweden)
- 2:37 pm T08-002A Human oligodendrocytes development in the second-trimester stage revealed by single-nuclei RNA-seq and single-nuclei ATAC-seq  
**Fabio Baldivia Pohl** (Stockholm, Sweden)
- 2:38 pm T08-003A Study of epigenetic markers in the cerebrospinal fluid of patients with spinal cord injury  
**Irina Baichurina** (Kazan, Russia)
- 2:39 pm T08-004A Tle4 prevents premature Schwann cell differentiation via a negative feedback loop with Sox10.  
**Tim Aberle** (Erlangen, Germany)
- 2:40 pm T08-005A Histone-ubiquitinating E3 ligase subunit Rnf40 influences oligodendrocyte differentiation and myelination in the postnatal spinal cord  
**Hannah M. Wüst** (Erlangen, Germany)
- 2:41 pm T08-006A The role of Rnf40 in mouse oligodendrocyte lineage cells during embryonic development  
**Verena Dehm** (Erlangen, Germany)



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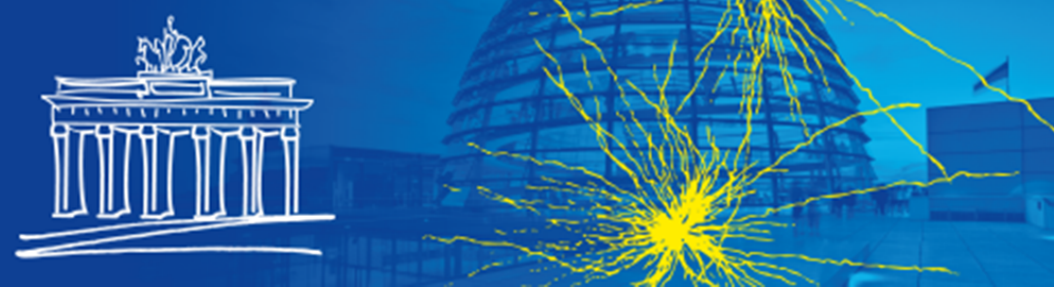
- 2:42 pm T08-007A Cellular heterogeneity in the development & progression of multiple sclerosis brain lesions  
**Mirjam Koster** (Groningen, Netherlands)
- 2:43 pm T08-008A siRNA-guided gene silencing in rat primary microglia maintained in defined vs serum-supplemented culture medium  
**Melania Magercu** (Bucharest, Romania)
- 2:44 pm T08-009A Transcriptomics analysis of developing Bergmann glia in anterior and posterior lobules  
**Chiara Di Pietro** (Monterotondo Scalo (RM), Italy)
- 2:45 pm T08-010A The role of Dusp15 as a regulator of oligodendrocyte differentiation and developmental CNS myelination in mice  
**Jana Wallberg** (Erlangen, Germany)
- 2:46 pm T09-001A Ca<sup>2+</sup>-dependent modulation of astrocytic gap junctional coupling upon brief metabolic stress  
**Sara Eitelmann** (Düsseldorf, Germany)
- 2:47 pm T09-002A A barrier attenuation of the glia limitans superficialis in the rat medial prefrontal cortex after sciatic nerve injury  
**Petr Dubovy** (Brno, Czech Republic)
- 2:48 pm T09-003A Impact of myelin phagocytosis on myeloid cells and its effect on human oligodendrocytes  
**Laura E. Schmitz-Gielsdorf** (Münster, Germany)
- 2:49 pm T09-004A Protective effects of astrocytes in reducing pericyte damage and improving cerebral blood flow in stroke mice  
**Gulnaz Begum** (Pittsburgh, USA)
- 2:50 pm T09-005A Retinal histological changes in a Dravet syndrome knock-in mouse model  
**Juan J. Salazar** (Madrid, Spain)
- 2:51 pm T09-006A Retinal glial changes in SOD1G93A Mouse Model of Amyotrophic Lateral Sclerosis  
**Ana I. Ramirez** (Madrid, Spain)
- 2:52 pm T09-007A Astrocytic chloride is brain state dependent and modulates inhibitory transmission  
**Verena Untiet** (Copenhagen N, Denmark)





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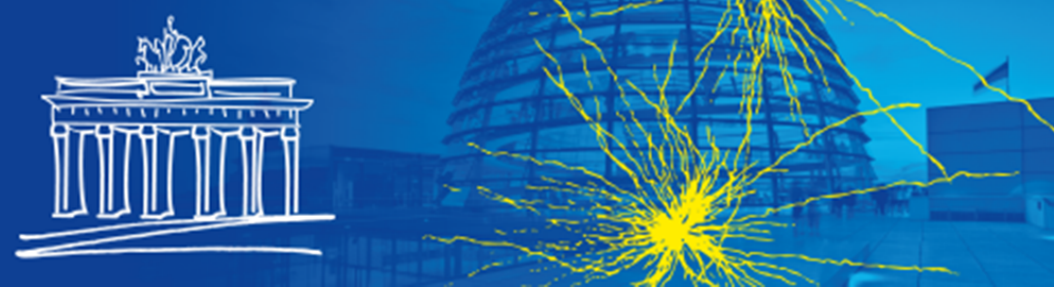
- 2:53 pm T09-008A Characterisation of extracellular vesicles derived from reactive and quiescent human astrocytes  
**Katherine White** (Nottingham, UK)
- 2:54 pm T09-009A Molecular and functional dissection of lesion-remote astrocyte reactivity states linked to regenerative plasticity, neural repair and inflammation after CNS injury  
**Sarah McCallum** (Los Angeles, USA)
- 2:55 pm T10-001A Profiling the chromatin landscape of adult human oligodendroglia using single-cell epigenomics  
**Mukund Kabbe** (Solna, Sweden)
- 2:56 pm T10-002A MorphOMICs: a new algorithm to unravel region- and sex-dependent microglia morphological plasticity in health and disease  
**Gloria Colombo** (Lausanne, Switzerland)
- 2:57 pm T10-003A Hexanucleotide repeat expansions in C9orf72 alter microglial responses and prevent a coordinated glial reaction in ALS  
**Pegah Masrori** (Leuven, Belgium)
- 2:58 pm T10-004A Contribution of astrocyte subtypes in the human dentate gyrus to the pathology of temporal lobe epilepsy  
**Chiara Löttsch** (Erlangen, Germany)
- 2:59 pm T10-005A Assessing the functional role of niche astrocytes in regulation of adult hippocampal neurogenesis  
**Evangelia Masouti** (Erlangen, Germany)
- 3:00 pm T10-006A A molecularly-defined non-redundant subpopulation of OPCs controls the generation of myelinating oligodendrocytes during postnatal development.  
**Shayan Moghimyfiroozabad** (Paris, France)
- 3:01 pm T10-007A Resolving the morpho-functional responses of locally-constrained retinal microglia with *morphOMICs*  
**Ryan John Cubero** (Klosterneuburg, Austria)
- 3:02 pm T10-008A The generation of morphologically and functionally distinct human astrocyte subtypes to uncover astrocyte shape-function relationships *in vitro*  
**Kelly O'Toole** (London, UK)
- 3:03 pm T10-009A Tracking heterogeneity and morphology of microglia after transient depletion and repopulation  
**Zuzanna M. Luczak-Sobotkowska** (Warsaw, Poland)





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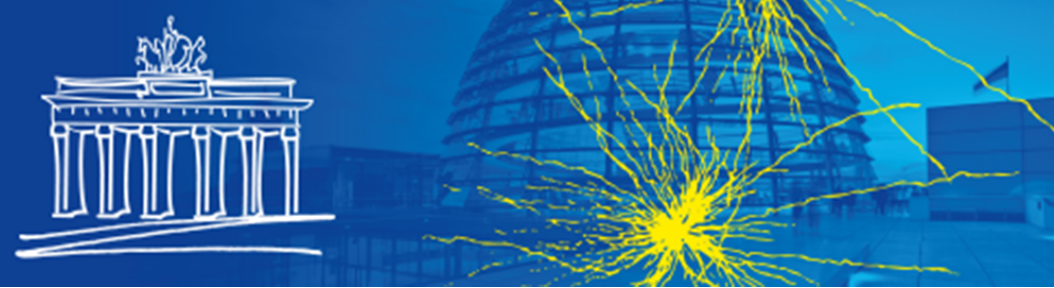


- 3:04 pm T10-010A Neurodevelopmental Origin of Cortical Satellite Cells.  
**Edson Rodrigues** (Montpellier, France)
- 3:05 pm T10-011A Towards modulating human microglial subtypes in disease: developing a pharmacological approach to polarize microglia in a targeted fashion  
**Verena Claudia Haage** (New York City, USA)
- 3:06 pm T10-012A Cortical astrocytes are generated from pallial and subpallial progenitors in the developing mouse brain  
**Karine Loulier** (Montpellier, France)
- 3:07 pm T10-013A Exploring astrocyte diversity using multi-omic single-nucleus sequencing  
**Michael R. O'Dea** (New York, USA)
- 3:08 pm T10-014A Astrocyte diversity across mammals: a comparative analysis on distribution and single-cell morphology  
**Caterina Ciani** (Trieste, Italy)
- 3:09 pm T10-015A Microglial surveillance and injury response are controlled by regionally modulated signaling pathways  
**Mark B. Stoessel** (Rochester, USA)
- 3:10 pm T11-001A Functional heterogeneity of astrocytes in the CA1 hippocampus  
**Darren Clarke** (Montréal, Canada)
- 3:11 pm T11-002A Synapses and Ca<sup>2+</sup> activity in oligodendrocyte precursor cells predict where myelin sheaths form  
**Jiaying Li** (Portland, USA)
- 3:12 pm T11-003A Quantification of intracellular Na<sup>+</sup> in hippocampal astrocytes and neurons employing rapidFLIM  
**Jan Meyer** (Duesseldorf, Germany)
- 3:13 pm T11-004A Hypothalamic tanycytes transduce temperature sensing to the inhibition of food intake  
**Marco Benevento** (Wien, Austria)
- 3:14 pm T11-005A Catching active Astrocyte Ensembles: astrocytic ensembles shape goal-directed behavior in the Nucleus Accumbens  
**Irene Serra** (Madrid, Spain)



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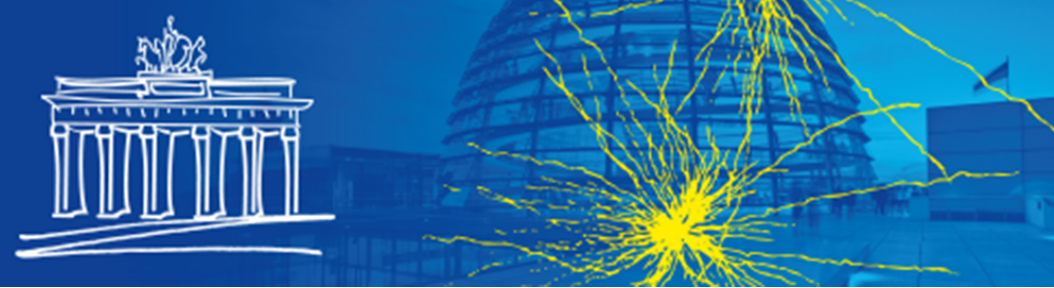


- 3:15 pm T11-006A Astrocyte Sema3c in neurodevelopment and Rett Syndrome  
**Krissy Lyon** (San Diego, USA)
- 3:16 pm T11-007A Contribution of astrocytes to synapse formation in newly generated neurons in the adult hippocampus  
**Nicholas Chalmers** (Erlangen, Germany)
- 3:17 pm T11-008A Astroglial swelling mediated by accumulation of non-excitatory amino acids aggravates hypoxic neuronal injury  
**Iris Álvarez-Merz** (Madrid, Spain)
- 3:18 pm T11-009A Impact of AMPA receptors in NG2 glia on signal transmission in the hippocampus and cerebellum  
**Dario Tascio** (Bonn, Germany)
- 3:19 pm T11-010A Mechanisms of microglial D-serine mediated synaptic loss after traumatic brain injury (TBI)  
**Dena Arizanovska** (Miami, USA)
- 3:20 pm T11-011A Heterogeneity in microglial morphodynamics regulation across the inactive period  
**Kassandre Combet** (Lyon, France)
- 3:21 pm T11-012A Deciphering the role of an astrocytic lncRNA in age-associated cognitive diseases  
**Sophie Schröder** (Göttingen, Germany)
- 3:22 pm T11-013A Astrocytic Ca<sup>2+</sup> dysfunctions in Major Depressive Disorder  
**Candela González Arias** (Madrid, Spain)
- 3:23 pm T11-014A Developmental cell death of lineage-related interneurons and oligodendroglia impacts prefrontal cortex function  
**Hasni Khelfaoui** (Paris, France)
- 3:24 pm T11-015A Developmental cell death of lineage-related interneurons and oligodendroglia is required for cognitive flexibility in mice  
**Cristobal Ibaceta** (Paris, France)
- 3:25 pm T11-016A A high-resolution in vivo drug-screen in zebrafish to investigate how myelinated axons grow in diameter.  
**Maria Eichel-Vogel** (Edinburgh, UK)



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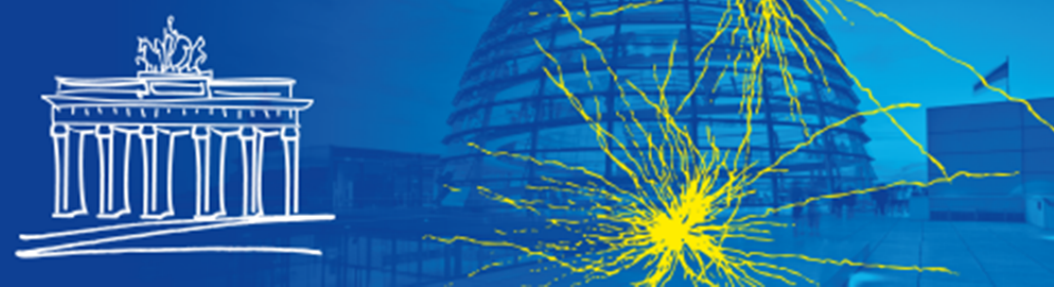


- 3:26 pm T11-017A A role for the Post-Synaptic Density Protein PSD-95 in CNS Myelination  
**Mary-Amélie Masson** (Paris, France)
- 3:28 pm T11-019A Nonapoptotic caspase activity regulates complement-dependent synaptic phagocytosis by microglia  
**Megumi Andoh** (Tokyo, Japan)
- 3:29 pm T11-020A PDE4B as a key regulator of out of control microglia  
**Ben Rombaut** (Diepenbeek, Belgium)
- 3:30 pm T11-021A Gold coated silicon nanowire interface for electrophysiological recording of neurons and glia in co-culture  
**Giorgia Conte** (Bologna, Italy)
- 3:31 pm T11-022A Microglia-complement interactions mediate synaptic dysfunctions in a mouse model of schizophrenia  
**Nala Gockel** (Bonn, Germany)
- 3:32 pm T11-023A Exploring functional sensor imaging of oligodendrocytes  
**Zainab Faik** (Zürich, Switzerland)
- 3:33 pm T11-024A Impact of early disruption of parvalbumin interneuron-OPC interactions on prefrontal-dependent cognitive processes  
**Fabrice Plaisier** (Paris, France)
- 3:34 pm T11-025A Altered secretion of astrocyte-derived extracellular vesicles contribute to the early metabolic failure and redox imbalance in Huntington's disease  
**Gonzalo Mayorga-Weber** (Valdivia, Chile)
- 3:35 pm T11-026A Neuronal Apoptosis Drives Transient CD11c Expression in Retinal Microglia  
**Nathaniel Ghena** (SALT LAKE CITY, USA)
- 3:36 pm T11-027A iPSC-derived human brain tissue models to investigate glial crosstalk in AD  
**Carolina Cardoso Gonçalves** (Munich, Germany)
- 3:37 pm T11-028A Retinal waves induce coordinated neuronal and astrocyte activity in developing visual centers of the brain  
**Vered Kellner** (Baltimore, USA)



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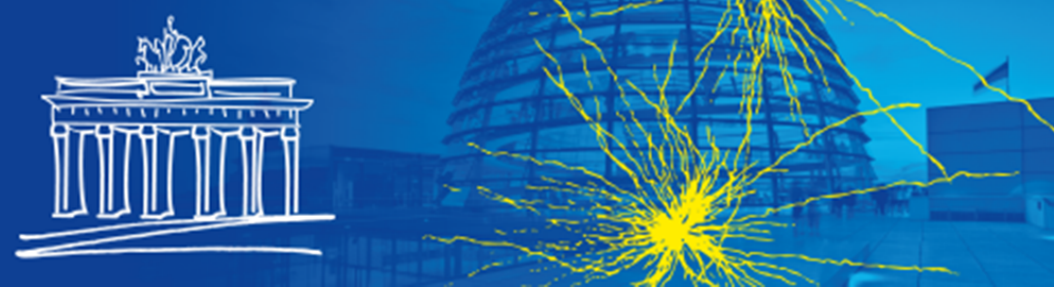
- 3:38 pm T11-029A Contribution of peripheral neuronal activity to spinal microglial reactivity in chronic pain  
**Manon Isler** (Lausanne, Switzerland)
- 3:39 pm T11-030A ICAM-1 reverses Amyloid- $\beta$  mediated microgliosis and subsequent synaptic degeneration by targeting ERK phosphorylation in 5xFAD mice model of Alzheimer's Disease  
**Soumita Goswami** (Kolkata, India)
- 3:40 pm T11-031A Terminal Schwann Cells are unable to complete efficiently synaptic reinnervation in both ALS mouse models and patient neuromuscular junctions.  
**Amaia Elicegui** (Donostia/San Sebastian, Spain)
- 3:41 pm T11-032A Influence of glial cells on signal transduction  
**Henrike Ohm** (Münster, Germany)
- 3:42 pm T11-033A Neuronal activity bidirectionally regulates myelin plasticity.  
**Stavros Vagionitis** (Cambridge, UK)
- 3:43 pm T11-034A Microglia contribute to full maturation of glutamatergic networks but are dispensable for pruning of synapses during hippocampal development  
**Michael Surala** (Berlin, Germany)
- 3:44 pm T11-035A Real-time mechanisms of microglia-synapse interaction and spine elimination in acute models of systemic inflammation and tauopathy  
**Carla Cangalaya** (Magdeburg, Germany)
- 3:45 pm T11-036A Dendritic ATP release mediates cell type-specific bidirectional neuron-astrocyte communication  
**Antonia Beiersdorfer** (Hamburg, Germany)
- 3:46 pm T11-037A Towards shining light on axonal energy metabolite dynamics in vivo  
**Henri S. Zanker** (Zürich, Switzerland)
- 3:47 pm T11-038A The ribosomal-associated protein RACK1 represses KIR4.1 translation in astrocytes and influences neuronal activity  
**Katia Avila Gutierrez** (PARIS, France)
- 3:48 pm T11-039A Atypical chemokine receptor 3: a novel player in astrocyte-mediated elimination of synaptic terminals  
**Veronica Giusti** (Venezia, Italy)





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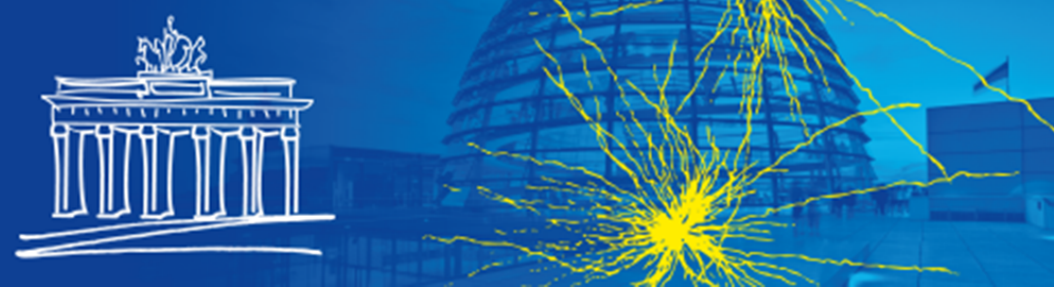
- 3:49 pm T11-040A Glial-neuronal crosstalk is crucial for postprandial carbohydrate sensing in *Drosophila melanogaster* larvae  
**Divita Kulshrestha** (Dresden, Germany)
- 3:50 pm T11-041A Developmental regulation of GABA<sub>A</sub> receptors in NG2 glia of the hippocampus  
**Gerald Seifert** (Bonn, Germany)
- 3:51 pm T12-001A Involvement of HIF-1 signaling in oligodendrocyte maturation in the *in vitro* model of neonatal hypoxia-ischemia  
**Justyna Janowska** (Warsaw, Poland)
- 3:52 pm T12-002A Effects of endothelial YAP/TAZ on neuroinflammation and outcome after ischemic stroke  
**Ria Götter** (Berlin, Germany)
- 3:53 pm T12-003A Chronic infection predisposes white matter to ischaemic injury  
**Alexander G. Mellor** (Plymouth, UK)
- 3:54 pm T12-004A Role of selected chemokines in crosstalk of glial cells in the *in vitro* rat model of neonatal asphyxia  
**Justyna M. Gargas** (Warszawa, Poland)
- 3:55 pm T12-005A The influence of histone deacetylase inhibitor – Sodium Butyrate - on microglia polarization in *in vitro* model of neonatal hypoxia-ischemia. The influence of histone deacetylase inhibitor – Sodium Butyrate - on microglia polarization in *in vitro* model of neonatal hypoxia-ischemia.  
**Karolina Zińska** (Warszawa, Poland)
- 3:56 pm T12-006A Autophagy regulates microglial phagocytosis of apoptotic cells in physiology and ischemic stroke pathology  
**Ainhoa Plaza-Zabala** (Leioa, Spain)
- 3:57 pm T12-007A The influence of HDACis - Givinostat /ITF2357 and Sodium Butyrate treatment on PI3K/AKT and MAPK/ERK signaling pathways in a rat model of neonatal hypoxic-ischemic brain damage.  
**Paulina Pawelec** (Warsaw, Poland)
- 3:58 pm T12-008A The role of astrocytic TRPV4 channels in regeneration after ischemic brain injury  
**Zuzana Hermanova** (Prague, Czech Republic)





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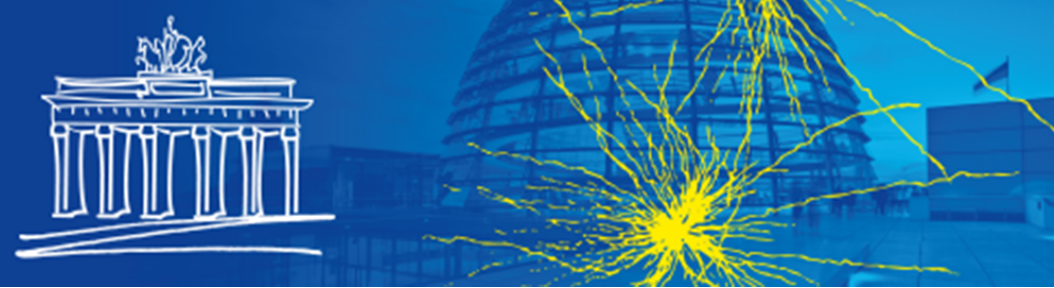


- 3:59 pm T12-009A Fetal inflammation and postnatal hypoxia cause reduced oligodendrocyte maturation, white matter injury and social deficits in a rat model for encephalopathy of prematurity  
**Myrna J.V. Brandt** (Utrecht, Netherlands)
- 4:00 pm T12-010A The role of TRPV4 and AQP4 in cytotoxic edema following brain ischemia  
**Valeria Marchetti** (Prague, Czech Republic)
- 4:01 pm T14-001A Low intensity repetitive transcranial magnetic stimulation enhances remyelination by newborn and surviving oligodendrocytes in the cuprizone model of toxic demyelination  
**Phuong Tram Nguyen** (Hobart, Australia)
- 4:02 pm T14-002A Human Schwann cells fail to myelinate mouse axons in nerve xenograft transplantation model  
**Tak Ho Chu** (Calgary, Canada)
- 4:03 pm T14-003A Dynamics of transcriptomic and epigenomic states of oligodendrocytes in experimental autoimmune encephalomyelitis  
**Chao Zheng** (Solna, Sweden)
- 4:04 pm T14-004A Myelination generates aberrant ultrastructure that is resolved by microglia  
**Minou Djannatian** (Munich, Germany)
- 4:05 pm T14-005A The role of Sox8 for myelin maintenance relative to Sox10  
**Lisa Mirja Jörg** (Erlangen, Germany)
- 4:06 pm T14-006A Role of Cyclin-dependent kinase 7 in Schwann cell development and myelination  
**Nathalie Schumacher** (Liège, Belgium)
- 4:07 pm T14-007A Role of maternal omega-3 fatty acid status in myelination during zebrafish neurodevelopment  
**Katherine M. Ranard** (Aurora, USA)
- 4:08 pm T14-008A Vagal Nerve Stimulation reduces neuroinflammation of demyelinated lesions in a murine model of Multiple Sclerosis  
**Fernando C. Ortiz** (Santiago, Chile)
- 4:09 pm T14-009A Increased expression of Charcot-Marie-Tooth associated protein PMP22 in Schwann cells induces the integrated stress response via heme-regulated inhibitor (HRI) Kinase  
**Gowda Sreerama Pramod** (Nashville, USA)



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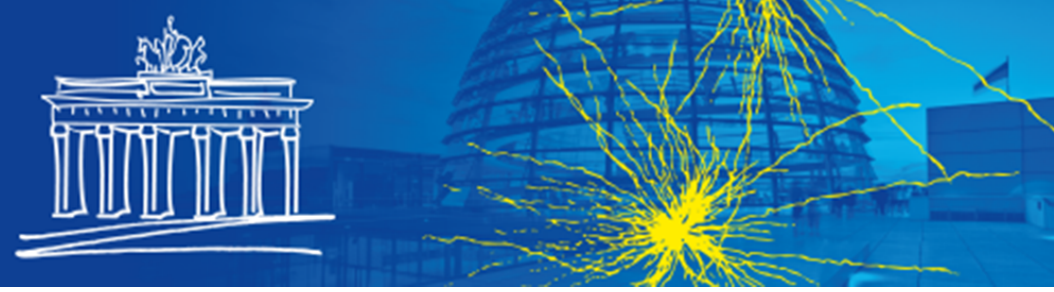


- 4:10 pm T14-010A Insufficient oligodendrocyte turnover in optic nerve contributes to age-related axon loss and visual deficits  
**Feng Mei** (Chongqing, China)
- 4:11 pm T14-011A Changes in cortical excitatory and inhibitory synaptic transmission in a cuprizone-induced demyelination mouse model  
**Eduardo J. Fernandez Perez** (Paris, France)
- 4:12 pm T14-012A Adenyl cyclase 6 and cAMP signaling in peripheral myelination  
**Océane EL HAGE** (Le Kremlin-Bicetre, France)
- 4:13 pm T14-013A Myelin proteome resources by quantitative mass spectrometry  
**Olaf Jahn** (Göttingen, Germany)
- 4:14 pm T14-014A The fast-aging killifish: a unique animal model to study the impact of aging on remyelination in the damaged central nervous system  
**Julie De Schutter** (Leuven, Belgium)
- 4:15 pm T14-015A Effects of  $\alpha$ -synuclein on myelination, actin remodelling, and mechanical properties in human induced oligodendrocytes  
**Kristina Battis** (Erlangen, Germany)
- 4:16 pm T14-016A EAAT3 modulation of the oligodendrocyte lineage in *in vitro* and *in vivo* models of Multiple Sclerosis.  
**Lieve van Veggel** (Hasselt, Belgium)
- 4:17 pm T14-017A Phosphodiesterase (PDE) 4 inhibition boosts Schwann cell myelination in a 3D regeneration model  
**Melissa Schepers** (Hasselt, Belgium)
- 4:18 pm T14-018A From methylation to myelination: epigenomic and transcriptomic profiling of chronic inactive demyelinated multiple sclerosis lesions  
**Assia Tiane** (Hasselt, Belgium)
- 4:19 pm T14-019A Schwann cell stimulation induces functional and structural changes in peripheral nerves  
**Cosmin I. Ciotu** (Vienna, Austria)
- 4:20 pm T14-020A Molecular structure of PMP22  
**David Ewers** (Göttingen, Germany)



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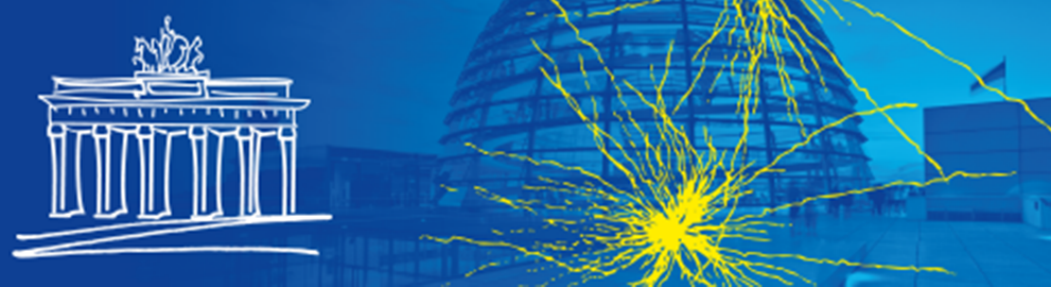


- 4:21 pm T14-021A Functional relevance of oligodendroglial CDC42 effector proteins CDC42EP1 and CDC42EP2 for myelin morphology  
**Sophie Hümmert** (Göttingen, Germany)
- 4:22 pm T14-022A Myelinated axon pathology in normal appearing white matter in progressive multiple sclerosis: Novel ultrastructural insight from large scale scanning transmission electron microscopy  
**Wendy Oost** (Groningen, Netherlands)
- 4:23 pm T14-023A The *soft* side of the brain: bioengineered platforms to unveil the role of mechanobiology in demyelinating diseases  
**Eva D. Carvalho** (Porto, Portugal)
- 4:24 pm T14-024A Long term impairment of cognitive function and neural network activity associated with structural changes in myelin after a transient episode of demyelination in adult mouse  
**Océane Mercier** (Marseille, France)
- 4:25 pm T14-025A Cyclin-dependent Kinase 4 (CDK4) is involved in the myelin sheath maintenance of hypothalamic neurons by modulating lipid biosynthesis  
**Sarah Geller** (Lausanne, Switzerland)
- 4:26 pm T14-026A Myelination: APC/C-Cdh1 new function?  
**Silvia Gomila Huguet** (Salamanca, Spain)
- 4:27 pm T15-001A The role of Sox9 in regulating the neuron/glial switch of adult hippocampal neural stem cells  
**Felix Beyer** (Erlangen, Germany)
- 4:28 pm T15-002A Ectopic recruitment of neuronal progenitors in/out of striatal white matter bundles following myelin impairment induced by chemical brain lesion.  
**Irini Thanou** (Athens, Greece)
- 4:29 pm T15-003A Mitochondrial pyruvate metabolism regulates the activation of quiescent adult neural stem cells  
**Francesco Petrelli** (Lausanne, Switzerland)
- 4:30 pm T15-004A Neural precursor/stem cell-based therapy for Rett syndrome  
**Angelisa Frasca** (Milan, Italy)



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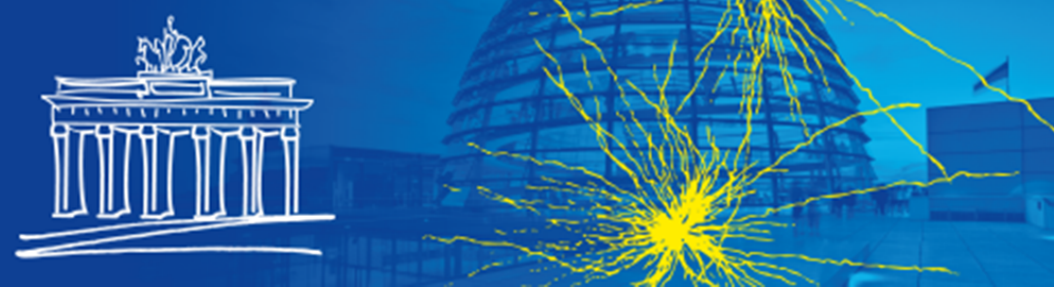
- 4:31 pm T15-005A BDNF and physical exercise as modulators of SVZ-derived adult oligodendrogenesis  
**Joana M. Mateus** (Lisboa, Portugal)
- 4:32 pm T15-006A Metabolic profiling of neural stem/progenitor cells reveals regional identity  
**Valentina Scandella** (Lausanne, Switzerland)
- 4:33 pm T16-001A Studying sterile inflammation in ISG15 deficient microglia derived from human pluripotent stem cells  
**Miguel Salvador Torres Perez** (Toronto, Canada)
- 4:34 pm T16-002A Opposing effects of microglial SIGLEC-11 and -16 receptors in transgenic mice on brain “inflammaging”  
**Harald Neumann** (Bonn, Germany)
- 4:35 pm T16-003A Breaking the *circulus vitiosus* of neuroinflammation; resveratrol modulates the activation of human glial cells during cytokine-induced neuroinflammation  
**Luise Schlotterose** (Kiel, Germany)
- 4:36 pm T16-004A Characterizing the accumulation of senescent-like myeloid cells in an experimental model of multiple sclerosis  
**Zeeba Manavi** (Washington, USA)
- 4:37 pm T16-005A Defining Schwann cell – T cell interactions in inflammatory neuropathies by nanoscale FIB-SEM 3D imaging  
**Kai Christine Liebig** (Essen, Germany)
- 4:38 pm T16-006A Understanding the interplay between meningeal inflammation and oligodendrocyte lineage cells in an MS mouse model  
**Leslie Kirby** (Stockholm, Sweden)
- 4:39 pm T16-007A Using ER-Hoxb8 conditionally-immortalized macrophages to study microglia replacement  
**Kelsey Nemec** (Philadelphia, USA)
- 4:40 pm T16-008A TNF and IL6/Jak2 signaling pathways are the main contributors of the glia-derived neuroinflammation present in Lafora disease, a fatal form of progressive myoclonus epilepsy  
**Pascual Sanz** (Valencia, Spain)
- 4:41 pm T16-009A Vagus nerve stimulation reduces microglia in lysolecithin induced demyelination.  
**Helen Bachmann** (Gent, Belgium)





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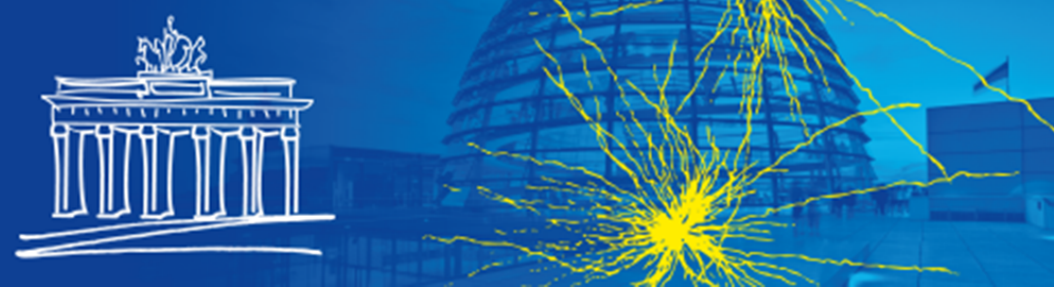
- 4:42 pm T16-010A Long lasting microglia activation after neonatal hypoxia correlates with neurological outcomes in a mouse model.  
**Aisling Leavy** (Dublin, Ireland)
- 4:43 pm T16-011A Activation and responses of Müller glia and microglia in retinal degeneration  
**Silvia Finnemann** (Bronx, USA)
- 4:44 pm T16-012A The aging CNS is protected by an autophagy-dependent microglia population promoted by IL-34  
**Rasmus Berglund** (Solna, Sweden)
- 4:45 pm T16-013A Enforced microglia repopulation by CSF1R inhibition alters the microglia response to peripheral LPS but does not revert endotoxin tolerance.  
**Tiago Medeiros-Furquim** (Groningen, Netherlands)
- 4:46 pm T16-014A Development of a new automated pipeline allowing microglial ranking and discrimination according to their morphology.  
**Sarah Benkeder** (Lyon, France)
- 4:47 pm T16-015A Increased neuronal oxytocin via chemogenetic modulation positively affects microglial reactivity and brain development in a mouse model of neonatal inflammation.  
**Marit Knoop** (Geneva, Switzerland)
- 4:48 pm T16-016A Senescent Neural Stem Cells as Disease Pacemakers in Progressive Multiple Sclerosis  
**Alexandra Nicaise** (Cambridge, UK)
- 4:49 pm T16-017A DNA Damage-Associated Pathological Mechanisms in Progressive Multiple Sclerosis  
**Pranathi Prasad** (Cambridge, UK)
- 4:50 pm T16-018A Human microglia incorporated into retinal organoids contribute to viral mediated inflammation and impact neuronal activity.  
**Verena Hübschmann** (Klosterneuburg, Austria)
- 4:51 pm T16-019A *Investigating the effect of peripheral immune cytokines on astrocyte reactivity in Parkinson's disease*  
**Adina N. MacMahon Copas** (Dublin, Ireland)
- 4:52 pm T16-020A Is TGF $\beta$ -1-signaling required for Nrf2-antioxidant pathway activation in a murine model of multiple sclerosis?  
**Coram Guevara Sánchez** (Santiago, Chile)





