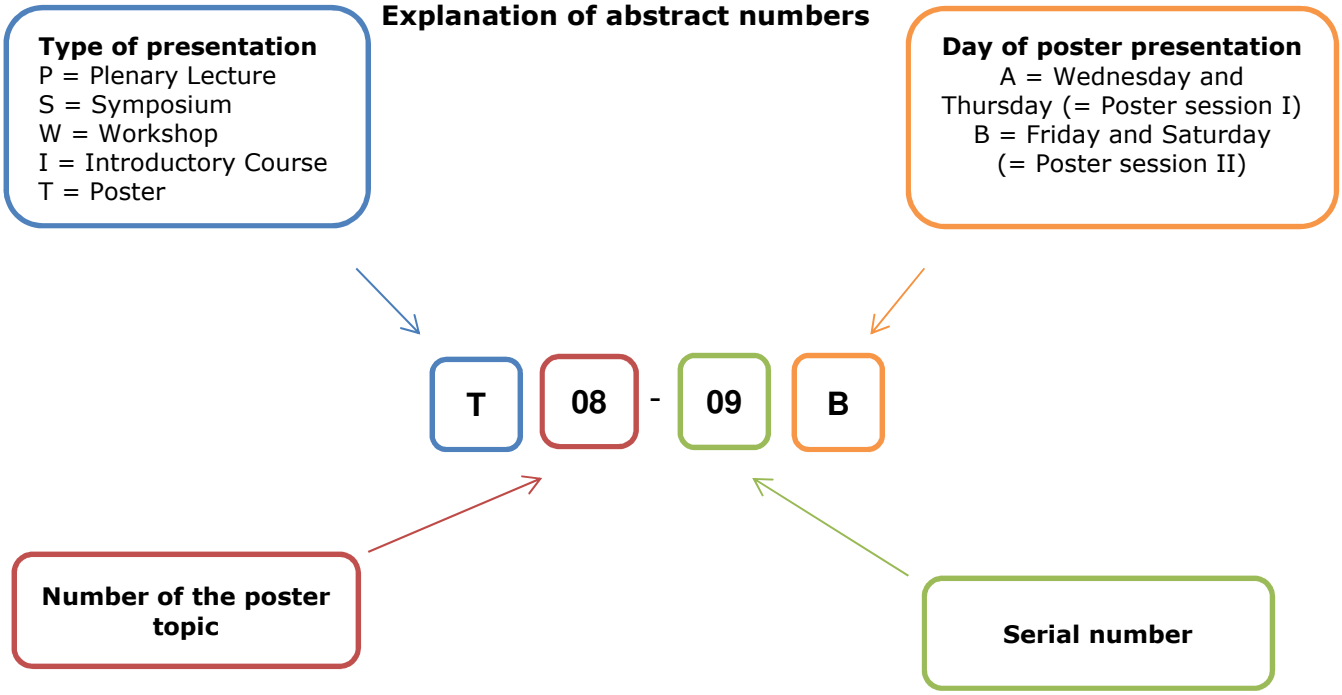
XI European Meeting
on Glial Cells in Health and Disease
Berlin | July 3 - 6, 2013

XI European Meeting on Glial Cells in Health and Disease – Poster Presentation

Poster session I Wednesday, July 3 (17:15 – 19:15) and Thursday, July 4 (13:15 – 15:15)
Poster session II Friday, July 5 (13:15 – 15:15) and Saturday, July 6, (13:00 – 15:00)

Explanation of abstract numbers



There is one poster session per day: Poster session I on Wednesday and Thursday, poster session II on Friday and Saturday. Posters with poster numbers ending with an A are displayed on Wednesday and Thursday (= poster session I), posters with a poster number ending with a B are displayed on Friday and Saturday (= poster session II). So every poster will be discussed during two days.

Each poster session (120 min) is divided into two parts (each 60 min): uneven and even serial numbers. In the first part of a session of a day posters with uneven serial numbers will be discussed (e.g. T12-**03**B). In the second 60 min of a session posters with even serial numbers will be discussed (e.g. T12-**02**B).
Posters should be mounted on the day of presentation until 10:00 h and are supposed to remain displayed until 17:30 h (except Saturday; posters can be taken down directly after the poster session).

Poster Topics

T01 Cell proliferation, lineages and differentiation
T02 Cell signaling
T03 Degenerative disease, toxicity and neuroprotection
T04 Extracellular matrix and cell adhesion molecules
T05 Gene expression and transcription factors
T06 Glial-neuronal interactions
T07 Ischemia and hypoxia
T08 Myelin
T09 Neural stem/progenitor cells
T10 Neuroimmunology and neuroinflammation
T11 Neurovascular interactions
T12 Regeneration and repair
T13 Transmitter receptors, ion channels and gap junctions
T14 Tumors
T15 Late poster session

T01 Cell proliferation, lineages and differentiation

T01-01A

Function of the Nkx2.2 transcription factor in oligodendrocytes and their progenitor cells

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T01-01B

Influence of ECM substrate and chemotropic molecule interactions on OPC migration and differentiation

D. Harlow[1], W. Macklin[1]
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T01-02A

Oligodendrocyte precursor cells generate astrocytes after acute cortical injury

X. Bai[1]
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T01-02B

SOX17 affects oligodendrocyte lineage progression and myelination

M. Fauveau[1], C. Kerninon[1], M. Frah[1], B. Nait Oumesmar[1]
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T01-03A

Glial differentiation is delayed in the hypothalamus of rats malnourished during a restrict period in early life

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T01-03B

Spatiotemporal and genetic fate-mapping of oligodendrogenesis following cuprizone-induced demyelination

T. Merson[1], Y. Xing[1], P. Röth[1], S. Ng[1], T. Kilpatrick[1]
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T01-04A

Enhanced human and murine oligodendrocyte differentiation in response to a selective thyroid hormone β receptor agonist.

E. Baxi[1], A. Fairchild[1], C. Pardo-Villamizar[1], J. Rothstein[1], D. Bergles[1], P. Calabresi[1]
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T01-04B

The Stem Cell Propeties of Adult Olfactory Horizontal Basal Cells

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T01-05A

Intrinsic mechanisms regulating oligodendrocyte progenitor cell division: the role of Citron-kinase

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T01-05B

An *ex-vivo* model of radial glial cell development in the spinal cord.

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T01-06A

Fast repopulation of microglia after ablation

J. Bruttger[1], S. Woertge[1], S. Yona[2], Y. Wolf[2], M. Prinz[3], S. Jung[2], A. Waisman[1]
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T01-06B

Mesenchymal Stem Cells Retain Their Pro-oligodendrogenic Activity During Aging: A Rationale For Autologous Transplantation in Multiple Sclerosis

F.J. Rivera[1,2,3], R. Wodnar[1,2], M. Feichtner[1,2], E. Oberbauer[1,2], G. Brachtl[4], R. Greil[4], E. Rohde[5], R.J.M. Franklin[3], L. Aigner[1,2]
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T01-07A

Proliferation of reactive astrocytes is enriched in juxtavascular positions

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T01-07B

Lithium promotes generation of oligodendrocytes *ex vivo* in the adult mouse optic nerve

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T01-08A

Enteric glia: S100B, GFAP and beyond

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T01-08B

Low density lipoprotein receptor-related protein 1 (LRP1) is expressed on radial glia cells and controls their differentiation towards oligodendroglia.

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T01-09A

Continuous live imaging of reactive astrocyte divisions in vitro

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T01-09B

Probing for oligodendrocyte progenitor cell function by limiting their proliferation in the adult brain

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T01-10A

Thyroid hormone mediated OPC differentiation is 'Hairless'

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T01-10B

Differential effects of Wnt3a and lithium on astrocytes in the adult mouse optic nerve

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T01-11A

Mouse Schwann cell culture and the expression of L-MAG in Schwann cells and in myelinating cocultures

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T01-11B

Neuroprotective properties of glia-committed NG2-positive cells: comparison with uncommitted mesenchymal stem cells derived from Wharton jelly.

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T01-12A

Variable differentiation potential of NG2 glia during mouse development

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T01-12B

Notch Signaling in in vitro derivation of Schwann cells from bone marrow stromal cells

E.W.Y. Tai[1], G.K.H. Shea[2], A.Y.P. Tsui[2], K.H.Y. Leung[2], Y.S. Chan[1], D.K.Y. Shum[2]
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T01-13A

The effect of microglia and secreted factors on cell density in oligodendrocyte precursor cell culture

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T01-13B

Usefulness of glucose transporter-5, MHC class II, CD68, and Iba-1 as human microglia markers

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T01-14A

Use of genetic tools to perform *in vivo* analysis of glia in the Enteric Nervous System

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T01-14B

BMP-Smad1/5/8 Signaling is Necessary for Development of Müller Glia

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T01-15A

ROCK inhibition with Y27632 promotes the proliferation and cell cycle progressionof cultured astrocyte from spinal cord

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T01-15B

Regional differences in differentiation properties highlight heterogeneity among adult oligodendrocyte progenitor cells.

