

7th
FENS
FORUM OF
EUROPEAN
NEUROSCIENCE

July 3-7, 2010

RAI Convention Centre | Amsterdam

DAY-TO-DAY PROGRAMME
SPEAKER SESSIONS

Final version 25 May 2010

Modifications programme always available on

<http://forum.fens.org/2010>

Saturday July 3

Workshops

12:30 - 15:30

Room Elicium 2

001 - WORKSHOP W01**IMAGING DYNAMIC CHANGES AT THE SYNAPSE**Chaired by: **Henley J.** (Bristol, United Kingdom)

W01.1 - Abstract 001.1

Glutamate receptor trafficking to, from and at the synapse

Henley J. (Bristol, United Kingdom)

W01.2 - Abstract 001.2

Synaptic processing of visual information in the retina studied using genetically-encoded reporters

Lagnado L. (Cambridge, United Kingdom)

W01.3 - Abstract 001.3

New molecular motor toolbox for neuronal trafficking: dynein steers AMPA receptor transport into dendrites

Hoogenraad C.C. (Rotterdam, Netherlands)

W01.4 - Abstract 001.4

Mapping the synaptic basis of cortical circuit formation using single cell photostimulation

Ashby M.C. (Bethesda, USA)

W01.5 - Abstract 001.5

Imaging plasticity at hippocampal synapses

Emptage N.J. (Oxford, United Kingdom)

W01.6 - Abstract 001.6

Imaging synaptic network development

Muller D. (Geneva, Switzerland)

12:30 - 15:30

Room G102

002 - WORKSHOP W02**STRATEGIES FOR PROMOTING PERIPHERAL NERVE REGENERATION**Chaired by: **Sousa M.M.** (Porto, Portugal)**Geuna S.** (Orbassano Torino, Italy)

W02.1 - Abstract 002.1

Neuroactive steroids in the peripheral nerve

Melcangi R.C. (Milano, Italy)

W02.2 - Abstract 002.2

Perspectives of the translocator protein TSPO ligands for promoting peripheral nerve regeneration

Schumacher M. (Kremlin-Bicêtre, France)

W02.3 - Abstract 002.3

Tranthyretin: From neuritogenic activity in vitro, to enhancement of nerve regeneration in vivo

Sousa M.M. (Porto, Portugal)

W02.4 - Abstract 002.4

Is VEGF a good candidate to promote peripheral axonogenesis by gene therapy?

Zacchigna S. (Trieste, Italy)

W02.5 - Abstract 002.5

Cell transplantation therapy in the peripheral nerve

Terenghi G. (Manchester, United Kingdom)

W02.6 - Abstract 002.6

Tissue engineering of peripheral nerves

Raimondo S. (Orbassano Torino, Italy)

12:00 - 15:30

Room G104

003 - WORKSHOP W03**NOVEL METHODS FOR ASSESSING TRANSMITTER RELEASE AND EFFECTS DURING BEHAVIOUR**Chaired by: **Feenstra M.G.P.** (Amsterdam, Netherlands)

W03.1 - Abstract 003.1

Optogenetic control of neurotransmission during motivated behaviors

Stuber G. (Emeryville, USA)

W03.2 - Abstract 003.2

The use of choline- and glutamate-sensitive microelectrodes in research on the neuronal mechanisms underlying basic cognitive operations

Sarter M. (Ann Arbor, USA)

W03.3 - Abstract 003.3

Simultaneous fixed potential amperometry & EEG recordings enable characterization of biochemical changes associated with the sleep/wake cycle and spontaneous EEG activity

Dash M.B. (Madison, USA)

W03.4 - Abstract 003.4

Second-by-second biotelemetric monitoring of brain energetic metabolism using microsensors and biosensors in freely moving rats

Serra P.A. (Sassari, Italy)

W03.5 - Abstract 003.5

Endocannabinoid control of accumbal processing in goal-directed behavior using a combined electrophysiological and voltammetric approach

Cheer J.F. (Baltimore, USA)

W03.6 - Abstract 003.6

Combined microdialysis and single-cell electrophysiology in free moving animals: Transmitter-selective dependence of neuronal correlates

Valencia-Alfonso C.E. (Amsterdam, Netherlands)

W03.7 - Abstract 003.7

Using chronic microsensors to track dopamine release over learning and changing cognitive states

Phillips P.E.M. (Seattle, USA)

12:30 - 15:30

Room Emerald

004 - WORKSHOP W04**NEUROANATOMICAL TRACING AND SYSTEMS NEUROSCIENCE: THE STATE OF THE ART**Chaired by: **Lanciego J.** (Pamplona, Spain)**Wouterlood F.G.** (Amsterdam, Netherlands)

W04.1 - Abstract 004.1

A double coinjection strategy for visualizing extended neuroanatomical connections and progressively elaborating the brain's basic wiring diagram

Swanson L.W. (Los Angeles, USA)

W04.2 - Abstract 004.2

Advances in viral transneuronal tracing

Ugolini G. (Gif Sur Yvette, France)

W04.3 - Abstract 004.3

Tracing combined with molecular markers

Lanciego J. (Pamplona, Spain)

Saturday July 3

Workshops (continued)

Wo4.4 - Abstract 004.4

Expression of exogenous DNA delivered via whole-cell recordings in vivo

Margrie T. (London, United Kingdom)

Wo4.5 - Abstract 004.5

MR connectomics: principles and challenges

Hagmann P. (Lausanne, Switzerland)

Wo4.6 - Abstract 004.6

Bringing results together in a digital standardized rat brain

Mailly P. (Paris, France)