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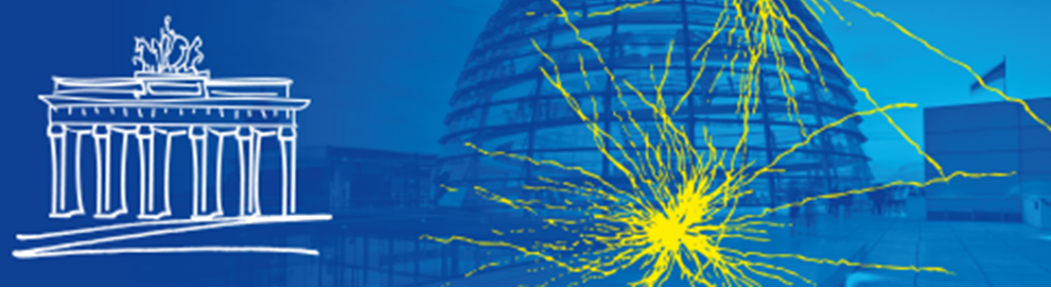


- 4:53 pm T16-021A An improved protocol yielding 'iPS-microglia' that faithfully recapitulate primary human microglia function and phenotype  
**Marie-France Dorion** (Montreal, Canada)
- 4:54 pm T16-022A Overexpression of the plasmalemmal  $\text{Ca}^{2+}$  pump hPMCA2 in microglia attenuates intracellular calcium signaling  
**Fan Zeng** (Shenzhen, China)
- 4:55 pm T16-023A In vivo imaging of oligodendrocyte injury in an NMO mouse model  
**Selin Kenet** (Munich, Germany)
- 4:56 pm T16-024A Changes in retinal macroglia over time in an experimental laser-induced glaucoma model.  
**Jose Antonio Fernandez-Albarral** (MADRID, Spain)
- 4:57 pm T16-025A Is the extent of reactive astrocyte transformation a function of implant size?  
**Janne Töykkälä** (Freiburg im Breisgau, Germany)
- 4:58 pm T16-026A Glial changes in the retina of aged tauopathy mice after suppression of microglial Hemoxygenase-1 (HO-1)  
**Elena Salobrar-Garcia** (Alcorcon, Spain)
- 4:59 pm T16-027A Comparison of brain damages between male and female in a model of encephalopathy of prematurity : study of a sexual dimorphism  
**Jennifer Hua** (Paris, France)
- 5:00 pm T16-028A The role of astrocytes in genetic epilepsies  
**Jenny Lange** (London, UK)
- 5:01 pm T16-029A Sitagliptin, a drug for type 2 diabetes, inhibits microglia reactivity triggered by exposure to lipopolysaccharide  
**António Francisco Ambrósio** (Coimbra, Portugal)
- 5:02 pm T16-030A A Non-canonical Mechanism of Complement 4-Driven Cortical Synaptic Loss  
**Rhushikesh Anand Phadke** (Boston, USA)
- 5:03 pm T16-031A Targeting the GPR17 receptor to counteract oligodendrocyte maturation failure during inflammation  
**Juliana Helena Castro e Silva** (Milan, Italy)



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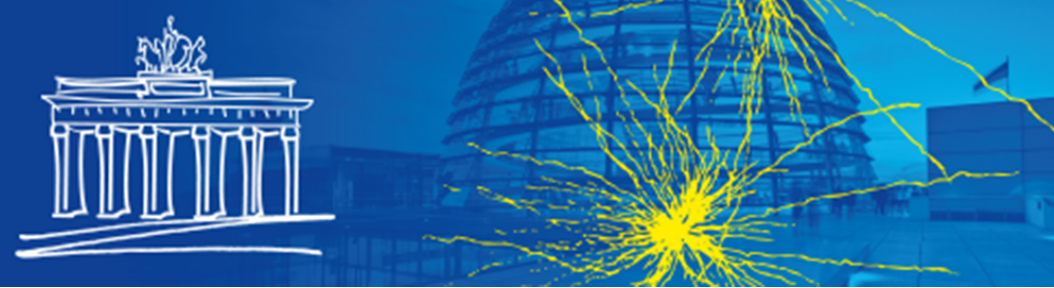


- 5:04 pm T16-032A Investigating microglial miRNAs as novel pro-remyelination therapeutics in multiple sclerosis  
**Sarrabeth Stone** (Parkville, Australia)
- 5:05 pm T16-033A Effects of microglia driven inflammation on glioblastoma cells  
**Urszula Hohmann** (Halle (Saale), Germany)
- 5:06 pm T16-034A *IN VIVO* MULTIMODAL IMAGING OF ADENOSINE A2A RECEPTORS IN NEUROINFLAMMATION AFTER EXPERIMENTAL STROKE  
**Maider Garbizu** (Leioa, Spain)
- 5:07 pm T16-035A Dissecting the role of mitochondrial dynamics in astrocyte reactivity  
**Abdulla Chihab** (Cologne, Germany)
- 5:08 pm T16-036A Cellular mechanisms of prolonged functional impairment after transient ischemic attacks  
**Gemma Llovera** (Munich, Germany)
- 5:09 pm T16-037A HCA2 receptors modulate inflammatory interactions of the skin-brain axis  
**Anne Albrecht** (Magdeburg, Germany)
- 5:10 pm T16-038A Adenosine exacerbates neuroinflammation via astrocytic A1 adenosine receptors  
**Qilin Guo** (Homburg, Germany)
- 5:11 pm T16-039A Sexual dimorphism of androgen effects upon demyelination of the central nervous system  
**Amina Zahaf** (Kremlin-Bicêtre, France)
- 5:12 pm T16-040A MS patient LY induce smoldering like demyelinating lesion in mouse spinal cord.  
**Océane Perrot** (Paris, France)
- 5:13 pm T16-041A NF-κB-mediated tolerance in a cellular model of neuroinflammation: implications for Parkinson's disease dopaminergic neurodegeneration  
**Irina Freitag Berenguel** (Barcelona, Spain)
- 5:14 pm T16-042A Influenza A virus (H1N1) infection induces microglia activation and temporal dysbalance in glutamatergic synaptic transmission  
**Henning P. Düsedau** (Magdeburg, Germany)



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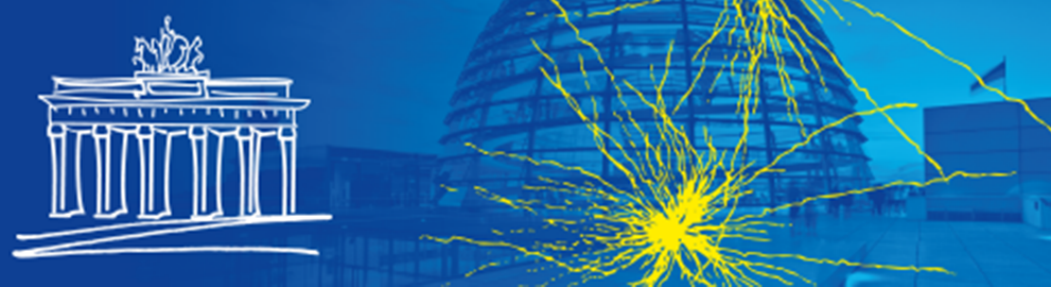


- 5:15 pm T16-043A Necrotizing enterocolitis promotes S100A9-induced activation of proinflammatory microglia  
**Line I. Christiansen** (Frederiksberg, Denmark)
- 5:16 pm T16-044A Reduced Sialylation Triggers Retinal Inflammation and Thinning of Photoreceptor Layer in Mice  
**German Cuevas Rios** (Bonn, Germany)
- 5:17 pm T16-045A A novel glial barrier structure of the choroid plexus: the *glia limitans perichoroidalis*  
**Sarah Joost** (Rostock, Germany)
- 5:18 pm T16-046A Blood-brain barrier integrity and sexual dimorphisms during macrophage invasion of the *Drosophila* nervous system  
**Dominik Funke** (Münster, Germany)
- 5:19 pm T16-047A Bioassays to study concentration level, binding and anti-inflammatory activity of polysialic acid  
**Annemarie Bungartz** (Bonn, Germany)
- 5:20 pm T16-048A The Role of the NF- $\kappa$ B-inducing Kinase in CX3CR1 Positive Cells During Experimental Autoimmune Encephalomyelitis  
**Nishada Ramphal** (Mainz, Germany)
- 5:21 pm T16-049A The role of Caspase 4 in anti-inflammatory effect of CB2R agonism during microglia-derived neuroinflammation.  
**Natalia Malek** (Wroclaw, Poland)
- 5:22 pm T16-050A Therapeutic effect of  $\alpha$ 7 nicotinic receptor modulation after cerebral ischemia in rats  
**Laura Aguado** (Leioa, Spain)
- 5:23 pm T16-051A B cells regulate chronic CNS inflammation in an IL-10-dependent manner  
**Darius Häusler** (Göttingen, Germany)
- 5:24 pm T16-052A Role of TDP-43 in reactive transformation of astrocytes in human stem cell model  
**Doaa Taha** (London, UK)
- 5:25 pm T16-053A OPCs as gatekeepers of neuroinflammation  
**Sonia Cabeza Fernández** (Alicante, Spain)



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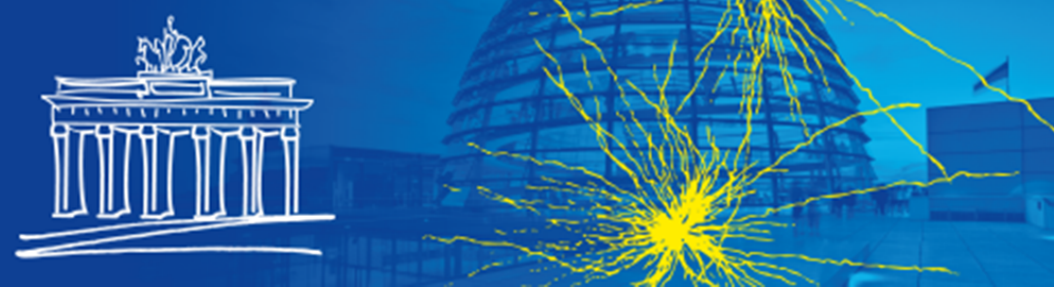
- 5:26 pm T16-054A Microgliosis, astrogliosis and aquaporin-4 abnormality in frontal cortex of Covid-19 patients  
**Christian Lohr** (Hamburg, Germany)
- 5:27 pm T16-055A Modulation of microglia phenotype and function by type I interferons  
**Carme Solà** (Barcelona, Spain)
- 5:28 pm T17-001A A sexual dimorphic microglia response modulates visual cortex network activity after ketamine-anesthesia.  
**Alessandro Venturino** (Klosterneuburg, Austria)
- 5:29 pm T17-002A Effects of oral saffron on retinal glial cytokine expression in an experimental model of glaucoma  
**Rosa de Hoz** (Madrid, Spain)
- 5:30 pm T17-003A Investigating neuron-glia interactive effects in cortical neuron network changes in an iPSC model of 4H leukodystrophy  
**Liza M.L. Kok** (Amsterdam, Netherlands)
- 5:31 pm T17-004A Contribution of glial cells during action selection in Drosophila larvae  
**Amber Amrei Krebs** (Münster, Germany)
- 5:32 pm T17-005A Manipulating astrocytic activity as a gateway to modulate adult neuroplasticity  
**Maria João Pereira** (Leuven, Belgium)
- 5:33 pm T17-006A Astrocyte integration of histaminergic signals in a cortical circuit  
**Charlotte R. Taylor** (San Francisco, USA)
- 5:34 pm T17-007A Enhancement of astrocytic Glu/GABA exchange by multiple mechanisms is effective against convulsive and non-convulsive seizures.  
**Saif Qahtan** (Budapest, Hungary)
- 5:35 pm T17-008A Dopamine signaling in striatal astrocytes  
**Giulia Favetta** (Padova, Italy)
- 5:36 pm T17-009A Remote and Selective Control of Astrocytes by Magnetomechanical Stimulation  
**Yichao Yu** (London, UK)





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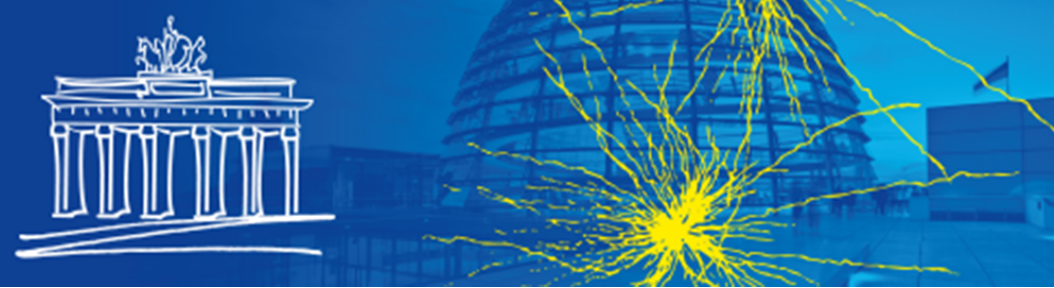


- 5:37 pm T19-001A A multi-omic approach to study mitochondrial deficits in iPSC-derived astrocytes with a high polygenic risk for schizophrenia  
**Karen E. Laupman** (Amsterdam, Netherlands)
- 5:38 pm T19-002A Hippocampal astrocytes modulate anxiety-like behavior  
**Sung Joong Lee** (Seoul, South Korea)
- 5:39 pm T19-003A A maternal high-fat diet during pregnancy and lactation altered myelination and induced depressive-like phenotype in rat offspring  
**Irena Smaga-Ma?lanka** (Kraków, Poland)
- 5:40 pm T19-004A Aldolase C in the astrocytes emerges as a protein that may connect early life stress to depression  
**Giulia Treccani** (Mainz, Germany)
- 5:41 pm T19-005A Microglia Display TREM2-Associated Deficits in Synaptic Engulfment in the Neuroligin-4 Knock-Out Mouse Model of Autism  
**Bilge Ugursu** (Berlin, Germany)
- 5:42 pm T19-006A Pathological oligodendrocyte precursor cells revealed in human schizophrenic brains and trigger schizophrenia-like behaviors and synaptic defects in genetic animal model  
**Jianqin Niu** (Chongqing, China)
- 5:43 pm T19-007A Astrocytic EAAT2 in Basolateral Amygdala Regulates Stress-Induced Anxiety-like Behavior  
**Qian Xiao** (Shenzhen, China)
- 5:44 pm T19-008A Early life adversity and the impact of glucocorticoids on NG2-glia: a potential mechanism for stress-related psychiatric disorders  
**Lorenzo Mattioni** (Mainz, Germany)
- 5:45 pm T19-009A Food restriction in mice induces circadian rhythm-related activity changes and glial cell alterations in the corpus callosum and hypothalamus  
**Linda Frintrop** (Rostock, Germany)
- 5:46 pm T19-010A 3D co-culture platform to study myelination deficits in schizophrenia using hiPSC-derived neurons and oligodendrocyte lineage cells  
**Martina von der Bey** (Heidelberg, Germany)
- 5:47 pm T19-011A Transcriptomic analysis of human brain nuclei to investigate hypomyelination pathology in schizophrenia  
**Janina Nadine Breining** (Heidelberg, Germany)



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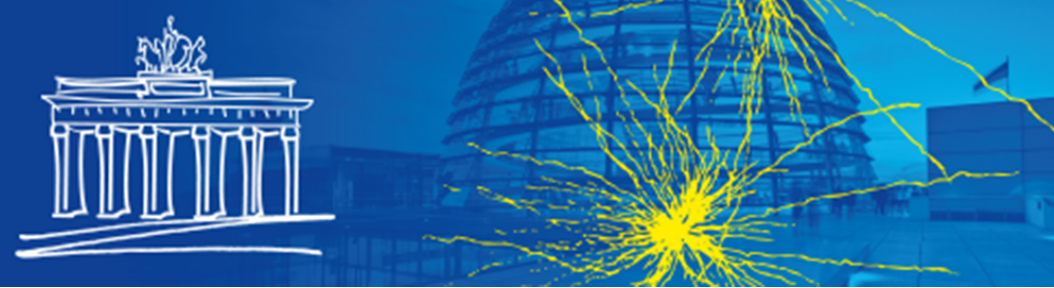


- 5:48 pm T19-012A The Role of Astrocytes in Postnatal Synaptic Refinement of the Medial Prefrontal Cortex  
**Johanna Furrer** (Zürich, Switzerland)
- 5:49 pm T20-001A Clearance of Senescent-Like Microglia Improves Remyelination in Young and Aged Mice  
**Phillip S. Gross** (Washington DC, USA)
- 5:50 pm T20-002A Control chromatin remodelling enzymes in Schwann cells to improve peripheral nerve regeneration  
**Nadège Hertzog** (Mainz, Germany)
- 5:51 pm T20-003A Learning from Schwann cells, modulating gene expression in Oligodendrocytes after injury  
**Gianluigi Nocera** (Mainz, Germany)
- 5:52 pm T20-004A The small intestine submucosa with high glial cell line-derived neurotrophic factor loading capacity enhanced Schwann cell proliferation after neurorrhaphy.  
**Wen Chieh Liao** (Taichung, Taiwan)
- 5:53 pm T20-005A NG2 cells mediate cannabinoid-induced functional recovery following demyelination  
**Javier Palazuelos** (Madrid, Spain)
- 5:54 pm T20-006A Characterization of Macroglia Response in an Experimental Retina Laser Model  
**Volker Enzmann** (Bern, Switzerland)
- 5:55 pm T20-007A Highly oriented nanofibers override barrier-forming Schwann cell-astrocyte interfaces and enable neuritic outgrowth into the astrocytic compartment *in vitro*  
**Pascal Achenbach** (Aachen, Germany)
- 5:56 pm T20-008A White matter myelin regeneration is regulated in the grey matter  
**Omar de Faria Jr.** (Cambridge, UK)
- 5:57 pm T20-009A Microglia regulate OPC recruitment and differentiation during remyelination  
**Charbel S. Baaklini** (Edmonton, Canada)
- 5:58 pm T20-010A Peripheral glia inhibit sensory nerve regeneration following central branch axotomy  
**Robin I. Brown** (Charlottesville, USA)



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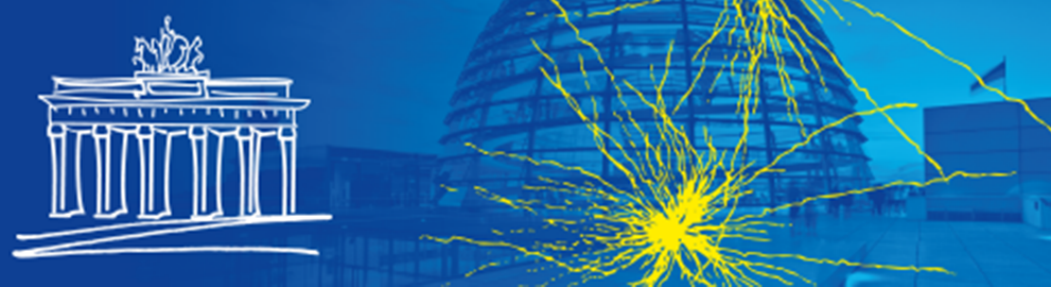


- 5:59 pm T20-011A The TAM receptor Tyro3 is critical for the promotion of remyelination by GAS6  
**Michele D. Binder** (Parkville, Australia)
- 6:00 pm T20-012A Innate immune training in remyelination  
**Vini Tiwari** (Munich, Germany)
- 6:01 pm T20-014A Teriflunomide promotes myelin repair *in vivo*  
**Peter Goettle** (Düsseldorf, Germany)
- 6:02 pm T20-015A Intranasal delivery enteric glia promotes angiogenesis and neurogenesis in a rat model of brain injury  
**Nina Colitti** (TOULOUSE, France)
- 6:03 pm T20-016A Generating human adult oligodendroglia to screen for compounds to enhance remyelination  
**Laura J. Wagstaff** (Edinburgh, UK)
- 6:04 pm T22-001A Ethanol activates hemichannels and pannexons with negative repercussions for astroglial function  
**Juan A. Orellana** (Santiago, Chile)
- 6:05 pm T22-002A The role of P/Q-type calcium channels in oligodendrocyte development  
**Melanie Piller** (Portland, USA)
- 6:06 pm T22-003A Modulating oligodendrocyte precursor cell states  
**Yasmine Kamen** (Cambridge, UK)
- 6:07 pm T22-004A Ablation of microglial Connexin43 alleviates the cognition decline and neuronal malfunction in a model of Alzheimer's disease  
**Yixun Su** (Shenzhen, China)
- 6:08 pm T22-005A Mitochondrial trafficking in primary microglia cells is influenced by the TRPV4 ion channel  
**Andreea E. Burlacu** (Hasselt, Belgium)
- 6:09 pm T24-001A SorLA impacts pro-tumorigenic properties of microglia during glioblastoma progression  
**Paulina Kaminska** (Warsaw, Poland)



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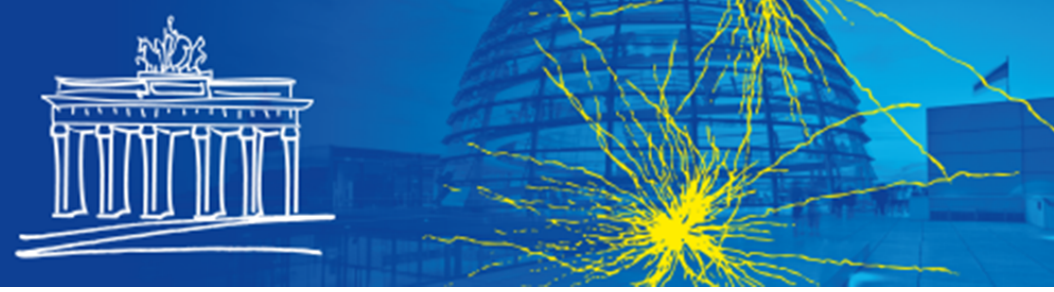
- 6:10 pm T24-002A Investigating the evolution of neuron-glioma circuit dynamics using an in vivo imaging method  
**Kiarash Shamardani** (Stanford, USA)
- 6:11 pm T24-003A Heterogeneity and plasticity of tumour associated astrocytes in murine gliomas as defined by immunohistochemistry and spatial transcriptomics  
**Mitrajit Ghosh** (Warsaw, Poland)
- 6:12 pm T24-004A An improved F98 rat glioma model for combinatorial approaches incorporating the standard therapy for glioblastoma  
**Velislava Zoteva** (Gent, Belgium)
- 6:13 pm T24-005A GABAergic neuron-to-glioma synapses in diffuse midline gliomas  
**Tara Barron** (Stanford, USA)
- 6:14 pm T24-006A S1P Receptor 1 on Glioma-Associated Astrocytes Regulates Tumor Growth and Progression  
**Alexandra Gonsiewski** (Richmond, USA)
- 6:15 pm T24-007A Trem2 promotes glioma progression and angiogenesis mediated by microglia/brain macrophages  
**Xianyuan Xiang** (Shenzhen, China)
- 6:16 pm T24-008A Spatially resolved transcriptomics for the study of horizontal transfer of mitochondria in a mouse model of glioblastoma  
**Ondřej Vařátko** (Prague, Czech Republic)
- 6:17 pm T24-009A STAT3-mediated astrocytic reactivity in glioblastoma multiforme  
**Paula Martínez Remedios** (Barcelona, Spain)
- 6:18 pm T24-010A Schwann cell plasticity contributes to axonal remodeling during pancreatic cancer progression.  
**Martha Montserrat Rangel Sosa** (Marseille, France)
- 6:19 pm T24-011A Astrocytic Reprogramming Impairs Human Glioblastoma Growth *In Vitro* and *In Vivo*  
**Francesco Trovato** (Lund, Sweden)
- 6:20 pm T24-012A Low doses Decitabine-induced anti-tumor effects are dependent on TRAIL-TRAIL receptor signal induction  
**Eun Jeong Lee** (Suwon, South Korea)





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Saturday, 8 July, 2023, 4:30 p.m. - 6:30 p.m.

## **S01 | Multiomic analysis of glia-mediated regeneration**

**Chairs:** **Enric Llorens-Bobadilla** (Stockholm, Sweden); **Seth Blackshaw** (Baltimore, USA)

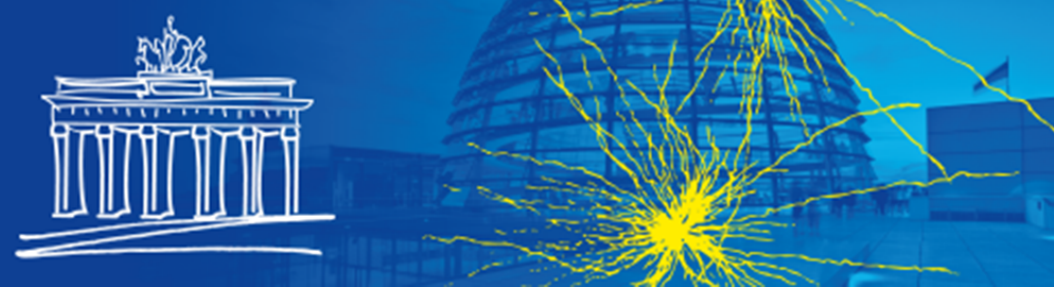
**Presentations:**

- |         |       |  |
|---------|-------|--|
| 4:30 pm | S0101 | The latent potential of mammalian neural stem cells to regenerate the injured spinal cord<br><b>Enric Llorens-Bobadilla</b> (Stockholm, Sweden)                          |
| 5:00 pm | S0102 | The unique regenerative state of spinal progenitors<br><b>Catherina G. Becker</b> (Dresden, Germany)   |
| 5:30 pm | S0103 | Gene regulatory networks controlling neurogenic competence and cell fate specification in zebrafish and mammalian Müller glia.<br><b>Seth Blackshaw</b> (Baltimore, USA) |
| 6:00 pm | S0104 | Understanding the gene regulatory program underlying the remarkable regeneration seen in salamanders<br><b>Elly Tanaka</b> (Vienna, Austria)                             |



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Saturday, 8 July, 2023, 4:30 p.m. - 6:30 p.m.

## **S02 | Building the nervous system: critical roles for microglia prior to pruning**

### **Chairs:**

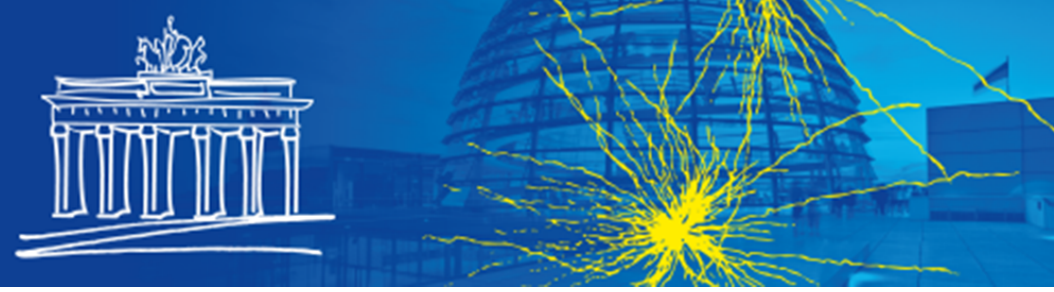
### **Presentations:**

- |         |       |   |
|---------|-------|---|
| 4:30 pm | S0201 | Microglial support of synaptic development in the nucleus accumbens<br><b>Lindsay De Biase</b> (Los Angeles, USA)                 |
| 5:00 pm | S0202 | Early invaders of the brain: embryonic colonization and functions of microglia<br><b>Morgane S. Thion</b> (Paris, France)         |
| 5:30 pm | S0203 | Microglia Regulate Chandelier Cell Axo-axonic Synaptogenesis<br><b>Linda Van Aelst</b> (Cold Spring Harbor, USA)                  |
| 6:00 pm | S0204 | Cross-talk of CNS macrophages and vasculature during development and homeostasis<br><b>Annika Keller</b> (Schlieren, Switzerland) |



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Saturday, 8 July, 2023, 4:30 p.m. - 6:30 p.m.

## **S03 | Astrocyte diversity drives specificity in the making, regulation and dysfunction of brain circuits**

**Chairs:** **Andrea Volterra** (Geneva, Switzerland)

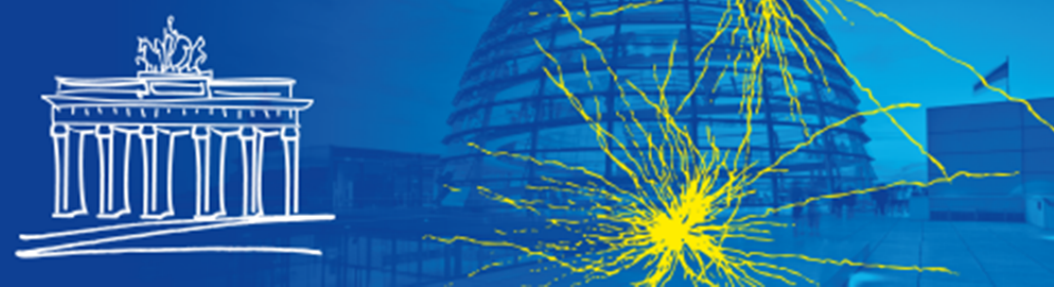
**Presentations:**

- |         |       |  |
|---------|-------|--|
| 4:30 pm | S0301 | Regulation of heterogeneous gene expression in astrocytes and synapse development by neuronal and astrocyte activity.<br><b>Isabella Farhy-Tselnicker</b> (College Station, USA) |
| 5:00 pm | S0302 | Astrocyte diversity: the adult dentate gyrus is populated by layer-specific astrocyte subtypes<br><b>Ruth Beckervordersandforth</b> (Erlangen, Germany)                          |
| 5:30 pm | S0303 | A specialized sub-population of astrocytes with glutamate-secreting properties in hippocampus<br><b>Andrea Volterra</b> (Lausanne, Switzerland)                                  |
| 6:00 pm | S0304 | Tracking astrocyte dynamics along Alzheimer's disease and aging: One cell at a time<br><b>Naomi Habib</b> (Jerusalem, Israel)  |



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Saturday, 8 July, 2023, 4:30 p.m. - 6:30 p.m.

## **S04 | Glial cells of the gut: from neural stem cells to regulators of homeostasis**

**Chairs:** **Werend Boesmans** (Diepenbeek, Belgium); **Carla Cirillo** (Toulouse, France)

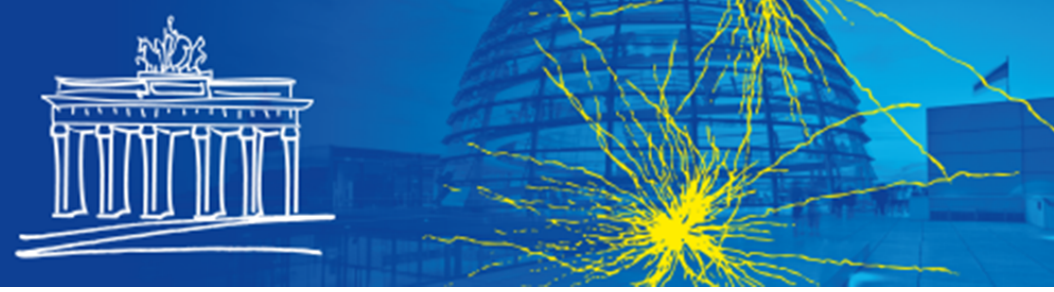
**Presentations:**

- |         |       |   |
|---------|-------|---|
| 4:30 pm | S0401 | Understanding the regulation of enteric glia status<br><b>Werend Boesmans</b> (Diepenbeek, Belgium)           |
| 5:00 pm | S0402 | tba<br><b>Vassilis Pachnis</b> (London, UK)   |
| 5:30 pm | S0403 | Neuron-glia interactions at the gut mucosal interface<br><b>Meenakshi Rao</b> (Boston, USA)                   |
| 6:00 pm | S0404 | Glia cells of the gut: promising candidates for cell-based therapy<br><b>Carla Cirillo</b> (Toulouse, France) |





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Saturday, 8 July, 2023, 4:30 p.m. - 6:30 p.m.

## S05 | Regulation of neuroinflammation in CNS remyelination

**Chairs:** Jeffrey Huang (Washington, USA); Tara DeSilva (Cleveland, USA)

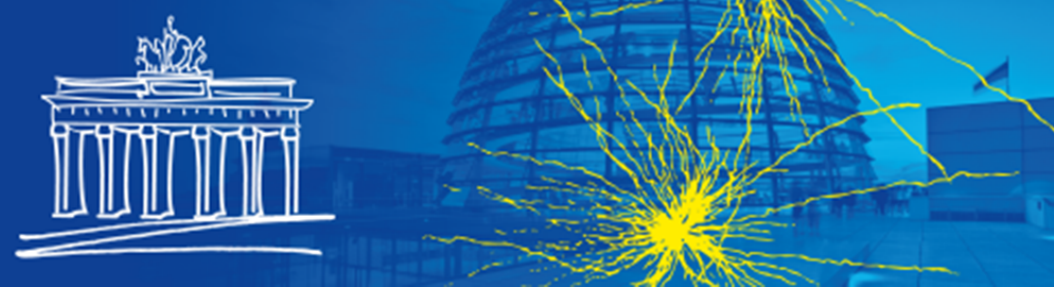
**Presentations:**

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|---------|-------|--|
| 4:30 pm | S0501 | tba<br><b>Jeffrey Huang</b> (Washington, USA)  |
| 5:00 pm | S0502 | Innate and adaptive immune mechanisms in myelin regeneration<br><b>Yvonne Dombrowski</b> (Belfast, UK) |
| 5:30 pm | S0503 | Microglia-mediated mechanisms of myelination<br><b>Tara M. DeSilva</b> (Cleveland, USA)                |
| 6:00 pm | S0504 | tba<br><b>Daniel Reich</b> (Bethesda, USA)   |



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Saturday, 8 July, 2023, 7:00 p.m. - 8:00 p.m.

## **L02 | Plenary Lecture II: Michael Wegner**

**Chairs:** Leda Dimou (Munich, Germany)

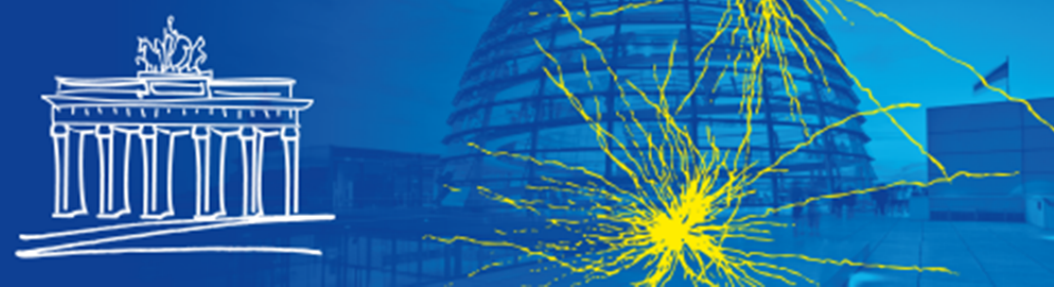
**Presentations:**

7:00 pm L0201 Organizing and adapting the gene regulatory network in myelinating glia  
**Michael Wegner** (Erlangen, Germany)





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Sunday, 9 July, 2023, 10:00 a.m. - 12:00 p.m.