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T01-16A

Inhibition of endogenous Phosphodiesterase 7 promotes oligodendrocyte precursor survival and differentiation

E.M. Medina-Rodriguez[1], F.J. Arenzana[1], J. Pastor[2,3], M. Redondo[4], V. Palomo[4], R. Garcia de Sola[2,3], C. Gil[4], A. Martinez[4], A. Bribian[1,5], F. de Castro[1]
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T01-16B

Foxj1 identifies cells other than ependymal epithelia that contribute to CNS remyelination

B. Wang[1], D. Ma[1], E. Rawlins[1], R.J.M. Franklin[1], C. Zhao[1]
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T01-17A

Specification and maintenance of oligodendrocyte precursor cells from neural progenitor cells: involvement of microRNA-7a

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T02 Cell signalling

T02-01A

Cell-specific receptor expression defines the differential response of astrocytes versus microglia to oncostatin M

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T02-01B

Microglial P2Y receptor-mediated currents and ATP release in situ

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T02-02A

High-resolution electrophysiological determination of unitary exocytic events in cultured astrocytes

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T02-02B

Epicatechin promotes the generation of oligodendrocytes *ex vivo* in the adult mouse optic nerve

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T02-03A

RXR Signalling and Regulation in Oligodendrocyte Lineage Cells

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T02-03B

Alpha and gamma secretase dependent cleavage of the glial proteoglycan NG2/Kontiki is conserved between species and mediates signalling

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T02-04A

TLR-signaling induces Type I interferon responses in microglia and astrocytes and regulates leukocyte infiltration to the CNS

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T02-04B

Phosphoinositide 3-kinaseγ mediates microglial phagocytosis via lipid kinase-independent control of cAMP

C. Schmidt[1], N. Schneble[1], J. Müller[1], R. Bauer[1], A. Perino[2], R. Marone[3], S.D. Rybalkin[4], M.P. Wymann[3], E. Hirsch[2], R. Wetzker[1]
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T02-05A

The involvement of NO-mediated signaling in PDT-induced injury of neurons and glial cells

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T02-05B

EphB1/ephrin-B1 reverse signalling induces astrocyte activation

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T02-06A

Laquinimod reduces astrocytic but not microglial NFkB activation in vitro and in vivo

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T02-06B

Brain-Derived Neurotrophic Factor/TrkB signaling regulates daily astroglial plasticity in the suprachiasmatic nucleus: electron-microscopic evidence in mouse

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T03 Degenerative disease, toxicity and neuroprotection

T03-01A

In vivo imaging of inflammation, de-and remyelination using Fluorescence Molecular Tomography (FMT)

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T03-01B

The role of Glia in the pathogenesis of the ataxic syndrome Dentatorubro-pallidoluysian atrophy (DRPLA)

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T03-02A

Beta-amyloid induces apoptosis of phagocytic microglia and macrophages

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T03-02B

Aquaporin 4 expression in the rat hippocampus and cortex during trimethyltin-induced neurodegeneration

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T03-03A

Decreased expression of alpha1 subunit of Na^+/K^+-ATPase in the ALS rat brain

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T03-03B

Branched-chain amino acids influence the immune properties of microglial cells and their responsiveness to pro-inflammatory signals

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T03-04A

Olesoxime for the treatment of hereditary dysmyelinating diseases: The importance of the therapeutic window

M. Begou[1], B. Depiets[2,3], F. Giraudet[4,3], J. Barbier[2,3], C. Bechon[2,3], M. Michaud[5], R. Pruss[5], T. Bordet[5], O. Boespflug-Tanguy[2,6]
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T03-04B

Pathways used for amyloid-beta uptake by adult human astrocytes and microglia

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T03-05A

CD38 deficiency inhibits Alzheimer's disease pathology in a mouse model

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T03-05B

Gap junction activity is necessary for Cx43-mediated protection of astrocytes in response to oxidative stress

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T03-06A

Lack of Microglial TREM2 Receptor Increases Susceptibility to Dopaminergic Degeneration Triggered by Systemic Inflammation

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T03-06B

Glucose transporters in mutliple sclerosis

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T03-07A

Pericytes are preserved in Alzheimer's Disease

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T03-07B

HDAC6 is present in rat brain oligodendrocytes and modulates tau phosphorylation

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T03-08A

Emergence of tyrosine hydroxylase-positive cells in rat cortex after intraventricular injection of 6-hydroxydopamine (6-OHDA)

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T03-08B

Importance of oligodendrocytes in oxidative stress-resistance in white matter ischemic injury

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T03-09A

Changes of the extracellular space diffusion parameters during aging in a triple transgenic animal model of Alzheimer's disease

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T03-09B

Early functional deficit and microglial disturbances in the hSOD1^{G93A} mouse model of amyotrophic lateral sclerosis

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T03-10A

Vanishing White Matter-mutated astrocytes impair oligodendrocyte maturation *in vitro*

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T03-10B

Inhibition of IL-12/IL-23 signaling reduces alzheimer´s disease-like pathology and cognitive decline

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T03-11A

Intravital characterization of microglia in Alzheimer's Disease

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T03-11B

Oxidative stress causes endoplasmic reticulum stress in X-adrenoleukodystrophy

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T03-12A

Alpha-synuclein impairs differentiation of oligodendrocytic CG4 cells

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T03-12B

Intraspinal delivery of PEGylated gold nanoparticles promotes repair after spinal cord injury

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T03-13A

Treatment early in life with the lectin ConA decelerates spreading depression in well-nourished and early-malnourished adult rats

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T03-13B

Pharmacological inhibition of monoacylglycerol lipase and its effect on physiological parameters *in vivo*

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T03-14A

Glial Lazarillo protects neurons from type I Spinocerebellar Ataxia (SCA1) degeneration by a mechanism involving the control of autophagy flow and of lipid peroxide clearance.

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T03-14B

Unlike physical exercise, modified environment increases the lifespan of SOD1^{G93A} mice however both conditions induce cellular changes

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T03-15A

N-Arachidonoyl - Dopamine (NADA) is a novel neuroprotective Endocannabinoid.

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T03-15B

Amyloid β impairs expression, traffic and secretion of carboxypeptidase e and secretogranin III in astrocytes

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T03-16A

Antagonizing the TGF-ß1 Receptor ALK5 reduces gliosis after Neonatal Hypoxia-Ischemia

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T03-16B

Diesel exhaust pollution affects learning abilities and leads to an altered stress response in the CNS of the honey bee (*Apis mellifera*)

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T03-17A

Ammonium induces an astroglial calcium dysbalance in different brain regions

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T03-17B

Bothropic neurotoxicity in nerve terminals and Schwann cells

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T03-18A

Astrocytes in the degenerating brain are primed to synthesize exaggerated levels of CXCL1 and CCL2 in response to IL-1b/TNF-a stimulation

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T03-18B

Effects of *in vivo* selective expression of mutated huntingtin by mouse striatal astrocytes on functional properties of medium spiny neurons

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T03-19A

The L-type voltage-gated calcium channel subunit alpha1C ($Ca_V1.2$) is expressed in astrocytes around beta-amyloid plaques in an Alzheimer mouse model

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T03-19B

Enriched environment and physical activity reverse astroglial atrophy in the hippocampus of the triple-transgenic model of AD

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T03-20A

Neuroprotective effects of Withaferin A in three mouse models of amyotrophic lateral sclerosis

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T03-20B

Astrocyte degeneration correlates with aberrant intracellular calcium signalling in Amyotrophic Lateral Sclerosis

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T03-21A

Lysosomal enzymes in the hippocampal glial cells of kainic acid treated rats: potential implication in temporal lobe epilepsy

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T03-21B

Gray matter oligodendroglia glia play an important role in human and rodent ALS pathogenesis

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T03-22A

Deletion of TLR-associated signaling adaptor TRIF significantly accelerates disease progression of ALS mice.

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T03-22B

Plaque associated-GFAP+ astrocytes show increasing autophagic activity in PDAPP mice, model of Alzheimer´s disease

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T03-23A

Early activation of microglia has a central role in the disease pathogenesis of progressive myoclonus epilepsy, EPM1

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T03-23B

Spatial arrangement of NG2 cells and their activation in a mouse model of Alzheimer´s disease

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T03-24A

Connexin hemichannels are activated in astrocytes of a murine model of Alzheimer's disease

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T03-24B

Levels of astrocyte-derived proteins increase in the cerebrospinal fluid of Alzheimer´s disease patients and inversely correlate to cognitive performance

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T03-25A

GDNF induces secretion of Cyr61 from retinal Müller glial cells - a novel neuroprotective factor in retinal degeneration

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T03-25B

Data-mining of genomic studies in psychiatric disorders for genes highly expressed in astrocytes

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T03-26A

Glia impair neuron health in Juvenile Neuronal Ceroid Lipofuscinosis

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T03-26B

Inhibition of deubiquitination by PR-619 leads to the formation of protein aggregates, to mitochondrial fragmentation and alters the GFAP network in astrocytes

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T03-27A

Axonal degeneration is limited in the optic nerve of EAE-induced mice by AAV2 transduction of Retinal ganglion cells (RGCs) with a site-specific phospho-mutant CRMP-2

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T03-27B

Purinergic signalling-regulated glial scar formation

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T03-28A

Nrf2 activators: a novel strategy to promote oligodendrocyte survival in multiple sclerosis?

