

6th FENS
FORUM OF
EUROPEAN
NEUROSCIENCE

July 12–16, 2008
Geneva | Switzerland
Palexpo

Organised by the Federation of European
Neuroscience Societies | FENS
<http://www.fens.org>
Hosted by the Swiss Society for Neuroscience | SSN

**A must in Europe for
neuroscientists all over
the world.**

Full details of the programme and
instructions for registration and abstract
submission can be obtained from
<http://forum.fens.org/2008>.

The website for abstract submission
opens on December 1, 2007.

Deadline for early registration and
abstract submission: January 31, 2008.



Scientific Programme of the FENS Forum 2008

→ PLENARY LECTURES

- David Attwell, London, UK
- Elena Cattaneo, Milan, Italy
- Barry Dickson, Vienna, Austria
- Barry Everitt, Cambridge, UK
- Magdalena Götz, Munich, Germany
- Riitta Hari, Helsinki, Finland
- Thomas M. Jessell, New York, USA
- Bert Sakmann, Heidelberg/Munich, Germany
- Daniel Schacter, Cambridge MA, USA

→ SYMPOSIA

DEVELOPMENT

- Cell adhesion molecules: from neural recognition to connectivity.
- Emerging functions of neuronal migration during brain development.
- Endocannabinoids in the developing brain.
- GABA and adult neurogenesis: from cell fate to synaptic plasticity.
- Genetic control of neuronal circuit assembly.
- Mitochondrial transport and its emerging impact on synaptic transmission and neurodegeneration.
- Molecular mechanisms of synaptic formation and function: insight for cognitive dysfunction.

SYNAPTIC TRANSMISSION AND EXCITABILITY

- Actin dynamics in synaptic transmission.
- G protein coupled inwardly rectifying K⁺ channels: from structure to function.
- Glia-mediated synaptic plasticity.
- Glycogen synthase kinase 3 (GSK3) in synaptic plasticity, memory and disease.
- Metabotropic glutamate receptor plasticity: roles in normal and abnormal brain function.
- Metaplasticity – from molecules to behaviour.
- Molecular probes and switches for functional analysis of receptors, ionic channels and synaptic networks.
- Neuronal network oscillations in health and disease.
- Nicotinic receptor signalling in the brain: from molecules to cognition.
- Presynaptic terminals: structural constraints and molecular dynamics.

- Recent advances in neurotrophin signalling at central synapses.
- Regulation of neurotransmission by cytoskeletal dynamics.
- Structure, dynamics and in vivo functions of neurotransmitter transporters.
- Subunit-specific NMDA receptor regulation.

SENSORY SYSTEMS

- Imaging development and plasticity in the visual cortex: from synapses to functional networks.
- Molecular mechanisms of whisker-to-barrel system development.
- Neuronal information processing in drosophila: genetics meets physiology.
- Neuronal network architecture and graphical processing in the neocortex.
- New TRP channels in mammalian thermosensation.
- Pain: mechanisms and persistent symptoms.
- Spontaneous activity in cortical networks.

MOTOR SYSTEMS

- Cerebellar network function: new imaging and modelling approaches.
- Computational and neural mechanisms for the control of goal directed movement in primates.
- Modulation and metamodulation of motor control networks.

AUTONOMIC, LIMBIC AND OTHER SYSTEMS

- Stress-protective effects of brain oxytocin: from animal to human studies.

COGNITION AND BEHAVIOUR

- Entorhinal grid cells, navigation and memory.
- Epigenetic regulation of cognitive function and behaviour.
- Localising memory traces – concepts, methods and organisms.
- Molecular, cellular and circuit contributions to cognitive decline in normal aging.
- Multiple hippocampi in one? Memory and beyond along the septo-temporal axis.
- Neuronal circuits of fear extinction.
- Sleep, off-line reactivation and memory consolidation.

- Social brains: how we perceive and understand intentions and feelings in other people.
- The neurobiology of choice and decision-making.
- Tracing mental images in the brain.
- Translation regulation subserving memory and synaptic plasticity consolidation.
- Wiring the developing brain: genes and activity in songbirds.
- Zebrafish: a new model organism for behavioural neuroscience.

NEUROLOGICAL AND PSYCHIATRIC CONDITIONS

- Adaptive changes within the mammalian nervous system and functional recovery following injuries.
- Antigen drainage out of the brain: a new role for microglia?
- Compartmental degeneration in motor neuron disease: where does the end begin?
- Gene transfer for neurodegenerative diseases.
- Molecular mechanisms in Parkinson's disease and other synucleinopathies.
- Neurogenesis and gliogenesis in brain repair.
- New insights into cortico-amygdala interactions: implications for disorders of emotion.
- Novel molecular mechanisms mediating cocaine addiction and its behavioural effects.
- Role of sodium channels in idiopathic and chronic focal epilepsies.
- Stress: a neural disconnection syndrome, towards new molecular targets.
- Synapse recycling, memory impairment and Alzheimer's disease.

→ WORKSHOPS

- Investigating dendritic membrane potential with voltage sensitive dyes.
- Integrated open-source solutions for data acquisition, management and dynamic analysis of cell structures in the nervous system.
- Pre-clinical evaluation of stem cell therapy in stroke.
- Emerging high-resolution in vivo technologies.

→ SPECIAL LECTURES

- **EBBS Lecture**
Angela Friederici, Leipzig, Germany
- **Hertie Foundation Lecture**
Paul Greengard, New York, USA
- **Human Frontier Science Program Lecture**
Nobutaka Hirokawa, Tokyo, Japan
- **Reemtsma Foundation – Zuelch Lecture**
John P. Donoghue, Providence, USA
- **Academia Europaea (Physiology & Medicine)**
Alexei Verkhratsky, Manchester, UK
- **Max Cowan Lecture**
James Fawcett, Cambridge, UK
- **Kemali Prize Lecture**
Massimo Scanziani, La Jolla, USA
- **Fondation IPSEN Neuronal Plasticity Awarding Lectures**
- **GlaxoSmithKline Neural Stem Cell FENS Research Award**
- **Boehringer Ingelheim FENS Research Award**
- **FENS EJP Awards**

→ SPECIAL EVENTS

- NEURON-CELL-Press Symposium
- EDAB BAW Reception/ Social programme
- EU-driven funding opportunities in brain research
- NENS Symposium
- EDAB symposium – Music and the brain: perception to emotion
- Swiss Academy of Medical Sciences – Théodore Ott Prize 2008 Award Ceremony
- FENS / European Brain Council Symposium
- Breaking news in neuroscience
- Blue Brain Project Phase I: the neocortical column model.
- Neuroscience and Human Culture – supported by the Evens Foundation
- FENS/IBRO Alumni Symposium

→ POSTERS