## S06 | How microglia sense and regulate neuronal activity

**Chairs:** Long-Jun Wu (Rochester, USA)

**Presentations:**

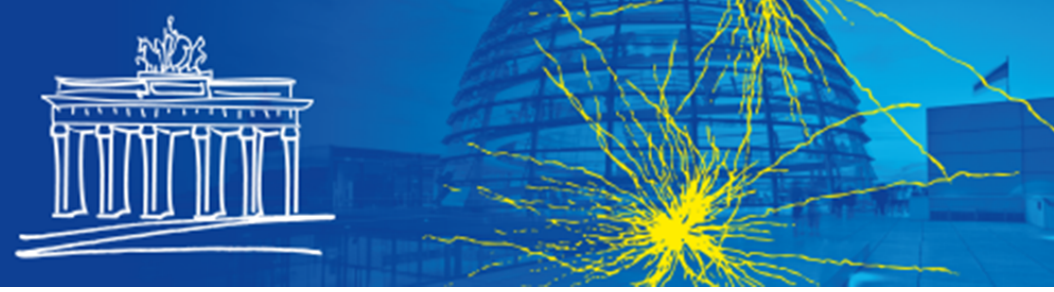
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|----------|-------|---|
| 10:00 am | S0601 | Dopamine-mediated control of microglia-neuron interaction and function<br><b>Hayley Strasburger</b> (New York City, USA)                |
| 10:30 am | S0602 | Microglia process dynamics: synapse formation, neuronal activity and local synchronization.<br><b>Junichi Nabekura</b> (Okazaki, Japan) |
| 11:00 am | S0603 | Neuron-microglia communication via neurotransmitters<br><b>Marcus Semtner</b> (Berlin, Germany)   |
| 11:30 am | S0604 | Microglia sense and regulate neuronal activity through adrenergic mechanisms<br><b>Long-Jun Wu</b> (Rochester, USA)                     |





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Sunday, 9 July, 2023, 10:00 a.m. - 12:00 p.m.

## **S07 | Using non-mammalian models to uncover fundamental roles of glia in circuit development**

**Chairs:** Sarah Ackerman (Saint Louis, USA); Vilaiwan Fernandes (London, UK)

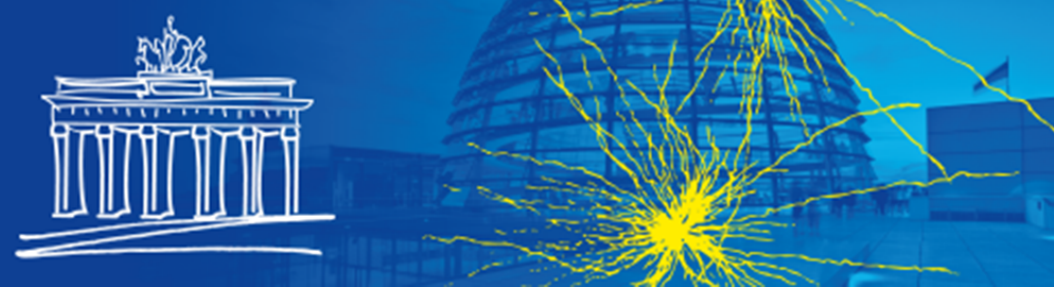
**Presentations:**

- 10:00 am S0701 How Oligodendrocyte Precursor Cells Shape the Form and Function of Neural Circuits  
**Tim Czopka** (Edinburgh, UK)
- 10:30 am S0702 Mechanistic insights into glial heterogeneity and glia-neuron interactions in *C. elegans*.  
**Aakanksha Singhvi** (Seattle, USA)
- 11:00 am S0703 ADrosophilaglial cell atlas reveals that transcriptionally defined cell types can be morphologically diverse  
**Vilaiwan Fernandes** (London, UK)
- 11:30 am S0704 Astrocytes set the timer for critical period plasticity  
**Sarah D. Ackerman** (Saint Louis, USA)



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Sunday, 9 July, 2023, 10:00 a.m. - 12:00 p.m.

## **S08 | Molecular and cellular regulation of myelination throughout life (Special Trainee symposium)**

**Chairs:** **Noémie Adès** (PARIS, France); **Michael Thornton** (Aurora, USA)

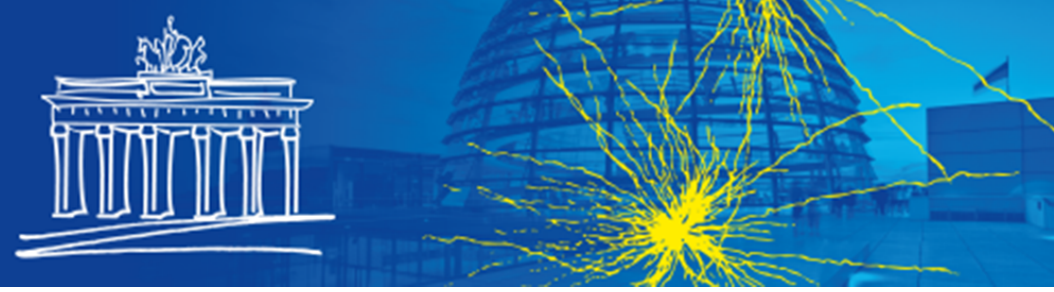
**Presentations:**

- |          |       |   |
|----------|-------|---|
| 10:00 am | S0801 | Spatial cellular dynamics of lesion development and progression in a mouse model of multiple sclerosis<br><b>Petra Kukanja</b> (Solna, Sweden)                                  |
| 10:05 am | S0802 | Longitudinal <i>in vivo</i> three-photon imaging reveals region-specific differences in healthy and regenerative oligodendrogenesis<br><b>Michael A. Thornton</b> (Aurora, USA) |
| 10:10 am | S0803 | Metabotropic glutamate receptors sense neuronal signals and mediate activity-driven myelination in zebrafish<br><b>Philipp Braaker</b> (Edinburgh, UK)                          |
| 10:15 am | S0804 | PAK1 inactivation triggers myelin formation through actin disassembly in oligodendrocytes<br><b>Noémie Adès</b> (PARIS, France)   |
| 10:20 am | S0805 | Myelin accuracy requires calcium-regulated actin steering<br><b>Manasi Iyer</b> (Stanford, USA)   |



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Sunday, 9 July, 2023, 10:00 a.m. - 12:00 p.m.

## **S09 | Mechanisms of glia-neuron crosstalk maintaining neural homeostasis**

**Chairs:**        **Aiman Saab** (Zurich, Switzerland)

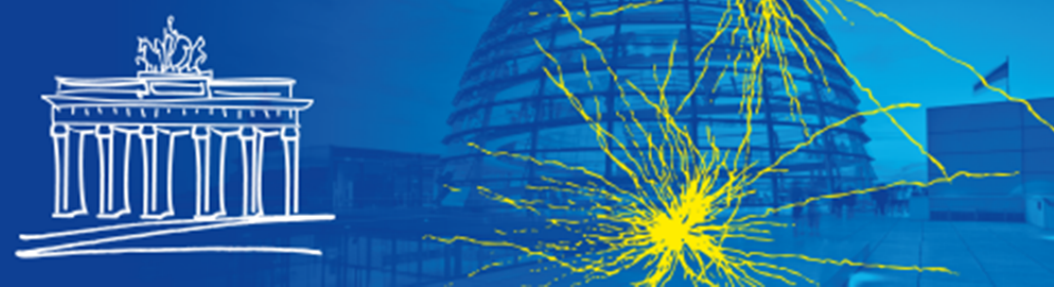
**Presentations:**

- |          |       |  |
|----------|-------|--|
| 10:00 am | S0901 | Impact of the metabolic shape of astrocytes on neuronal function and animal behavior<br><b>Juan P Bolanos</b> (Salamanca, Spain) |
| 10:30 am | S0902 | Endogenous Protective Mechanisms of the Astrocyte Connectome<br><b>Melissa L. Cooper</b> (New York, USA)                         |
| 11:00 am | S0903 | Myelin's highway to the glial-axonal junction<br><b>Julia M. Edgar</b> (Glasgow, UK)   |
| 11:30 am | S0904 | Oligodendrocyte functions shape axonal energy metabolism<br><b>Aiman S. Saab</b> (Zurich, Switzerland)                           |



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Sunday, 9 July, 2023, 10:00 a.m. - 12:00 p.m.

## **S10 | Do astrocytes really regulate cerebral blood flow?**

**Chairs:** **Alexander Gourine** (London, UK); **Jessica Filosa** (Augsuta, USA)

**Presentations:**

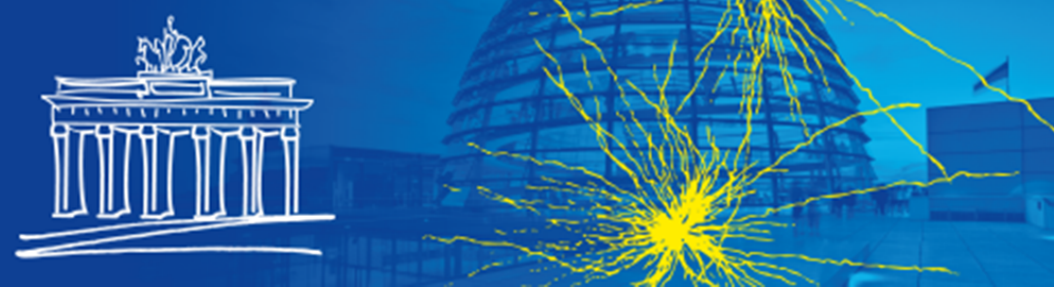
- 10:00 am S1001 Astrocyte regulation of neurovascular coupling in health and disease  
**Anusha Mishra** (Portland, USA)
- 10:30 am S1002 Astrocyte calcium contributes to specific types of cerebral blood flow regulation  
**Grant R. Gordon** (Calgary, Canada)
- 11:00 am S1003 *In vivo* pressure-evoked astrocyte calcium increases in a mouse model of high blood pressure variability.  
**Jessica A. Filosa** (Augsuta, USA)
- 11:30 am S1004 Astrocytes and regulation of cerebral blood flow during brain hypoxia  
**Alexander Gourine** (London, UK)





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Sunday, 9 July, 2023, 1:00 p.m. - 4:00 p.m.

## PS2 | Poster Session II

### Chairs:

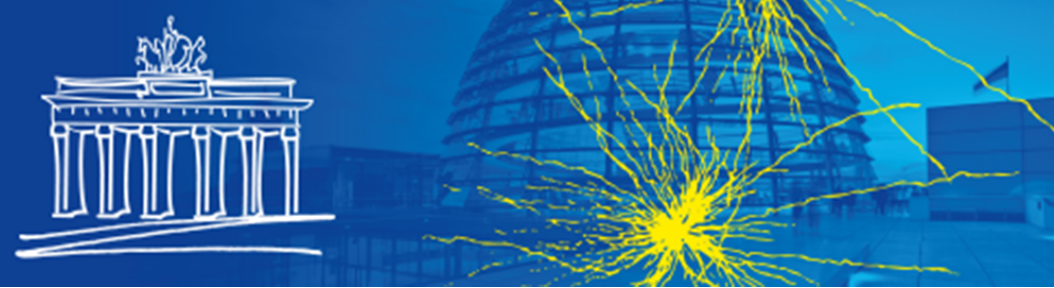
### Presentations:

- |         |          |   |
|---------|----------|---|
| 1:00 pm | T02-011B | Exploring the role of the NG2 glia-specific receptor GPR17 in the context of aging<br><b>Lea Jäger</b> (Ulm, Germany)   |
| 1:01 pm | T02-012B | Harnessing the power of movement: exploring the effects of voluntary physical activity on glial cell function and oligodendrogenesis in the aging brain<br><b>Aladdin Skaf</b> (Ulm, Germany)                                 |
| 1:02 pm | T02-013B | Generation of oligodendrocytes-enriched 3D human brain organoids for the study of Globoid Cell Leukodystrophy<br><b>Elisabeth Mangiameli</b> (Milan, Italy)   |
| 1:03 pm | T02-014B | Activated caspase-3 is not an exclusive apoptotic marker in the spinal cord: a comprehensive study of the activated caspase-3 <sup>+</sup> population of cells in rat spinal cord<br><b>Radovan Holota</b> (Košice, Slovakia) |
| 1:04 pm | T02-015B | PKD1 regulates astrocyte maturation and mitochondrial biogenesis<br><b>Luis Sánchez-Miranda Pajuelo</b> (Madrid, Spain)   |
| 1:05 pm | T02-016B | Spatio-temporal recruitment of adult neural stem cells during pregnancy for transient neurogenesis<br><b>Zayna Chaker</b> (Basel, Switzerland)  |
| 1:06 pm | T02-017B | Improved functional properties of microglia-like cells derived from trained precursors<br><b>Mihaela Guranda</b> (Göttingen, Germany)   |
| 1:07 pm | T02-018B | Monocyte-derived microglia-like cells – A human model to replace mouse primary microglia?<br><b>Johannes Wurm</b> (Bielefeld, Germany)  |



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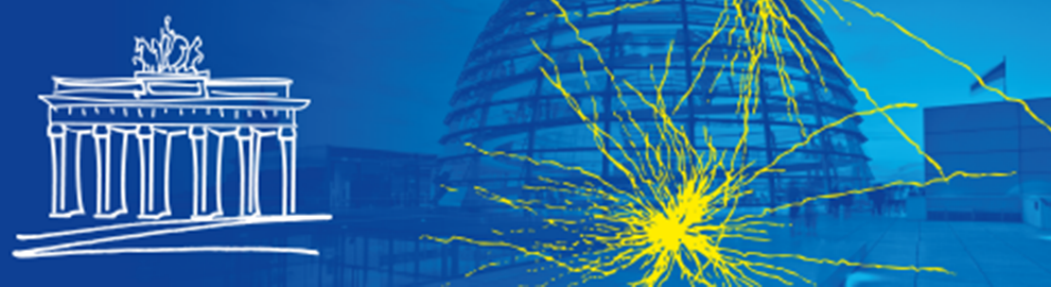


- 1:08 pm T02-019B STIMULATION OF ASTROCYTES IN THE NEUROGENIC NICHE OF THE DENTATE GYRUS  
**Thibault Sprenger** (Prilly, Switzerland)
- 1:09 pm T02-020B Human induced pluripotent stem cell-derived microglia-like cells to investigate therapeutic strategies targeting multiple sclerosis progression  
**Alica Blenkle** (Göttingen, Germany)
- 1:10 pm T03-011B Palmitic acid drives Müller glial cells pro-inflammatory and metabolic switch in a diabetic retinopathy model  
**Remi Karadayi** (Paris, France)
- 1:11 pm T03-012B Extracellular vesicle signaling and its effects on Schwann cells in a regenerative setting  
**Maximilian Haertinger** (Vienna, Austria)
- 1:12 pm T03-013B Cdc42 orchestrates microglial signaling and morphological plasticity  
**Joana Tedim-Moreira** (Porto, Portugal)
- 1:13 pm T03-014B Lysophosphatidic acid signaling via LPA<sub>6</sub>: a negative modulator of oligodendrocyte maturation.  
**Babette Fuss** (Richmond, Virginia, USA)
- 1:14 pm T03-015B Exploring the neuroprotective mechanisms of astrocyte-derived extracellular vesicles in the context of Parkinson's disease  
**Greta Paternò** (Catania, Italy)
- 1:15 pm T03-016B Enteric glial cells regulate T-cell activity in inflammatory bowel diseases.  
**Marvin Bubeck** (Erlangen, Germany)
- 1:16 pm T03-017B *Short term regulation of aqp4ex: from bioinformatic approach to in vitro study*  
**Roberta Pati** (Bari, Italy)
- 1:17 pm T03-018B Reconstruction of Bergmann glial morphology for whole-cell calcium simulations  
**Laura Keto** (Tampere, Finland)
- 1:18 pm T03-019B CaSCaDe: a toolbox for an automatic analysis of calcium signals from neural cells  
**Khaleel Alhalaseh** (Heidelberg, Germany)



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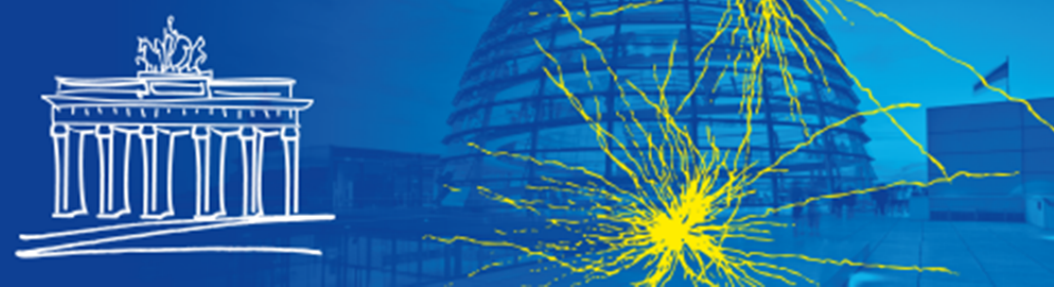


- 1:19 pm T03-020B Computational tools to unravel mechanistic links between intracellular architecture and cell function  
**Audrey Denizot** (Onna-son, Japan)
- 1:20 pm T04-001B Star-shape: combining hiPSC modeling and bionengineering to probe the mechanobiology of astrocytes' shape-function dynamics  
**Ludovica Malu Guetta** (London, UK)
- 1:21 pm T04-002B The role of ADF/cofilin1 in microglia morphology and function  
**Marie Denise Roggan** (Bonn, Germany)
- 1:22 pm T04-003B Arp2/3 complex controls microglial cell dynamics and maturation  
**Shima Safaiyan** (Freiburg, Germany)
- 1:23 pm T04-004B Drosophila  $\beta_{\text{Heavy}}$ -Spectrin is required in polarized ensheathing glia that form a diffusion-barrier around the neuropil  
**Nicole Pogodalla** (Münster, Germany)
- 1:24 pm T04-005B Unraveling astrocyte dysfunction in the white matter disease MLC: linking the cytoskeleton to volume-regulated ion channels  
**Quinty Bisseling** (Amsterdam, Netherlands)
- 1:25 pm T04-006B Disrupted-In-Schizophrenia 1 controls microglial movement and phagocytosis  
**Sofie Kessels** (Hasselt, Belgium)
- 1:26 pm T04-007B Methamphetamine activates rac1 in striatal microglia  
**Ana F. Terceiro** (Porto, Portugal)
- 1:27 pm T05-031B miRNA depleted Müller glia show diminished gliosis and better retinal health after retinal damage  
**Daniel Larbi** (New York, NY, USA)
- 1:28 pm T05-032B Spatial multi-omic characterization of multiple sclerosis lesions  
**Yonglong Dang** (Stockholm, Sweden)
- 1:29 pm T05-033B Premature brain ageing, the aftermath of an early-life inflammatory event  
**David Guenoun** (Paris, France)



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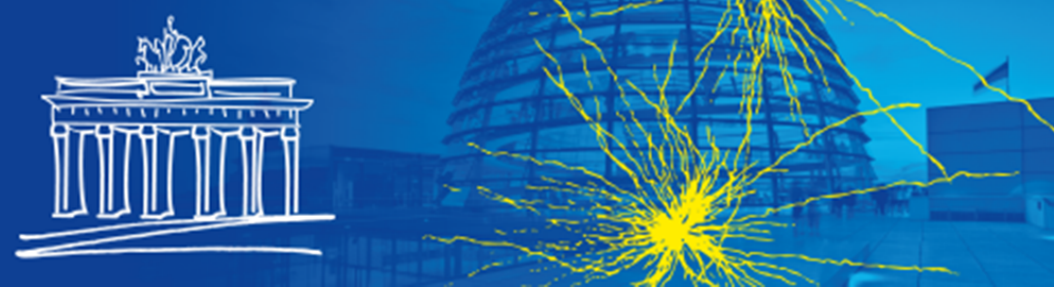
- 1:30 pm T05-034B Human iPSC-based models unveil altered trafficking and processing of GALC mutant enzymes in Globoid cell leukodystrophy.  
**Clarissa Rosato** (Milan, Italy)
- 1:31 pm T05-035B Microglia ferroptosis contributes to neurodegeneration in an hiPSC-derived tri-culture  
**Sean Ryan** (Cambridge, USA)
- 1:32 pm T05-036B Cracking the code of amyotrophic lateral sclerosis (ALS): how astrocyte mutations affect the cross-talk with motor neurons  
**Benedetta Frizzi** (Leuven, Belgium)
- 1:33 pm T05-037B Identifying the function of novel genetic variants associated with multiple sclerosis development and progression  
**Jessica Fletcher** (Hobart, Australia)
- 1:34 pm T05-038B GFAP Upregulation by Astrocytes Does Not Substantially Impact Phospho-Tau Pathology or Downstream Neurodegeneration in a Tauopathy Mouse Model  
**Clara Muñoz-Castro** (Boston, USA)
- 1:35 pm T05-039B Ascorbate insufficiency disrupts glutamatergic neurotransmission recorded by surface electroencephalogram in a mouse model of Alzheimer's disease  
**Rebecca Buchanan** (Nashville, USA)
- 1:36 pm T05-040B Induction of plaque-like A $\beta$  aggregates in human iPSC-derived mixed cell type neurospheres as a model to study A $\beta$ -microglia interaction  
**Stefan Wendt** (Vancouver, Canada)
- 1:37 pm T05-041B Human neuron and astrocyte behaviour is affected by Dystrophin mutations  
**Reem R. Alkharji** (London, UK)
- 1:38 pm T05-042B Peripheral glial cells in late-onset spinal muscular atrophy – Schwann cells in focus  
**Markus Leo** (Essen, Germany)
- 1:39 pm T05-043B Subtle changes in cortical microglia and oligodendrocytes in a mouse model of amyotrophic lateral sclerosis.  
**Jana Tureckova** (Prague, Czech Republic)
- 1:40 pm T05-044B Astrocytes in focus: EAAT1-induced glutamate-toxicity plays a significant role in motor neuron degeneration in a late-onset spinal muscular atrophy mouse model  
**Linda-Isabell Schmitt** (Essen, Germany)





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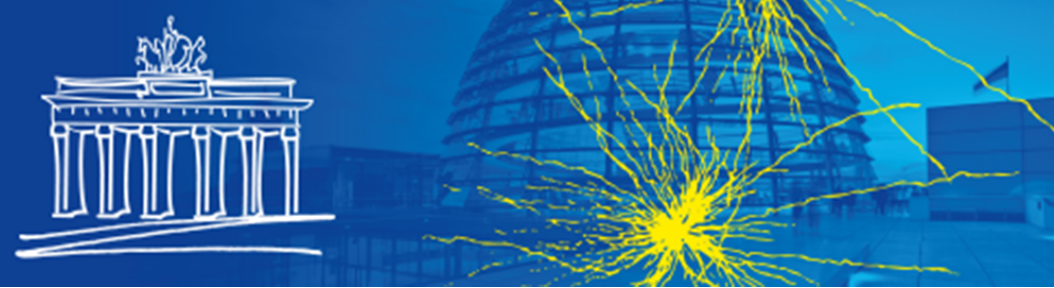


- 1:41 pm T05-045B Evaluation of astrocytes morphological changes in tauopathies  
**Emma Augustin** (Fontenay-aux-Roses, France)
- 1:42 pm T05-046B New insights on the role of AQP4 and its isoforms in cerebral water homeostasis: an *in vitro* and *in vivo* study  
**Pasqua Abbrescia** (Bari, Italy)
- 1:43 pm T05-047B CB<sub>2</sub> receptor in glial cells as a new therapeutic target in amyotrophic lateral sclerosis and frontotemporal dementia.  
**Carmen Rodriguez-Cueto** (MADRID, Spain)
- 1:44 pm T05-048B Characterising functional effects of fibrinogen on TREM2-mutant human iPSC-microglia  
**Emily Boorman** (London, UK)
- 1:45 pm T05-049B S100B protein plays a crucial role in astrocyte activation  
**Fabrizio Michetti** (Rome, Italy)
- 1:46 pm T05-050B Human iPSC derived Microglia model for Toxicology assays  
**János Farkas** (Gödöllő, Hungary)
- 1:47 pm T05-051B Identifying biomarkers for potential pathological mechanisms in neurological diseases  
**Paula Klassen** (Ulm, Germany)
- 1:48 pm T05-052B Polycaprolactone nanofiber substrates attenuate astrocyte reactivity following A1 stimulation  
**Gregory Thinnies** (Aachen, Germany)
- 1:49 pm T05-053B Phenotype changes of spinal cord microglia cells acutely purified from SOD1<sup>G93A</sup> ALS mice during disease progression: focus on the genetic down regulation of mGlu5 receptor  
**Matilde Balbi** (Genoa, Italy)
- 1:50 pm T05-054B Astroglial GABA<sub>B</sub> receptor deletion protects against  $\gamma$ -hydroxybutyric acid-induced absence seizures  
**Davide Gobbo** (Homburg, Germany)
- 1:51 pm T05-055B The Influence of TGF $\beta$  signaling on the phagocytosis of amyloid beta species  
**Natascha Vidovic** (Bielefeld, Germany)



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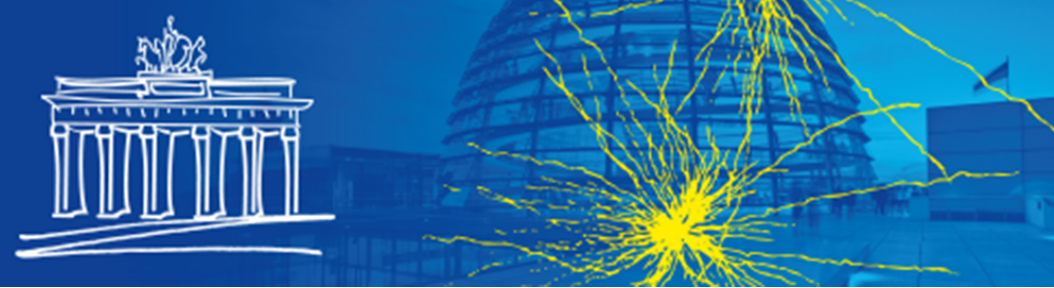


- 1:52 pm T05-056B Novel assay for the detection of serum-mediated astrocytopathy in neuromyelitis optica spectrum disorders based on human astrocytes  
**Marlen Alisch** (Berlin, Germany)
- 1:53 pm T05-057B Developing organotypic chimeric human-murine brain slices as a model system for studying neurodegeneration  
**Bakhrom Muinjonov** (Berlin, Germany)
- 1:54 pm T05-058B A repurposing approach to delay disease progression in  $SOD1^{G93A}$  mice by counteracting oligodendrocyte dysfunction  
**Stefano Raffaele** (Milano, Italy)
- 1:55 pm T05-059B The Alzheimer's disease risk gene *INPP5D* modulates microglia-mediated synaptic pruning in the developing hippocampus  
**Alessandro Matera** (Lausanne, Switzerland)
- 1:56 pm T06-013B Rewiring of glucose and lipid metabolism induced by GPR17 silencing enables the transition of oligodendrocyte progenitors to myelinating cells  
**Davide Lecca** (Milan, Italy)
- 1:57 pm T06-014B Role of blood brain barrier *Drosophila* monocarboxylate transporters in the adaptive response to nutritional restriction.  
**Andres Gonzalez-Gutierrez** (Santiago, Chile)
- 1:58 pm T06-015B Myelin lipids as nervous system energy reserves  
**Ebrahim Asadollahi** (Göttingen, Germany)
- 1:59 pm T06-016B Tanycyte FoxO1-dependent extracellular matrix (ECM) deposition regulates ghrelin action in AgRP neurons  
**Marta Porniece Kumar** (Cologne, Germany)
- 2:00 pm T06-017B Exploring the impact of oligodendroglial reactive oxygen species on axonal function  
**Urvashi Sanjay Dalvi** (Zürich, Switzerland)
- 2:01 pm T06-018B Understanding the Effect of the Ketogenic Diet on the Mouse Brain Using Genetically Encoded Metabolite Sensors  
**Rachel Meister** (Zurich, Switzerland)
- 2:02 pm T06-019B Extracellular pH is brain state dependent.  
**Zuzanna Bojarowska** (Copenhagen N, Denmark)



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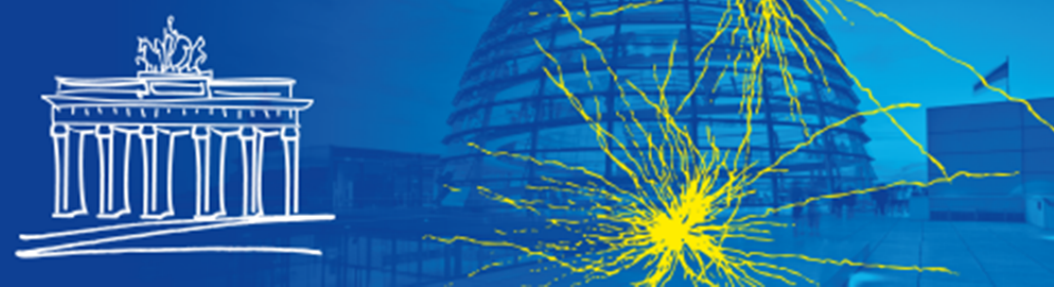


- 2:03 pm T06-020B L-serine-mediated PKM2 allosteric regulation coordinates L-serine synthesis, glycolytic rate and lactate release  
**Emmanuel Than-Trong** (Fontenay-aux-Roses, France)
- 2:04 pm T06-021B Characterization of Microglial Lipid Metabolism in Progressive Multiple Sclerosis  
**Monica E. Garcia-Segura** (Cambridge, UK)
- 2:05 pm T06-022B Noradrenaline-induced L-lactate production in rat astrocytes requires transit through the glycogen shunt which is dependent on cannabinoid signalling  
**Katja Fink** (Ljubljana, Slovenia)
- 2:06 pm T06-023B Astrocytic CREB neuroprotection in experimental traumatic brain injury is associated with regulation with energetics and lipid metabolism: role of lactate  
**Irene Fernández González** (Bellaterra, Spain)
- 2:07 pm T07-001B Viral-mediated fluorescent labelling of the extracellular matrix for live brain tissue imaging.  
**Mario Fernandez-Ballester** (Leioa, Spain)
- 2:08 pm T07-002B Distinct cell-free extracellular matrix composition between multiple sclerosis and toxin-induced demyelinated lesions  
**Jody M. de Jong** (Groningen, Netherlands)
- 2:09 pm T07-003B Role of cell adhesion molecules in oligodendrocyte-T cell interactions in MS  
**Haritha L. Desu** (Montreal, Canada)
- 2:10 pm T07-004B Phosphorylation and shedding of *DDR1* in the HOG16 human oligodendroglial cell line upon collagen IV incubation  
**Selena Aranda Castel** (Reus, Spain)
- 2:11 pm T07-005B Astrocytic hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>) and its role in collagen production and scar formation  
**Jae-Hun Lee** (Daejeon, South Korea)
- 2:12 pm T07-006B *Cspg4* governs oligodendrocyte lineage cell development  
**Samantha Bromley-Coolidge** (Denver, USA)
- 2:13 pm T08-011B Astrocyte-specific gene targets of the transcription factor ZEB1  
**Niharika Singh** (Cardiff, UK)



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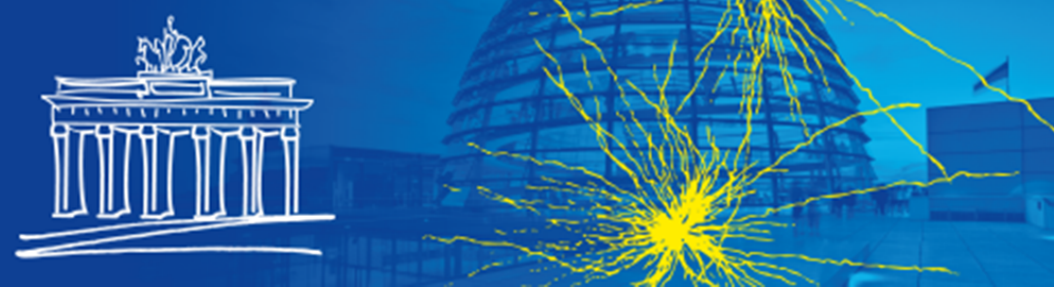
- 2:14 pm T08-012B snRNAseq of microglia and astrocytes in a model of remyelination failure  
**Katie Emberley** (Portland, USA)
- 2:15 pm T08-013B Spatial gene expression profiling predicts multiple sclerosis lesion evolution  
**Marion H.C. Wijering** (Groningen, Netherlands)
- 2:16 pm T08-014B Effective extraction of polyribosomes exposes gene expression strategies in primary astrocytes  
**Shir Mandelboum** (Tel Aviv, Israel)
- 2:17 pm T08-015B The transcription factor Zfh2 acts in glia to regulate CNS development and motor behavior  
**Adela Ralbovska** (Montreal, Canada)
- 2:18 pm T08-016B A single-cell transcriptomics approach to identifying senescent retinal glia via the SenMayo panel.  
**Samyuktha Suresh** (Singapore, Singapore)
- 2:19 pm T08-017B A far upstream enhancer is a crucial regulator of catecholamine-dependent expression of the neurotrophin *Bdnf* in rodent astrocytes  
**Annela Avarlaid** (Tallinn, Estonia)
- 2:20 pm T08-018B All roads lead to astrocyte identity – Different human induced pluripotent stem cell to astrocyte differentiation protocols reveal high transcriptomic concordance with primary astrocytes  
**Luisa Egert** (Planegg, Germany)
- 2:21 pm T09-010B *Helicobacter pylori* outer membrane vesicles induce astrocyte reactivity and demyelination in organotypic cerebellar slice cultures  
**Esteban Palacios** (Groningen, Netherlands)
- 2:22 pm T09-011B Human iPSCs-derived astrocytes and oligodendrocytes as the first Autosomal Dominant Leukodystrophy-relevant cellular models  
**Martina Lorenzati** (Orbassano (Turin), Italy)
- 2:23 pm T09-012B Dynamic clearance of dying oligodendrocytes by single microglia  
**Genaro E. Olveda** (Hanover, USA)





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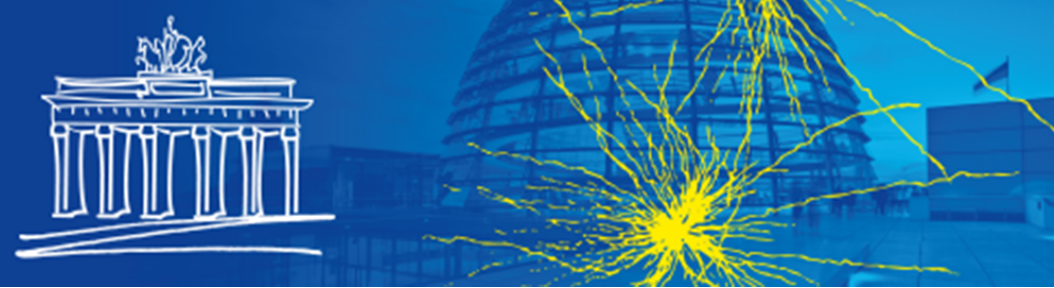


- 2:24 pm T09-013B Glia cells in a mouse model of stuttering disorder: a morphometric study  
**Afuh Adeck** (Frederick, USA)
- 2:25 pm T09-014B Reconstructing glial dynamics and interactions underlying early pathological events in Alzheimer's mouse models  
**Anna Schmidtner** (Jerusalem, Israel)
- 2:26 pm T09-015B *Exclusive perivascular localization of AQP4<sup>ex</sup> in mouse brain after stereotaxic lentiviral gene delivery*  
**Gianluca Signorile** (Bari, Italy)
- 2:27 pm T09-016B Microglia and astrocytes regulate adult hippocampal neurogenesis in an inflammatory context in vitro  
**Marta Vilademunt Alcaide** (Prilly, Switzerland)
- 2:28 pm T09-017B Coupling of calcium events in the cortical astrocyte network  
**Max Collard** (San Francisco, USA)
- 2:29 pm T10-016B Genetic analysis of wrapping glia development in Drosophila  
**Marie Baldenius** (Münster, Germany)
- 2:30 pm T10-017B Unveiling the diversity of cerebellar astrocytes: insights into their molecular identities, development and functions  
**Valentina Cerrato** (Orbassano, Torino, Italy)
- 2:31 pm T10-018B Functional and molecular characterization of the Olig2-AS, an astrocyte subtype  
**Clemence Debacq** (Toulouse cedex 09, France)
- 2:32 pm T10-019B The Key Players of CNS function: Exploring the Effects of Region, Age, and Sex on Human Glia Diversity  
**Luise A. Seeker** (Edinburgh, UK)
- 2:33 pm T10-020B Investigating a novel microglial phenotype in a genetic model of Parkinson's disease  
**Gurkirat Kaur** (Padova, Italy)
- 2:34 pm T10-021B Astrocyte heterogeneity in Alzheimer's disease  
**Yiannis Poulot** (Fontenay-aux-roses, France)



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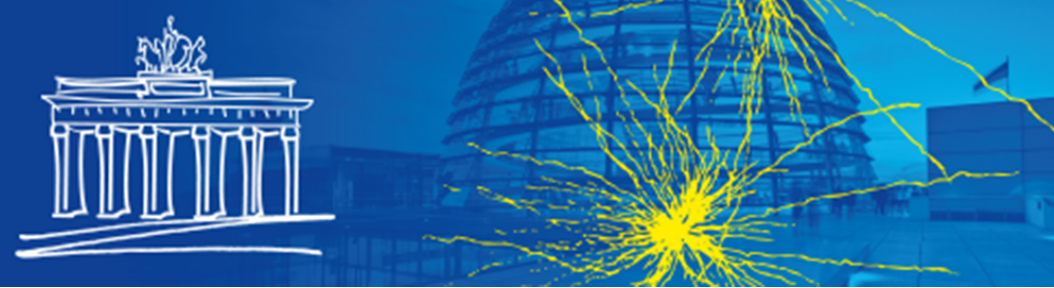