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T03-28B

Conditional ablation of *Perk* in Schwann cells improves myelination in S63del/CMT1B mice.

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T03-29A

Glial pathology in the prefrontal cortex affects the cognitive function of the rat

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T03-29B

Metabolic alteration in amyotrophic lateral sclerosis

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T03-30A

Time-course study of NG2 glia activation in the MPTP mouse model of Parkinson's disease

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T03-30B

CNS-targeted methylprednisolone reduces pathology in mouse model of ALS

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T03-31A

Assessment of Cell Toxicity and Matrix Metalloproteinase-9 expression by Antiretroviral Drugs in Cultured Primary Astrocytes.

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T03-31B

Expression of glial potassium channel Kir4.1 and water channel aquaporin-4 (AQP4) after status epilepticus in a mouse model of temporal lobe epilepsy

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T03-32A

Molecular Mechanisms in Astrocytic Degradation

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T03-32B

Curcumin Increases Proliferation and Enhances Migration of Olfactory Ensheathing Cells

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T03-33A

Effects of prenatal drinking on astrocytes parameters and behavior.

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T03-33B

Litter size, age-related memory impairments, and microglial morphological changes in the rat lateral septum analyzed by three dimensional reconstruction

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T03-34A

Energy metabolism deficits in Huntington's disease: key role of astrocytes-neurons interactions

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T03-34B

The Effects of N-acetyl-aspartyl-glutamate (NAAG) and N-acetyl-aspartate (NAA) on oligodendrocyte precursor cells

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T03-35B

New mouse models for Vanishing White Matter disease

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T03-36A

Expression and function of the late-onset Alzheimer disease associated CD33 in human microglia

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T03-36B

A BDNF mimetic promotes peripheral myelin development and ameliorates experimental autoimmune neuritis (EAN)

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T03-37A

Oligodendrocytes, small heat shock protein HSPB5 (alpha-B-crystallin) and Huntington's disease: What is the link?

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T03-37B

Alterations of juxtaparanodal domains in two rodent models of CNS demyelination

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T03-38A

***In vivo* therapeutic effects and oligodendrocyte protection from excitotoxicity by the magl inhibitor JZL184**

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T03-38B

Mitochondrial permeability transition pores but not ryanodyne-sensitive endoplasmic reticulum calcium channels are involved in photodynamic injury of sensory neurons and satellite glial cells in the crayfish stretch receptor

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T03-39A

The role of Connexin43 gap junctions and hemichannels in the pathophysiology of Amyotrophic Lateral Sclerosis (ALS).

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T03-39B

The mitochondrial serine protease OMI/HtrA2 binds to the NG2 protein expressed by oligodendrocyte progenitor cells: a role for NG2 in homoestasis and stress protection?

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T03-40A

The complex interplay between astrocytes and microglia during the development of Alzheimer's-like symptomatology in a mouse model.

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T04 Extracellular matrix and cell adhesion molecules

T04-01A

Roles of anosmin-1 and FGF-2 in the biology of adult oligodendrocyte precursor cells.

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T04-01B

Improving outgrowth and survival of grafted iPSC-derived dopaminergic neurons by L1 and PSA-NCAM

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T04-02A

Intracellular trafficking, matrix association and function of VEGF in astroglial cells

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T04-02B

Migration of microglia in the embryonic neocortex: cellular and molecular interactions

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T04-03A

Astrocyte-derived TG2 contributes to ECM production and aggregation, and cell adhesion

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T04-03B

Role of extracellular matrix and growth factors in oligodendrocyte cytoskeletal reorganization

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T04-04A

Characterization of adhesional and cytomechanical properties of single living cells and tissue slices by AFM

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T04-04B

Extracellular space diffusion parameters in the mouse thalamus in Bral2 knock-out mice

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T05 Gene expression and transcription factors

T05-01A

Cyclic AMP signaling promotes differentiation of astrocyte transcriptome

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T05-01B

Microglia immune priming in physiologically aged and senescence accelerated mice: gene co-expression network analysis

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T05-02A

The Role of FoxO3a in Oligodendrocyte Precursor Cell Differentiation

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T05-02B

Role of the β2 adrenergic receptor in multiple sclerosis severity

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T05-03A

PGC-1α expression in neurons and glia cells

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T05-03B

Role of ncRNAs in oligodendrocyte precursor differentiation

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T05-04A

Gene Regulatory Networks Underlying Astrocyte Identity and Potential

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T05-04B

The IRF8-IRF5 transcription factor axis governs P2X4R^{hi} reactive microglia driving neuropathic pain

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T05-05A

Analysis of astrocyte-specific gene recombination in the brain

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T05-05B

Targeted CREB activation in astrocytes deeply modifies the gene-expression profile of cortex following a focal injury.

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T05-06A

NFAT-c3 promotes calcium-dependent MMP3 expression in activated astroglial cells

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T05-06B

Circadian Variations of Gene Expression Related to Neuro-Metabolic Coupling in Astrocytes of Anterior and Posterior Hypothalamus of the Mice

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T05-07A

Identification and characterization of novel subtypes of astrocytes

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T05-07B

Selective microglial depletion of the transcription factor C/EBPβ in LysM-Cre/C/EBPβ$^{fl/fl}$ mice

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T05-08A

Overexpression of CPEB3 leads to astrocyte dysfunction

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T05-08B

New role of p53 in retinal astroglia outgrowth and signaling

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T05-09A

Understanding the role of microRNAs in microglia-mediated neuroinflammation

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T05-09B

SUMO-1 regulates the inflammatory response of activated microglia via NFκB-mediated TNF-α release

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T05-10A

Transcriptional remodeling in microglia from the penumbra area in an experimental mouse stroke model

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T05-10B

Identification and characterization of novel subtypes of astrocytes

Z. Chen[1], M. Ghosh[2], R. Sattler[1], M. Robinson[2], J. Rothstein[1]
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T05-11A

The RNA helicase DDX5 binds MBP mRNA and regulates MBP expression on a posttranscriptional level

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T05-11B

The transcription factor C/EBPδ participates in the pro-inflammatory and neurotoxic response of activated glia. In vitro and in vivo evidence.

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T05-12A

Promises and pitfalls of Pannexin1 transgenic mice.

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T06 Glial-neuronal interactions

T06-01A

Novel conditional GCaMP3 mouse lines for imaging Ca2+ signals in astrocytes

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T06-01B

Activated Satellite Glial Cells Induce Peripheral Sensitization by Increasing Glutamate Concentration in the Trigeminal Ganglion

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T06-02A

Lactate modifies neuronal excitability through both NMDA and KATP receptors: importance for plasticity genes expression

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T06-02B

Roles of Neuregulin 1 Type III in the Ex Vivo Generation of Fate Committed Schwann cells from Bone Marrow Stromal Cells

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T06-03A

Contribution of different carbonic anhydrase isforms to proton dynamics in mouse cerebellar glial cells and neurons

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T06-03B

TGF-β1-Induced Astrocytic Release of Interleukin-6: A Possible Role in Epielsptogenesis

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T06-04A

Astrocytes in the striatum act as a reservoir of L-DOPA but less convert to dopamine

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T06-04B

The role of glial cells in nutrient homeostasis of the Drosophila brain

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T06-05A

Axon Initial Segment Associated Microglia

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T06-05B

Perturbation of sleep-wake cycle affects astroglial networking

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T06-06A

Postnatal down-regulation of the γ_2 subunit of $GABA_A$ receptors in NG2 cells precedes synaptic-to-extrasynaptic change in GABAergic transmission mode

M. Balia[1], M. Vélez-Fort[1], S. Passlick[2], C. Schäfer[2], E. Audinat[1], C. Steinhäuser[1], G. Seifert[2], M.C. Angulo[1]
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T06-06B

Alterations in Microglial Behavior During Ocular Dominance Plasticity

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T06-07A

Role of neuronal injury in the control of microglia reactivity exerted by GDNF

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T06-07B

Lactate modulates network activity in primary cortical neurons

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T06-08A

Volume coverage by microglial processes is reduced in the aging brain and occurs significantly earlier in mouse models of Alzheimer's disease

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T06-08B

Estimation of glycolytic rates of single cells *in vivo*

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T06-09A

Synaptically evoked calcium signals in astrocytic processes enhance the stability of excitatory synapses

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T06-09B

Astrocyte reactivity is associated with changes in the concentration of multiple striatal metabolites in situ

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T06-10A

Histamine triggers microglial phagocytosis

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T06-10B

Alterations of Gray Matter Gap Junctions in Multiple Sclerosis and in EAE

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T06-11A

Strongly reduced density of gray matter glutamine synthetase expressing astroglial cells in major depression but not bipolar disorder

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T06-11B

Glutamine transport in perisynaptic astrocytes and presynaptic terminals supports glutamatergic transmission at the calyx of Held synapse

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T06-12A

Astrocytes uptake extracellular plasminogen and plasmin to control their levels.

