

# LATE PROGRAMME CHANGES

Please note the following changes in the programme:

## Poster sessions

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### P010 - Glutamate I

Please note that there will be an additional poster presentation related to this session. It will be presented on Sunday 9 July in the morning and can be found in Hall X, poster board number 125.

Astroglial survival and function under hypoxia and high glutamate.

Lehmann C. & Engele J.

*Institute of Anatomy molecular neurobiology, Leipzig, Germany*

Astrocytes are long known to efficiently remove synaptically released glutamate from the extracellular space through the sodium-dependent, high affinity glutamate transporters, EAAT-2/GLT1 and EAAT-1/GLAST, a process crucial to termination of glutamatergic neurotransmission. Due to their high glutamate uptake capacity, it is further assumed that glutamate transport into astroglia is a major means to reduce extracellular glutamate concentrations to subtoxic levels in the injured brain, thereby preventing excessive glutamate-induced brain damage. It is, however, of note that although this neuroprotective role of astroglia has been postulated already a number of years ago, basically no information is available on how astrocytes withstand brain injuries. We have now addressed this issue by determining the effects of high extracellular glutamate and hypoxia (9%) on astrocytic survival and glutamate transporter expression. By using the live-dead kit, we detected similar numbers of dying cells in cultures of cortical astrocytes under normoxic and hypoxic conditions as well as in cultures additionally treated with glutamate in the range 1mM to 50mM. Detection of GLT-1 by Western blotting further demonstrated that high extracellular glutamate does not affect GLT-1 expression under normoxic conditions. However, GLT-1 expression dramatically declined upon exposing cultures to glutamate and hypoxia, but not hypoxia alone.

Together these findings suggest that under normoxic conditions astroglial are capable to take up and metabolize high amounts of extracellular glutamate. The findings further identify high extracellular glutamate in combination with hypoxia as a trigger inducing a loss of astrocytic GLT-1 expression.

### P045- Metabotropic glutamate receptors

A045.7. Activity-dependent regulation of glutamate release at the parallel fibre - Purkinje cell synapse in rat cerebellar cortex by presynaptic metabotropic glutamate receptors type 4 (mGlu4).

Kohl M. M. & Batchelor A. M.

This poster initially scheduled on Sunday 9 July in the afternoon, will be presented on Tuesday 11 July in the afternoon and can be found in Hall X, poster board number 126.

### P225 - Synaptic plasticity III

A225.21. Plasticity of synaptic connections in visual cortex layers 4 and 2/3.

Saez I. & Friedlander M. J.

This poster initially scheduled on Wednesday 12 July in the morning, will be presented on Tuesday 11 July in the afternoon and can be found in Hall X, poster board number 125.

### P229- Development: motor system

A229.11. Differentiation in the respiratory behaviour of holometabolous insects during metamorphosis.

Zafeiridou G., Papachristoforou A. & Theophilidis G.

This poster initially scheduled on Wednesday 12 July in the morning, will be presented on Monday 10 July in the morning and can be found in Hall X, poster board number 125.

### P233- Learning and memory: animals VII

A233.39. Context-specific cocaine sensitization in CAMKII-alpha 3'UTR mutant mice.

Wilson A., Miller S., Sage J. R., Mayford M. & Anagnostaras S. G.

This poster initially scheduled on Wednesday 12 July in the morning, will be presented on Tuesday 11 July in the morning and can be found in Hall X, poster board number 126.

## Symposia

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### S01 - Neural correlates of consciousness: new trends and data

A027.1 Dr Christof Koch will be replaced by Dr Rodrigo Quiroga.

### S10- Brain immunity as a double edged sword

A062.1. Dr Mathias Jucker will be replaced by co-author Dr Lars Stoltze.

### S56- Axon growth and guidance

A247.4. Dr Laure Strohlic will be replaced by Dr Esther Stoeckli.

Presentation title:

Identification of subpopulation-specific guidance cues directing sensory afferents to their target laminae in the spinal cord.

Stoeckli E.T. & Bourikas D.