- 2:35 pm T10-022B Characterization of astrocyte reactivity in a model of encephalopathy of prematurity  
**Ariane Heydari Olya** (Paris, France)
- 2:36 pm T10-023B Characterization of microglial states including dark microglia during postnatal development, in health and maternal immune activation  
**Sophia Loewen** (Victoria, Canada)
- 2:37 pm T10-024B Molecular heterogeneity of ischemic injury-induced reactive astrocytes.  
**Rachel D. Kim** (New York, USA)
- 2:38 pm T10-025B Exploring myelinating glial plasticity at motor exit point transition zones  
**Laura Fontenas** (Jupiter, USA)
- 2:39 pm T10-026B Alterations of Astrocytic Aquaporin 4 expression and morphological distributions in Down syndrome with Alzheimer's Disease  
**Cherie Lepe (Stringer)** (Irvine, USA)
- 2:40 pm T10-027B Comparison of olfactory ensheathing cells from the olfactory bulb and olfactory mucosa revealing differences in migration patterns  
**Sophie Steinwenter** (Wien, Austria)
- 2:41 pm T10-028B Microglial diversity along the hippocampal longitudinal axis impacts synaptic plasticity in adult male mice under homeostatic conditions.  
**Eleonora De Felice** (Rome, Italy)
- 2:42 pm T10-029B Investigation of astroglial heterogeneity in the human cortex and caudate nucleus  
**Paulina Hoppa** (Budapest, Hungary)
- 2:43 pm T10-030B Radial glia and progenitor diversity in the brain of the fast-aging African turquoise killifish  
**Caroline Zandecki** (Leuven, Belgium)
- 2:44 pm T11-042B MeCP2 deficiency in astrocytes alters synaptogenesis through IL-6 mediated non-cell autonomous mechanism  
**Martina Breccia** (Milano, Italy)
- 2:45 pm T11-043B N-acetyl cysteine rescues cortical glial cell populations and results in functional improvements in a mouse model of primary autosomal recessive microcephaly 17 (MCPH17)  
**Maryam Khastkhodaei Ardakani** (Torino, Italy)



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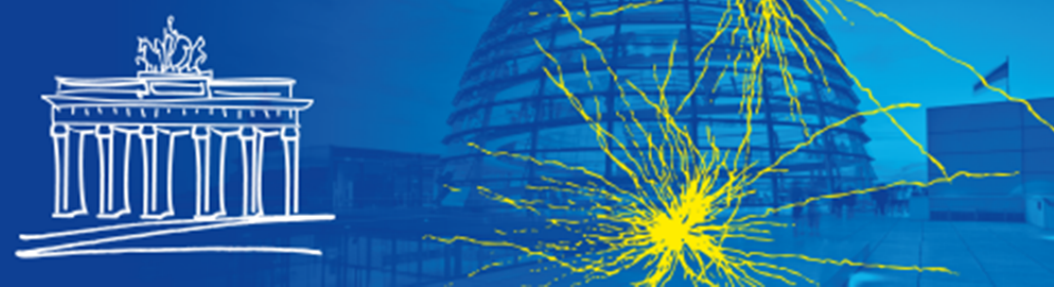


- 2:46 pm T11-044B Sex specific differences in the secretome of oligodendrocyte progenitor cells post hyperoxic stress  
**Donna E. Sunny** (Greifswald, Germany)
- 2:47 pm T11-045B Microglia Actively Remove NR1 Autoantibody-Bound NMDA Receptors And Associated Post-Synaptic Proteins In Neuron Microglia Co-cultures.  
**Kazi Atikur Rahman** (Berlin, Germany)
- 2:48 pm T11-046B Examining the regulation of resident mRNAs in myelin plasticity  
**Kadidia P. Adula** (Aurora, USA)
- 2:49 pm T11-047B Remyelination failure triggers MAP3K-mediated neurodegeneration  
**Greg J. Duncan** (Portland, USA)
- 2:50 pm T11-048B Astrocyte store-released calcium perturbation disrupts glutamatergic synapse development  
**Isabella Farhy-Tselnicker** (College Station, USA), **Gillian Imrie** (College Station, USA)
- 2:51 pm T11-049B Rapid differentiation of induced pluripotent stem cells towards mature astrocytes  
**Imke M.E. Schuurmans** (Nijmegen, Netherlands)
- 2:52 pm T11-050B Adenosine mediates metabolic signaling between neurons and astrocytes  
**Shafeeq M. Theparambil** (London, UK)
- 2:53 pm T11-051B Tuberous Sclerosis Complex iPSC-derived cultures reveal the role of astrocyte-secreted factors in neuronal development  
**Stephanie Dooves** (Amsterdam, Netherlands)
- 2:54 pm T11-052B SOD1G93A astrocyte-derived extracellular vesicles induce motor neuron death by a miRNA-155-5p mediated mechanism.  
**Soledad Marton** (Montevideo, Uruguay)
- 2:55 pm T11-053B *BDNF Signaling onto Astrocyte TrkB.T1 Drives Astrocyte Structural Plasticity Supporting Glutamatergic Synaptogenesis*  
**Michelle L. Olsen** (Blacksburg, USA)
- 2:56 pm T11-054B Cortical astrocyte N-Methyl-D-Aspartate receptors influence whisker barrel activity and sensory discrimination  
**Noushin Ahmadpour** (Winnipeg, Canada)



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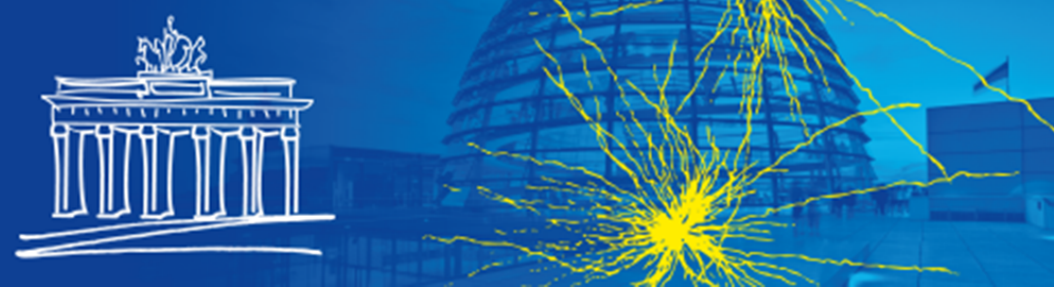
- 2:57 pm T11-055B Astrocytic contribution in spasticity after spinal cord injury  
**Tony Barbay** (Marseille, France)
- 2:58 pm T11-056B Unravelling glia-specific contributions to neuronal network phenotypes: engineering a human stem cell-derived tri-culture on multielectrode arrays  
**Annika Mordelt** (Nijmegen, Netherlands)
- 2:59 pm T11-057B Population calcium activity in cortical astrocytes during mouse locomotion  
**Anna Fedotova** (Moscow, Russia)
- 3:00 pm T11-058B Bioelectrical properties in oligodendrocyte precursor cells drive differences in their proliferation capacity  
**Helena Pivonkova** (Cambridge, UK)
- 3:01 pm T11-059B Investigating mechanisms by which oligodendrocyte precursor cells regulate arbour size of retinal ganglion cell axons in the zebrafish visual system.  
**Emma Dumble** (Edinburgh, UK)
- 3:02 pm T11-060B Perinatal inflammation impairs neuroglia plasticity of cerebellum in a sex-dependent manner  
**Maryam Ardalan** (Gothenburg, Sweden)
- 3:03 pm T11-061B Microglia regulate autonomic function via modulating pre-sympathetic neurons in the hypothalamic paraventricular nucleus  
**Peng Shi** (Hangzhou, China)
- 3:04 pm T11-062B Tunneling nanotubes-mediated functional interactions between neuronal and microglial cells  
**Ranabir Chakraborty** (Paris, France)
- 3:05 pm T11-063B Microglial Dysfunction and Synaptic Alterations within Inflamed Circuits in the Degenerating Visual System of Multiple Sclerosis-relevant mouse models  
**Sebastian Werneburg** (Ann Arbor, USA)
- 3:06 pm T11-064B Investigating neuron-oligodendrocyte precursor cell communication using dual-colour calcium imaging in a zebrafish *in vivo* model  
**Patricia Bispo** (Edinburgh, UK)
- 3:07 pm T11-065B Development of a murine 3D-tri-culture approach for the analysis of neuron-glia interactions  
**Christian Schmeer** (Jena, Germany)





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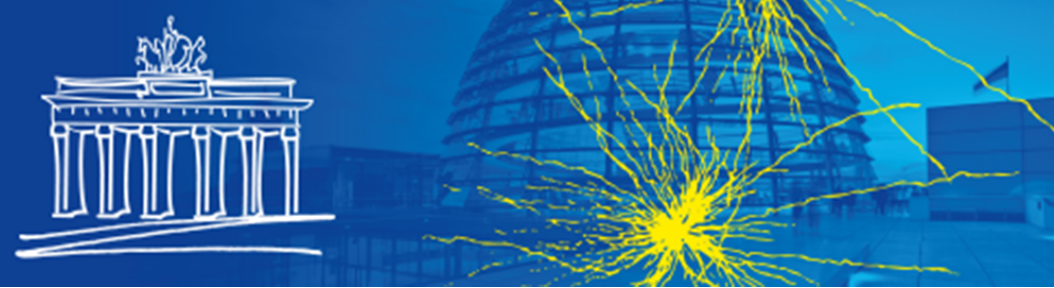


- 3:08 pm T11-066B Conversations with friends: Examining pyramidal cells and microglia interaction during development  
**Fong Kuan Wong** (Manchester, UK)
- 3:09 pm T11-067B Effect of a peptide secreted by astrocytes on adult hippocampal neurogenesis  
**Charline Carron** (Lausanne, Switzerland)
- 3:10 pm T11-068B Human iPSC-derived microglia in 3D MICro-brains: A three-dimensional myelination & inflammation cortical network platform  
**Sakshi Bansal** (Rotterdam, Netherlands)
- 3:11 pm T11-069B Locomotion differently changes the mitochondria redox state and H<sub>2</sub>O<sub>2</sub> production in astrocytes and neurons  
**Alisa Tiaglik** (Jiaxing, China)
- 3:12 pm T11-070B (Pro)Renin-induced microglial proinflammatory response enhances dopaminergic neuronal death  
**Andrea Lopez-Lopez** (Santiago de Compostela, Spain)
- 3:13 pm T11-071B Impact of aberrant neuronal activity on oligodendrocyte lineage cells in a mouse model of focal cortical dysplasia  
**Bohdana Hruskova** (Prague 5, Czech Republic)
- 3:14 pm T11-072B Investigations on the contribution of the astrocytic connexin-43 in the pathogenesis of spinal muscular atrophy in a mouse model  
**Schahin Salmanian** (Essen, Germany)
- 3:15 pm T11-073B Human microglia enhance developmental neuronal maturation and induce synapse activation  
**Balazs Varga** (Cambridge, UK)
- 3:16 pm T11-074B Computational modeling of neuron-astrocyte interactions in networks: Experiments, theory, and models  
**Tiina Manninen** (Tampere, Finland)
- 3:17 pm T11-075B Regulation of striatal synaptic connectivity by astrocytic phagocytosis  
**Ji-young Kim** (Daegu, South Korea)
- 3:18 pm T11-076B Improved gliotransmission by increasing intracellular Ca<sup>2+</sup> via TRPV1 on multi-walled carbon nanotube platforms  
**Won-Seok Lee** (Cheonan-si, Chungcheongnam-do, South Korea)



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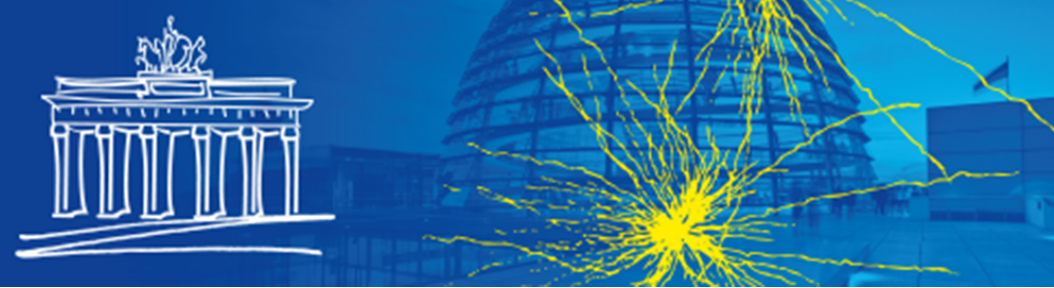


- 3:19 pm T11-077B Neuronal Response to *In Vivo* Autoimmune Astrocyte Ablation in the Mouse Cortex  
**Nicola B. Schmid** (Zurich, Switzerland)
- 3:20 pm T11-078B Neuronal activity modulates microglia phenotype in repair through microglia-node of Ranvier interaction.  
**Clement Perrot** (Paris, France)
- 3:21 pm T11-079B Remission after stress via enriched environment increases hippocampal dendritic spine density independent of microglia  
**Fabrizio Musacchio** (Bonn, Germany)
- 3:22 pm T11-080B Radial glial action potentials initiate fetal motor activity  
**Jean-Marie Mangin** (Paris, France)
- 3:23 pm T11-081B The role of the postsynaptic scaffold protein SHANK3 in NG2-glia in the adult brain and in autism spectrum disorder  
**Katrin Volbracht** (Ulm, Germany)
- 3:24 pm T11-082B Microglia mediate the plasticity-promoting effect of TNF $\alpha$   
**Dimitrios Kleidonas** (Freiburg, Germany)
- 3:25 pm T12-011B Cerebral ischemia model optimised for two-photon imaging  
**María Isabel Ardaya Franco** (Leioa, Spain)
- 3:26 pm T12-012B Cell-type dependent regulation of stemness in glioblastoma cells through Bafilomycin A1 during hypoxia and acidosis  
**Eleni Roussa** (Freiburg, Germany)
- 3:27 pm T12-013B Spatiotemporal transcriptomic landscape of experimental ischemic brain injury  
**Lukas Valihrach** (Vestec, Czech Republic)
- 3:28 pm T12-014B The role of astrocyte dysfunction in the evolution of spreading depolarization during ischemia  
**Rita Frank** (Szeged, Hungary)
- 3:29 pm T12-015B Evaluation of the deleterious effect of hyperglycemia in experimental stroke: role of the hypoxia-inducible factor (HIF).  
**María Isabel Hernández Cortés** (Leioa, Vizcaya, Spain)



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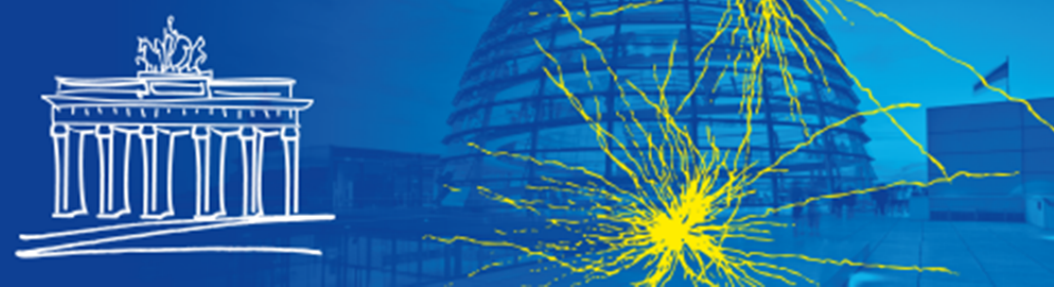


- 3:30 pm T12-016B Inhibition of peptidylarginine deiminase 4 confers neuroprotective effects in the post-ischemic brain via anti-inflammatory effects  
**Song-I Seol** (Incheon, South Korea)
- 3:31 pm T12-017B HMGB1-mediated hepcidin upregulation in astrocytes causes an acute iron surge and subsequent ferroptosis in the post-ischemic brain  
**Dashdulam Davaanyam** (Incheon, South Korea)
- 3:32 pm T12-018B Oligodendrocytes are key players in the montelukast-induced protection against stroke  
**Majeda Muluhie** (Milan, Italy)
- 3:33 pm T12-019B Targeting Ionotropic Glutamate Receptors in Models of Focal Cerebral Ischemia  
**Daniel Morgan** (Plymouth, UK)
- 3:34 pm T12-020B Effect of Ischemia on Oligodendrocyte Morphology in the Mouse Optic Nerve  
**Naomi H. Lynham** (Plymouth, UK)
- 3:35 pm T14-027B Dock1 Regulates Developmental and Regenerative Schwann Cell Myelination  
**Ryan A. Doan** (Portland, USA)
- 3:36 pm T14-028B Myelin insulation as a risk factor for axonal degeneration in autoimmune demyelinating disease  
**Mar Bosch Queralt** (Leipzig, Germany)
- 3:37 pm T14-029B Caveolin-1 as a novel interaction partner of PMP22 gives insights into the regulation and dysregulation of peripheral nerve myelination  
**Daniela Stausberg** (Göttingen, Germany)
- 3:38 pm T14-030B A humanized mouse model to study remyelination after demyelination in spinal cord.  
**Beatriz Garcia Diaz** (Malaga, Spain)
- 3:39 pm T14-031B Autophagic degradation of CNS myelin maintains axon integrity  
**Niki Ktena** (Heraklion, Greece)
- 3:40 pm T14-032B Role of clathrin-mediated endocytosis in myelinating oligodendrocytes  
**Sophie Siems** (Göttingen, Germany)



# XVI European Meeting on Glial Cells in Health and Disease

**Berlin** | July 8–11, 2023



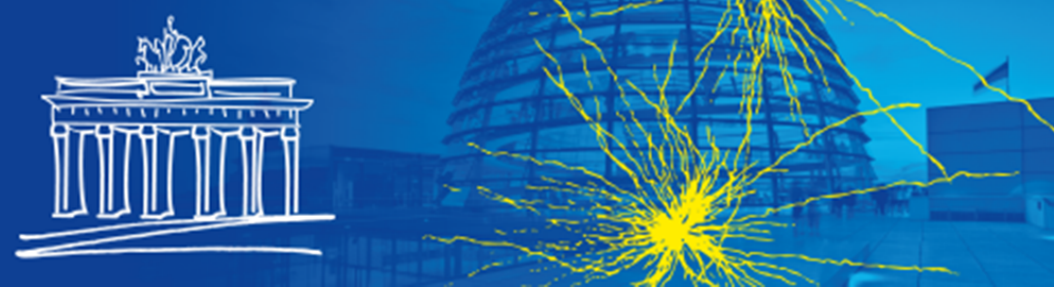
- 3:41 pm T14-033B Molecular diversity of CNS myelin  
**Silya Gargareta** (Göttingen, Germany)
- 3:42 pm T14-034B Toxic CUG RNA repeats disrupt developmentally-regulated splicing in oligodendrocytes causing transient hypomyelination in a mouse model of myotonic dystrophy  
**Louison Lallemand** (Paris, France)
- 3:43 pm T14-035B Region-specific myelin changes along the mouse lifespan  
**Sebastian Timmler** (Cambridge, UK)
- 3:44 pm T14-036B High Dose Pharmaceutical Grade Biotin (MD1003) Accelerates Differentiation of Murine and Grafted Human Oligodendrocyte Progenitor Cells In Vivo  
**Sabah Mozafari** (Paris, France)
- 3:45 pm T14-037B Mechanisms controlling neuroblasts migration and reprogramming during myelin repair.  
**Marie Falque** (Marseille, France)
- 3:46 pm T14-038B Visualizing live myelinic channels for a mechanistic understanding of myelin wrapping  
**Daryan Chitsaz** (Montreal, Canada)
- 3:47 pm T14-039B Are there different mechanisms of oligodendrocyte recruitment in regeneration and plasticity?  
**Laura J. Hoodless** (Edinburgh, UK)
- 3:48 pm T14-040B Myelin plasticity in ventral tegmental area is required for opioid reward  
**Belgin Yalcin** (Stanford, USA)
- 3:49 pm T14-041B Exploring the role of voltage-gated calcium channel subunits in activity-dependent myelination in the central nervous system  
**Wenjing Sun** (Columbus, USA)
- 3:50 pm T14-042B Novel mechanism of myelination regulation in neurodevelopmental disorders  
**Gilad Levy** (Tel-Aviv, Israel)
- 3:51 pm T14-043B Effect of axon stiffness on myelin ensheathment by oligodendrocytes  
**Mingyu Yang** (Cambridge, USA)





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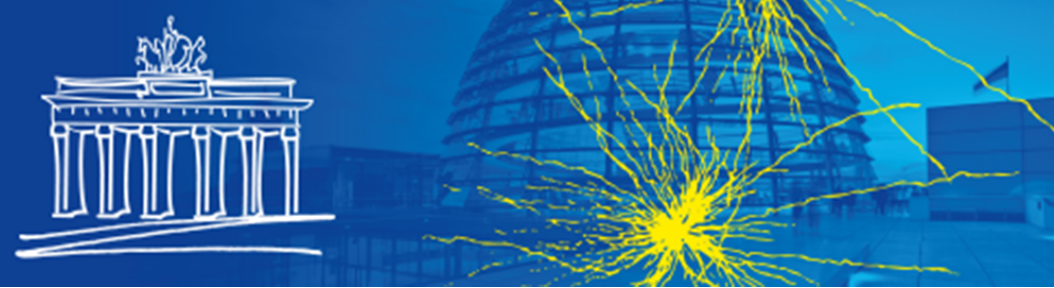


- 3:52 pm T14-044B Prolactin receptor deficiency promotes hypomyelination in white matter tracts during central nervous system maturation in mice  
**Ana Luisa Ocampo Ruiz** (Querétaro, Mexico)
- 3:53 pm T14-045B Imbalance of NRG1 type III-ERBB2/3 signaling underlies altered myelination in Charcot-Marie-Tooth disease type 4H  
**Valerie Delague** (Marseille, France)
- 3:54 pm T14-046B Citron-kinase loss leads to hypomyelination *via* cell autonomous and non-cell autonomous mechanisms  
**Martino Bonato** (Turin, Italy)
- 3:55 pm T14-047B Exploring the Pathogenic Role of Claudin-11 Mutations in Hypomyelinating Leukodystrophy Using a Novel Humanized Knock-In Mouse Model  
**Oguz K. Ozgoren** (Vancouver, Canada)
- 3:56 pm T14-048B RhoA Is a Putative Negative Regulator of CNS Myelination  
**Raquel Vale Silva** (Porto, Portugal)
- 3:57 pm T14-049B Using human iPSC-derived organoids to model demyelination, oligodendrocyte dysfunction and microglial toxicity in Multiple Sclerosis  
**Shwathy Ramesan** (Melbourne, Australia)
- 3:58 pm T14-050B Astrocyte-specific deletion of the volume-regulated anion channel does not reproduce key aspects of Megalencephalic Leukoencephalopathy with subcortical Cysts  
**Sven Kerst** (Amsterdam, Netherlands)
- 3:59 pm T14-051B Prostaglandin D2 synthase controls Schwann cells metabolism  
**Rosa La Marca** (Milan, Italy)
- 4:00 pm T15-007B Nanoscale interfaces alter adult mice neurospheres adhesion morphology and differentiation  
**Chiara Lazzarini** (Bologna, Italy)
- 4:01 pm T15-008B Effects of peripheral trauma on adult neurogenesis and the reaction of glial cells in the brain  
**Marsela Hakani** (Ulm, Germany)
- 4:02 pm T15-009B Noradrenergic agonists attenuate microglial inflammation and impairments in hippocampal neurogenesis induced by whole-brain irradiation  
**Isabeau De Bie** (Ghent, Belgium)



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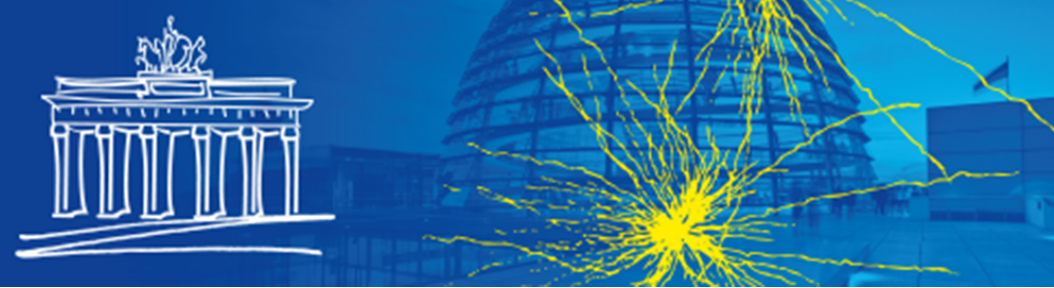


- 4:03 pm T15-010B Galectin-3 regulates apical-basal polarity in the developing forebrain  
**Francis Szele** (Oxford, UK)
- 4:04 pm T15-011B Developmental origin of enteric glial cell plasticity  
**Anna Laddach** (London, UK)
- 4:05 pm T15-012B Striatal astrocytes generate a novel neuron type that transiently integrates into damaged circuits  
**Giulia Nato** (Orbassano, Italy)
- 4:06 pm T16-056B miR-21 is deregulated in *ex vivo* and *in vitro* models of demyelination and neuroinflammation  
**María Muñoz San Martín** (Dublin, Ireland)
- 4:07 pm T16-057B Brain Inflammation Triggers Macrophage Invasion Across the Blood-Brain Barrier in *Drosophila*  
**Bente Winkler** (Muenster, Germany)
- 4:08 pm T16-058B An *in vitro* and *ex vivo* analysis of the potential of GelMA hydrogels as a therapeutic platform for preclinical spinal cord injury.  
**Ciara M. Walsh** (Dublin, Ireland)
- 4:09 pm T16-059B Immunotherapy-related cognitive impairment after CAR T cell therapy in mice  
**Anna Geraghty** (Palo Alto, USA)
- 4:10 pm T16-060B Choroid Plexus Immune Activation and Barrier Integrity Breakdown in Amyotrophic Lateral Sclerosis Mouse Model  
**Anna Dong** (Cambridge, USA)
- 4:11 pm T16-061B Effects of influenza A virus infection on hippocampal neuron structure and function in aged wild-type mice  
**Shirin Hosseini** (Braunschweig, Germany)
- 4:12 pm T16-062B Incorporation of human iPSC-derived microglia into test systems to study early brain development  
**Chiara S. Wolfbeisz** (Konstanz, Germany)
- 4:13 pm T16-063B Forced polarisation of microglia by IL-13 is modified by microenvironmental context.  
**Emmanuelle D. Aiyegbusi** (Dublin, Ireland)



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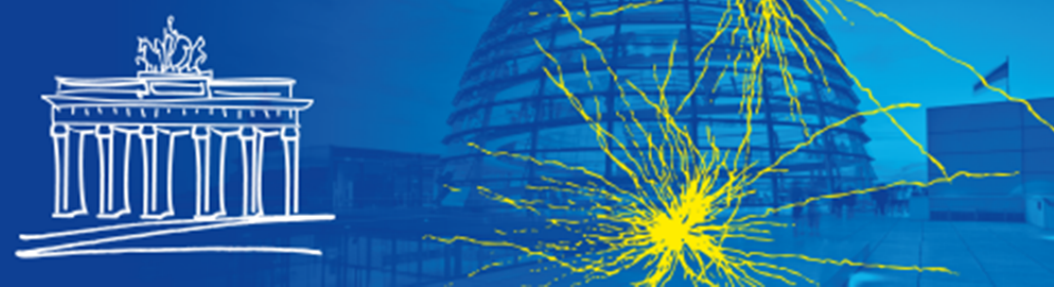


- 4:14 pm T16-064B Manganese-induced microglial LRRK2 hyper kinase activity induces neuroinflammation via Rab10 in mice, which is further exacerbated in LRRK2 G2019S mutation  
**Eunsook Lee** (Tallahassee, USA)
- 4:15 pm T16-065B Impact of diesel-exhaust derived air pollution on transcriptome and functionality of human iPSC-derived microglia  
**Sohvi Ohtonen** (Kuopio, Finland)
- 4:16 pm T16-066B Microglial impairment as a novel basis for hypothalamic dysfunction in Prader-Willi Syndrome  
**Felipe Correa da Silva** (Amsterdam, Netherlands)
- 4:17 pm T16-067B Modulation of neuroinflammation by cannabinoids and cannabis cultivars: possible implications for multiple sclerosis  
**Sigal Fleisher-Berkovich** (Beer-Sheva, Israel)
- 4:18 pm T16-068B Microglial DLG4 functions in Neurodevelopmental Disorders associated to Prematurity  
**Florence Julien-Marsollier** (Paris, France)
- 4:19 pm T16-069B Establishing an *ex-vivo* model of neuro-inflammatory driven white matter pathology and its use as a drug testing platform  
**Verity F.T. Mitchener** (Plymouth, UK)
- 4:20 pm T16-070B THIK-1 controls microglial interleukin-1 $\beta$  release in the human brain  
**Ali Rifat** (Berlin, Germany)
- 4:21 pm T16-071B Fucoxanthin's therapeutic and protective properties prevented UVB-induced astrocyte activation of the trigeminal ganglion in a rat model.  
**Shiu-Jau Chen** (New Taipei City, Taiwan)
- 4:22 pm T16-072B Maternal obesity impairs neuroglia plasticity in the cerebellum of adult offspring  
**Seyedeh Marziyeh Jabbari Shiadeh** (Göteborg, Sweden)
- 4:23 pm T16-073B Endogenous Sox8 is a critical factor for oligodendroglial cell repletion and myelin integrity in the cuprizone model of demyelination  
**David Freudenstein** (Regensburg, Germany)
- 4:24 pm T16-074B Additive deleterious effects of delivery mode on perinatal brain injuries: microbiota's fault.  
**Cindy Bokobza** (Paris, France)



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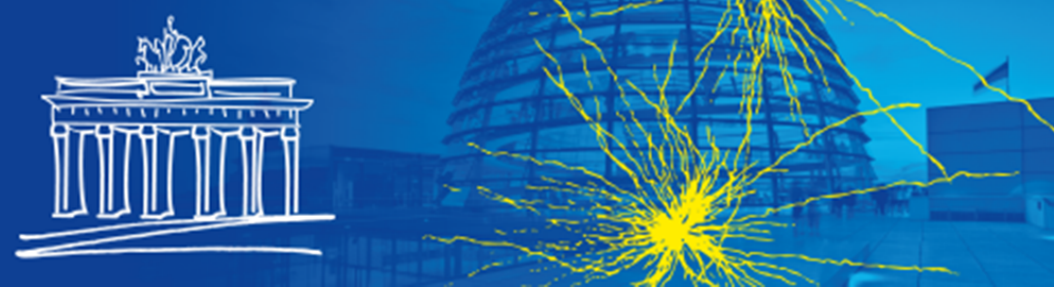
- 4:25 pm T16-075B The effects of chronic high-dose morphine on microgliosis and the microglial transcriptome in rat spinal cord  
**Fredrik H. Ahlström** (Helsinki, Finland)
- 4:26 pm T16-076B Assessment of the therapeutic potential of MaR1 for the treatment of acute Spinal Cord Injury and characterization of its receptors in the lesioned spinal cord  
**Marc Caro Cantón** (Bellaterra, Spain)
- 4:27 pm T16-077B Interplay Between Microglial Receptor TREM2 and Maternal Immune Challenges in Schizophrenia  
**Matteo Bizzotto** (Pieve Emanuele, Italy)
- 4:28 pm T16-078B Targeting PPAR $\delta$ / $\beta$  pathways to regulate inflammatory responses in human microglia *in vitro*.  
**Rawan Aloufi** (Nottingham, UK)
- 4:29 pm T16-079B A new cerebral organoid culture model to study microglia during neurodevelopment and neuropathology and the effects of novel drugs targeting microglia  
**Alice Buonfiglioli** (New York, USA)
- 4:30 pm T16-080B Interleukin-12-driven crosstalk in Alzheimer's disease affecting oligodendrocyte survival and myelination  
**Maria Geesdorf** (Berlin, Germany)
- 4:31 pm T16-081B The role of NG2-glia in neuroinflammation  
**Maja Papic** (Mainz, Germany)
- 4:32 pm T16-082B FABP7 expression modulates the response of astrocytes to inflammatory stimuli  
**Marcelo R. Vargas** (Madison, USA)
- 4:33 pm T16-083B Microglial CD300f immune receptor contributes to synaptic pruning and depression by recruiting CCR2+ macrophages  
**Daniela Alí** (Montevideo, Uruguay)
- 4:34 pm T16-084B Single-cell spatial proteomics approach to study microglial cell phenotype in health and pathology using CODEX multiplex imaging technology  
**Paula Sanchez-Molina** (Portland, USA)
- 4:35 pm T16-085B Cytosolic HMGB1 mediates LPS-induced autophagy in microglia by interacting with NOD2 and suppresses its proinflammatory function  
**Sang-A Oh** (Incheon, South Korea)





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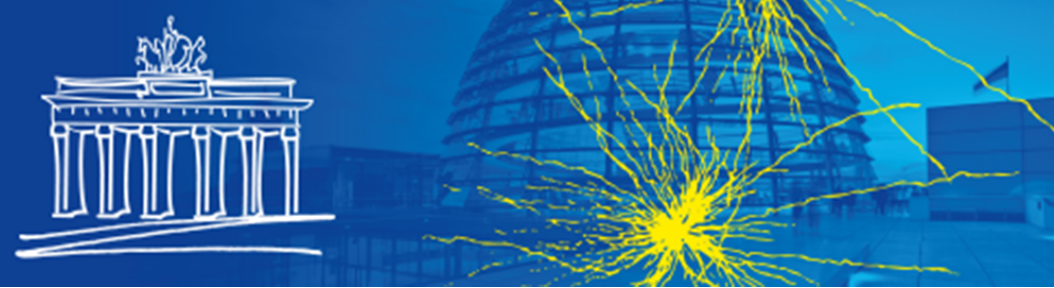


- 4:36 pm T16-086B Complement in Glial Components of the Sciatic Nerve  
**Shani Berkowitz** (Ramat Gan, Israel)
- 4:37 pm T16-087B LRRK2 G2019S attenuates repair of brain injury by reducing osteopontin expression and release of monocytic exosomes  
**Eun-Hye Joe** (Suwon, South Korea)
- 4:38 pm T16-088B IFN $\gamma$  induced inflammatory profile on human microglia is enhanced on interaction with alpha-synuclein fibrils  
**Jonna Niskanen** (Kuopio, Finland)
- 4:39 pm T16-089B Epigenetic regulation of phosphatidylinositol 3-kinase (PI3K) by miR-21-5p and HDAC3i in murine microglia  
**S. Thameem Dheen** (Singapore, Singapore)
- 4:40 pm T16-090B The JAK1/2-inhibitor ruxolitinib prevents the lasting interferon-gamma-mediated priming of microglia (brain macrophages)  
**Marc Schulz** (Heidelberg, Germany)
- 4:41 pm T16-091B Role of the immunoreceptor CD200R1 in neuroinflammation induced by spinal cord injury and LPS challenge  
**Natalia Lago Pérez** (Bellaterra, Spain)
- 4:42 pm T16-092B Studying the heterogeneity of extracellular vesicles upon neuroinflammatory stimulation: comparing an in vitro, ex vivo and in vivo set-up  
**Lien Cools** (Leuven, Belgium)
- 4:43 pm T16-093B Persistent infection of seasonal and pandemic influenza viruses in a hiPSC-derived neural model  
**Feline F.W. Benavides** (Rotterdam, Netherlands)
- 4:44 pm T16-094B IL-38 characterization in Experimental Autoimmune Encephalomyelitis and Multiple Sclerosis  
**Néstor López González** (Bellaterra (Cerdanyola del Vallès), Spain)
- 4:45 pm T16-095B Lipidomic profile changes associated with loss of phagocytic activity in iron-treated microglia  
**Sylvester, Shu Ming Wong** (Singapore, Singapore)
- 4:46 pm T16-096B Influenza vaccine is able to prevent neuroinflammation triggered by H7N7 IAV infection  
**Luisa Demuth** (Braunschweig, Germany)