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T06-12B

Neuroprotective effects of serotonin 1A agonist target astrocytes

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T06-13A

Microglia reactivity to amyloid-β oligomers (AβO) changes according to experimental ageing

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T06-13B

Effects of URMC-099 on Tat-treated BV-2 Microglia Cells

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T06-14A

Proteomic identification of astrocyte proteins involved in synaptic plasticity

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T06-14B

The role of merlin isoform 2 in neurofibromatosis type 2-associated polyneuropathy

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T06-15A

Axonal degeneration is assisted cell non-autonomously by glial cells

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T06-15B

Surface dynamics of the astroglial glutamate transporter GLT-1

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T06-16A

Astroglial networks set the dynamics of neuronal bursting activity

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T06-16B

Post-hypoxic potentiation of breathing is mediated by astrocytes

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T06-17A

Microglial modulation of synaptic strength at the first synapse in the nociceptive pathway

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T06-17B

Unitary synaptic connections between GABAergic interneurons and NG2 cells in the developing somatosensory cortex

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T06-18A

Exploring motor neuron signaling dynamics to microglia in ALS

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T06-18B

Alterations of NG2 cell synaptic connectivity following demyelination of *corpus callosum*

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T06-19A

Tailoring substrates for long-term organotypic culture of adult neuronal tissue

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T06-19B

Glial and neuronal mechanisms underlying the label-free intrinsic optical signal

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T06-20A

The age-related hippocampal alterations of glutamatergic neurotransmission are aggravated by ω3 PUFA deficiency and reduced by fish oil supplementation in rats.

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T06-20B

Ibudilast and SKF modulate cisplatin-evoked PGE2 release from isolated trigeminal satellite glial cells

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T06-21A

The "Yin and Yang" in depression: how astrocytes and neurons differently respond to antidepressants to remodel neuronal synaptic contacts

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T06-21B

VMAT2-positive astrocytes affect brain monoamine levels.

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T06-22A

The role of glia cells in thyroid hormone induced regulation of neuronal sodium current and Na^+/K^+-ATPase density

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T06-22B

Refining Methods for Studying Microglial Diversity in the Healthy and Ageing Brain

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T06-23A

D-Serine released by astrocyte can modulate the respiratory rhythm in neonatal mice

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T06-23B

Microglia protect neurons at the onset of motoneuron developmental cell death and of neuronal network formation in the spinal cord of mouse embryo in vivo.

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T06-24A

Role of the α-secretase TACE in Central Nervous System myelination

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T06-24B

Rapid control of glutamate transport and energy metabolism by extracellular potassium in astrocytes

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T06-25A

Neurofilaments protect oligodendrocytes from lysolecithin toxicity in vitro

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T06-25B

A new algorithm for counting microglial cells in wholemount mice retinas

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T06-26A

Characterization of Schwann cells in mouse sciatic nerve slice: electrophysiological properties and neurotransmitter receptor expression.

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T06-26B

The role of myelin gap junctions in the regulation of axonal cytoskeleton

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T06-27A

Transfer of Exosomes from Oligodendrocytes to Neurons

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T06-27B

The Principle of Ca^{2+} Integration in Single Astrocytes

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T06-28A

Neurotransmitter signaling controls exosome secretion from oligodendrocytes

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T06-28B

Function of human-specific sialic acid binding receptor Siglec-11 in amyloid-β mediated neurotoxicity

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T06-29A

Characterization of glial cells in organotypic cultures of rat retina

B.I. Gallego[1], A.I. Ramírez[1,2], M. Dierstein[3], R. de Hoz[1,2], B. Rojas[1,4], A. Triviño[1,4], J. Ramírez[1,4], M. Ueffing[3], J.J. Salazar[1,2], B. Arango-Gonzalez[3]
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T06-29B

Ultrastructural investigation of lateralized experience-dependent synaptic plasticity in rat hippocampal CA1 stratum radiatum

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T06-30A

Neuron-astrocyte-microglia interactions in a rat model of chronic cerebral ischemia

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T06-30B

Super-resolution optical microscopic measurements of synaptobrevin 2 in vesicles of cultured astrocytes

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T06-31A

Epigenetic induction of the *Ink4a/Arf* locus prevents Schwann cell overproliferation during nerve regeneration and after tumorigenic challenge

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T06-31B

Effects of P2Y12 Signaling on Microglial Morphology and Motility in Visual Cortex

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T06-32A

Tonic suppression of synaptic and extrasynaptic inhibition in the striatum as a consequence of GLT-1 deficiency in mice carrying a mutant form of huntingtin

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T06-32B

Nascent nodes of Ranvier are formed on hippocampal GABAergic neurons prior to myelination

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T06-33A

Basal forebrain lesions reduce acetylcholinergic tone, induce microglial priming and predispose mice to inflammation-induced cognitive deficits

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T06-33B

K^+ and glutamate trigger the release of lactate from astrocytes within seconds, as detected by a lactate sniffer cell.

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T06-34A

A specific role for the Na,K-ATPase α2 isoform in the support of astrocyte glutamate uptake

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T06-34B

Remodeling of glial coverage of rat NTS glutamatergic synapses after ozone inhalation.

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T06-35A

Astrocyte TNFα-dependent alteration of hippocampal excitatory synaptic transmission in a mouse model of Multiple Sclerosis

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T06-35B

Somatic integration of synaptic inputs in NG2 cells

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T06-36A

The $P2X_7R$-Panx1 complex in glia: Role in orofacial hypersensitivity

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T06-36B

Inhibitory avoidance learning is associated with altered expression of genes involved in neuron-glia metabolic coupling

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T06-37A

Quantitative profiling of retinal Müller glial cell surface proteome changes in response to LPS treatment

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T06-37B

Astrocytic Ca^{2+} signals affect on tripartite synapse structure and hippocampus-related learning and memory

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T06-38A

Bidirectional expression of Lck-GCaMP3 and DsRed in NG2-cells as an approach for monitoring glial Ca^{2+}-microdomains

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T06-38B

Optogenetic interrogation of the mechanism of astrocyte-neurone communication in the locus coeruleus

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T06-39A

Neuroprotection of Retinal Ganglion Cells by Müller Glia and Astrocytes

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T06-39B

Potential Physiological Role of Astrocytic Glycogen-Derived Lactate in Energy Balance

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T06-40A

Dehydroepiandrosterone sulfate and Sulforhodamine 101 compete for active uptake by an organic anion transporting polypeptide in hippocampal astrocytes

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T06-40B

A new approach to understanding the 3D structure of the CNS node of Ranvier

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T06-41A

Neuron-astrocyte interactions during the development of the somatosensory cortex in a genetic model of absence epilepsy: from morphology to *in vivo* calcium imaging

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T06-41B

IOP Induces qualitative But Not quantitative Changes In Astrocytes In Mice Retina Contralateral To Experimental Glaucoma

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T06-42A

Mapping astrocyte heterogeneity by analysis of specific cell surface marker expression

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T06-42B

Role of CX3CR1 in supporting cell-to-cell contacts between microglia and degenerating TH+ neurons

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T06-43A

Misfolded truncated tau protein influences neuron-glial interaction via regulation of the "On" and "Off" signalling molecules

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T06-43B

BDNF-mediated enhancement of LTP is modulated by astrocytes

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T06-44A

Glial GABA transporters downregulate enhanced neuronal activity

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T06-44B

Chronic stress induces profound structural remodelling of astrocytes within theprefrontal cortex: A characterization of the relationship between astrocyte morphologyand density

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T06-45A

Protection effect of glial cell line-derived neurotrophic factor on neurons and glial cells under photodynamic injury

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T06-45B

Regulation of nutrient transport across the BBB

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T06-46A

Macrophages and microglia play distinct roles in neuropathic pain perception

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T06-46B

Metabolic imaging in the awake mouse

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T06-47A

Impact of oligodendrocyte-derived exosomes on neuronal metabolism: a role in neuroprotection?

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T06-47B

Lactate as a signaling molecule for the regulation of plasticity-related genes expression

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T06-48A

Mechanisms of K^+-clearance in the brain: The Na^+/K^+-ATPase as the key contributor

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T06-48B

Amino acid exchanger in the brain of Drosophila: Phylogenesis, Expression and Function

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T07 Ischemia and hypoxia

T07-01A

The fate of mDach1-expressing cells in the dorsal part of the lateral ventricles following focal cerebral ischemia

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T07-01B

Microglia express the dopaminergic D2 receptor upon activation in experimental stroke

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T07-02A

Age-dependent activity of nitric oxide synthase during ischemic white matter injury

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T07-02B

Transplantation of cerebral microvascular endothelial cells promotes remyelination in ischemic white matter damage

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T07-03A

Lactate increases TREK channel activity in CA1 stratum radiatum Astrocytes

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T07-03B

Sirt1 regulates the regenerative response of white matter oligodendrocyte progenitor cells after neonatal hypoxia

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P07-04A

Neuroprotection in stroke by gonadal steroids: an active role for microglia and astroglia-microglia crosstalk

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T07-04B

Cannabinoid receptor antagonists/inverse agonists, hinokiresinols regulate astroglial heme-oxygenase-1 expression and microglial migration

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T07-05A

Pyruvate carboxylation in astrocytes and the pentose phosphate pathway are affected after neonatal hypoxic-ischemic brain injury - a ^{13}C NMR spectroscopy study.