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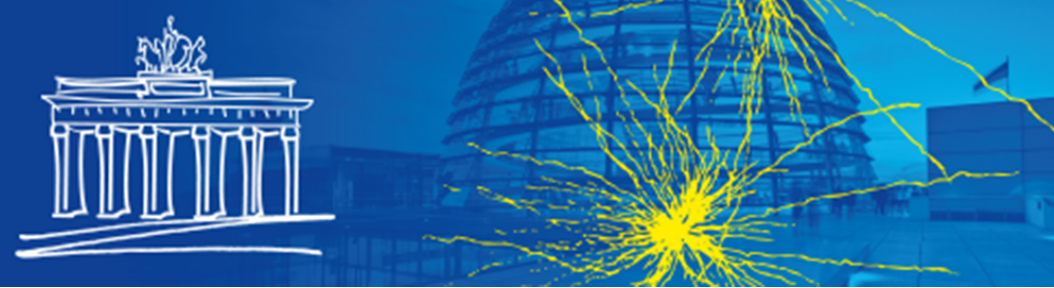


- 4:47 pm T16-097B Role of the cannabinoid receptor type 2 in microglia function in a mouse model of Alzheimer's disease.  
**M Teresa Grande** (Pozuelo de Alarcón, Spain)
- 4:48 pm T16-098B Mitochondrial dysfunction in microglia induced by sleep disorders promotes Neuroinflammation  
**Yachong Hu** (Xi'an, China)
- 4:49 pm T16-099B *In vitro* characterization of human SOD1<sup>G93A</sup> ALS embryonic stem cell-derived microglia  
**Joana Garcia Garcia** (Bellaterra, Spain)
- 4:50 pm T16-100B Large-scale proteomic analysis of male and female mice revealed sex-specific features following CNS injury.  
**Veronika Schwarz** (Planegg-Martinsried, Germany)
- 4:51 pm T16-101B Addressing human astrogliosis in a hiPSC-derived 3D CNS model  
**Catarina M. Gomes** (Oeiras, Portugal)
- 4:52 pm T16-102B Shared inflammatory glial cell signature after brain injury revealed by spatial, temporal and cell-type-specific profiling of the murine cerebral cortex  
**Christina Koupouridou** (Planegg-Martinsried, Germany)
- 4:53 pm T16-103B *Proteomic and Lipidomic characterization of peripheral blood exosomes as predictive biomarker in patients with Multiple Sclerosis*  
**Claudia Palazzo** (Bari, Italy)
- 4:54 pm T16-104B In vivo microglial BIN1 deletion following LPS-induced neuroinflammation regulates microglia proliferation and inflammatory response  
**Maria Margariti** (Athens, Greece)
- 4:55 pm T16-105B Does diroximel fumarate protect against ferroptosis?  
**Katinka Fischer** (Düsseldorf, Germany)
- 4:56 pm T16-106B Loss of Cox-1 attenuates microglia reactivity after optic nerve injury  
**Florianne E. Schoot Uiterkamp** (Klosterneuburg, Austria)
- 4:57 pm T16-107B NLRP3 regulates microglial metabolic state, impacting cellular function in Alzheimer's disease  
**Roisin M. McManus** (Bonn, Germany)



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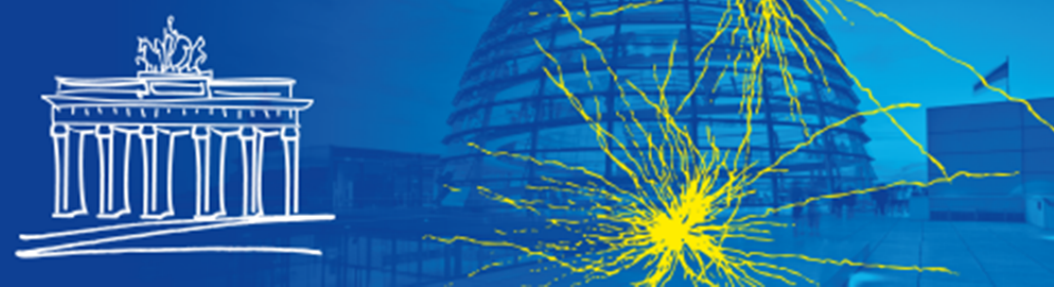


- 4:58 pm T16-108B Ageing and infection-induced neuroinflammation enhance microglial synaptic engulfment  
**Tabea Linde** (Magdeburg, Germany)
- 4:59 pm T16-109B A major role for type I interferon (IFNs-I) response and RNA-dependent kinase R (PKR) in directly activating microglia in the context of Zika virus infection  
**Violaine Bortolin** (Paris, France)
- 5:00 pm T16-110B Cellular and molecular mechanisms of the interferon-responsive gene *OAS1* in microglia for Alzheimer's disease  
**Naciye Magusali** (London, UK)
- 5:01 pm T18-001B Interleukin-1 signaling in the blood-brain barrier influences the behavioral response to chronic social stress  
**Eva Schramm** (Mainz, Germany)
- 5:02 pm T18-002B Astrocyte gap junctions regulate neuronal excitability and neurovascular coupling in the mouse cortex  
**Danica Bojovic** (Portland, USA)
- 5:03 pm T18-003B Terminal Schwann cells and Kranocytes: connecting Neuromuscular Junctions to vascular network in health, injury and disease.  
**Sandra Fuertes-Alvarez** (San Sebastian, Spain)
- 5:04 pm T18-004B Microglia change at micro- and nanoscopic scales in response to therapeutic focused ultrasound blood-brain barrier modulation  
**Elisa Gonçalves de Andrade** (Victoria, Canada)
- 5:05 pm T18-005B A network of CD163<sup>+</sup> macrophages monitors enhanced permeability at the blood-sensory ganglion barrier  
**Harald Lund** (Stockholm, Sweden)
- 5:06 pm T19-013B Optogenetic activation of astrocytes rescues synaptic defects and anxiety-like behavior in early life stress  
**Lan Xiao** (Chongqing, China)
- 5:07 pm T19-014B *The effect of MeCP2 mutations on microglia phenotype and function in Rett Syndrome*  
**Mara Graziani** (New york, USA)
- 5:08 pm T19-015B Astrocyte-mediated phagocytosis in mood and depressive-like disorders  
**Eugenia Vivi** (Regensburg, Germany)



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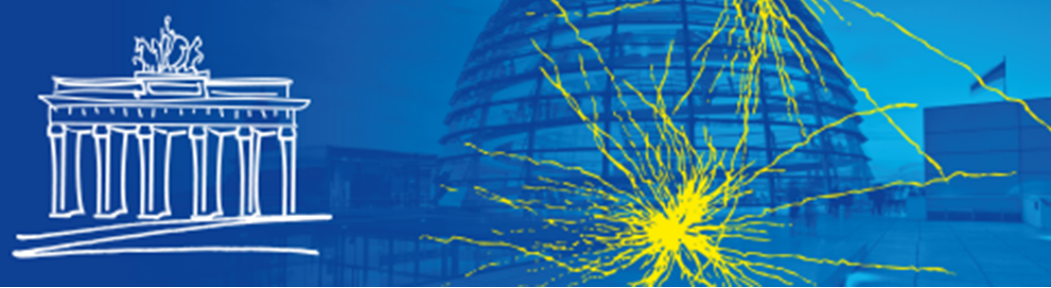
- 5:09 pm T19-016B Role of Astrocytic O-GlcNAcylation in Social and Cognitive Behavior  
**Prajitha Pradeep** (Daejeon, South Korea)
- 5:10 pm T19-017B Novel mechanisms underpinning fluoxetine-induced changes to astrocytic lactate release  
**Catriona Marston** (Bristol, UK)
- 5:11 pm T19-018B Preclinical and clinical evidence for IL-6 and CCL2 as potential mediators in the pathophysiology of psychosis  
**Chloë Trippaers** (Baltimore, USA)
- 5:12 pm T19-019B Circulating biomarkers indicate suicidal risk in patients with major depressive disorder  
**Alejandra P. Garza** (Magdeburg, Germany)
- 5:13 pm T19-020B Effects of chronic social stress on oligodendrocyte lineage proliferation-maturation and myelin status  
**Giulia Poggi** (Zürich, Switzerland)
- 5:14 pm T19-021B Synaptic competency of Hoxb8-lineage microglia in repetitive and anxiety-like behavior.  
**Kayla M. Eschenbacher** (Salt Lake City, USA)
- 5:15 pm T19-022B Blocking methamphetamine-induced microglia reactivity by targeting glutamate receptors  
**Teresa Summavielle** (Porto, Portugal)
- 5:16 pm T19-023B GIT1 haploinsufficiency-driven ADHD-like symptoms by region-specific tonic inhibition alteration  
**Jong Min Joseph Kim** (Cheonan-si, Chungcheongnam-do, South Korea)
- 5:17 pm T20-017B Remyelination by UPR modulation - a novel BBB penetrating variant of MANF  
**Tapani Koppinen** (Helsinki, Finland)
- 5:18 pm T20-018B Mechanisms of endocannabinoid mediated remyelination in cortical organotypic slice cultures  
**Kieran Higgins** (Amsterdam, Netherlands)
- 5:19 pm T20-019B ROS TRIGGER SOX10+ OLIGODENDROCYTE ACTIVATION DURING ZEBRAFISH REGENERATION  
**Adrian Santos-Ledo** (Salamanca, Spain)





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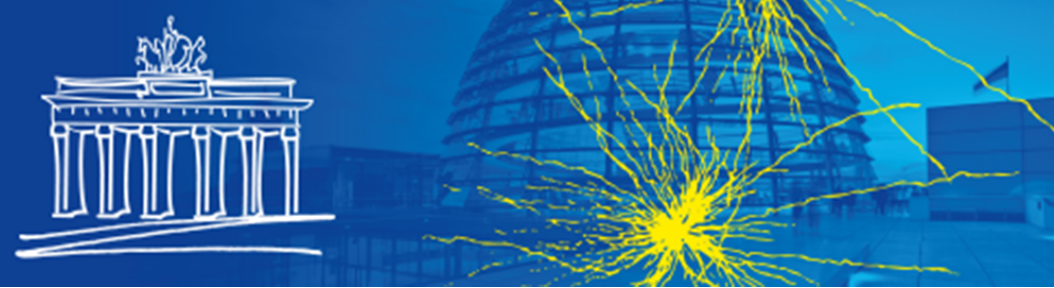


- 5:20 pm T20-020B Extracellular vesicle-associated cholesterol dictates the regenerative functions of macrophages in the brain  
**Sam Vanherle** (Diepenbeek, Belgium)
- 5:21 pm T20-021B Selective PDE4 subtype inhibition provides new opportunities to intervene in neuroinflammatory versus myelin damaging hallmarks of multiple sclerosis  
**Tim Vanmierlo** (Hasselt, Belgium)
- 5:22 pm T20-022B RT-qPCR based analysis of myelin markers in organotypic brain slices as a fast and quantitative evaluation of myelin content  
**Imane Charmarke askar** (Strasbourg, France)
- 5:23 pm T20-023B Directly converted human oligodendrocytes from older donors display an age-associated phenotype  
**Farina Windener** (Münster, Germany)
- 5:24 pm T20-024B A new toolbox for neuroscientists: soft cryogel scaffolds for localised manipulation of neural tissue in culture.  
**Ben Newland** (Cardiff, UK)
- 5:25 pm T20-025B Inhibition of Microglia proliferation at chronic stage after Spinal Cord Injury  
**Jean-Christophe Perez** (Montpellier, France)
- 5:26 pm T20-026B What regulates the early Schwann cell injury response?  
**Clara Mutschler** (Cambridge, UK)
- 5:27 pm T20-027B N-acetyl aspartate induces oligodendroglia differentiation  
**Alessandra Dominicis** (Roma, Italy)
- 5:28 pm T20-028B Pharmacological blockade of GPR17 promotes functional and structural remyelination in the murine cuprizone model  
**Irene Knuesel** (Leuven, Belgium)
- 5:29 pm T20-029B Transcription factors EB and E3 promote repair Schwann cell formation and expansion following PNS injury  
**Akash Patel** (Newark, USA)
- 5:30 pm T20-030B Investigating the glial checkpoints for circuit integration of neuronal transplants  
**Maria Fernanda Martinez Reza** (Munich, Germany)



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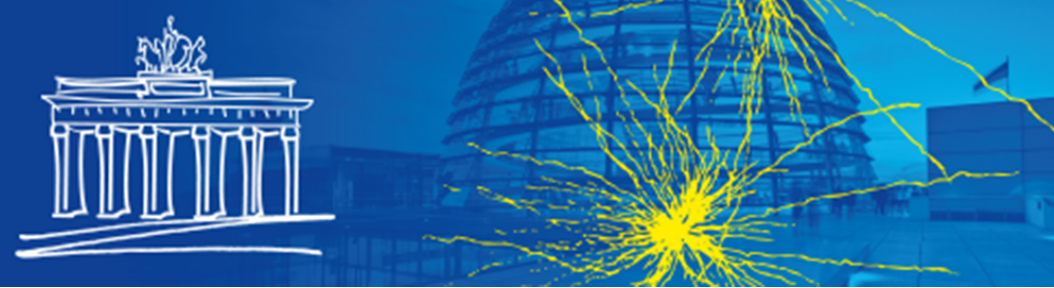


- 5:31 pm T20-031B Myelin water fraction of the corpus callosum is a robust measure of remyelination in a double blind-placebo controlled clinical trial.  
**Christian Cordano** (San Francisco, USA)
- 5:32 pm T20-032B Discovery and targeting of pathological cell states after spinal cord injury  
**Margherita Zamboni** (Stockholm, Sweden)
- 5:33 pm T21-001B Overcoming Neuronal Reprogramming Barriers as a Novel Therapeutic Strategy for ALS  
**Hussein Ghazale** (Toronto, Canada)
- 5:34 pm T21-002B miR-25 reprograms murine primary Müller glia into functional mature neurons  
**Seoyoung Kang** (New York, USA)
- 5:35 pm T21-003B Reprogramming of glial progenitor-like cells from adult DRG with developmental transcription factors  
**Annemarie Schulte** (Würzburg, Germany)
- 5:36 pm T21-004B Müller glia mediated retinal repair in the African turquoise killifish: a mammalian-like outcome  
**Pieter-Jan Serneels** (Leuven, Belgium)
- 5:37 pm T21-005B Activation of the neurogenic potential in 3D bioprinted astrocytes  
**Elisa Marozzi Cruz** (Sao Paulo, Brazil)
- 5:38 pm T21-006B Influence of the starter cell in direct neuronal reprogramming  
**Giacomo Masserdotti** (Planegg-Martinsried, Germany)
- 5:39 pm T21-007B Investigating a gene regulatory network and developmental trajectory for promoting parvalbumin neuronal fate during reprogramming  
**Christina-Anastasia Stamouli** (Lund, Sweden)
- 5:40 pm T21-008B Unlocking the regenerative potential of the mammalian retina  
**Luke A. David** (Montreal, Canada)
- 5:41 pm T24-013B Defining the role of hypoxia and glioblastoma secreting factors in STAT3-mediated astrocyte reactivity  
**Sebastien Serres** (Nottingham, UK)



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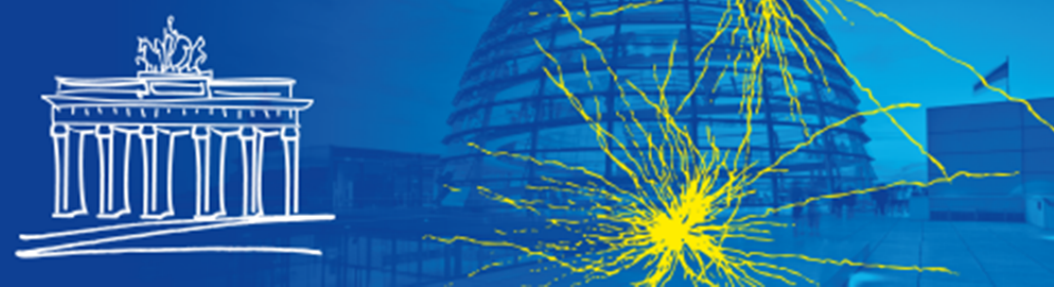


- 5:42 pm T24-014B Elucidating the Role of Microglia in Neuron-Glioma Circuitry  
**Rebecca Mancusi** (Stanford, USA)
- 5:43 pm T24-015B The Thrombin Receptor PAR1 is Located Intracellularly on Microtubules, Modulating Mitosis and Process Formation in Glioma Cells.  
**Valery Golderman** (Tel-Aviv, Israel)
- 5:44 pm T24-016B Molecular mechanisms of perineural invasion in pancreatic cancer  
**Elia Pennati** (Milan, Italy)
- 5:45 pm T24-017B Hepatocellular carcinoma is associated with increased oxidative stress and glial cell activity in mouse suprachiasmatic nucleus and decreased amplitude in rhythmic spontaneous locomotor activity  
**Amira A.H. Ali** (Düsseldorf, Germany)
- 5:46 pm T24-018B Functional consequences of IDH1 and CIC mutations on oligodendrogloma cells of origin  
**Nina Pottier** (Paris, France)
- 5:47 pm T24-019B Investigating the region-specific effects of oncohistone H3 K27M in oligodendrocyte development  
**Kaitlin M. Budd** (Memphis, USA)
- 5:48 pm T24-020B Glioblastoma cell motility depends on enhanced oxidative stress coupled with mobilization of a sulfurtransferase  
**Elias A. El-Habr** (Paris, France)
- 5:49 pm T24-021B Deep brain three-photon imaging of microglia glioma interaction at the invading front in corpus callosum  
**Felix C. Nebeling** (Bonn, Germany)
- 5:50 pm T24-022B Changes in mitochondrial redox state and lipid-protein composition of cells in tumoral and peritumoral regions under high-and low-grade gliomas  
**Kseniia Morozova** (Moscow, Russia)
- 5:51 pm T24-023B Interaction of Glia Cells with Glioblastoma and Melanoma Cells under the Influence of Phytocannabinoids  
**Christoph Walsleben** (Halle, Germany)



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Sunday, 9 July, 2023, 4:00 p.m. - 6:00 p.m.

## **S11 | The many faces of Schwann cells: new roles and different perspectives**

**Chairs:** **Katharina Scherschel** (Düsseldorf, Germany); **Jose Antonio Gomez Sanchez** (Alicante, Spain)

**Presentations:**

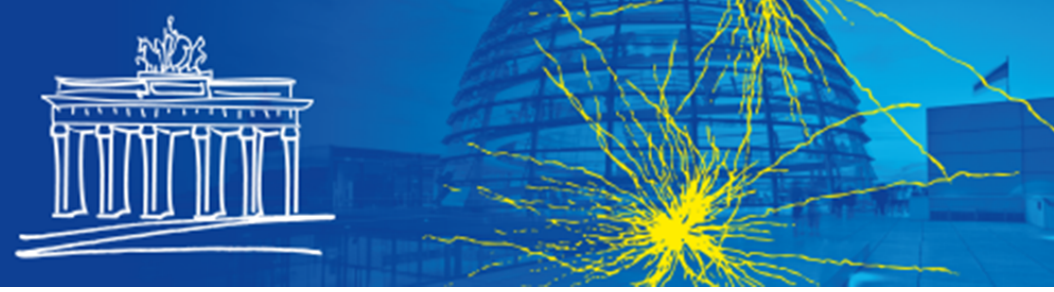
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|---------|-------|---|
| 4:00 pm | S1101 | The role of peripheral glial cells in skin wound healing and skin cancer<br><b>Lukas Sommer</b> (Zurich, Switzerland)       |
| 4:30 pm | S1102 | Schwann cell plasticity in injured human nerves and peripheral neuroblastic tumors<br><b>Tamara Weiss</b> (Vienna, Austria) |
| 5:00 pm | S1103 | <i>Glial cells in the heart - what we know and what we don't</i><br><b>Katharina Scherschel</b> (Düsseldorf, Germany)       |
| 5:30 pm | S1104 | Live imaging of Schwann cells during corneal nerve regeneration<br><b>Jose Antonio Gomez Sanchez</b> (Alicante, Spain)      |





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Sunday, 9 July, 2023, 4:00 p.m. - 6:00 p.m.

## **S12 | The circuit logic of myelination - when, where, and why**

**Chairs:** **Wendy Xin** (San Francisco, USA); **Ethan Hughes** (Aurora, USA)

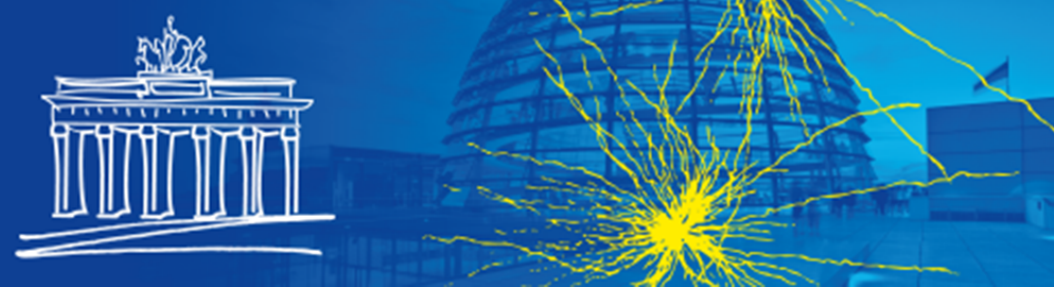
**Presentations:**

- |         |       |   |
|---------|-------|---|
| 4:00 pm | S1201 | tba<br><b>Cassandra Baptista</b> (Glasgow, UK)  |
| 4:30 pm | S1202 | Dynamics of Myelination on Behaviorally-Activated Axons<br><b>Ethan G. Hughes</b> (Aurora, USA)   |
| 5:00 pm | S1203 | Oligodendrocytes and myelin restrict experience-dependent neuronal plasticity in the visual cortex<br><b>Wendy Xin</b> (San Francisco, USA) |
| 5:30 pm | S1204 | Myelin and the temporal dynamics of corticothalamic oscillations<br><b>Maarten H. Kole</b> (Amsterdam, Netherlands)                         |



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Sunday, 9 July, 2023, 4:00 p.m. - 6:00 p.m.

## **S13 | mRNA localization and translation in glial cells: local events with broad roles**

**Chairs:** **Martine Cohen-Salmon** (Paris, France)

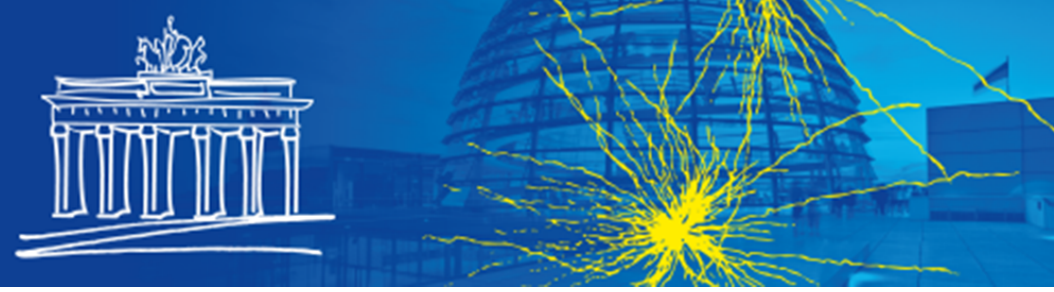
**Presentations:**

- |         |       |  |
|---------|-------|--|
| 4:00 pm | S1301 | mRNA localization and translation in glial cells: local events with broad roles<br><b>Martine Cohen-Salmon</b> (Paris, France) |
| 4:30 pm | S1302 | Alternative Translation and Local Translation in Glia<br><b>Joseph Dougherty</b> (SAINT LOUIS, USA)                            |
| 5:00 pm | S1303 | tba<br><b>Fu Meng-Meng</b> (Bethesda, USA)   |
| 5:30 pm | S1304 | Local translation in microglial peripheral processes<br><b>Jimena Baleriola</b> (Leioa, Spain)                                 |



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Sunday, 9 July, 2023, 4:00 p.m. - 6:00 p.m.

## **S14 | The tripartite synapse under metabolic stress**

**Chairs:** **Christine R. Rose** (Duesseldorf, Germany); **Christian Henneberger** (Bonn, Germany)

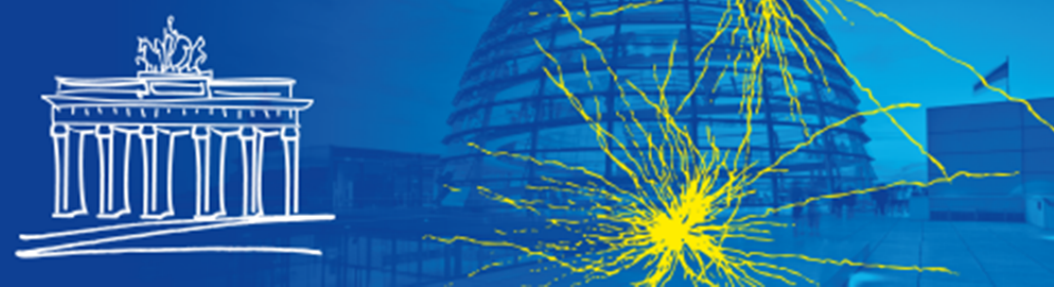
**Presentations:**

- |         |       |   |
|---------|-------|---|
| 4:00 pm | S1401 | Mechanisms and pathological relevance of Na <sup>+</sup> dysregulation upon metabolic stress<br><b>Christine R. Rose</b> (Duesseldorf, Germany)           |
| 4:30 pm | S1402 | Rapid changes of glutamate signaling in response to acute metabolic stress<br><b>Christian Henneberger</b> (Bonn, Germany)                                |
| 5:00 pm | S1403 | The contribution of astrocytes to ischemia-related cerebral edema formation and increased neuronal excitability<br><b>Eszter Farkas</b> (Szeged, Hungary) |
| 5:30 pm | S1404 | Data-driven modelling of the tripartite synapse under acute metabolic stress<br><b>Ghanim Ullah</b> (Tampa, FL, USA)                                      |



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Sunday, 9 July, 2023, 4:00 p.m. - 6:00 p.m.

## **S15 | Heterogeneity and function of microglia in brain stem cell niches**

**Chairs:** Francis Szele (Oxford, UK)

**Presentations:**

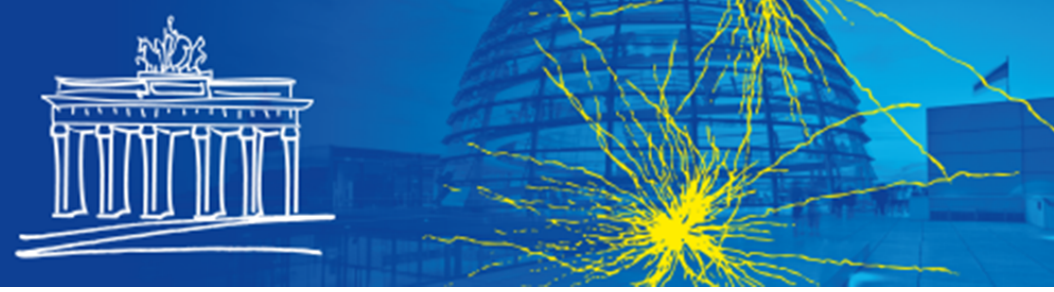
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|---------|-------|---|
| 4:00 pm | S1501 | Microglia lining the lateral ventricles contribute to a unique neuroinflammatory niche<br><b>Francis Szele</b> (Oxford, UK) |
| 4:30 pm | S1502 | Pre-activated microglia in the human subventricular zone<br><b>Istvan Adorjan</b> (Budapest, Hungary)                       |
| 5:00 pm | S1503 | Microglia and adult neurogenesis in the human hippocampal neurogenic niche<br><b>Maria Llorens-Martín</b> (Madrid, Spain)   |
| 5:30 pm | S1504 | Specification of CNS macrophage subsets occurs postnatally in defined niches<br><b>Marco Prinz</b> (Freiburg, Germany)      |





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Sunday, 9 July, 2023, 6:00 p.m. - 7:00 p.m.

## **L04 | Plenary Lecture IV: Shane Liddelow**

**Chairs:** Nicola Allen (La Jolla, USA)

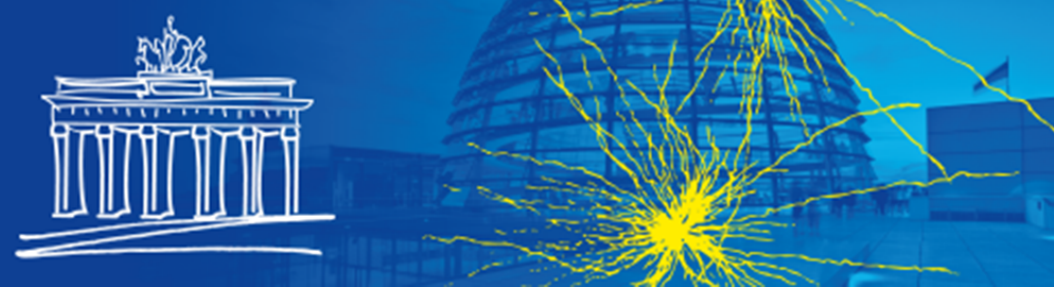
**Presentations:**

6:00 pm L0401 Novel reactive astrocyte sub-states and function  
**Shane Liddelow** (New York, USA)



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Monday, 10 July, 2023, 8:30 a.m. - 9:30 a.m.

## **L05 | Plenary Lecture V: Ragnhildur Thora Karadottir**

**Chairs:** **Gonçalo Castelo-Branco** (Stockholm, Sweden)

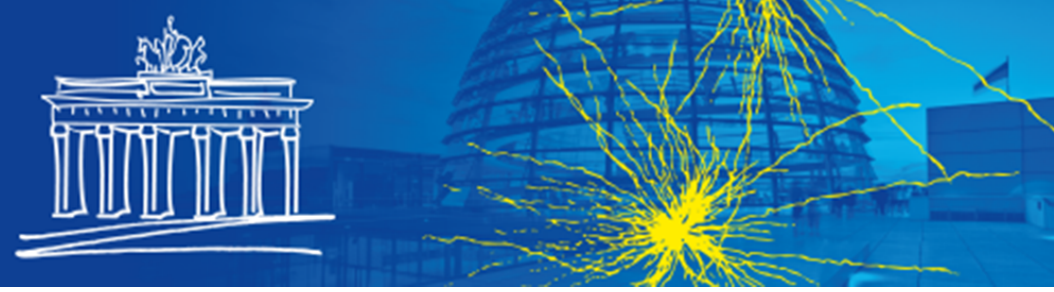
**Presentations:**

8:30 am L0501 Neuronal activity modulates myelin plasticity and regeneration



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Monday, 10 July, 2023, 10:00 a.m. - 12:00 p.m.

## **S16 | The role of Schwann cell metabolism in regulating neuronal function and viability**

**Chairs:** **Bruce Carter** (Nashville, USA); **Sung Ok Yoon** (Columbus, USA)

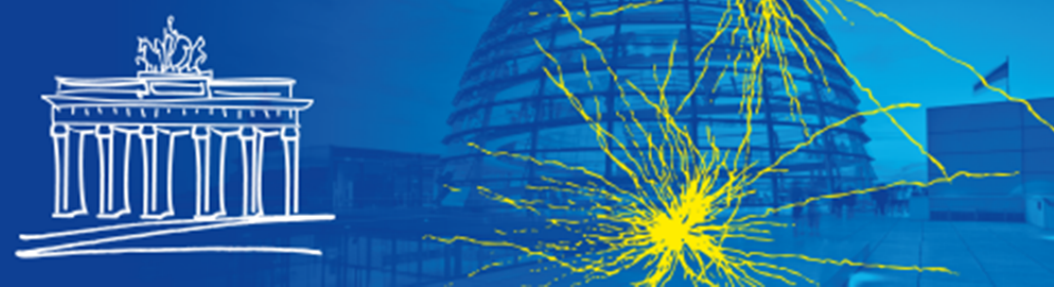
**Presentations:**

- 10:00 am S1601 Sensory neuron survival during development depends on the crosstalk with Schwann cells  
**Sung Ok Yoon** (Columbus, USA)
- 10:30 am S1602 The p75 neurotrophin receptor regulates Schwann cell lipid metabolism, thereby indirectly modulating sensory neuron viability  
**Bruce D. Carter** (Nashville, USA)
- 11:00 am S1603 Gimme more lactate: Glial phospho-enol pyruvate kinase type 2 (PKM2) is a key factor of myelinated axons function and survival  
**Nicolas Tricaud** (Corbeil-Essonnes, France)
- 11:30 am S1604 Schwann cells respond to axon injury with distinct neuroprotective programs  
**Bogdan Beirowski** (Columbus, OH, USA)



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Monday, 10 July, 2023, 10:00 a.m. - 12:00 p.m.

## **S17 | Understanding the role of cell-cell interactions involving microglia in CNS homeostasis and neuroinflammation**

**Chairs:** **Roland Liblau** (Toulouse, France); **Ari Waisman** (Mainz, Germany)

**Presentations:**

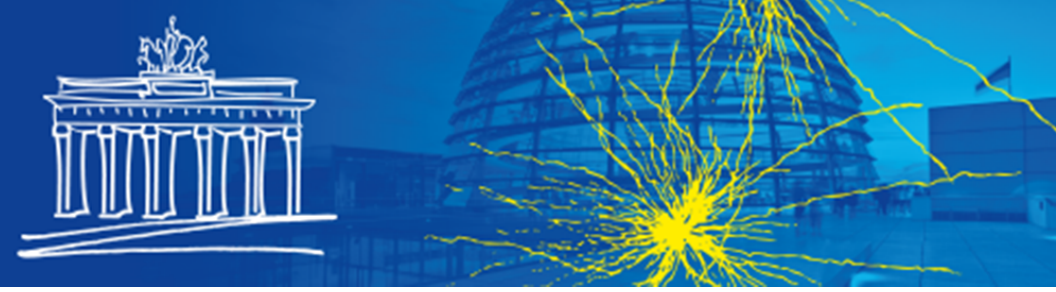
- |          |       |  |
|----------|-------|--|
| 10:00 am | S1701 | Regulation and Function of Brain Border-Associated Macrophages<br><b>Melanie Greter</b> (Zürich, Switzerland)  |
| 10:30 am | S1702 | Microglial A20 Protects the Brain from CD8 T-Cell-Mediated Immunopathology and is important for the brain homeostasis<br><b>Ari Waisman</b> (Mainz, Germany) |
| 11:00 am | S1703 | tba<br><b>Francesca Odoardi</b> (Göttingen, Germany)   |
| 11:30 am | S1704 | The microglia – tissue-resident T cell interplay drives compartmentalized and chronic autoimmune damage<br><b>Roland LIBLAU</b> (TOULOUSE, France)           |





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Monday, 10 July, 2023, 10:00 a.m. - 12:00 p.m.

## **S18 | Understanding the role of oligodendrocytes in neurodegenerative disorders: human and animal studies**

**Chairs:** **Mahmoud Pouladi** (Vancouver, Canada); **Anna Williams** (Edinburgh, UK)

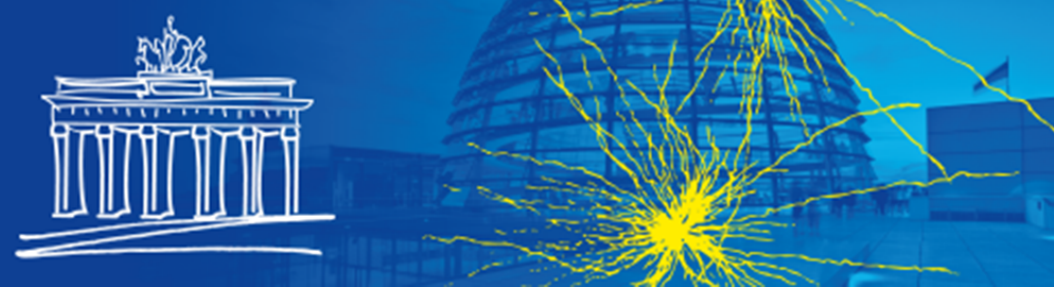
**Presentations:**

- |          |       |  |
|----------|-------|--|
| 10:00 am | S1801 | Using transcriptome and epigenome profiling to better understand the role of oligodendrocytes in neurodegenerative disorders<br><b>Julia Schulze-Hentrich</b> (Saarbrücken, Germany) |
| 10:30 am | S1802 | <i>Deciphering the glial functions of TDP-43</i><br><b>Shuo-Chien Ling</b> (Singapore, Singapore)  |
| 11:00 am | S1803 | Myelination and oligodendrocyte abnormalities in models of Huntington disease<br><b>Mahmoud A. Pouladi</b> (Vancouver, Canada)   |
| 11:30 am | S1804 | How do oligodendrocytes change in multiple sclerosis and Huntington's disease and how can we manipulate this for benefit?<br><b>Anna Williams</b> (Edinburgh, UK)                    |



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Monday, 10 July, 2023, 10:00 a.m. - 12:00 p.m.