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T07-05B

Long-term activation of the hippocampal neurogenic niche following stroke

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T07-06A

The Isolectin IB4 binds RET Receptor Tyrosine Kinase in microglia

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T07-06B

Oxygenation regulates monocarboxylate transporter 4 (MCT4) expression via HIF-1a in primary cultures of mouse cortical astrocytes.

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T07-07A

Hypoxia/ischemia increases the expression of TREM2 in gray and white matter of neonatal mice brain

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T07-07B

Metabolic impairment of Müller glia differentially affects retinal ganglion cell survival after acute ischemia/reperfusion in the mouse eye *in vivo*

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T07-08A

Post-ischemic treatment of the standardized *Cordyceps militaris* extract, WIB-801C reduces cerebral ischemic injury and improved long-term survival in rats.

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T07-08B

Phenotypic characterization of CD200R+ microglia/ macrophages and CD200+ neuronal cells in Neonatal C57BL/6 mice brain following hypoxia/ischemia.

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T07-09A

Distinct subsets of interleukin-1 receptor antagonist producing cells are neuroprotective after focal cerebral ischemia in mice

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T07-09B

Glial activation following oxygen-glucose deprivation

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T07-10A

Heterogeneity of GFAP-positive glia in the cerebral cortex: from development to injury - single cell gene expression profiling

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T07-10B

Differentiated character of astroglial proliferative response to transient ischemia in the cerebral cortex and striatum of the rat.

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T07-11A

Attenuated Inflammatory Response in Triggering Receptor Expressed on Myeloid Cells 2 (TREM2) Knock-Out Mice following Stroke

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T07-11B

Glial expression of metabotropic glutamate receptors in the mouse optic nerve: a role in ischemia mediated disruption in postnatal CNS white matter

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T07-12A

Comparative analysis of neuronal loss, glial activation and tissue degeneration in different cortical areas of adult rats following focal ischemia

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T07-12B

Ischemic Preconditioning In Vivo and Hypoxia-hypoglycemia In Vitro Induce Interferon Stimulated Gene Expression in Microglia

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T07-13A

Increased expression of hyperpolarization-activated cyclic nucleotide-gated channels in reactive astrocytes after ischemia

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T07-13B

Involvement of TREK-1 channel activity in astrocyte function and neuroprotection under ischemia conditions

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T08 Myelin

T08-01A

[1,6-^{13}C]glucose metabolism in immature and in differentiated oligodendrocytes in vitro

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T08-01B

FASN-mediated fatty acid homeostasis is critical for myelination

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T08-02A

A vertebrate specific Glutaredoxin affects cellular functions of oligodendrocytes

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T08-02B

The nootropic agent nefiracetam is a potential remyelinating therapeutic *in vivo*.

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T08-03A

Silencing or knocking-out of the Na^+/Ca^{2+} exchanger 3 (NCX3) impairs oligodendrocyte differentiation

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T08-03B

Kif13B motor protein regulates myelination in the peripheral and central nervous system

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T08-04A

Resetting translational homeostasis restores myelination in CMT1B mice

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T08-04B

Exploring the Mechanism of Action of the Novel Remyelinating Therapeutic Nefiracetam.

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T08-05A

The growth factor NRG induces NMDA receptor dependent myelination by oligodendrocytes, employing Akt and CREB signalling

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T08-05B

Up-regulation of the multiligand receptor megalin/LRP-2 in multiple sclerosis

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T08-06A

Effects of TrkB expression and signalling on oligodendrocyte myelination

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T08-06B

The adaxonal compartment of CNS myelin: septin filaments are required to prevent pathological outfoldings of myelin sheaths

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T08-07A

Dysregulation of GPR17, a key receptor involved in oligodendrocyte maturation, as a novel potential pathogenetic mechanism in demyelinating diseases

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T08-07B

Ganglioside GD1A: a novel molecular tool to promote remyelination in MS lesions?

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T08-08A

Role of Apolipoprotein D in macrophage recruitment and myelin phagocytosis upon peripheral nerve injury

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T08-08B

The transcription factor Sip1 is required for peripheral nerve myelination

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T08-09A

GPR56, an adhesion-GPCR, regulates oligodendrocyte development and CNS myelination

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T08-09B

Role of Jun activating binding protein 1 (Jab1) in Central Nervous System (CNS) myelination

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T08-10A

Post-transcriptional regulation of Myelin Basic Protein during cell stress conditions

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T08-10B

In vivo pathogenesis of demyelination in an animal model of multiple sclerosis

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T08-11A

A_3 adenosina receptor triggers oligodendrocyte death and myelin loss

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T08-11B

Efficient Lentiviral Gene Delivery to Schwann Cells

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T08-12A

Long-term consequences of perinatal inflammation on de- and remyelination in the central nervous system

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T08-12B

Modulation of Neuregulin-1 signaling in S63del-CMT1B Neuropathy.

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T08-13A

Histone Methyltransferase Enhancer of Zeste Homolog 2 regulates Schwann cell differentiation

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T08-13B

Schwann cell neuregulin-1 constitutes an endogeneous factor of myelin repair

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T08-14A

Electrical activity-dependent control of myelin gene expression *in vivo*

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T08-14B

Schwann cell type-specific requirements of Dynamin-2 function revealed by gene ablation

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T08-15A

Remyelination after Cuprizone treatment: Galectin-3 involvement.

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T08-15B

Oligodendrocyte production in the adult CNS: myelin remodelling or replacement?

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T08-16A

Unravelling protein networks involved in peripheral nerve myelination

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T08-16B

Immunoglobilun dependent modulation of Schwann cell differentiation: implication for peripheral nerve damage and disease.

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T08-17A

2`,3`-cyclic nucleotide 3`-phosphodiesterase (CNP) deficiency causes axonal loss and hypermyelination in the sensory peripheral nervous system

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T08-17B

The role of the ERAD pathway in the pathophysiology of PNS myelination

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T08-18A

Transport and translation of MBP MRNA is differentially regulated by distrinct hnRNP proteins

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T08-18B

Ectopic myelination of cerebellar granule cell axons triggered by PtdIns(3,4,5)P3-dependent neuronal signals

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T08-19A

Transferrin and Thyroid hormone converge in the control of myelinogenesis

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T08-19B

Functions of Exon-II Containing Isoforms of Myelin Basic Protein in Oligodendrocytes

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T08-20B

Myelin Basic Protein synthesis is regulated by small non-coding RNA 715

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T09 Neural stem/progenitor cells

T09-01A

Wnt-signalling regulates oligodendrogenesis in the dorsal postnatal subventricular zone

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T09-01B

Neurogenic and gliogenic astroglial progenitors in the developing cerebellum

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T09-02A

Modulation of the proliferation and differentiative potential of adult brain subventricular zone cells by purinergic signaling in vitro and in vivo: contribution of reactive astrocytes.

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T09-02B

Generation of oligodendrocyte precursors by direct cellular reprogramming

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T09-03A

Enteric stem cell niche in Hirschsprung's disease

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T09-03B

Mechanisms of activation of the adult subventricular zone in response to inflammatory demyelination

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T09-04A

Hypothalamic tanycytes: a neurogenic population of radial-glial like cells in the postnatal and adult brain

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T09-04B

GFAP-positive cells are multipotent progenitors with limited self-renewal potential in the adult spinal cord

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T09-05A

microRNA regulation of neural precursor maintenance and specification

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T09-05B

Distinct Roles of Nogo-A and Nogo Receptor 1 in the Homeostatic Regulation of Adult Neural Stem Cell Function

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T09-06A

Mesenchymal stem cell conditioning promotes oligodendroglial maturation

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T09-06B

The impact of erythropoietin and its isoforms on murine neurogenesis

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T09-07A

Adult neural stem cells generate waves of oligodenrocyte progenitor cells that populate transiently the corpus callosum but do not contribute to its pool of oligodendrocytes.

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T09-07B

Stimulation of Müller Glia Proliferation and Progeny Generation in the Mouse Retina

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T09-08A

Artificial cell fate regulation of the progenitor cells in the adult spinal cord

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T09-08B

The human enteric nervous system: an appropriate autologous source for neural stem cells

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T09-09A

Isolation of radial glia-like neural stem cells from fetal and adult mouse brain via selective adhesion to a novel adhesive peptide-conjugate

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T09-09B

High efficiency transfection and survival rates of oligodendrocyte precursor cells achieved by electroporation

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T09-10A

Endogenous retinoic acid synthesis contributes to neural stem cell differentiation

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T09-10B

Two neurogenic factors with synergistic action, Cend1 and Neurogenin-2, drive astrocytic reprogramming towards multipotency and neurogenesis

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T09-11A

The Wnt signaling pathway affects the differentiation potential of neonatal neural stem cells *in vitro*

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T09-11B

Towards remyelination therapy: derivation of oligodendrocyte precursors from adult bone marrow stromal cells

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T09-12A

Selective ablation of CNS-resident microglia disturbs homeostasis within the adult hippocampal neurogenic niche

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T09-12B

Subventricular glial nodules in the third and lateral ventricles of the human brain contain neural stem cells

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T09-13A

Influence of demyelination and aging on adult oligodendrocyte precursor cells RNA profil: towards an identification of new molecular cues for myelin repair

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T09-13B

Neural stem cell properties of an astrocyte subpopulation sorted by sedimentation field-flow fractionation.

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T09-14A

Characterization of neural precursors derived from mouse iPS cells: *in vitro* and *in vivo* after transplantation into the central nervous system

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T09-14B

Adult spinal cord and adult DRG sphere-forming cells exhibit distinct but promising features for CNS remyelination.

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T09-15A

Regulation of ischemia-induced progenitor cell proliferation in the adult mouse hippocampus by the ERK/MAPK effector ribosomal S6 kinase.

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T09-15B

Cx3cr1-expressing cells analysis reveals distinct features of microglia residing within the postnatal subventricular zone/rostral migratory stream

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T09-16A

Oligodendrogliogenic and neurogenic adult subependymal zone neural stem cells constitute distinct lineages and exhibit differential responsiveness to Wnt signaling

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T09-16B

Induced Neural Progenitors from somatic cells by a Novel Combination of Defined Factors: New strategy for the treatment of neurodegenerative diseases

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T10 Neuroimmunology and neuroinflammation

T10-01A

Astrocyte-Tissue inhibitor of metalloproteinases-1: The TIMP-ed balance of neuroinflammation: Relevance to HIV-1-associated neurocognitive disorders

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T10-01B

Nogo-66/NgR signal is involved in neuroinflammation through regulating microglia inflammatory mediators expression

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T10-02A

CCL-1 in the spinal cord contributes to neuropathic pain induced by nerve injury.

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T10-02B

FGF9 inhibits remyelination via an off target effect on astrocytes

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T10-03A

Impact of microglia-mediated inflammation on hypothalamic homeostasis

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T10-03B

Astrocyte-targeted production of IL-10 modifies glial phenotype

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T10-04A

Therapeutic Efficacy of Suppressing the JAK/STAT Pathway in Multiple Models of Neuroinflammation

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T10-04B

Nutritional n-3 polyunsaturated fatty acid deficiency impairs microglial cell activity in the developing brain

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T10-05A

Immune complexes of beta amyloid with specific monoclonal antibodies induce neuronal loss via microglial activation

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T10-05B

The effect of milnacipran and venlafaxine in a rat neuropathic pain model: Glia cell modulation.

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T10-06A

Primary microglia lack strict regulation of inflammasome-mediated activation as compared to myeloid macrophages

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T10-06B

Telomere dysfunction leads to changes in microglial numbers and morphology in a mouse model of premature aging

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T10-07A

Cannabigerol quinone exerts therapeutic effects in experimental autoimmune encephalomyelitis

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T10-07B

***The Lactosylceramide synthase B4galt6* controls astrocytes activation during chronic CNS inflammation.**

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T10-08A

Lipopolysaccharide-induced brain activation of the indoleamine 2,3-dioxygenase and depressive-like behavior are impaired in obese and diabetic *db/db* mice

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T10-08B

TLR2-induced MMP9 activation compromise blood brain barrier and enhances brain damage in Collagenase-induced Intracerebral Hemorrhage

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T10-09A

Complement-independent modulation of chemokine expression by antibodies in myelinated cultures.

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T10-09B

Retinoic acid, a novel regulator of blood-brain barrier function in neuroinflammation.

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T10-10A

Does tissue Transglutaminase play a role in leukocyte/monocyte infiltration during experimental multiple sclerosis?

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T10-10B

ABCD2 expression modifies the phenotype in ABCD1 deficient mouse peritoneal macrophages

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T10-11A

Neuroprotective function of microglial Siglec-E

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T10-11B

Anti-inflammatory properties of omega 3 supplementation restore normal microglia-neuron interactions in the hippocampus in a model of prenatal inflammation

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T10-12A

The modification of myeloid-derived suppressor cell population by the synthetic retinoid AM80 abolishes symptom recovery in a murine model of multiple sclerosis

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T10-12B

Sildenafil (Viagra®) prevents glial activation in a mouse demyelination model possibly via NFκB

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T10-13A

Characterization of the role of the Metallothionein-1 in an animal mouse model of Alzheimer's disease.

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T10-13B

The effect of lipopolysaccharide induced maternal inflammation on the cytoarchitectural development on the amygdala and hippocampus

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T10-14A

Cox-2 inhibitors reduce microglia inflammation *in vivo*

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T10-14B

Neuroimmunological changes in the neurodegeneration caused by cystatin B deficiency (progressive myoclonus epilepsy).

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T10-15A

Anti-epileptic drugs (AEDs) alter the microglial in-/ activation state in astroglia/microglia cocultures

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T10-15B

Microglial cell activation by lipopolysaccharide does not induce neurotoxicity in organotypic hippocampal slice cultures.

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T10-16A

IOP Induces upregulation of MHC-II and GFAP in the glia of Contralateral Mice Retina To Experimental Glaucoma

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T10-16B

Continuous Vs Bolus exposure of Microglial cells to Hydrogen Peroxide

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T10-17A

Peroxisome Proliferator-Activated Receptor-γ agonists protect oligodendrocyte from mitochondrial stress

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T10-17B

Do stressed oligodendrocytes trigger microglia activation in pre-active MS lesions?

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T10-18A

Quantitative and phenotypic analysis of mesenchymal stromal cell graft survival and recognition by microglia and astrocytes in mouse brain.

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T10-18B

CD300f immunoreceptor is a novel neuron-glia interaction molecule with a neuroprotective role after acute brain injuries

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T10-19A

N-3 polyunsaturated fatty acids protect against the cognitive effects of a peripheral inflammation by targeting microglia morphofunctional activity

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T10-19B

Opposing roles of nitric oxide and interleukin-10 on CXCL12 gene expression in astrocytes

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T10-20A

The neuroprotective effect of a PPAR-γ agonist in microglia-induced neuronal death is abrogated if CD200-CD200R1 interaction is disrupted

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T10-20B

ICG-001, but not Aspirin promotes myelin gene expression in oligodendrocytes

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T10-21A

Microglial activation beyond the Substantia Nigra in Parkinson's Disease

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T10-21B

Chemokine signalling in hippocampal lesions of Multiple Sclerosis patients

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T10-22A

Characterization and modulation of *Hm*Iba1 as an activation marker for microglia in the invertebrate model, the leech *Hirudo medicinalis*.

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T10-22B

Role of Microglia Activation in Neurogenic Hypertension

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T10-23A

Inflammatory profiling of the satellite glial cells in the dorsal root ganglia of rat experimental neuropathic pain models

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T10-23B

Priming of Microglia as Response to Neuronal Dysfunction in a DNA Repair Deficient Model of Accelerated Aging

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T10-24A

Acidosis affects interleukin-1β processing in glial cells

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T10-24B

***Phoneutria nigriventer* spider venom activates astrocytes and microglia through sGC-cGMP inhibition**

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T10-25A

I-TAC signalling in primary rodent astrocytes and human glioma cells requires CXCR4

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T10-25B

***In vivo* imaging of astrocytes activation in rat hippocampus as a biomarker of epilepsy using ^{1}H-magnetic resonance spectroscopy**

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T10-26A

Astrocytary IL-6 involment in EAE and traumatic lesions

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T10-26B

IL-10 induces changes in microglial reactivity following perforant pathway transection in GFAP-IL10Tg mice

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T10-27A

Imaging reactive astrocytes *in vivo* by positron emission tomography with TSPO radioligands

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T10-27B

Interferon gamma protects mice from CNS autoimmunity also in the absence of IL-17A and IL-17F.

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T10-28A

Cross-talk between neurons and non-neuronal cells within sensory neurons : effects on ATP-gated P2X3 receptors

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T10-28B

Immune response in rat neuron-glia co-cultures infected with *Neospora caninum*: role of oxide nitric synthetase inducible

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T10-29A

Cannabidiol provides long-lasting protection against the deleterious effects of inflammation in a viral model of multiple sclerosis: a role for A_{2A} receptors

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T10-29B

Microglial activation In Contralateral Mice Retina To Experimental Glaucoma

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T10-30A

Lack of astrocytic interleukin-6 enhances high-fat diet-induced obesity in mice

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T10-30B

The mechanism of analgesia after minocycline administration in a rat model of neuropathic pain

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T10-31A

A novel human in vitro microglia model

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T10-31B

Epigenetic memory in microglia?

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T10-32A

Expression of Calreticulin and Other Endoplasmic Reticulum Stress Molecules in a rat model of inflammatory demyelination

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T10-32B

Differential regulation of the Wnt signaling pathway in experimental autoimmune encephalomyelitis

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T10-33A

Brain response to traumatic brain injury: interleukin-6 relevance

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T10-33B

Development of an in vitro model to study the impact of iron in inflammatory demyelinating diseases

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T10-34A

Are microglia just macrophages? Analysis of both cell types functions after brain injury.

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T10-34B

Inflammatory mediators increase expression of tissue Transglutaminase, but not Factor XIIIa, in primary human monocytes

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T10-35A

Regulation of microglial proliferation in chronic neurodegeneration

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T10-35B

TLR3 and-4 mediated fibronectin aggregation after demyelination impairs remyelination.