## **S19 | Bioengineering meets glia: biomaterials applications to study glia and glial-associated disorders (Special Trainee Symposium)**

**Chairs:** **Eva Carvalho** (Porto, Portugal); **Emanuela Saracino** (Bologna, Italy)

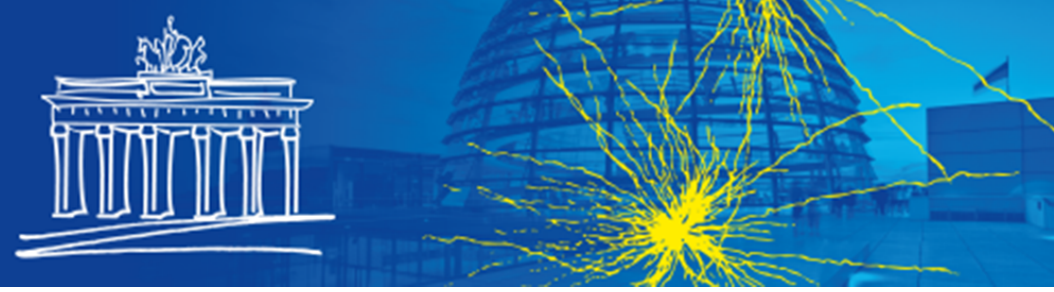
### **Presentations:**

- |          |       |   |
|----------|-------|---|
| 10:00 am | S1901 | Oligodendrocytes' "feelings": a tissue engineered model to study the mechanobiology of myelination<br><b>Eva D. Carvalho</b> (Porto, Portugal)                                |
| 10:20 am | S1902 | Nanostructured materials and Nano-probes to modulate the functional activity of astrocytes.<br><b>Emanuela Saracino</b> (Bologna, Italy)                                      |
| 10:40 am | S1903 | Nanomedicines for the induction of OPC differentiation and remyelination<br><b>Ariane Mwema</b> (Bruxelles, Belgium)  |
| 11:00 am | S1904 | A biofabrication technology for complex 3D <i>in vitro</i> neural co-cultures containing microchannels in hydrogels<br><b>Adrián Seijas-Gamardo</b> (Maastricht, Netherlands) |
| 11:20 am | S1905 | A soft cryogel scaffold for creating focal regions of demyelination on brain slice cultures<br><b>Lida Zoupi</b> (Edinburgh, UK)  |
| 11:40 am | S1906 | Hyaluronic acid-based devices for transcranial drug delivery to tackle neurodegenerative diseases<br><b>Mansoor Al-waeel</b> (Galway, Ireland)                                |



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Monday, 10 July, 2023, 10:00 a.m. - 12:00 p.m.

## **S20 | Wrapping memories with myelin**

**Chairs:** **Mohit Dubey** (Amsterdam, Netherlands)

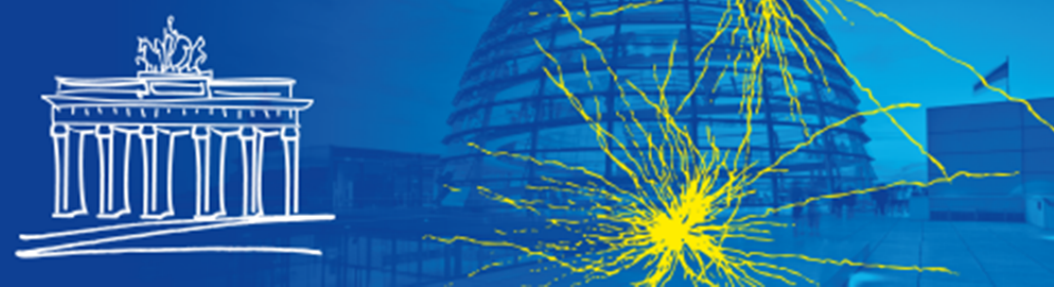
**Presentations:**

- 10:00 am S2001 Chemogenetic activation of hippocampal CAMKii $\alpha$ -expressing neurons accelerates remyelination and improves cognition in lysolecithin-induced demyelination.  
**Olamide Adebisi** (London, Canada)
- 10:30 am S2002 Myelin dysfunction drives amyloid deposition in mouse models of Alzheimer's disease  
**Constanze Depp** (Göttingen, Germany)
- 11:00 am S2003 Myelin consolidates memories by conserving theta-gamma oscillations.  
**Mohit Dubey** (Amsterdam, Netherlands)
- 11:30 am S2004 The role of myelin in the etiology of tau pathology in Alzheimer's disease.  
**Michael Ewers** (Munich, Germany)



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Monday, 10 July, 2023, 12:15 p.m. - 1:15 p.m.

## **W02 | Student Lecture: Successful Scientific Publishing**

**Chairs:**

**Presentations:**

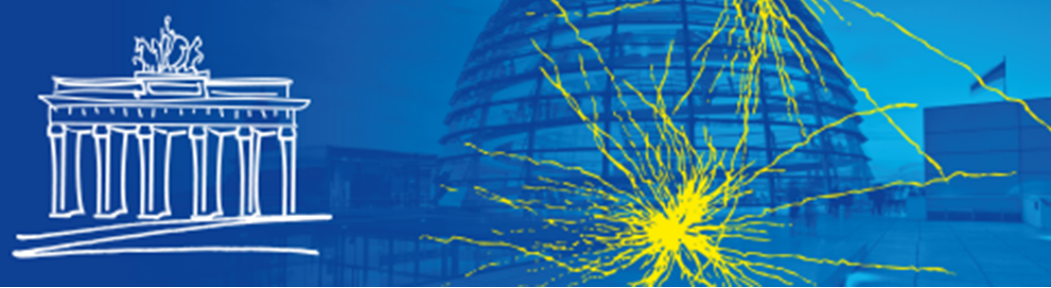
12:15 pm W0201 Successful scientific publishing  
**Bruce R. Ransom** (Hong Kong, China)





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Monday, 10 July, 2023, 1:00 p.m. - 4:00 p.m.

## PS3 | Poster Session III

### Chairs:

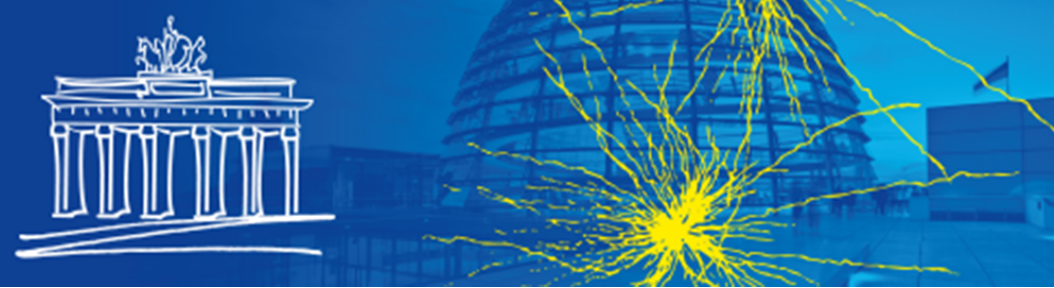
### Presentations:

- |         |          |   |
|---------|----------|---|
| 1:00 pm | T02-021C | Myeloid progenitor cells can efficiently repopulate the CNS as microglia-like cells<br><b>Konstantina Kolotourou</b> (Göttingen, Germany)                                       |
| 1:01 pm | T02-022C | Mapping Cortical Astrocyte Emergence and Distribution from V-SVZ Neural Stem Cells<br><b>Daniela A. Lozano Casasbuenas</b> (Toronto, Canada)                                    |
| 1:02 pm | T02-023C | Single cell sequencing and functional analysis of early differentiated glia in human and mouse.<br><b>Paul Frazel</b> (New York, USA)   |
| 1:03 pm | T02-024C | Role in neural stem cell differentiation of CHD8 and CHD7, chromatin remodelers, implicated in Autism Spectrum Disorder<br><b>Morgane Pigache</b> (Paris, France)               |
| 1:04 pm | T02-025C | The epigenetic regulation of Schwann Cells differentiation through DNA methylation, histone deacetylation and oxidative stress-response<br><b>Tasnim Mohamed</b> (Milan, Italy) |
| 1:05 pm | T02-026C | Oligodendrocytes aberrantly re-enter the cell cycle and die following neurotrauma<br><b>Chidozie Anyaegbu</b> (Nedlands, Australia)   |
| 1:06 pm | T02-027C | Impaired proliferation of oligodendrocyte precursor cells in aged mice following traumatic brain injury<br><b>Georgios Michaletos</b> (Lund, Sweden)                            |
| 1:07 pm | T02-028C | A mechanistic view of TGF- $\beta$ -mediated microglia cell fate in the zebrafish embryo<br><b>Valerie Wittamer</b> (Brussels, Belgium)   |



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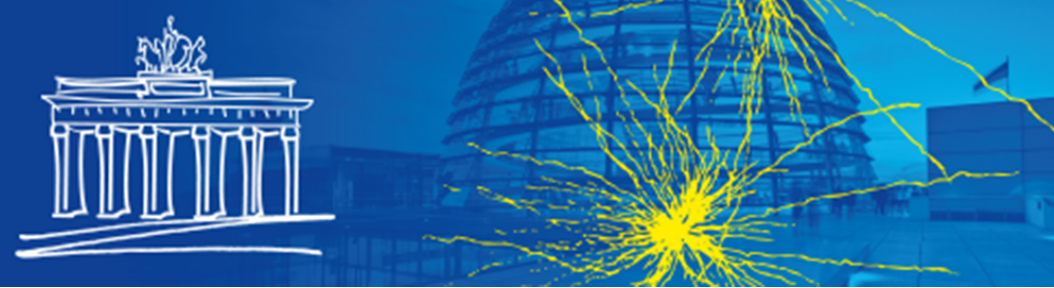


- 1:08 pm T02-029C The effect of siponimod on oligodendrocyte precursor cell proliferation and maturation in naïve mice  
**Julie Damgaard Jakobsen** (Odense C, Denmark)
- 1:09 pm T02-030C Determining the role of RXRg in oligodendrogenesis using reporter system  
**Quentin Brassart** (ILLKIRCH, France)
- 1:10 pm T05-060C Characterization of microglial population expansion and activation state in the cerebral cortex of a TgF344-AD rat model  
**Julie S. Hansen** (Odense, Denmark)
- 1:11 pm T05-061C PROTECTIVE EFFECTS OF *ARONIA MELANOCARPA* EXTRACT ON THE ASTROCYTES IN THE *IN VITRO* MODEL OF PARKINSON'S DISEASE  
**Nika Gržeta** (Rijeka, Croatia)
- 1:12 pm T05-062C *APOE* genotype influences astrocyte-mediated spreading of pathogenic tau aggregates  
**Tobias Mothes** (Uppsala, Sweden)
- 1:13 pm T05-063C Reactive astrocytes impair human motor units through both gain-of-toxicity and loss-of-support mechanisms in amyotrophic lateral sclerosis (ALS)  
**Katarina Stoklund Dittlau** (Leuven, Belgium)
- 1:14 pm T05-064C Mouse strain-specific microglial phenotype in aging  
**Marie J. Pietrowski** (Bonn, Germany)
- 1:15 pm T05-065C GABA<sub>B</sub> receptor activation modulates oligodendrocyte progenitor cell activity and ameliorates experimental multiple sclerosis  
**Laura Bayón-Cordero** (Leioa, Spain)
- 1:16 pm T05-066C Modeling Alexander's Disease using stem cells, genome editing and forward programming  
**Oskar G. Zetterdahl** (Lund, Sweden)
- 1:17 pm T05-067C Pulse-modulated 1800 MHz electromagnetic fields affect gene expression in lipopolysaccharide-activated microglia  
**Michel Mallat** (Paris, France)
- 1:18 pm T05-068C Hippocampal neuroimmune reactivity in adult and aged male rats following binge-like alcohol exposure  
**Erika R. Carlson** (Austin, USA)



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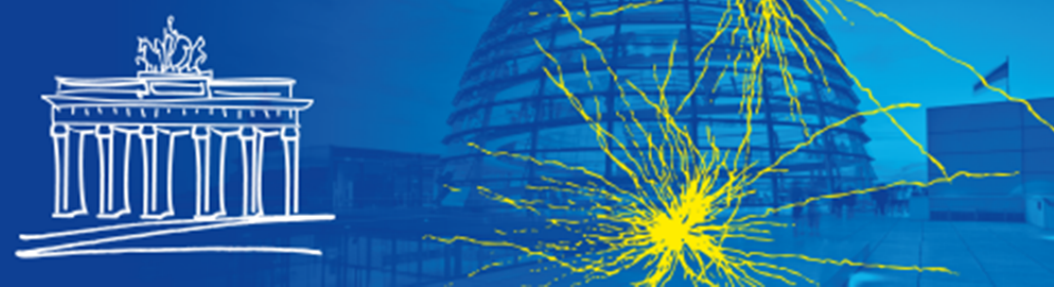


- 1:19 pm T05-069C Increased surface expression of P2X4 receptors in microglia/macrophages ameliorates experimental multiple sclerosis in females  
**Paloma Mata** (Leioa, Bizkaia, Spain)
- 1:20 pm T05-070C Astrocytes generated from iPSC of Megalencephalic leukoencephalopathy with subcortical cysts (MLC) donors show phenotype associated with disease and reveal novel dysfunctional molecular pathways and possible druggable targets for therapeutic purposes  
**Elena Ambrosini** (Rome, Italy)
- 1:21 pm T05-071C Combinatorial effect of genetic factors predicts microglia dysfunction in Alzheimer's Disease  
**Gonzalo Leguía Fauro** (Antwerp, Belgium)
- 1:22 pm T05-072C Air pollution and neurodegeneration: an *in vitro* study of the role of astrocytes in magnetite nanoparticles-induced neurotoxicity  
**Ludovica Carpinelli** (Rome, Italy)
- 1:23 pm T05-073C Comprehensive characterization of APP<sup>NL-F</sup> mice a promising model to study Alzheimer's disease early stages  
**Helene Hirbec** (Montpellier, France)
- 1:24 pm T05-074C The impact of pharmacological depletion of microglia on ethanol-induced corticolimbic neurodegeneration in male rats  
**Jennifer K. Melbourne** (Austin, USA)
- 1:25 pm T05-075C Co-labeling Strategy for Analyzing Astrocyte Morphology in a Rat Model of Alcohol Use Disorder  
**Steven P. Guerin** (Austin, USA)
- 1:26 pm T05-076C Glucocorticoid receptors in astrocytes regulate alpha-synuclein pathological actions impacting motor an non-moto symptomology of Parkinson's disease.  
**Agnès Chaperon** (Paris, France)
- 1:27 pm T05-077C Pyruvate dehydrogenase kinase 2 knockdown restores the ability of ALS-linked SOD1G93A rat astrocytes to support motor neuron survival  
**Ernesto Miquel** (Montevideo, Uruguay)
- 1:28 pm T05-078C Gas6 protein is secreted by brain glial cells and is present at different levels across different neurodegenerative diseases.  
**Nadide Aydin** (Portsmouth/Southsea, UK)



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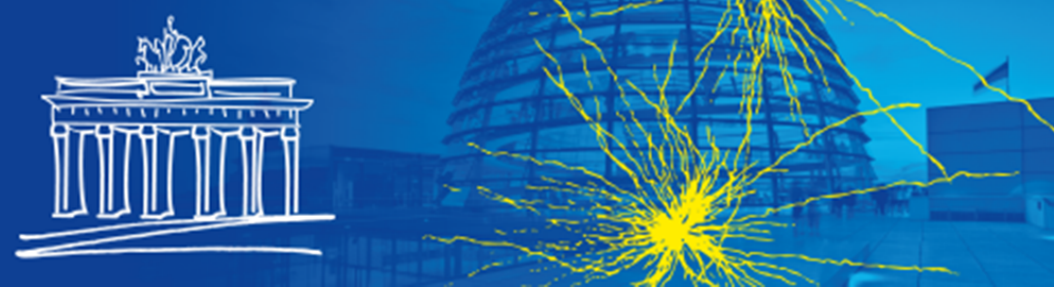
- 1:29 pm T05-079C A Novel preclinical human *Ex-vivo* Cerebellum Model: For a Bench to Bedside Research  
**Junyi Zhang** (Freiburg im Breisgau, Germany)
- 1:30 pm T05-080C Higher throughput glial assays to screen compounds in neurodegeneration drug discovery  
**Rebeka Popovic** (London, UK)
- 1:31 pm T05-081C Loss of TDP-43 in microglia leads to abnormal brain development  
**Anne-Claire Compagnion** (Lausanne, Switzerland)
- 1:32 pm T05-082C Examination of the relevance of noradrenergic transmission in astrocytes in in vitro and in vivo models of presymptomatic Parkinson's disease.  
**Justyna Barut** (Kraków, Poland)
- 1:33 pm T05-083C The neuroprotective effects of stimulating astroglia in a rat model of neurodegeneration  
**Jessica L. McNeill** (Ottawa, Canada)
- 1:34 pm T05-084C How Does Aging Affect Microglia and OPCs?  
**Ebb M. Vang** (Reykjavík, Iceland)
- 1:35 pm T05-085C TREM2 impacts brain microglia, oligodendrocytes and endothelial co-expression modules revealing genes and pathways important in Alzheimer's disease  
**Angela Hodges** (London, UK)
- 1:36 pm T05-086C Contribution of  $K_{ir4.1}$  dysfunction in spinal astrocytes to the pathogenesis of late-onset SMA  
**Christina David** (Essen, Germany)
- 1:37 pm T05-087C Role of CERT1 in control of microglia biology in mice – relevance for cognitive functions  
**Yash Parekh** (ILLKIRCH, France)
- 1:38 pm T05-088C Neuronal Tau Pathology Alters Human Microglial Morphology, Transcriptome, and Function  
**Zahara Keulen** (Irvine, USA)
- 1:39 pm T06-024C Multi-omics analyses reveal impaired lipid metabolism and oxidative stress in a zebrafish model of Alexander disease  
**Deianira Bellitto** (Genoa, Italy)





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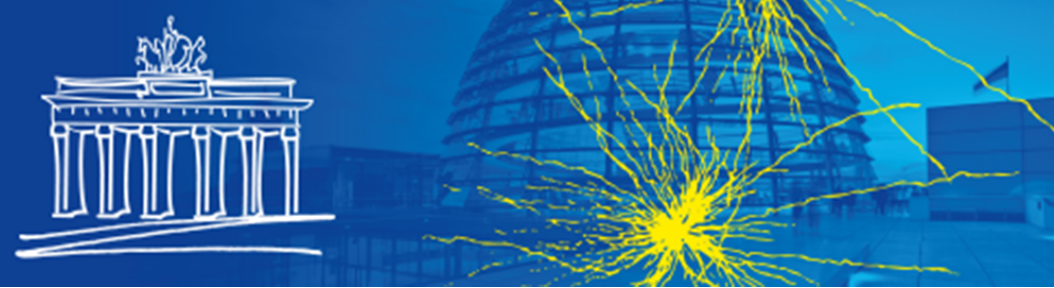


- 1:40 pm T06-025C Impaired neuronal and glial calcium signaling and glucose metabolism in aged *Drosophila* brain  
**Urška Žerne** (Ljubljana, Slovenia)
- 1:41 pm T06-026C Translocator protein 18kDa (TSPO) regulation of astrocyte metabolic flexibility  
**Wyn Firth** (Exeter, UK)
- 1:42 pm T06-027C Stress stimuli trigger lipid droplet accumulation in astrocytes  
**Anemari Horvat** (Ljubljana, Slovenia)
- 1:43 pm T06-028C The influence of cold exposure on glial physiology in *Drosophila*  
**Nina Surina** (Dresden, Germany)
- 1:44 pm T06-029C Microglia Regulation of Neuronal Metabolism and mRNA Translation  
**Drew Adler** (New York, USA)
- 1:45 pm T06-030C Metabolic differences in mouse and human microglia during inflammation  
**Alejandro Marmolejo** (Groningen, Netherlands)
- 1:46 pm T06-031C Pathophysiological consequences of microcephaly-associated mutations in the asparagine synthetase (ASNS) gene  
**Anja Reinert** (Leipzig, Germany)
- 1:47 pm T06-032C Structural remodeling of microglial mitochondria across brain regions and developmental stages  
**Katherine Espinoza** (Los Angeles, USA)
- 1:48 pm T06-033C Region-specific and sex-independent glutamate regulation of mitochondrial fatty acid catabolism in astrocytes demonstrated by different experimental approaches  
**Francina Bagur Llufríu** (Cerdanyola del Vallès, Spain)
- 1:49 pm T06-034C Hypothalamic glial cells and metabolic alterations in the mouse model of Alzheimer's disease 5xFAD  
**José Joaquín Ochoa Navarro** (Alcorcón, Spain)
- 1:50 pm T07-007C Studying CEPsh glia in *C. elegans* uncovers factors of early development and lifelong maintenance of astroglia architecture  
**Francesca Caroti** (Heidelberg, Germany)



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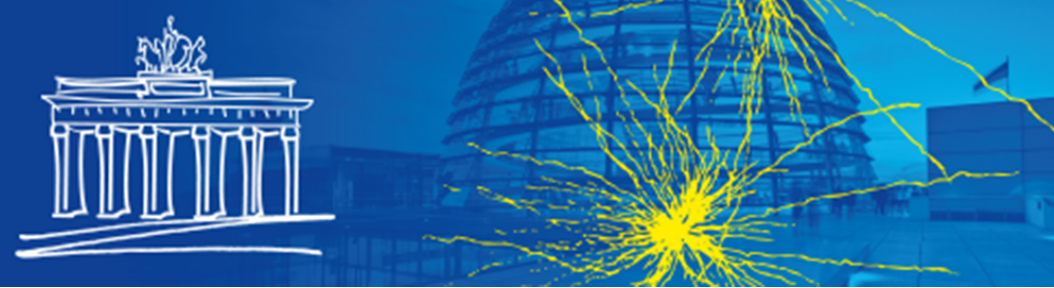


- 1:51 pm T07-008C Brevikine generated by extracellular proteolysis of astrocyte-released brevicin activates ERK1/2 signaling and induces neurite outgrowth in hippocampal neurons  
**Marina Guizzetti** (Portland, USA)
- 1:52 pm T07-009C Matrix Metalloproteinase 1 and NinjurinA Govern Glial Responses to Neurodegeneration  
**Cole Brashaw** (Portland, USA)
- 1:53 pm T07-010C Rescue of cognitive and synaptic functions in aged mice by microglial modulation through inhibition of the colony stimulating factor-1 receptor  
**Luisa Strackeljan** (Magdeburg, Germany)
- 1:54 pm T07-011C Adhesion GPCR dissociation in glia controls neural progenitor cell number  
**Nicole Scholz** (Leipzig, Germany)
- 1:55 pm T07-012C Untangling remyelination failure in multiple sclerosis: absence of matrix metalloproteinase 7 does not lead to fibronectin aggregate formation  
**Rianne P. Gorter** (Groningen, Netherlands)
- 1:56 pm T08-019C IFN $\gamma$  mediated repression of enteric glial cell *Sox10* drives gut inflammation  
**Jay V. Patankar** (Erlangen, Germany)
- 1:57 pm T08-020C Reduced ABCA1 expression and disrupted cholesterol homeostasis in human and mouse astrocytes modeling fragile X syndrome  
**Karo Talvio** (Helsinki, Finland)
- 1:58 pm T08-021C Exploring transcriptional cascades in cortical astrocytes: the role of Sox9 and Trps1  
**Poornema Natarajan** (Munich, Germany)
- 1:59 pm T08-022C A CRISPRi/a screen to identify regulators of human oligodendrocyte precursor cell specification  
**Neemat Mahmud** (Stockholm, Sweden)
- 2:00 pm T08-023C Gene expression profiling of remyelinating lesions in MS donors with different remyelinating capacity  
**Alida Chen** (Amsterdam, Netherlands)
- 2:01 pm T08-024C Ribosomal tagging (Ribotag) in Astrocytes: Methodological approach for extracting mRNA from small brain tissue samples in short period of time  
**Despoina Binou** (Jena, Germany)



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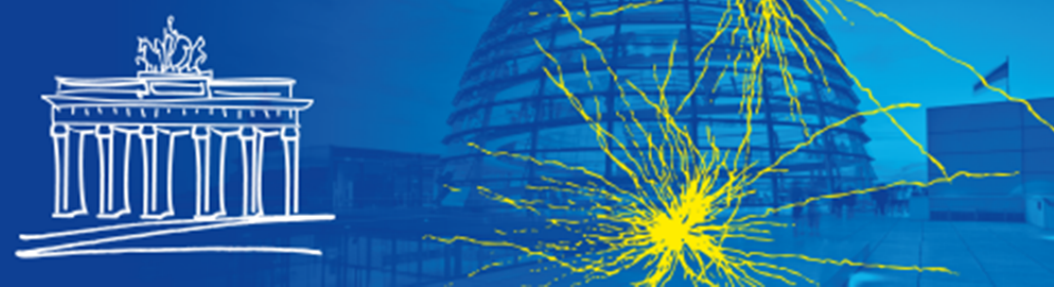


- 2:02 pm T08-025C Cut homeodomain transcription factor regulates cortical glial cell morphogenesis in *Drosophila* ventral nerve cord  
**VAISHALI YADAV** (VARANASI, India)
- 2:03 pm T08-026C Heterogeneous contribution of pericytes and perivascular fibroblasts to fibrotic scar tissue after CNS injury  
**Daniel Holl** (Solna, Sweden)
- 2:04 pm T08-027C Perinatal estrogen differentially masculinizes expression of astroglial markers in the developing neocortex  
**Gareth M. Rurak** (Ottawa, Canada)
- 2:05 pm T08-028C The role of the intellectual disability gene and histone demethylase Phf8 in oligodendroglia  
**Marco Kremp** (Erlangen, Germany)
- 2:06 pm T10-031C Astrocyte heterogeneity in the ageing cortex  
**Maroussia Hennes** (Planegg-Martinsried, Germany)
- 2:07 pm T10-032C Early exposure to Inflammation imbalance immune and developmental populations of microglia  
**Juliette Van Steenwinckel** (Paris, France)
- 2:08 pm T10-033C Origin and diversity of cortical astrocytes  
**Jiafeng Zhou** (Geneva, Switzerland)
- 2:09 pm T10-034C Uncovering two faces of reactivity: Microenvironment dependent subtypes of astrocytes contribute to the pathogenesis in a MSA mouse model  
**Yanni Schneider** (Erlangen, Germany)
- 2:10 pm T10-035C Hallmarks of white matter astrocytes reveal region-specificity and adult astrogenesis  
**Judith Fischer-Sternjak** (Planegg-Martinsried, Germany)
- 2:11 pm T10-036C An ependymal cell census identifies heterogeneous and ongoing cell maturation in the adult spinal cord that is transiently reversed upon injury  
**Aida Rodrigo Albors** (Edinburgh, UK)
- 2:12 pm T10-037C Astrocyte diversity by region-specific proteomic labeling *in vivo*  
**Rainer Pielot** (Magdeburg, Germany)



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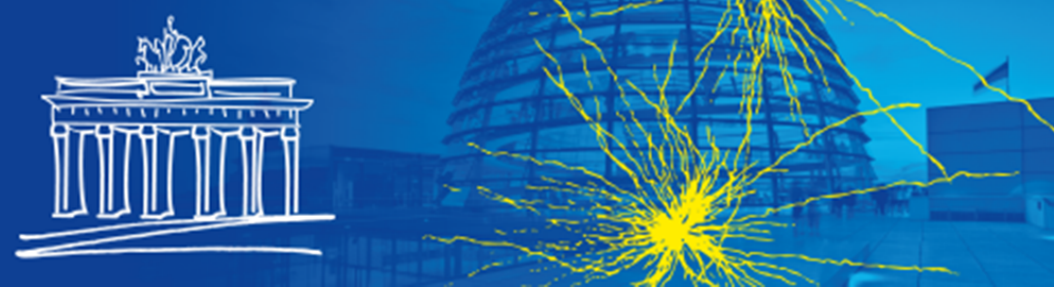
- 2:13 pm T10-038C Integrating single-cell and spatially resolved transcriptomic strategies to survey astrocytes in response to stroke  
**Emerson Daniele** (Toronto, Canada)
- 2:14 pm T10-039C Enteric gliosis entailed by pathological alpha-synuclein in the duodenum of Parkinson's disease patients  
**Michele Sandre** (Padova, Italy)
- 2:15 pm T10-040C Spatial cellular dynamics of lesion development and progression in a mouse model of multiple sclerosis  
**Petra Kukanja** (Solna, Sweden)
- 2:16 pm T10-041C Spatial-transcriptomics of postnatal microglia  
**Susanne Wiemann** (Bielefeld, Germany)
- 2:17 pm T10-042C The molecular identity of *glia limitans superficialis* astrocytes  
**Philip Hasel** (New York, USA)
- 2:18 pm T10-043C Proteomic characterization of interferon-responsive reactive astrocytes in the mouse and human brain  
**Priya Prakash** (New York, USA)
- 2:19 pm T10-044C Structural analysis of astrocytes in different experimental conditions  
**Sara Barsanti** (Braga, Portugal)
- 2:20 pm T10-045C Astrocyte structural heterogeneity in the mouse hippocampus  
**João Luís Machado** (Braga, Portugal)
- 2:21 pm T10-046C Characterising the immune potential of enteric glia cells  
**Sofia Archontidi** (London, UK)
- 2:22 pm T10-047C ARG1 expression in basal forebrain microglia modulates hippocampal innervation and cognition during postnatal development  
**Jose Luis Venero** (Seville, Spain)
- 2:23 pm T10-048C Exploring the Impact of 5-HTR Signaling on Astrocyte Calcium Dynamics and Morphology  
**Franziska E. Müller** (Hannover, Germany)





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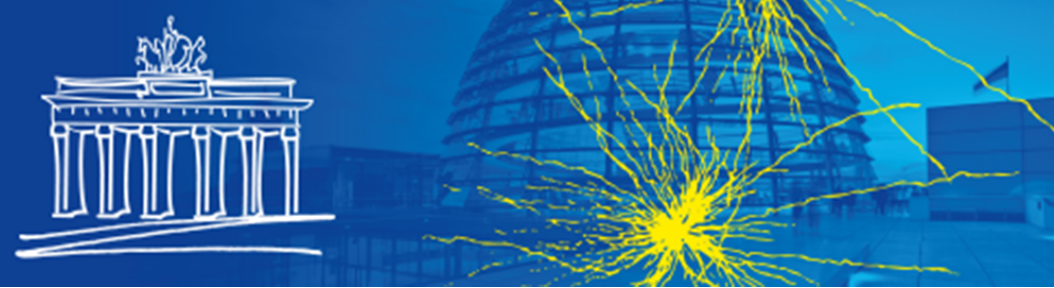


- 2:24 pm T10-049C Effects of gender and age on glial cells and axon myelination within the primate spinal cord  
**Florence E. Perrin** (Montpellier, France)
- 2:25 pm T10-050C Blood brain barrier disruption after traumatic brain injury induces an atypical response in astrocytes and neurons  
**Carmen Muñoz-Ballester** (Birmingham, USA)
- 2:26 pm T10-051C Enteric Glia Display Regional and Phenotype-specific MicroRNA Signatures  
**Amy M. Holland** (Maastricht, Netherlands)
- 2:27 pm T10-052C Age-related changes in parenchymal astrocytes within different areas of the human cerebral cortex  
**Patrizia Della Vecchia** (Planegg-Martinsried, Germany)
- 2:28 pm T10-053C From indicator to biosensor: GCaMPs for deciphering astrocyte Ca<sup>2+</sup> complexity  
**Andre Zeug** (Hannover, Germany)
- 2:29 pm T10-054C Immaturity of microglia leads to alterations in CNS development  
**Tamara H. Ruß** (Bielefeld, Germany)
- 2:30 pm T10-055C Morphological Heterogeneity of Astrocytes in a Cerebral Organoid  
**Kaitlin Szederkenyi** (Toronto, Canada)
- 2:31 pm T11-083C Investigating the neuron and astrocyte-specific contribution to disease and network dysfunction in a human iPSC model of MPSIIIC  
**James A. Crowe** (Lund, Sweden)
- 2:32 pm T11-084C Impact of adaptative inflammatory cues on microglia-neuron interaction at the Node of Ranvier in Multiple Sclerosis and EAE  
**Anne Desmazieres** (PARIS, France)
- 2:33 pm T11-085C Dysfunctional astrocyte calcium signaling and neuron-astrocyte interplay in experimental multiple sclerosis  
**Andres Mateo Baraibar** (Barakaldo, Spain)
- 2:34 pm T11-086C Dysregulated gliomedin alters C-fiber excitability  
**Yael Eshed Eisenbach** (Rehovot, Israel)



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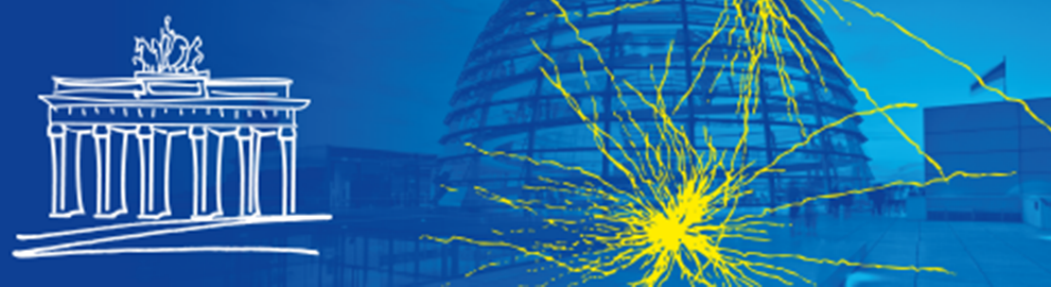


- 2:35 pm T11-087C Characterizing the spatial distribution of spinal cord microglia after *Spared nerve injury* model of neuropathic pain  
**Andreea-Violeta Grosu** (Bucharest, Romania)
- 2:36 pm T11-088C Microglial Rac1 is essential for microglia-synapse crosstalk and cognitive performance  
**Tiago O. Almeida** (Porto, Portugal)
- 2:37 pm T11-089C Deciphering ATP signaling in Epilepsy with Biosensors  
**Paola Nobili** (Montpellier, France)
- 2:38 pm T11-090C Novel Regulatory Mechanisms in Peripheral Nerve Development and Disease  
**Stephen Bradley** (Edinburgh, UK)
- 2:39 pm T11-091C Interferon- $\gamma$ : opponent or teammate of oxaliplatin-induced neurotoxicity in rat organotypic spinal cord slices?  
**Valentina Ferrara** (Florence, Italy)
- 2:40 pm T11-092C Activated macrophages after SNI increase DRG neuronal excitability  
**Alexandru-Florian Deftu** (Lausanne, Switzerland)
- 2:41 pm T11-093C The involvement of astrocyte calcium-dependent signaling in fear memory  
**Daniela Sofia Abreu** (Braga, Portugal)
- 2:42 pm T11-104C Epileptiform activity synchronizes microglial calcium signaling through P2Y12 receptors  
**Elena Avignone** (BORDEAUX CEDEX, France)
- 2:43 pm T11-095C Dissecting the role of p75 pan-neurotrophin receptor in the hyperglycemia-driven neuroinflammation and neurodegeneration.  
**Konstantina Chanoumidou** (HERAKLIO CRETE, Greece)
- 2:44 pm T11-096C Glial neuronal interactions in a synaptic connectomic dataset of zebrafish  
**Christina Schick** (Planegg, Martinsried, Germany)
- 2:45 pm T11-097C *In vitro* modelling of intraneuronal tau aggregation in a hiPSC-derived co-culture system of neurons, astrocytes and microglia  
**Julian Röwe** (Ludwigshafen, Germany)



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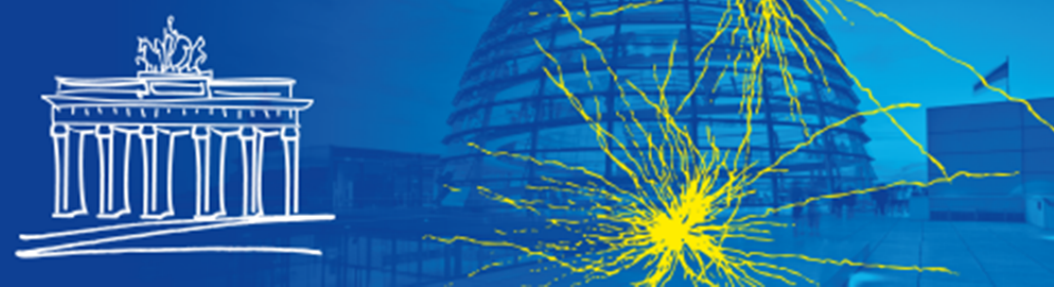