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T10-36A

Altered microglial response in pre-symtomatic SOD1 mutant mediated disease

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T10-36B

Temporal and regional pattern of expression of pro-inflammatory and anti-inflammatory genes in mouse experimental autoimmune encephalomyelitis

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T10-37A

Stimulation of the IL-1 Signaling Pathway by CNS-Infiltrating Myelin Reactive T Cells in Zones of Axonal Degeneration

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T10-37B

Expression of metabotropic glutamate receptor 4 (mGluR4) in glial cells and its involvement in oligodendrocyte survival

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T10-38A

Upregulation of c-Jun in the 3xTrg AD model regulates miR-155 expression in glial cells and contributes to neuroinflammation.

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T10-38B

TGFβ-mediated regulation of classical and alternative microglia activation states

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T10-39A

Ageing augments the behavioural response to systemic Salmonella Typhimurium infection in mice - do microglia play a role?

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T10-39B

Presence of severe neuroinflammation does not intensify the extent of neurofibrillary degeneration

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T10-40A

Peripheral poly I:C-induced neuroinflammation: role of Toll-like receptor 3 (TLR3) in microglia

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T10-40B

Regulation of progranulin expression and modulation of progranulin by matrix metalloproteinase-12 (MMP-12) and secretory leukocyte protease inhibitor (SLPI) in human microglia

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T10-41A

Is an inflammation caused by injury necessary for the brain?

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T10-41B

A high fat diet exacerbates neuroinflammation by activation of the brain renin angiotensin system in experimental autoimmune encephalomyelitis

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T10-42A

Phenotype and function of CD11c (dendritic) cells within the CNS

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T10-42B

The phenotypes of microglia and macrophages during experimental autoimmune encephalomyelitis

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T10-43A

Does systemic inflammation contribute to the progression of age-related hearing loss?

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T10-43B

Seropositive and Seronegative neuromyelitis optica differs in the inflammatory profile: an in vitro study on spinal cord glial cultures

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T10-44A

CD14 as a key regulator of TLR-mediated responses of microglia

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T10-44B

Targeted cell ablation reveals dynamics of immune responses to programmed cell death in the brain

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T10-45A

Immunomodulatory properties of LIF and OSM in multiple sclerosis

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T10-45B

Effects of astrocyte-targeted IL-6 or IL-10 production on neuronal survival and microglial activation after facial nerve axotomy

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T10-46A

Role of anti-inflammatory lipid mediators in the resolution of inflammation in microglial cells

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T10-46B

Macrophages in inflammatory multiple sclerosis lesions have an intermediate activation status

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T10-47A

Correlation of binding of [^{3}H]PK11195 to lesion type and presence of activated microglia in human multiple sclerosis tissues

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T10-47B

Scavenger receptor A (SRA) in the induction of inflammatory activation of microglia and astrocytes: its relevance for alzheimer's disease.

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T10-48A

Microglial P2Y receptor-mediated motility in situ

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T10-48B

Impact of the Immuno-proteasome on the pathogenesis of Alzheimer´s and Parkinson´s disease

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T10-49A

Mesenchymal stem cells require to be in close vicinity with microglia to arrest cell cycle

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T10-49B

Cell types derived from CD34+ stem cells show diverging phenotypes in X-linked adrenoleukodystrophy

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T10-50A

Transcriptional and epigenetic control of microglia polarization into inflammatory or alternative phenotype

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T10-50B

Interleukin-33 in brain development and traumatic brain injury

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T10-51A

Differential roles for the small heat shock protein Alpha B-Crystallin in de- & remyelination

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T10-51B

Molecular mechanisms driving tissue damage in multiple sclerosis

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T10-52A

Progesterone attenuates astro and microgliosis and decreases inflammatory reaction following spinal cord injury

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T10-52B

Antigen-presenting cells in the central nervous system in EAE.

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T10-53A

MC4R activation induces BDNF expression through ERK and PI3K in rat astrocytes.

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T10-53B

Glutamate receptors in EAE and microglia activation

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T10-54A

Microglial CX3CR1-CX3CL1 signaling contributes to astroglial scarring following mesenchymal stem cell grafting in mouse brain

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T10-54B

Inhibition of EGFR/MAPK signaling reduces microglial inflammatory response and the associated secondary damage in rats after spinal cord injury

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T10-55A

Microglia activation in the leech *Hirudo medicinalis*: *Hm*C1q promotes the microglial accumulation through the distinct recognition of gC1qR and cC1qR receptors.

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T10-55B

The leukocytes influx is modified by genetic background in Alzheimer's disease rat models

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T10-56A

Expression of UNC-93B1 in the CNS

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T10-56B

Doxepin and fluoxetine influence neuropathic pain in rats and modulate microglia and astroglia cell activation.

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T10-57A

Periplaques form extensive lesions in multiple sclerosis spinal cords

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T10-57B

Netrins enhance blood-brain barrier function and regulate immune responses at the blood-brain barrier

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T10-58A

Myosin-dependent functions in microglia

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T10-58B

MMP-independent role of TIMP-1 in regulating CD4 T cell migration across the glia limitans during viral encephalomyelitis

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T11 Neurovascular interactions

T11-01A

The Hedgehog pathway promotes optimal Blood Brain Barrier functioning

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T11-01B

Cerebral cortical blood flow response to brief basal forebrain stimulation

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T11-02A

Deciphering the role of astroglial Cx30 at the gliovascular interface

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T11-02B

The 'double settlement' of the perivascular glia - changes during the radial glia/astrocytes replacement. An immunohistochemical study in rats.

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T11-03B

The Oligodendrogenic Activity Of Brain Pericytes: A Novel Player During Myelin Repair?

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T12 Regeneration and repair

T12-01A

Understanding and manipulating the astrocyte response to spinal cord injury using diblock copolypeptide hydrogels for depot delivery of bioactive molecules

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T12-01B

Embryonic stem cell-derived microglia and primary microglia display a similar transcriptome signature

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T12-02A

Comparative study of human mesenchymal stem cells isolated from the olfactory system and bone marrow: Effects on myelination.

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T12-02B

Spinal cord injury: development of a novel *in vitro* model

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T12-03A

Grey Matter Astrocytes Activated by Remote Axonal Transection Mediate Structural Plasticity

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T12-03B

Mobilization of progenitors in the subventricular zone to undergo oligodendrogenesis in the theiler´s virus model of multiple sclerosis: implications for a remyelinating process in lesions sites

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T12-04A

ROCK inhibitors decrease actin stress fibres and GFAP while elevating stellation, L-glutamate uptake and AHNAK expression in astrocytes on 3D nanoscaffolds

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T12-04B

Galectin-1/NRP1 interaction via carbohydrate binding produces regenerative response and functional recovery after spinal cord injury by blocking the Semaphorine 3A pathway.

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T12-05A

Propentofylline improves oligodendrocyte remyelination following gliotoxic injury in the rat brainstem

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T12-05B

High resolution microscopic analysis of the peripheral nerve regeneration using double/triple fluorescent transgenic mice.

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T12-06A

Sip1 expression by Schwann cells plays a role in peripheral nerve regeneration

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T12-06B

Maldi imaging mass spectrometry: a novel technology for studying neurosciences

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T12-07A

S1PR1-modulation in the convalescence period improves functional recovery and reduces reactive astrogliosis in experimental stroke

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T12-07B

Aligned Schwann cells derived from human dental pulp stem cells direct neurite growth in a tissue engineered collagen construct

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T12-08A

Combination of growth factor treatment and scaffold deposition following experimental traumatic brain injury show a temporary effect on cellular regeneration

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T12-08B

Regulation of astrocyte activation by the cleaved P75 neurotrophin receptor

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T12-09A

Does the developmental heterogeneity of oligodendrocyte origin influence remyelination of the adult central nervous system?

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T12-09B

Reactive glia acquire stem cell properties in response to Sonic hedgehog in the injured brain

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T12-10A

Role of Tumor Necrosis Factor-Alpha Inhibition following Spinal Cord Injury

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T12-10B

Oncostatin M Reduces Lesion Size and Promotes Functional Recovery after Spinal Cord Injury

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T12-11A

Three Ca^{2+} channel inhibitors in combination reduce chronic secondary degeneration following neurotrauma

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T12-11B

EphrinB3 antibody accelerates CNS remyelination following toxin-induced demyelination

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T12-12A

Neuregulin-1 type I enhances functional recovery after acute peripheral nerve injury and rescues axonal loss in a mouse model for Charcot Marie Tooth disease 1A

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T12-12B

Profiling of Aquaporin 4 knockout astrocytes regarding tight junction protein expression

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T12-13A

Demyelinated axons regulate their own remyelination via glutamate signalling to oligodendrocyte precursor cells

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T12-13B

Enhancement of stem cell integration into the retina by modulating glial reactivity in an *in-vitro* stem cell transplantation model.

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T12-14A

Olfactory ensheathing cells promote neurite outgrowth from organotypic spinal cord co-cultures

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T12-14B

Netrin-1 and central nervous system remyelination

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T12-15A

Hydrogel as a tool for vascular endothelial growth factor gradual release in peripheral nerve regeneration.