- 2:46 pm T11-098C The effect of acute and chronic insufficient sleep on mouse microglia  
**Sarah Steffens** (Helsinki, Finland)
- 2:47 pm T11-099C Astrocytic control of thalamic sensory processing  
**Eunji Cheong** (Seoul, South Korea)
- 2:48 pm T11-100C Discovering RNA sequence motifs necessary and sufficient for mRNA localization in astrocytes using a novel SN-MPRA approach  
**Joseph Dougherty** (SAINT LOUIS, USA)
- 2:49 pm T11-101C GAT transporters control GABA release by Schwann cells in peripheral nerve fibers  
**Valerio Magnaghi** (Milan, Italy)
- 2:50 pm T11-102C Neuron-derived Thioredoxin-80: a novel regulator of type-I interferon response in microglia  
**Julen Goicolea** (Solna, Sweden)
- 2:51 pm T11-103C Profiling of glial cell-surface molecules that mediate engulfment of neurons  
**Leire Abalde Atristain** (Portland, USA)
- 2:52 pm T11-094C Astrocytic Foxo1 regulates hippocampal spinogenesis and synaptic plasticity and enhances fear memory  
**João Filipe Viana** (Braga, Portugal)
- 2:53 pm T11-105C Modulation of the synaptic translome by glial extracellular vesicles in 5xfad mice  
**Aida de la Cruz** (Leioa, Spain)
- 2:54 pm T11-106C Dopaminergic drugs induce changes in transporters' mRNA expression in adult and neonatal rat astrocytes  
**Vesna So?an** (Ljubljana, Slovenia)
- 2:55 pm T11-107C Different effects of ageing on astrocytes and neurons in the human brain  
**Aleksandr Popov** (Jiaxing, China)
- 2:56 pm T11-108C Potassium signaling and its role in regulating axon-oligodendrocyte metabolic interactions  
**Zoe J. Looser** (Zurich, Switzerland)



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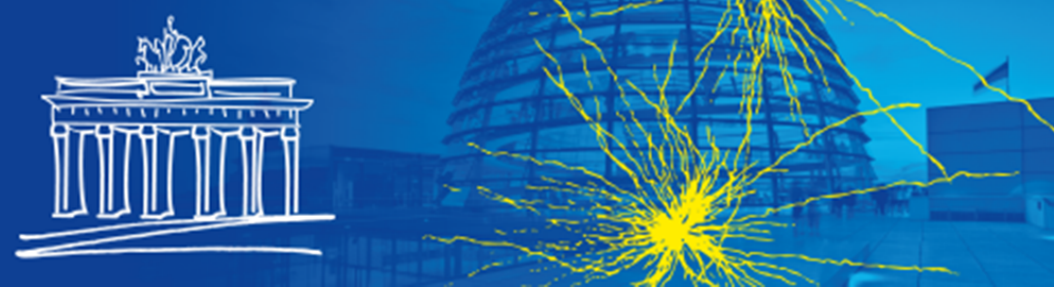
- 2:57 pm T11-109C Disrupted iron homeostasis in mice engineered with a mutation associated with stuttering  
**Marissa Millwater** (Bethesda, USA)
- 2:58 pm T11-110C Breaking the code of myelination: The Drosopus chimera, an evolutionary perspective from invertebrates to vertebrates.  
**Noémie Frère** (Paris, France)
- 2:59 pm T11-111C Enrichment of neurogenetic epilepsy genes within the astroglial lineage suggests potential new role for glial ion channels in cortical progenitors  
**Laura R. Morcom** (Cambridge, UK)
- 3:00 pm T11-112C Crosstalk between Glia Cells and Neurons under the Influence of Paclitaxel: Novel insights into the `Chemobrain`  
**Sabine U. Vay** (Koeln, Germany)
- 3:02 pm T11-114C Microglial signatures in an *in vivo* familial Parkinson's disease mouse model  
**Elpinickie Ninou** (Athens, Greece)
- 3:03 pm T11-115C Norepinephrine regulates Ca<sup>2+</sup> signals and the fate of oligodendrocyte progenitor cells in the cortex  
**Frederic Fiore** (Heidelberg, Germany)
- 3:04 pm T11-116C Gamma-frequency oscillations influence the morphology and activation of microglia  
**Meg Elley** (Exeter, UK)
- 3:05 pm T11-117C Oligodendroglial NMDA receptors: roles in activity-dependent myelination and remyelination  
**Alice Staffa** (Sant Joan d'Alacant, Spain)
- 3:06 pm T11-118C Exploring feedback mechanisms employed by oligodendrocyte precursor cells to regulate neuronal circuit development in the zebrafish visual system.  
**Denis Yuan** (Edinburgh, UK)
- 3:07 pm T11-119C Radial glial action potentials initiate fetal motor activity  
**Agathe Lafont** (Paris, France)
- 3:08 pm T11-120C Distinct handling of intracellular L-lactate in locus coeruleus neurons and cortical astrocytes  
**Zala Smole** (Ljubljana, Slovenia)





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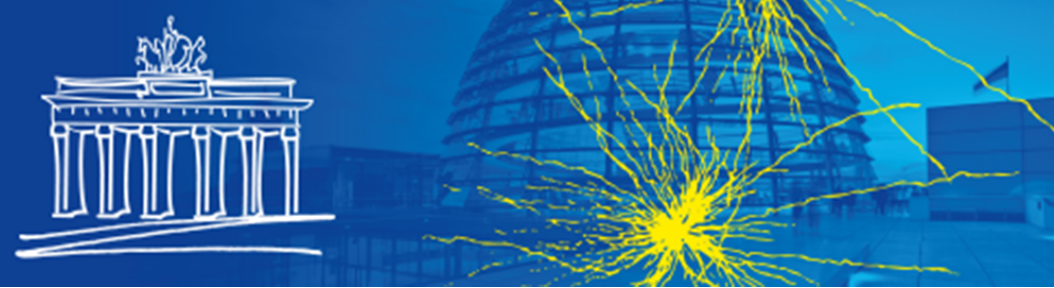


- 3:09 pm T11-121C Mechanisms of microglial mediated elimination of newborn embryonic retinal ganglion cells  
**Navita N. Lopez** (Salt Lake City, USA)
- 3:10 pm T11-122C Astrocytic Nr3n1 Tunes Astrocytic Functions in an Input-Specific Manner  
**Justin H. Trotter** (Stanford, USA)
- 3:11 pm T11-123C The myelinic channel system: A highway to the glial-axonal junction and infrastructure for myelin remodelling  
**Katie J. Chapple** (Glasgow, UK)
- 3:12 pm T12-021C Renewal of microglia alters their epigenetic status and increases their biological age in physiological conditions and after stroke  
**Mattia Gallizioli** (Barcelona, Spain)
- 3:13 pm T12-022C Brain angiogenesis induced by non-viral gene therapy leads brain damage recovery following experimental ischemic stroke  
**Leire Iglesias Iglesias** (Leioa, Spain)
- 3:14 pm T12-023C Fight for survival or get destroyed? – Autophagy in glial cells after hypoxic-ischemic injury  
**Paulina G?bala** (Warsaw, Poland)
- 3:15 pm T12-024C A robust gene set module highlights major transcriptomic changes induced by stroke in brain endothelial cells: effect of aging on the neuroinflammatory response  
**Maria Arbaizar Rovirosa** (Barcelona, Spain)
- 3:16 pm T12-025C Dectin-1<sup>+</sup> microglia participate in clearance of apoptotic neuronal cells  
**Jordi Pedragosa** (Barcelona, Spain)
- 3:17 pm T12-026C A 3D system for modelling astrocytic response in brain pathology – the paradigm of ischemic stroke  
**Georgia Athanasopoulou** (Porto, Portugal)
- 3:18 pm T12-027C Interglial communication of astrocytes and microglia in an in vitro model of ischemia  
**Daniel Navin Olschewski** (Cologne, Germany)
- 3:19 pm T12-028C Ischemic stroke induces a chronically altered microglia phenotype with pro-regenerative capacities  
**Steffanie Heindl** (München, Germany)



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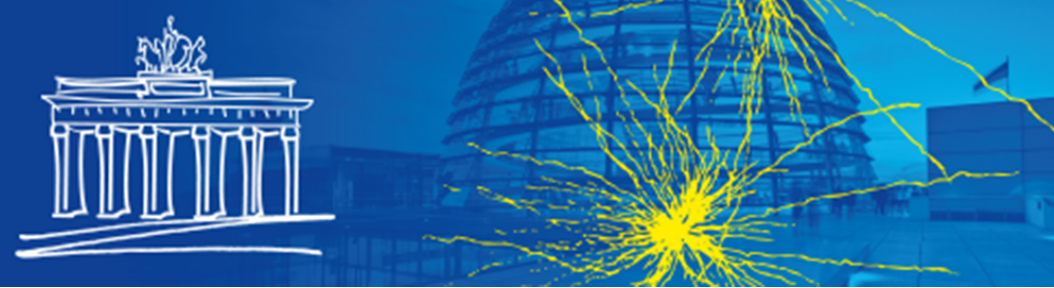


- 3:20 pm T12-029C MicroRNA Regulation of Ischemic White Matter Injury  
**Selva Baltan** (Portland, USA)
- 3:21 pm T12-030C A Human Brain Organoid Model for Cerebral Ischemia  
**Siri Egenæs** (Oslo, Norway)
- 3:22 pm T12-031C Intermittent hypoxia promotes gliogenesis and effective migration of Neuronal stemcells into the stroke infarct through modulation of glial scar  
**Syed A. Roshan** (Tiruchirapalli, India)
- 3:23 pm T12-032C Hypoxia activates a unique reactive transformation signature in hiPSC-derived astrocytes  
**Hannah D. Franklin** (London, UK)
- 3:24 pm T13-001C Voluntary Wheel Running in Old C57BL/6 Mice Reduces Age-Related Inflammation in the Colon but Not in the Brain  
**Christiane Frahm** (Jena, Germany)
- 3:25 pm T13-002C Investigating the role of dorsal CA1 astrocytes activation during contextual memory formation and recall.  
**Toko Kikuchi** (Geneva, Switzerland)
- 3:26 pm T13-003C Astrocytes provide the temporal dynamic required for theta driven memory formation in the hippocampus  
**Silas Dalum Larsen** (Copenhagen, Denmark)
- 3:27 pm T13-004C Daphnetin improves cognitive function in an APP/PS1 double-transgenic mouse model of Alzheimer's disease by inhibiting A $\beta$  deposition and astrocytic activation  
**Peipei Gao** (Xi'an, China)
- 3:28 pm T13-005C Learning-induced changes in secretome of hippocampal astrocytes  
**Hyeyeon Kim** (Daegu, South Korea)
- 3:29 pm T13-006C The role of astrocytic Gs-GPCR signaling in cortical engram formation and remote memory retrieval  
**Aline Mak** (AMSTERDAM, Netherlands)
- 3:30 pm T13-007C Oligodendrocyte lineage dynamics dictate cognitive performance outcomes of pre-test working memory training.  
**Stuart G. Nayar** (London, UK)



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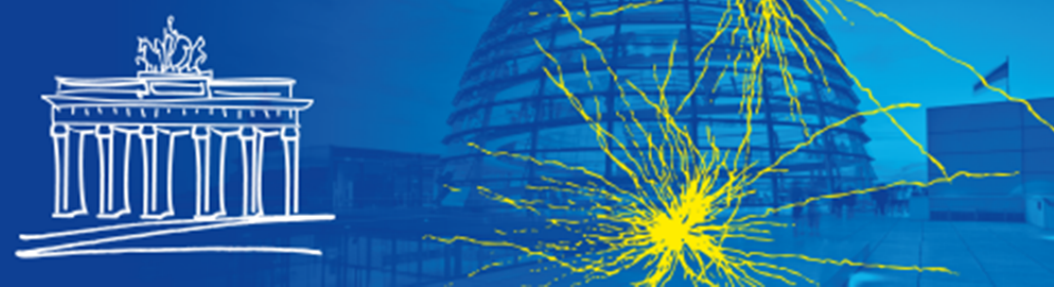


- 3:31 pm T13-008C Astrocyte dynamics determine the long-term fate of memories  
**Hiroki Yamao** (Miyagi prefecture, Sendai, Japan)
- 3:32 pm T13-009C Analyzing learning-evoked myelination  
**Tanja M. Birgisdóttir** (Reykjavík, Iceland)
- 3:33 pm T13-010C Astrocytic synchronization promotes memory consolidation  
**Márton Péter** (Budapest, Hungary)
- 3:34 pm T14-052C Evaluation of safety and efficacy of novel drugs in de- and remyelination conditions using immunocompetent brain organoids  
**Simona Lange** (Basel, Switzerland)
- 3:35 pm T14-053C Tiling of myelin patterns: the dynamics of developmental myelination in the optic nerve.  
**Alexandra Beaudry-Richard** (San Francisco, USA)
- 3:36 pm T14-054C Myelin deposition follows striking distinct patterns in human and mouse cerebella  
**Annalisa Buffo** (Orbassano, TORINO, Italy)
- 3:37 pm T14-055C Ablation of oligodendrogenesis in adult mice alters brain microstructure and activity independently of behavioural deficits  
**Malte Kaller** (Oxford, UK)
- 3:38 pm T14-056C Comparative morphology of mitochondria in optic nerve and cell body of retinal ganglion cells in the *Plp*-deficient mouse  
**Leonie C. Schadt** (Göttingen, Germany)
- 3:39 pm T14-057C Role of monocarboxylate transporter (MCT) 2 in the central nervous system (re)myelination  
**Leire Izagirre Urizar** (Leioa, Spain)
- 3:40 pm T14-058C The role of the actin cytoskeleton in axon ensheathment and myelination  
**Yi Jiang** (London, UK)
- 3:41 pm T14-059C AMPA receptor signalling to oligodendrocyte precursors stimulates motor skill learning  
**Matthew Swire** (London, UK)



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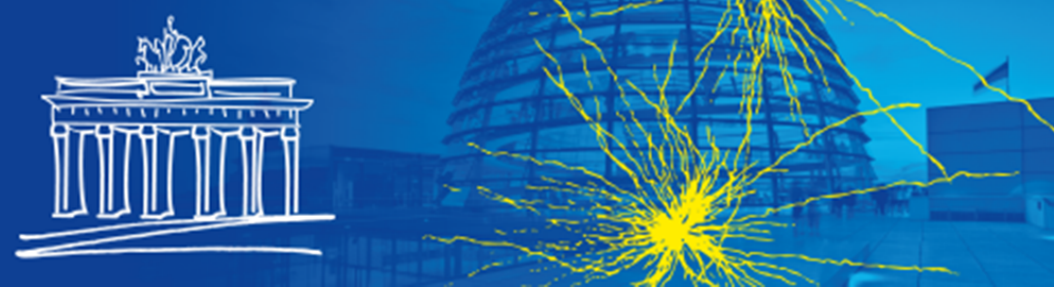
- 3:42 pm T14-060C Control of myelinated axon conduction speed by node of Ranvier electrical and structural adaptations  
**Jonathan Lezmy** (London, UK)
- 3:43 pm T14-061C Type-dependent dysregulation of myelination in focal cortical dysplasia in the frontal lobe of the human neocortex  
**Catharina Donkels** (Freiburg im Breisgau, Germany)
- 3:44 pm T14-062C Role of corepressors Ncor1 and Ncor2 in Schwann cell biology.  
**Nikiben Patel** (San Juan, Spain)
- 3:45 pm T14-063C Ceruloplasmin deficient mice show signs of reduced microglial activation state in response to cuprizone treatment  
**Birgitte Villadsen** (Odense C, Denmark)
- 3:46 pm T14-064C Hippocampal PV<sup>+</sup>BC axon myelination shortens inhibitory delays and speeds up sharp-wave ripple frequency  
**David Vandael** (Amsterdam, Netherlands)
- 3:47 pm T14-065C Development of a Boronic Acid-based fluorescent platform for the live imaging of myelin-carrying cells as a tool to study and characterize Multiple Sclerosis-like foamy microglia.  
**Maria Vaz Pinto** (Lisbon, Portugal)
- 3:48 pm T14-066C Amyloid  $\beta$  oligomers impair node of Ranvier structure in Alzheimer's disease  
**Tania Quintela Lopez** (London, UK)
- 3:49 pm T14-067C Reactive microglia phagocytose synapses in response to focal demyelination  
**Michael Perry** (Cambridge, UK)
- 3:50 pm T14-068C Tissue-type plasminogen activator contributes to developmental myelination.  
**Barbara Delaunay-Piednoir** (CAEN, France)
- 3:51 pm T14-069C Modification of grey and white matter composition during postnatal mouse development measured by Fourier transformed infrared microspectroscopy  
**Gemma Manich** (Cerdanyola del Vallès, Spain)
- 3:52 pm T14-070C Siponimod ameliorates metabolic oligodendrocyte injury via the sphingosine-1 phosphate receptor 5  
**Leo Heinig** (Rostock, Germany)





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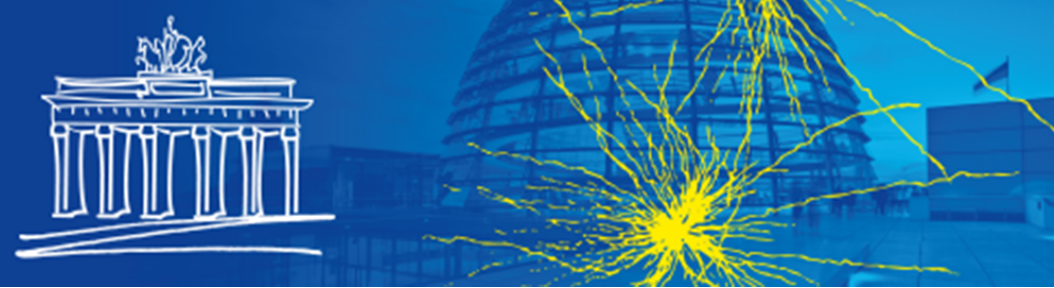


- 3:53 pm T14-071C ROLE OF NEDDYLATION IN OLIGODENDROCYTE DIFFERENTIATION AND MYELINATION  
**Izaskun Buendia** (A Coruña, Spain)
- 3:54 pm T14-072C Spatiotemporal patterns of developmental myelination across early and higher-level visual cortex in the human.  
**Clara M. Bacmeister** (Stanford, USA)
- 3:55 pm T14-073C Myelin preserves sleep oscillations and memory function  
**Mohit Dubey** (Amsterdam, Netherlands)
- 3:56 pm T14-074C A role of Schmidt-Lanterman Incisure number for sustaining Schwann cell function during chronic and acute nerve injury  
**Doris Krauter** (Göttingen, Germany)
- 3:57 pm T14-075C Oligodendrocytes may utilize post-synaptic proteins to coordinate myelin formation on distinct axon classes  
**Natalie Carey** (Aurora, USA)
- 3:58 pm T14-076C Studying the role of GPR37 in CNS myelination  
**Renana Hajbi Karasik** (Rehovot, Israel)
- 3:59 pm T14-077C Investigating the role of oligodendrocyte TRPA1 channel in demyelinating disease using the cuprizone model  
**Grace Flower** (London, UK)
- 4:00 pm T14-078C The Monoselective Sphingosine-1-Phosphate Receptor-1 Modulator Ponesimod Enhances Remyelination in the Cuprizone Model of Demyelination  
**Emily Willems** (Hasselt, Belgium)
- 4:01 pm T14-079C Oligodendroglial UNC5B regulates the organization of paranodal junctions and myelin modification during aging  
**Nonthué A. Uccelli** (Montreal, Canada)
- 4:02 pm T14-080C Myelin internalization by oligodendroglia promotes lineage progression and maturation  
**Carla Peiró Moreno** (Leioa, Spain)
- 4:03 pm T14-081C Oligodendroglial cells and myelin in SCN2A mutant mice  
**Julia Volkmer** (Tübingen, Germany)



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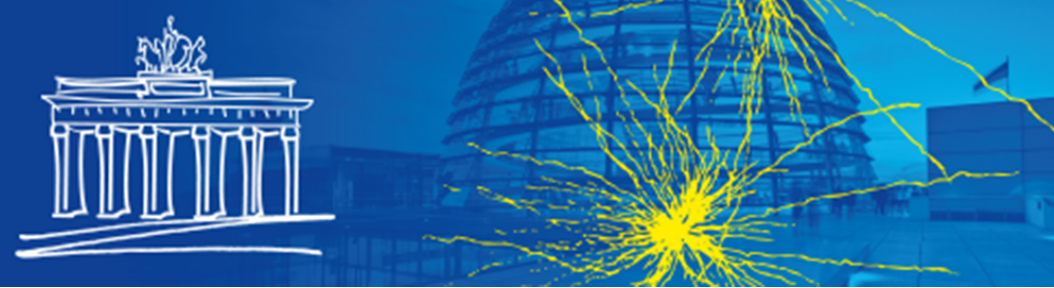


- 4:04 pm T14-082C Exploring Fbxw7 regulation of Myrf in CNS myelination  
**Hannah Y. Collins** (Portland, USA)
- 4:05 pm T14-083C Repurposing of PARP-1 Inhibitors in Rare Demyelinating Diseases  
**Marianne Mekhaeil** (Dublin, Ireland)
- 4:06 pm T15-013C Widespread and continuous astrocytes activation supports long-term neurogenesis in the lesioned striatum  
**Marco Fogli** (Orbassano, Italy)
- 4:07 pm T15-014C Identification of transiently formed spinal cord immune-endogenous neural stem cell niches upon injury  
**Martyna Lukoseviciute** (Solna, Stockholm, Sweden)
- 4:08 pm T15-015C Dynamics and regulation of intraventricular oligodendrocyte progenitors in the adult brain  
**Ana Delgado** (Basel, Switzerland)
- 4:09 pm T15-016C Aquaporin-4 aggregation into Orthogonal Arrays of Particles affects Neural Stem Cell behaviour in the early phases of neural differentiation  
**Guido Moggi** (Bari, Italy)
- 4:10 pm T15-017C Novel regulators of astrocyte-adult neural progenitor cells crosstalk  
**Mariagrazia Grilli** (Novara, Italy)
- 4:11 pm T15-018C A distinct population of neuroblasts in the aged SVZ acquires an inflammatory active expression profile and doesn't reach the OB  
**Jonas Fritze** (Lund, Sweden)
- 4:12 pm T16-111C Transcriptional and behavioural response of microglia-specific Smad4 knock-out mice to LPS  
**Phani Sankar Potru** (Bielefeld, Germany)
- 4:13 pm T16-112C P2X7R,  $\beta_3$ -integrin and Cx-43 mediate interaction between astrocytes and adjacent autoreactive immune cells  
**Katarina D. Milicevic** (Belgrade, Serbia)
- 4:14 pm T16-113C CD300f immune receptor-dependent phagocytosis and lipid degradation in demyelinating lesions of the nervous system  
**Andrés Cawen** (Montevideo, Uruguay)



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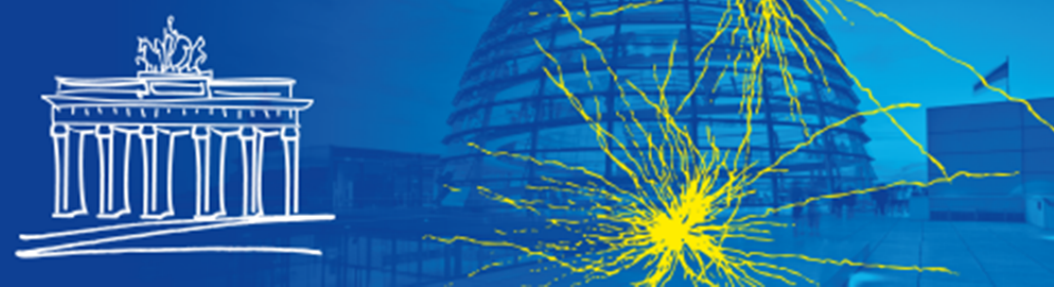


- 4:15 pm T16-114C Human iPSC-derived microglia - a model for neuronopathic Gaucher Disease  
**Juliane F. Tampé** (Lund, Sweden)
- 4:16 pm T16-115C In vitro characterization of human neuroinflammatory astrocytes  
**Francesca Rapino** (Cambridge, USA)
- 4:17 pm T16-116C Evobrutinib, a Bruton's tyrosine kinase inhibitor, modulates microglia activity in vivo  
**Anastasia Geladaris** (Göttingen, Germany)
- 4:18 pm T16-117C In vitro modeling of multiple sclerosis utilizing human iPSC-derived microglia  
**Johanna Lotila** (Tampere, Finland)
- 4:19 pm T16-118C The potential therapeutic role of itaconate and mesaconate on the detrimental effects of neuroinflammatory processes in the brain  
**Melanie Ohm** (Braunschweig, Germany)
- 4:20 pm T16-119C Reboxetine treatment reduces glial reactivity in the P301S mouse model  
**Irene Lopez Gutierrez** (MADRID, Spain)
- 4:21 pm T16-120C Mechanistic single-cell investigation of neuroinflammation induced by influenza A virus infection  
**Lea Gabele** (Braunschweig, Germany)
- 4:22 pm T16-121C The effect of selective soluble TNF-TNFR1 signaling inhibition on microglial phenotypes in chronic neuroinflammation post-stroke  
**Pernille Vinther Nielsen** (Odense C, Denmark)
- 4:23 pm T16-122C Defining the consequence of LRRK2 dysregulation in human ESC-derived astrocytes  
**Áine Bríd Heffernan** (Edinburgh, UK)
- 4:24 pm T16-123C IL-10 protects female mice from Methamphetamine-induced neuroinflammation  
**Ana Isabel Silva** (Porto, Portugal)
- 4:25 pm T16-124C ABCA7 DYSFUNCTION IN MICROGLIAL BIOLOGY AND ALZHEIMER'S DISEASE  
**Jessie Premereur** (Antwerp, Belgium)



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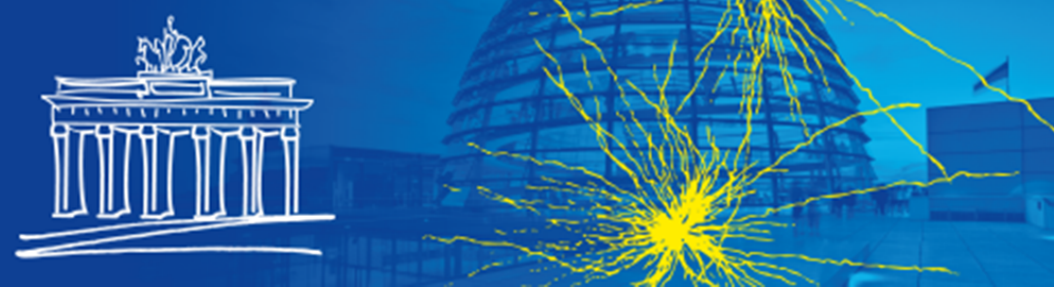
- 4:26 pm T16-125C *Irf5* modulates myelin-derived lipid processing and remyelination  
**Maria Domercq** (Leioa, Spain)
- 4:27 pm T16-126C Astrocytes and microglia: the mechanosensing side of the CNS power couple  
**Miguel R.G. Morais** (Porto, Portugal)
- 4:28 pm T16-127C The role of microglia in 5xFAD/FAAH<sup>-/-</sup> mice: an *in vivo* multiphoton microscopy and molecular study  
**María Andrea Arnanz** (Pozuelo de Alarcón, Spain)
- 4:29 pm T16-128C GRN and C9orf72: converging disease mechanisms in human microglia  
**Paula Polanco Miquel** (ANTWERPEN, Belgium)
- 4:30 pm T16-129C The role of MHC-II in CNS remyelination  
**Jessica A. White** (Belfast, UK)
- 4:31 pm T16-130C An investigation of the behavioral changes induced by the conditional inactivation of 5-HT<sub>2B</sub> receptors on microglia cells  
**Marco Anzalone** (Odense C, Denmark)
- 4:32 pm T16-131C Deciphering the role of an astrocytic lncRNA in neuroinflammation  
**Ulrike Fuchs** (Göttingen, Germany)
- 4:33 pm T16-132C Human iPSC glial co-culture chip model for studying neuroinflammation *in vitro*  
**lisa Tujula** (Tampere, Finland)
- 4:34 pm T16-133C Tackling the role of microglia in Multiple Sclerosis-associated cognitive impairment  
**Catarina Barros** (Lisboa, Portugal)
- 4:35 pm T16-134C Human pluripotent stem cell-based models establish the cellular neurotropism and neurovirulence of monkeypox virus  
**Lisa Bauer** (Rotterdam, Netherlands)
- 4:36 pm T16-135C *In vitro* assay development for studying the interaction between microglia and myeloid cells in neuroinflammatory conditions  
**Estrid Thougard Pedersen** (Odense, Denmark)





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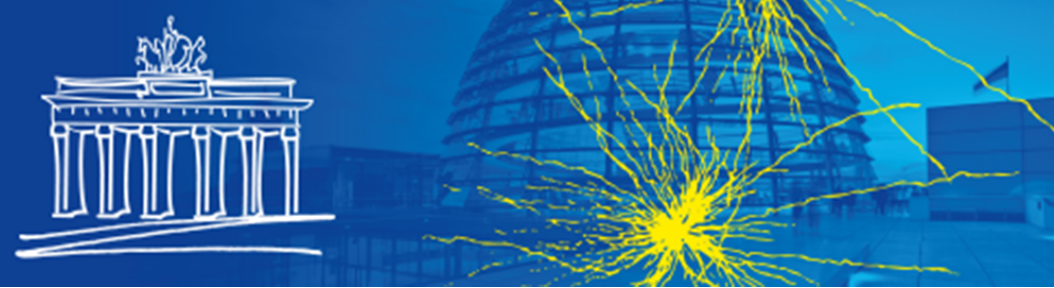


- 4:37 pm T16-136C Sex- and cell-type specific neuroimmune responses underlie demyelination  
**Chloe Lopez-Lee** (New York, USA)
- 4:38 pm T16-137C FGFR3 is Expressed in Mice and Humans Meissner Corpuscles: A Neural Autoantigen in Autoimmune Small Fiber Neuropathy Patients?  
**Efrat Shavit-Stein** (Ramat Gan, Israel)
- 4:39 pm T16-138C Succinate receptor 1 (SUCNR1) signalling sustains microglial activation in CNS inflammation  
**Grzegorz Krzak** (Cambridge, UK)
- 4:40 pm T16-139C Rod microglia is associated to tau pathology in the Alzheimer's disease hippocampus  
**Juan Jose Fernandez-Valenzuela** (Malaga, Spain)
- 4:41 pm T16-140C Contribution of microglial  $\beta$ 2 adrenergic signaling degeneration to Alzheimer's disease pathology  
**Linh H. Le** (Rochester, USA)
- 4:42 pm T16-141C Investigating the role of Clec7a in microglia function and assessing whether it may represent an early molecular target in Alzheimer Disease (AD)  
**Mathieu Prieur** (Montpellier, France)
- 4:43 pm T16-142C Deletion of GABA<sub>B</sub> receptors from oligodendrocyte precursor cells impairs blood-brain barrier function  
**Lipao Fang** (Homburg, Germany)
- 4:44 pm T16-143C Effects of a gut-selective integrin-targeted therapy in mice exposed to early life immunostimulation (EIA): rescue of the social novelty deficit and of the expression of protective genes in hippocampus and cortex  
**Roberta De Simone** (Rome, Italy)
- 4:45 pm T16-144C The bidirectional relation between Corticosterone and Foxp3<sup>+</sup> T Regulatory cell population in Major Depression-like Disorder  
**Inssaf Berkiks** (capetown, South Africa)
- 4:46 pm T16-145C An *in vivo* model to study autoimmune encephalitis  
**Joanne Falck** (Berlin, Germany)



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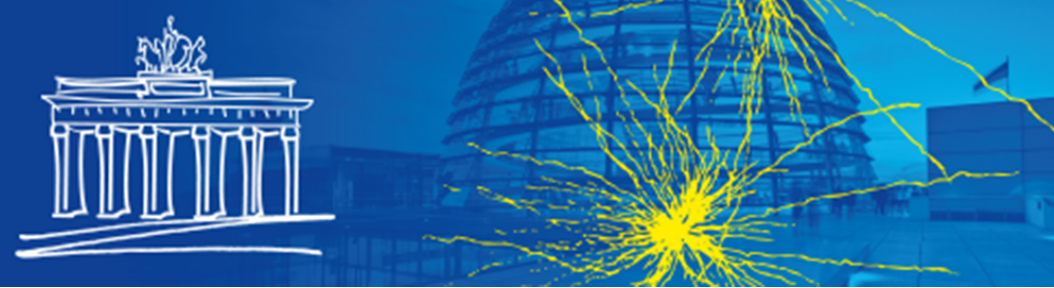


- 4:47 pm T16-146C Microglia-mediated chronic neuroinflammation impairs neurogenesis  
**Alma N. Mohebiany** (Antwerp, Belgium)
- 4:48 pm T16-147C SORLA impacts reactivity and response to pro-inflammatory stimulation of iPSC-derived microglia cells  
**Peter L. Ovesen** (Berlin, Germany)
- 4:49 pm T16-148C Effects of Gestational and Lactational Exposure to Perfluorohexanoic Acid (PFHxA) on Cerebellum Development  
**Elizabeth Plunk** (Rochester, USA)
- 4:50 pm T16-149C Modulation of glial inflammatory reactions by GPR55  
**Annika Hensel** (Halle (Saale), Germany)
- 4:51 pm T16-150C Profiling of MS microglia nodules reveals enriched propensity for lesion formation  
**Aletta van den Bosch** (Amsterdam, Netherlands)
- 4:52 pm T16-151C Endocytosis boost by the cholesterol-dependent cytolysin pneumolysin enhances inflammatory response  
**Asparouh I. Iliev** (Bern, Switzerland)
- 4:53 pm T16-152C Enteric Glial Cells as a Possible Source of Myelin Antigen in Inflammatory Bowel Disorders and Multiple Sclerosis  
**Ryan Brown** (Charlottesville, USA)
- 4:54 pm T16-153C Understanding the effect of neutrophil infiltration on microglia population after spinal cord injury  
**Andreia G. Pinho** (Braga, Portugal)
- 4:55 pm T16-154C Cannabidiol induces autophagy in human microglia: relevance for its immuno-modulatory effect  
**Adriano M. Chaves** (Fortaleza, Brazil)
- 4:56 pm T16-155C Therapeutic modulation of soluble TNF-TNFR1 signaling selectively in microglia promotes remyelination in the cortical grey matter.  
**Athena Boutou** (Athens, Greece)
- 4:57 pm T16-156C Distinct astrocyte phenotype and transcription profiles associated with remyelination and demyelination in the cuprizone model of multiple sclerosis  
**Ilias Roufagalas** (Athens, Greece)



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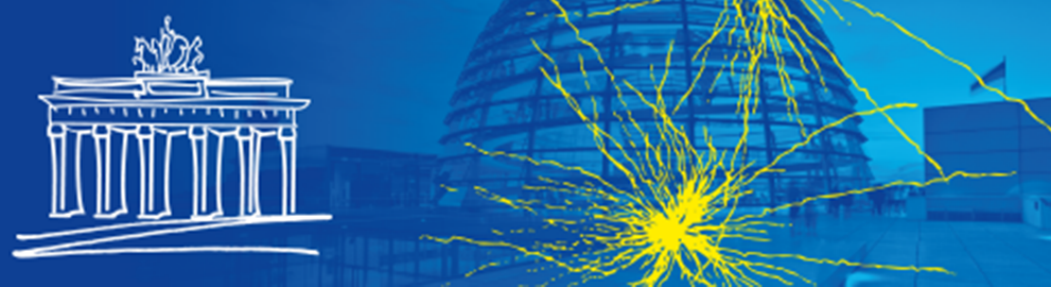