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T12-15B

Human Platelet Derived Growth Factor Responsive Neural Precursors (PRPs) Differentiate into Mature Oligodendrocytes and Produce Myelin when Transplanted into the Injured Rat Spinal Cord

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T12-16A

Tamoxifen promotes CNS remyelination by modulation of the PKC signalling pathway in oligodendrocyte precursor cells (OPCs)

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T12-16B

Optimization of iPS-cell based remyelination cell therapy in a nonhuman primate model for multiple sclerosis (MS)

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T12-17A

Human pluripotent stem cell-derived oligodendrocyte precursor cells for spinal cord injury repair

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T12-17B

Vascular niche provides unique microenvironment for oligodendrocyte precursor cells differentiation during CNS remyelination

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T12-18A

HDACs in control of maintenance and regeneration in Schwann cells

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T12-18B

New insights into the reaction of mouse oligodendrocyte progenitor cells after brain injury by live *in vivo* imaging

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T12-19A

Living art - method for labeling living human derived neural cells with fluorescent probes

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T12-19B

Low-dose-fractionated X-irradiation attenuates astrogliosis-mediated inhibition of axonal regeneration and facilitates recovery of motor function after spinal cord hemi-section in Beagle dogs

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T12-20A

Bone marrow-derived mesenchymal stem cell intraventricular injection in a chronically demyelinated mouse model

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T12-20B

Investigation of de- and remyelination of toxin-induced lesions in the adult zebrafish optic nerve

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T12-21A

Perineurial Glia: First Repsonders After a Peripheral Nerve Injury

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T12-21B

Novel interactions between the c-Jun and Notch signalling pathways regulate the Schwann cell response to peripheral nerve injury

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T12-22A

CD300f immunoreceptor contributes to peripheral nerve regeneration after crush injury

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T12-22B

Hematopoetic stem/progenitor cell-derived microglia-like cells with potential to support regeneration in the central nervous system

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T12-23A

Canonical Wnt signaling and formation of the glial scar

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T12-23B

Schwann cell c-Jun is essential for successful peripheral nerve regeneration

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T13 Transmitter receptors, ion channels and gap junction

T13-01A

In search of the satellite glia role: insights from their membrane properties

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T13-01B

Functional Role of Potassium Channels in Oligodendroglial Lineage Cells

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T13-02A

Phosphorylation of aquaporin-4 at Ser^{111} is not required for channel gating

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T13-02B

Selective permeation pathway through connexin 43 hemichannels

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T13-03A

Inhibition of P2X4 function by P2Y6 UDP receptors in microglia

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T13-03B

Ca^{2+} permeable AMPA receptors are coupled to vesicular glutamate release from Bergmann glia processes

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T13-04A

Astrocyte volume regulation in the cortex of alpha-syntrophin-negative GFAP/EGFP mice

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T13-04B

The subpopulation of microglia expressing functional muscarinic acetylcholine receptors expands in stroke and Alzheimer's disease

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T13-05A

Astrocytes and S1P Receptors.

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T13-05B

Expression of Kir7.1 in glia; potential glioprotective qualities

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T13-06A

MLC1 dysfunction causes brain oedema with white matter vacuolation in murine brain.

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T13-06B

Molecular and functional characteristics of $GABA_A$ receptors in NG2 cells of the hippocampus

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T13-07A

Purinergic receptors in adipose-derived stem cells differentiated to Schwann cells

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T13-07B

Differential regulation of acid-base transporters in glial cells following extracellular pH changes

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T13-08A

Connexin mediated glial networks are heterogenous among brain regions

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T13-08B

ATP released through connexin43 hemichannels mediates secondary cellular damage spread from the trauma zone to distal zones in astrocyte monolayers.

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T13-09A

K^+ effects on oligodendrocytes in ischaemia

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T13-09B

Analysis of $GABA_B$ receptor deletion in mouse astrocytes

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T13-10A

Temporally controlled ablation of astroglial P2Y1 receptors

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T13-10B

Microglia in the embryonic cortex - mature team players or young bench sitters?

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T13-11A

Scratch-wound induced alterations in glial glutamate transporter distribution and function.

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T13-11B

High bicarbonate sensitivity of mouse cortical astrocytes mediated by sodium-bicarbonate cotransporter NBCe1: a novel bicarbonate sensor?

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T13-12A

Oligodendrocyte-targeted gene therapy to treat leukodystrophy

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T13-12B

The role of L-type calcium channels subtypes 1.2 and 1.3 in NG2 glia

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T13-13A

Astrocytic CX43 hemichannels and gap junctions play a crucial role in development of chronic neuropathic pain following spinal cord injury

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T13-13B

Panx1 form Ca^{2+} permeable membrane hemichannels essential for amyloid β peptide-induced mast cells degranulation

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T14 Tumors

T14-01A

Metabolic reprogrammation following mouse cortical astrocytes transformation in vitro: a proteomic study

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T14-01B

Migration of glioblastoma cells is modulated by KCa3.1 channel activity

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T14-02A

Identification of epigenetic modifications associated with inhibition of the stem and tumorigenic properties of glioblastoma stem cell.

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T14-02B

Toll-like-receptor 2 mediates microglia/brain macrophage MT1-MMP expression and glioma expansion

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T14-03A

Proteomic profiling of human induced pluripotent stem cell-derived microglia upon exposure to glioblastoma cells

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T14-03B

Dissecting the Role of Apelin Signaling in Gliomagenesis

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T14-04A

Pro- versus anti-tumor activities of microglia/macrophages: experimental and mathematical modeling approaches

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T14-04B

Siglec-h on M1-polarized microglia triggers uptake of cells with an altered glycocalyx

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T14-05A

Cytostatic and cytotoxic effects induced by M2 muscarinic receptor activation on human glioblastoma cells.

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T14-05B

Glioblastoma a fatal tumour with stem cells.

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T14-06A

Regulation of glioblastoma stem-like cells properties by GABA-related metabolites.

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T14-06B

LIM domain kinases as therapeutic targets for Neurofibromatosis Type 2

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T14-07A

Tumor suppression effects of miRNA-302-367 on glioblastoma stem cells are correlated with altered GABA metabolism.

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T14-07B

Carcinoma cells misuse the host tissue danger response to invade the brain

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T14-08A

An allograft glioma model reveals the dependence of aquaporin-4 expression on the brain microenvironment

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T14-08B

A vascularisation switch induced by Notch pathway activation in glioblastoma stem-like cells

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T15 Late poster session

T15-01A

Thrombin protects β-arrestin 1-lacking astrocytes from apoptosis through activating PI3K/Akt signaling pathway

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T15-01B

Serotonin and axonal refinement during development: new players?

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T15-02A

CDH5 is specifically activated in glioblastoma stem like cells and contributes to vasculogenic mimicry induced by hypoxia

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T15-02B

Identification and quantification of proteins in tissue sections and laser capture microdissected astrocytes by matrix assisted laser desorption ionization mass spectrometry imaging (MALDI-MSI)

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T15-03A

Neuronal but not glial expression of complex gangliosides is necessary for the maintenance of axon and axo-glial junction integrity

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T15-03B

Antagonistic interaction between adenosine A_{2A} receptors and Na^+/K^+-ATPase-α_2: implications for astrocyte glutamate uptake

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T15-04A

Blood-brain barrier breakdown in the hippocampus leads to early neural network dysfunction in the peri-ischemic brain

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T15-04B

Study on the possible association between infarct development and microglial activation with behavioural deficits after permanent middle cerebral artery occlusion in mice

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T15-05A

Fingolimod modulates astroglial glutamate metabolism in autoimmune demyelination

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T15-05B

Altered calcium kinetics and mitochondrial oxidative stress in psychosine induced cell death: implications for globoid cell leucodistrophy

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T15-06A

Netrin-1 contributes to vascular remodeling in SVZ and promotes progenitor emigration after demyelination

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T15-06B

PI3Kγ regulates MMP expression in microglial cells by control of cAMP dependent signaling

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T15-07A

The capsaicin receptor TRPV1 as a novel modulator of neural precursor cell proliferation

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T15-07B

Role of cannabinoid 1 receptors on hippocampal gabaergic neurons in brain aging

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T15-08A

PDGFRα-positive progenitor cells form myelinating oligodendrocytes and Schwann cells following spinal cord contusion injury

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T15-08B

In vivo characterization of the role of transcription factor Sox4 in Schwann cell myelination

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T15-09A

The phagocyte NADPH oxidase Nox2 promotes microglial chemotaxis and infiltration into the developing cerebral cortex

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T15-09B

CREB regulates calcium excitability in astrocytes

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T15-10A

Peroxisomal multifunctional protein-2 deficiency causes neuroinflammation and degeneration of Purkinje cells independent of very long chain fatty acid accumulation

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T15-11A

Identification of a glial gene related to Parkinson Disease: Split-Ends regulates sensitivity to paraquat in *Drosophila*

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T15-12A

ASCL1/MASH1 promotes brain oligodendrogenesis during myelination and remyelination

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