- 4:58 pm T16-157C Astrocytes exhibit morphological differences between female and male at 30 days post juvenile mTBI  
**Lea Hippauf** (Bordeaux Cedex, France)
- 4:59 pm T16-158C Elucidating microglia programs under PARK7/DJ-1-deficiency, a genetic cause of Parkinson's disease  
**Frida Lind-Holm Mogensen** (Luxembourg, Luxembourg)
- 5:00 pm T16-159C TSPO is required for CGAS expression and function in human iPSC microglia-like cells  
**Maria Weinert** (London, UK)
- 5:01 pm T16-160C Psychostimulants and neuroinflammation: finding critical players in the crosstalk between glial cells and neurons  
**Joana Bravo** (Porto, Portugal)
- 5:02 pm T16-161C Effects of the cannabinoids 2-Arachidonylglycerol and WIN 55,212-2 on primary isolated astrocytic cultures and astrocytic-microglial co-cultures  
**Franziska Vieregge** (Halle (Saale), Germany)
- 5:03 pm T16-162C The Roles of NLRX1 in Regulation of TLR4-mediated Inflammation and Cell Death in Microglia.  
**Wan-Wan Lin** (Taipei, Taiwan)
- 5:04 pm T16-163C Inflammatory stimuli interfere with of myelin phagocytosis in macrophages via the Jak/STAT pathway  
**Lorenzo Romero-Ramírez** (Toledo, Spain)
- 5:05 pm T16-164C Microglial aggregation and demyelinating cortical pathology in mouse  
**Trevor Owens** (Odense C, Denmark)
- 5:06 pm T16-165C Induction and modulation of inflammatory responses in bi- and tri-cellular murine iPSC-derived neurospheroids  
**Julia Di Stefano** (Antwerp, Belgium)
- 5:07 pm T17-010C The presence of glia cells is required for the up-regulation of Na<sup>+</sup> currents as well as of Na<sup>+</sup>/K<sup>+</sup>-ATPases by thyroid hormone in cultures from postnatal rats  
**Irmgard D. Dietzel-Meyer** (Bochum, Germany)
- 5:08 pm T17-011C Tanycyte signal for Tanycyte/Neuron communication in Energy Balance regulation.  
**Rafik Dali** (Lausanne, Switzerland)



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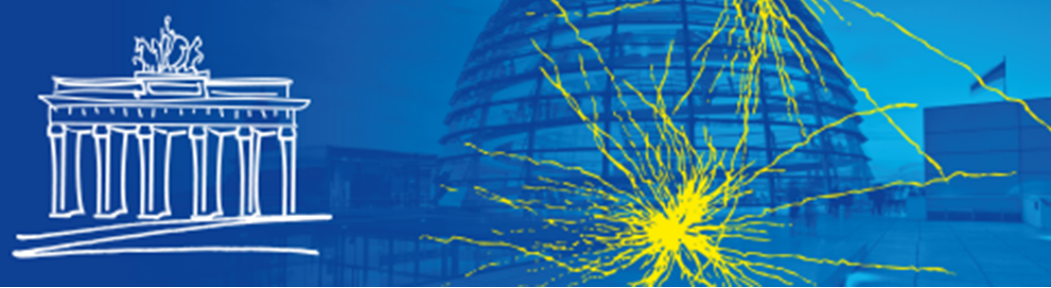
- 5:09 pm T17-012C Investigation of noradrenaline mediated glial wave induced motor arrest upon aversive stimulation  
**Mahalakshmi Dhanasekar** (Paris, France)
- 5:10 pm T17-013C Transmission of mechanical forces dictates astrocyte local stiffness and calcium dynamics, modulated by cell morphology  
**Miguel Fernández de la Torre** (Leganés, Spain)
- 5:11 pm T17-014C Function of  $\mu$ -crystallin expressing striatal astrocytes *in vivo*  
**Matthias Ollivier** (Los Angeles, USA)
- 5:12 pm T17-015C Focused Ultrasound for Glial Modulation  
**Sophie V Morse** (London, UK)
- 5:13 pm T17-016C Microglial contribution to neuronal network remodeling after paralysis onset  
**Fanny S. Martineau** (Lausanne, Switzerland)
- 5:14 pm T17-017C Oligodendrocyte TRPA1 regulates potassium siphoning and neuronal excitability  
**Nicola Hamilton-Whitaker** (London, UK)
- 5:15 pm T17-018C Calcium signaling in Astrocytes  
**Ahmad Jibai** (Rotterdam, Netherlands)
- 5:16 pm T17-019C The astrocyte  $\alpha$ 1-adrenoreceptor is an essential component of the neuromodulatory system in mouse visual cortex.  
**Jérôme Wahis** (Leuven, Belgium)
- 5:17 pm T18-006C Deciphering the dynamic of cerebrovascular reactivity to hypercapnia and neurovascular coupling  
**Marine Tournissac** (Paris, France)
- 5:18 pm T18-007C Spatio-temporal dynamics of microglia phenotype in chronic hypertensive states  
**Lorena Morton** (Magdeburg, Germany)
- 5:19 pm T18-008C mRNA distribution and local translation sustain the postnatal molecular maturation of perivascular astrocytic processes  
**Anne-Cécile Boulay** (Paris, France)





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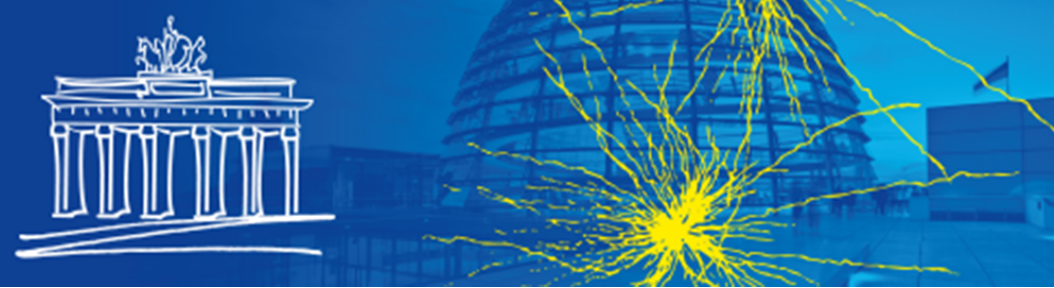


- 5:20 pm T18-009C Sulfite oxidase in astrocyte mitochondria generates nitric oxide during brain hypoxia  
**Alexander Mascarenhas** (London, UK)
- 5:21 pm T18-010C Cross-talk between endothelial cells and macrophages through soluble factors  
**Valerie Petegnief** (Barcelona, Spain)
- 5:22 pm T18-011C Deletion of aquaporin-4 improves capillary blood flow distribution and intracranial pressure load after brain edema in awake mice  
**Luca Bordoni** (Oslo, Norway)
- 5:23 pm T20-033C Acquisition of astroglial plasticity in the human cerebral cortex is pathology-dependent and mediated by injury-specific factors in the cerebrospinal fluid  
**Swetlana Sirko** (Planegg-Martinsried, Germany)
- 5:24 pm T20-034C The role of Nicotinamide in central nervous system re/myelination  
**Ioannis-Stefanos Kaplanis** (Heraklion, Greece)
- 5:25 pm T20-035C Adipo-glia signaling mediates metabolic adaptation in peripheral nerve regeneration  
**Venkat Krishnan Sundaram** (Leipzig, Germany)
- 5:26 pm T20-036C Comparative Expression Analysis Reveals Cell Type-Specific Neuronal Injury-Responses  
**Frank Bosse** (Duesseldorf, Germany)
- 5:27 pm T20-037C Study of the role of Smoothed non-canonical signalling in oligodendroglia differentiation  
**Antonella Ragnini-Wilson** (Rome, Italy)
- 5:28 pm T20-038C Contribution of Platelets to Remyelination in Multiple Sclerosis  
**Francisco J. Rivera** (Helsinki, Finland)
- 5:29 pm T20-039C Epigenetic priming in perivascular cells promotes fibrotic response after CNS injury  
**Anais Julien** (Solna, Sweden)
- 5:30 pm T20-040C Tamoxifen Attenuates Reactive Astroglia in the Xenopus Tadpole Optic Tectum Following Focal Impact Injury  
**Amy K. Sater** (Houston, USA)



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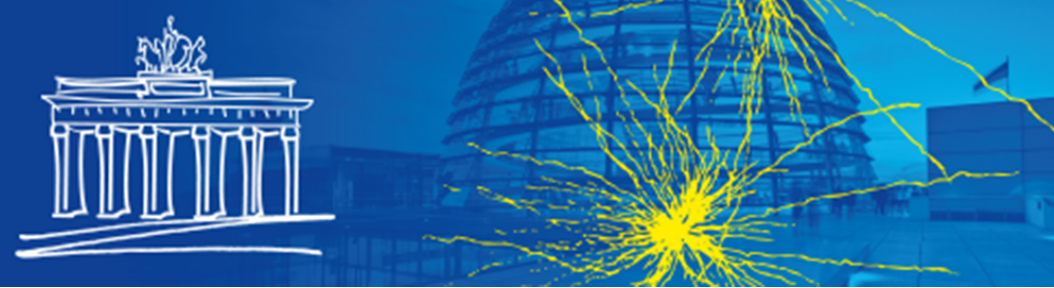


- 5:31 pm T20-041C Adaptive post-traumatic changes in the neurogenic niches of adult mouse brain are strongly dependent on the location of CNS injury and vary with increasing age  
**Chiara Marchesan** (Planegg-Martinsried, Germany)
- 5:32 pm T20-042C Combination-Based Small Molecule Screening for Induced Oligodendrocyte Differentiation  
**Luke Lairson** (La Jolla, USA)
- 5:33 pm T20-043C Effects of the PPAR- $\gamma$  agonist pioglitazone on the microglia in different brain regions after traumatic brain injury in the rat  
**Petra Dolenc** (Rijeka, Croatia)
- 5:34 pm T20-044C Local cholesterol metabolism orchestrates remyelination  
**Stefan A. Berghoff** (Munich, Germany)
- 5:35 pm T20-045C Schwann cells - endothelial cells interactions during the nerve regeneration inside a vein graft enriched with fresh skeletal muscle  
**Federica Zen** (Orbassano, Italy)
- 5:36 pm T20-046C Changes in CNS extracellular matrix stiffness and its effects in human oligodendrocyte differentiation  
**Carmen Melendez-Vasquez** (New York, USA)
- 5:37 pm T20-047C Pharmacogenomic screening identifies and repurposes small molecules for their pro-oligodendrogenic and pro-myelinating activities  
**Jean-Baptiste Huré** (Paris, France)
- 5:38 pm T20-048C Leriglitazone protects oligodendrocytes and promotes myelination in demyelinating diseases.  
**Anna Vilalta** (Mataró, Spain)
- 5:39 pm T20-049C A novel protein involved in peripheral nerve injury: Regulator of G Protein Signalling 16 (RGS16)  
**Marina García Bejarano** (Orbassano (Torino), Italy)
- 5:40 pm T21-009C Cell-intrinsic pathological characteristics in p.A53T- $\alpha$ Syn iPSC-derived astrocytes from Parkinson's disease patients  
**Christina Paschou** (Athens, Greece)
- 5:41 pm T21-010C Releasing mechanical stress as a major facilitator in glia-to-neuron reprogramming  
**Marcelo Salierno** (London, UK)



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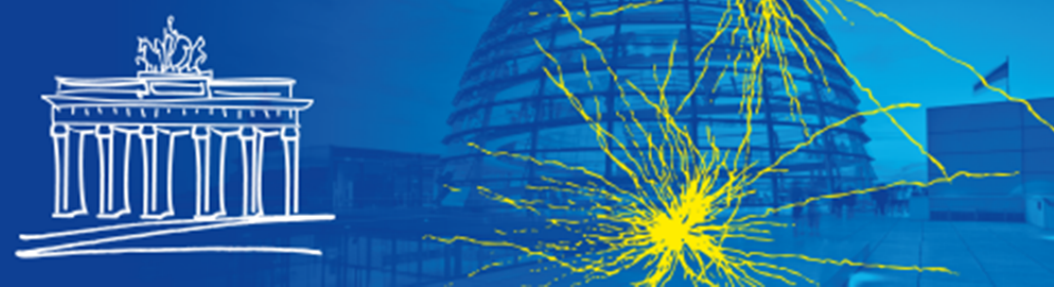


- 5:42 pm T21-011C Glia-to-glutamatergic neuron conversion in the mouse postnatal cerebral cortex  
**Laia Torres Masjoan** (London, UK)
- 5:43 pm T21-012C Glia and neurons from human iPSCs to address the pathology of Alzheimer's disease  
**Juan Antonio Garcia Leon** (Malaga, Spain)
- 5:44 pm T21-013C Is it real? An investigation of astrocyte to oligodendrocyte reprogramming *in vitro*  
**Justine Bajohr** (Toronto, Canada)
- 5:45 pm T21-014C Impact of the reactive cellular environment on glia-derived neurons in the injured adult mouse cortex  
**Catarina Fernandes** (Mainz, Germany)
- 5:46 pm T21-015C SnRNAseq dissection of Neurog2-induced glia-to-neuron reprogramming indicates progressive acquisition of homeostatic gene expression responses to neuronal activity modulation.  
**Filippo Calzolari** (Mainz, Germany)
- 5:47 pm T21-016C Generation of functional neurons from adult human olfactory ensheathing glia by direct lineage conversion  
**Javier Sierra** (Pozuelo de Alarcón, Spain)
- 5:48 pm T22-006C Regional and Time difference in K<sup>+</sup> Clearance in Hippocampal Slices of Healthy and Epileptic Mice  
**Nariman Kiani** (Marseille, France)
- 5:49 pm T22-007C Selective optical control of calcium signalling in astrocytes by Azobenzene photoswitches *in vitro* and *ex-vivo*.  
**Diletta Spennato** (Bologna, Italy)
- 5:50 pm T22-008C Purinergic control of microglia- balancing survival, inflammation and death  
**Hanna Bielecka** (Norwich, UK)
- 5:51 pm T22-009C Astrocytic intracellular chloride levels in functional hyperemia  
**Katharina F. Baumgart** (Copenhagen, Denmark)



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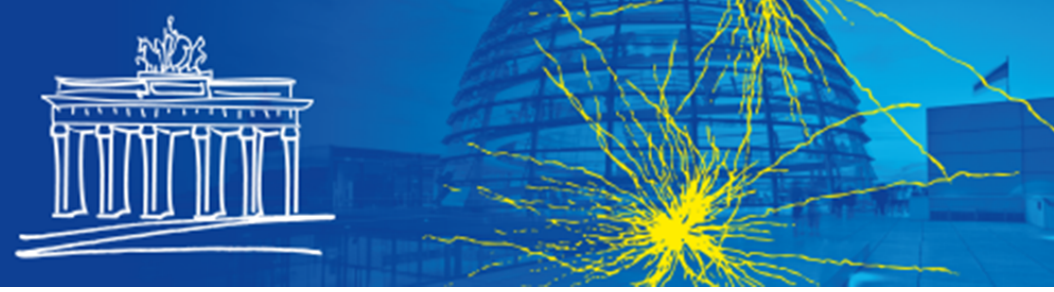
5:52 pm T22-010C Regulation of the VRAC pore-forming subunit LRRC8A in the intrahippocampal kainic acid model of epilepsy  
**Manolia Ghoul** (Riverside, USA)





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Monday, 10 July, 2023, 4:00 p.m. - 6:00 p.m.

## **S21 | Transcriptional control of myelination and repair**

**Chairs:** **Claire Jacob** (Mainz, Germany)

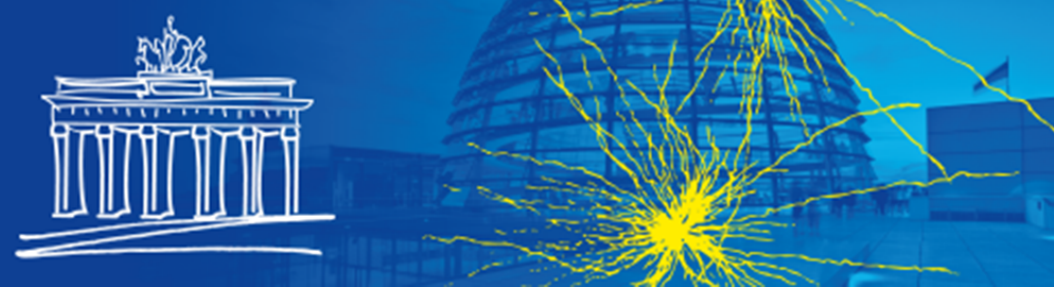
**Presentations:**

- |         |       |   |
|---------|-------|---|
| 4:00 pm | S2101 | Age-dependent epigenetic and transcriptomic regulation of remyelinating cells in the central nervous system<br><b>Sarah Moyon</b> (NYC, USA)  |
| 4:30 pm | S2102 | Role of promoter antisense RNAs in theregulation ofgenome organization and chromatin remodeling of Schwann cells<br><b>Nikos Tapinos</b> (Providence, USA)  |
| 5:00 pm | S2103 | A genetic compensatory mechanism modulates the expression of distinct class IIa HDACs to ensure peripheral nerve myelination and repair<br><b>Hugo Cabedo</b> (Sant Joan d'Alacant (Alicante), Spain) |
| 5:30 pm | S2104 | Transcriptional control of regeneration in myelinating glia<br><b>Claire Jacob</b> (Mainz, Germany)   |



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Monday, 10 July, 2023, 4:00 p.m. - 6:00 p.m.

## **S22 | Reprogramming glial cells into neurons: a new avenue for brain repair**

**Chairs:** **Christophe Heinrich** (Bron, France)

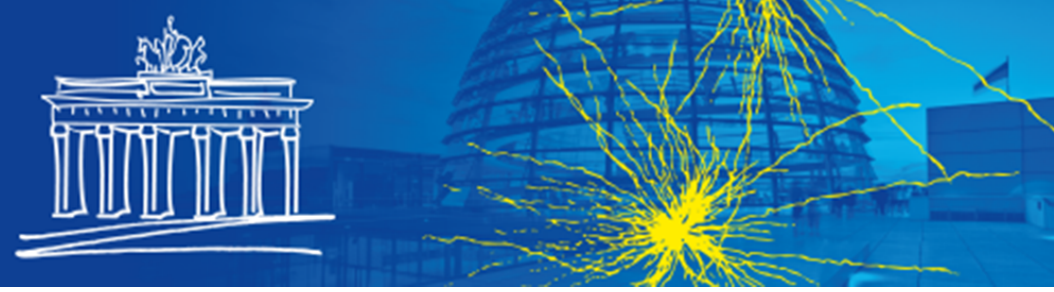
**Presentations:**

- |         |       |  |
|---------|-------|--|
| 4:00 pm | S2201 | Human glia reprogramming into interneurons - a therapeutic strategy for cell replacement?<br><b>Daniella Rylander Ottosson</b> (Lund, Sweden)                          |
| 4:30 pm | S2202 | Reprogramming reactive glia into GABAergic interneurons: A new avenue to reduce seizures in Mesial Temporal Lobe Epilepsy<br><b>Christophe Heinrich</b> (BRON, France) |
| 5:00 pm | S2203 | Dissecting the molecular framework underlying pericyte-to-neuron conversion<br><b>Marisa Karow</b> (Erlangen, Germany)   |
| 5:30 pm | S2204 | Engineering neural cell fates: the impact of cellular context on direct lineage reprogramming in vivo<br><b>Benedikt Berninger</b> (London, UK)                        |



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Monday, 10 July, 2023, 4:00 p.m. - 6:00 p.m.

## **S23 | Disentangling neuroinflammation and neurodegeneration using induced pluripotent stem cells: spotlight on glia**

**Chairs:** **Rebecca Matsas** (Athens, Greece); **Jari Koistinaho** (Helsinki, Finland)

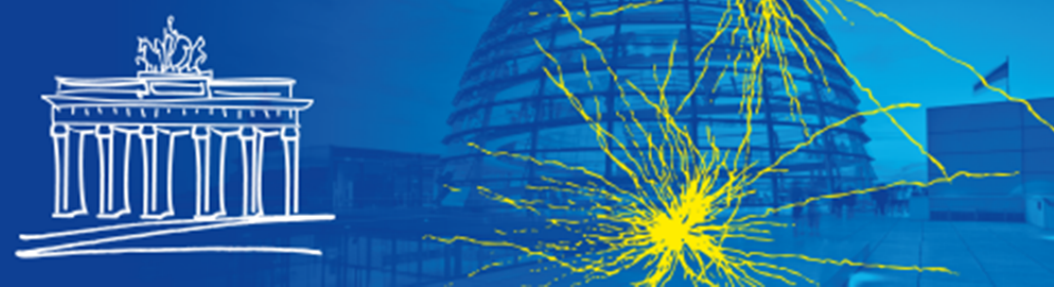
**Presentations:**

- |         |       |   |
|---------|-------|---|
| 4:00 pm | S2301 | Modelling neuroinflammation in vitro with iPSC-microglia<br><b>Sally A. Cowley</b> (Oxford, UK)                   |
| 4:30 pm | S2302 | The impact of <i>PSEN1</i> ΔE9 mutation on iPSC-derived glial cells<br><b>Jari Koistinaho</b> (Helsinki, Finland) |
| 5:00 pm | S2303 | tba<br><b>Bart De Strooper</b> (Leuven, Belgium)  |
| 5:30 pm | S2304 | Targeting neuron-astrocyte interplay in Parkinson's disease<br><b>REBECCA MATSAS</b> (Athens, Greece)             |



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Monday, 10 July, 2023, 4:00 p.m. - 6:00 p.m.

## **S24 | The many roles of microglia in brain development**

**Chairs:** **Rosa Chiara Paolicelli** (Lausanne, Switzerland); **Michela Matteoli** (Pieve Emanuele (MI), Italy)

**Presentations:**

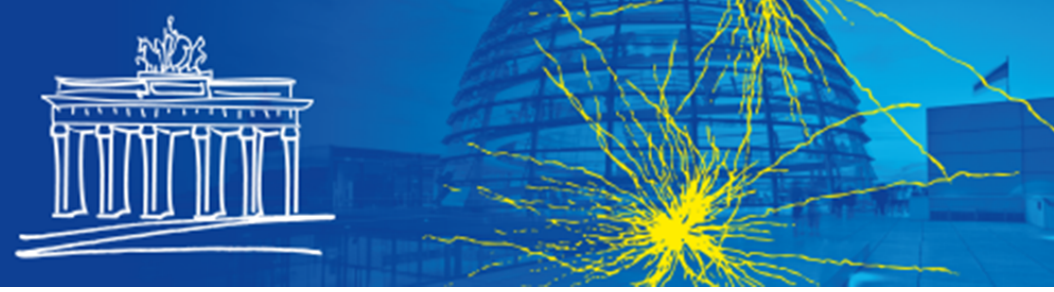
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|---------|-------|--|
| 4:00 pm | S2401 | Microglial Trem2 in the shaping of brain synapses and circuits<br><b>Michela Matteoli</b> (Rozzano, Italy)   |
| 4:30 pm | S2402 | Neuronal phospholipid scramblase Xkr8 guides neuron-microglia interaction in developing brain<br><b>Urte Neniskyte</b> (Vilnius, Lithuania)  |
| 5:00 pm | S2403 | Diversity of microglia in a model of perinatal inflammation<br><b>Pierre Gressens</b> (Paris, France)  |
| 5:30 pm | S2404 | Dysfunctional microglia lacking TDP-43 influences the maturation of the motor-somatosensory cortex in the early postnatal brain<br><b>Rosa Chiara Paolicelli</b> (Lausanne, Switzerland) |





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Monday, 10 July, 2023, 4:00 p.m. - 6:00 p.m.

## **S25 | Sculpting of neuronal circuit function by the structural plasticity of astrocytes**

**Chairs:** **Min Zhou** (Columbus, USA); **Michelle Olsen** (Blacksburg, USA)

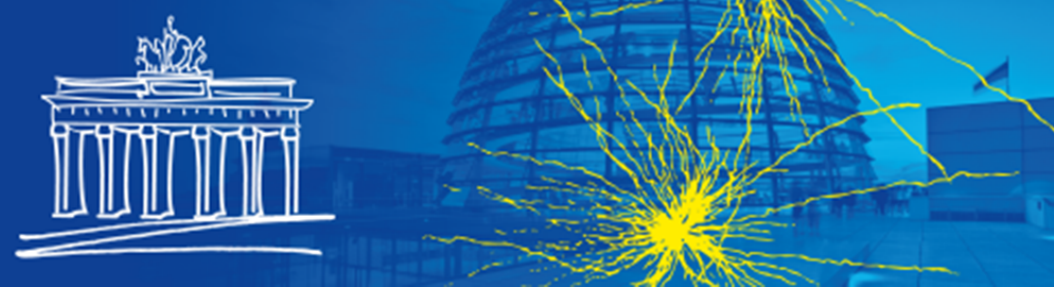
**Presentations:**

- 4:00 pm S2501 *BDNF Signaling onto Astrocyte TrkB.T1 Drives Astrocyte Structural Plasticity Supporting Glutamatergic Synaptogenesis*  
**Michelle L. Olsen** (Blacksburg, USA)
- 4:30 pm S2502 Regional heterogeneity of astrocyte morphogenesis via formins modifies circuit function  
**Hyun Kyoung Lee** (Houston, USA)
- 5:00 pm S2503 *Anisotropic gap junctional coupling reflects tonotopic organization of neuronal circuitry in the auditory brainstem*  
**Jonathan Stephan** (Düsseldorf, Germany)
- 5:30 pm S2504 Astrocyte syncytium shapes the plasticity of synaptic transmission  
**Min Zhou** (Columbus, USA)



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Tuesday, 11 July, 2023, 8:30 a.m. - 9:30 a.m.

## **L06 | Plenary Lecture VI: Anne Schaefer**

**Chairs:** David Lyons (Edinburgh, UK)

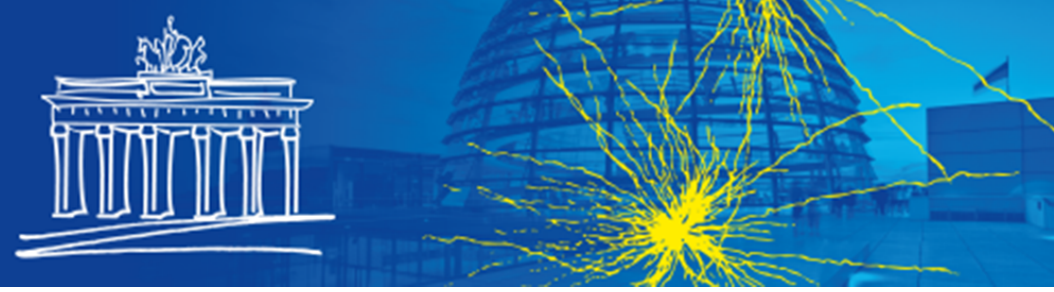
**Presentations:**

8:30 am L0601 The operational principles of neuron-microglia  
**Anne Schaefer** (New York, UK)



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Tuesday, 11 July, 2023, 10:00 a.m. - 12:00 p.m.

## **S26 | Glia-Glia interaction in brain physiopathology**

**Chairs:** **Alexei Verkhratsky** (Manchester, UK); **Chenju Yi** (Shenzhen, China)

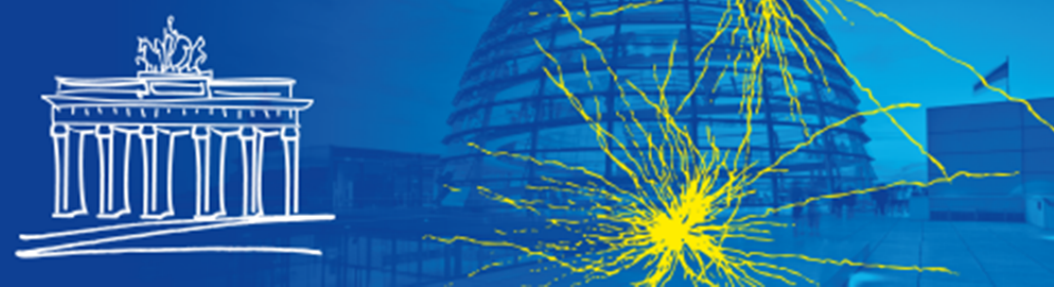
**Presentations:**

- |          |       |  |
|----------|-------|--|
| 10:00 am | S2601 | Astrocyte endfoot formation controls the termination of oligodendrocyte precursor cell perivascular migration during development<br><b>Chenju Yi</b> (Shenzhen, China) |
| 10:30 am | S2602 | Scar-forming severe reactive astrocytes as fibroblasts<br><b>C Justin Lee</b> (Daejeon, South Korea)   |
| 11:00 am | S2603 | Microenvironment in the brain after peripheral tumor metastases<br><b>Mami Noda</b> (Xi'an, China)   |
| 11:30 am | S2604 | Astrocytes regulate glial homeostatic and defensive capabilities of the brain active milieu<br><b>Alexei Verkhratsky</b> (Manchester, UK)                              |



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**Berlin** | July 8–11, 2023



Tuesday, 11 July, 2023, 10:00 a.m. - 12:00 p.m.

## **S27 | Oligodendrocyte progenitor cell fates and interactions with neurons in the adult and developing brain**

**Chairs:** **Akiko Nishiyama** (Storrs, USA); **Enrica Boda** (Orbassano, Italy)

**Presentations:**

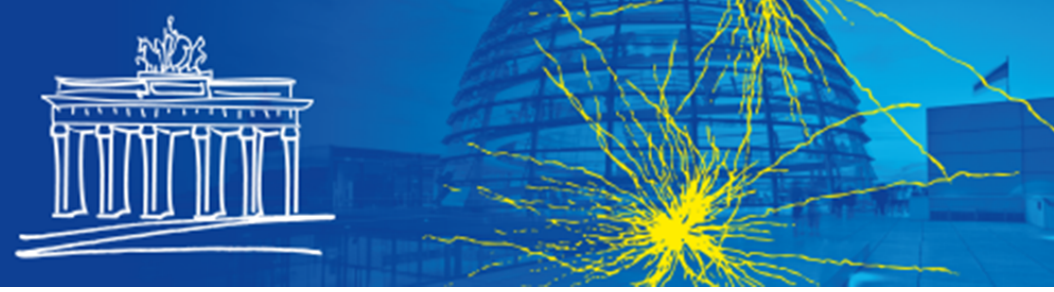
- |          |       |   |
|----------|-------|---|
| 10:00 am | S2701 | Dynamic extension of oligodendrocyte precursor cell processes toward active neurons in the hippocampus<br><b>Akiko Nishiyama</b> (Storrs, USA)  |
| 10:30 am | S2702 | Refinement of developing circuits through synaptic phagocytosis by oligodendrocyte precursor cells<br><b>Lucas Cheadle</b> (Cold Spring Harbor, USA)  |
| 11:00 am | S2703 | Oligodendrocyte precursor cells guide cortical interneuron migration by unidirectional contact repulsion<br><b>Laurent Nguyen</b> (Liège, Belgium)  |
| 11:30 am | S2704 | Molecular and functional heterogeneity in dorsal and ventral oligodendrocyte progenitor cells of the mouse forebrain in response to DNA damage<br><b>Enrica Boda</b> (Orbassano (Turin), Italy) |





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Tuesday, 11 July, 2023, 10:00 a.m. - 12:00 p.m.

## **S28 | Lipid metabolism as major determinant of CNS remyelination**

**Chairs:** **Gesine Saher** (Goettingen, Germany); **Jerome Hendriks** (Hasselt, Belgium)

**Presentations:**

- |          |       |  |
|----------|-------|--|
| 10:00 am | S2801 | Local cholesterol and lipid metabolism orchestrate the repair of demyelinated lesions<br><b>Gesine Saher</b> (Goettingen, Germany)                             |
| 10:30 am | S2802 | Myelin induced alterations in cellular lipid metabolism direct the reparative properties of microglia.<br><b>Jerome Hendriks</b> (Hasselt, Belgium)            |
| 11:00 am | S2803 | Role of microglia and lipid metabolism in remyelination<br><b>Mikael Simons</b> (Munich, Germany)  |
| 11:30 am | S2804 | Lipoxin A <sub>4</sub> : a novel therapeutic strategy to dampen neuro-inflammation and boost remyelination in MS<br><b>Gijs Kooij</b> (Amsterdam, Netherlands) |



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Tuesday, 11 July, 2023, 10:00 a.m. - 12:00 p.m.

## **S29 | Oligodendrocyte precursors shape brain circuits**

**Chairs:**        **Xianshu Bai** (Homburg, Germany)

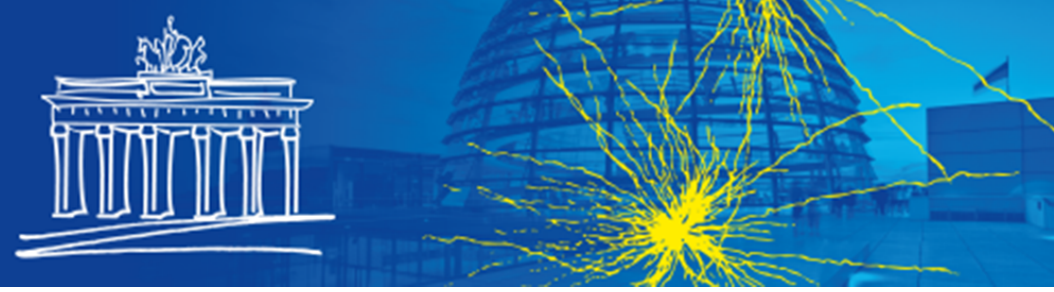
**Presentations:**

- |          |       |   |
|----------|-------|---|
| 10:00 am | S2901 | Bi-directional communication of oligodendrocyte precursors with interneurons determines social cognition<br><b>Xianshu Bai</b> (Homburg, Germany) |
| 10:30 am | S2902 | Early parvalbumin interneuron-OPC synapses sculpt cortical inhibition and behavior<br><b>Maria Cecilia Angulo</b> (Paris, France)                 |
| 11:00 am | S2903 | Dysfunction of NG2 glia affects neuronal plasticity and behavior<br><b>Christian Steinhäuser</b> (Bonn, Germany)                                  |
| 11:30 am | S2904 | NG2 glia, GABA synapses, and beyond<br><b>Xiaoping Tong</b> (Shanghai, China)   |



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Tuesday, 11 July, 2023, 10:00 a.m. - 12:00 p.m.

## **S30 | Glial senescence in neurodegeneration**

**Chairs:** **Diego Gomez-Nicola** (Southampton, UK)

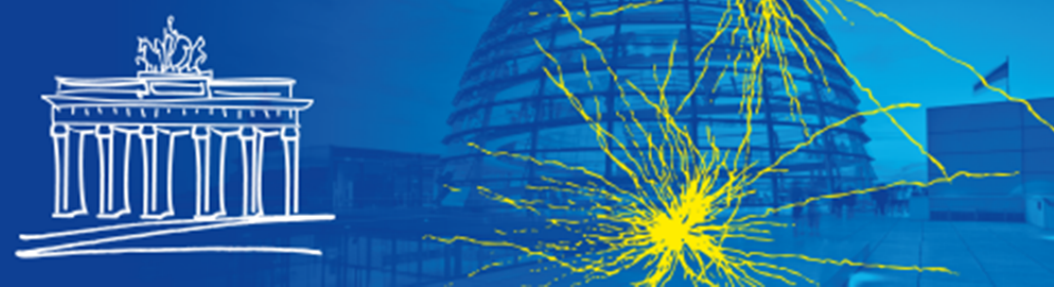
**Presentations:**

- |          |       |  |
|----------|-------|--|
| 10:00 am | S3001 | Dystrophic microglia in the human brain and their potential role in Alzheimer`s disease<br><b>Ingo Bechmann</b> (Leipzig, Germany) |
| 10:30 am | S3002 | Replicative senescence in microglia in Alzheimer`s disease<br><b>Diego Gomez-Nicola</b> (Southampton, UK)                          |
| 11:00 am | S3003 | tba<br><b>Darren Baker</b> (Rochester, USA)  |
| 11:30 am | S3004 | tba<br><b>Maria Grazia Spillantini</b> (Cambridge, UK)   |



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Tuesday, 11 July, 2023, 12:45 p.m. - 1:45 p.m.

## **L07 | Plenary Lecture VII: Michelle Monje**

**Chairs:** Helmut Kettenmann (Berlin, Germany)

**Presentations:**

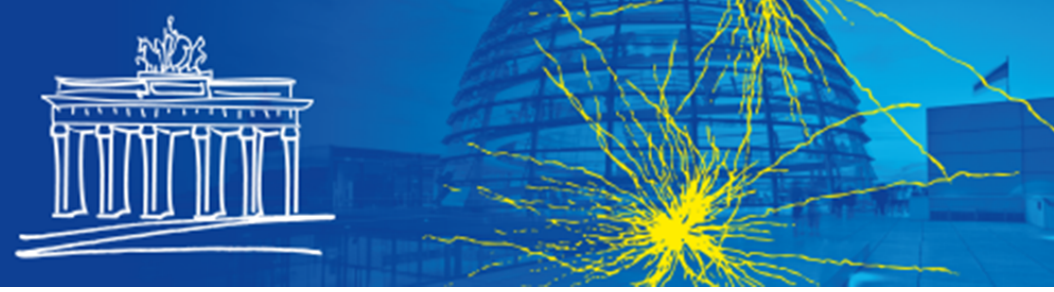
12:45 pm L07 Neuron-glia interactions in health and disease: from cognition to cancer  
**Michelle Monje** (Stanford, USA)





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Tuesday, 11 July, 2023, 1:45 p.m. - 2:00 p.m.

## **Closing | Closing**

**Chairs:**

**Presentations:**