12:30 - 15:30

Room Forum

005 - WORKSHOP W05**FROM NEURONS TO NETWORKS – NEW APPROACHES IN ELECTROPHYSIOLOGY**Chaired by: **Polder H.R.** (Tamm, Germany)**Draguhn A.** (Heidelberg, Germany)

Wo5.1 - Abstract 005.1

Receptor mobility as a variable of synaptic transmission and signal integration

Heine M. (Magdeburg, Germany)

Wo5.2 - Abstract 005.2

Understanding the regulation of D-serine concentration in the brain interstitial medium using biosensor detection combined with local pharmacology

Marinesco S. (Lyon, France)

Wo5.3 - Abstract 005.3

Development of sensory and cognitive cortico-subcortical networks: lessons from in vivo electrophysiology

Hanganu-Opatz I.L. (Hamburg, Germany)

Wo5.4 - Abstract 005.4

In vivo spike timing, synaptic connectivity and molecular expression profiles of GABAergic interneurons in the cerebral cortex

Klausberger T. (Vienna, Austria)

Wo5.5 - Abstract 005.5

Closed loop recordings and stimulation in sensory electrophysiology

Benda J. (München, Germany)

Wo5.6 - Abstract 005.6

Advanced multi-channel recording techniques for understanding temporal lobe epilepsy

Menendez De La Prida L. (Madrid, Spain)

12:30 - 15:30

Room G103

006 - WORKSHOP W06**STRUCTURE, DYNAMICS AND FUNCTION IN LARGE SCALE NEURONAL ENSEMBLES**Chaired by: **Marom S.** (Haifa, Israel)

Wo6.1 - Abstract 006.1

Targeted interaction with oscillatory network dynamics

Egert U. (Freiburg, Germany)

Wo6.2 - Abstract 006.2

Neuronal avalanches and coherence potentials: the canvas and paint of ongoing cortical information processing

Plenz D. (Bethesda, USA)

Wo6.3 - Abstract 006.3

Non-linear interactions in populations of spiking neurons

Cardanobile S. (Freiburg, Germany)

Wo6.4 - Abstract 006.4

Dynamics and stimulus representation in large-scale networks

Marom S. (Haifa, Israel)

Wo6.5 - Abstract 006.5

Bursting and synaptic plasticity in neuronal networks

Stegenga J. (Enschede, Netherlands)

Wo6.6 - Abstract 006.6

Functional collectivity: How to deal with collective states

Chialvo D.R. (Chicago, USA)

12:30 - 15:30

Room G105

007 - WORKSHOP W07**OPTOGENETIC MANIPULATIONS OF SYNAPTIC TRANSMISSION, PLASTICITY, VISION AND BEHAVIORS**Chaired by: **Oertner T.G.** (Basel, Switzerland)**Gottschalk A.** (Frankfurt, Germany)

Wo7.1 - Abstract 007.1

Light-actuated ion channels and receptors for optical control of neurons and behavior

Trauner D. (Munich, Germany)

Wo7.2 - Abstract 007.2

The widened Channelrhodopsin-toolbox for broad optogenetic application

Hegemann P. (Berlin, Germany)

Wo7.3 - Abstract 007.3

Structure-function analysis of individual synapses

Oertner T.G. (Basel, Switzerland)

Wo7.4 - Abstract 007.4

Genetic reactivation of cone photoreceptors restores complex visual responses in Retinitis pigmentosa

Roska B.M. (Basel, Switzerland)

Wo7.5 - Abstract 007.5

Optogenetic analysis of synaptic transmission and neural networks in *Caenorhabditis elegans***Gottschalk A.** (Frankfurt, Germany)

Wo7.6 - Abstract 007.6

Optogenetic analysis of nervous system function and behaviour in *Drosophila melanogaster***Fiala A.** (Goettingen, Germany)

Saturday July 3

❖❖❖ Special event

❖❖❖ Opening session

15:45 - 17:15

Auditorium

008 - SPECIAL EVENT SE01**EJN SPECIAL FEATURE: THE EVER-CHANGING BRAIN**Chaired by: **Fritschy J.M.** (Zürich, Switzerland)**Sarter M.** (Ann Arbor, USA)

SE01.1 - Abstract 008.1

Cell biology of synaptic plasticity: protein synthesis at synapses

Schuman E.M. (Frankfurt Am Main, Germany)

SE01.2 - Abstract 008.2

Dichotomous control of striatal synaptic plasticity and Parkinson's disease

Surmeier J. (Chicago, USA)

SE01.3 - Abstract 008.3

Molecular aspects of brain development: Insights from the Fragile X syndrome

Bagni C. (Leuven, Belgium)

17:30 - 18:00

Plenary Hall

OPENING CEREMONYIntroduced by: **Boer G.** (Amsterdam, Netherlands)

Welcome by FENS

Kettenmann H. (Berlin, Germany)

Welcome by Dutch Neurofederation

Joëls M. (Utrecht, The Netherlands)

Official opening

Gispen W.H. (Utrecht, The Netherlands)

Cultural brain address

De Jonge F. (Muiderberg, The Netherlands)

18:00 - 19:00

Plenary Hall

009 - OPENING PLENARY LECTURE*Support contributed by Dutch neuroscience schools and institutes*Introduced by: **Boer G.** (Amsterdam, Netherlands)

L01.1 - Abstract 009.1

Probing neurons and brains with molecules and photons

Tsien R.Y. (La Jolla, USA)

Sunday July 4

 Scientific sessions

08:30 - 09:30	Plenary Hall	09:45 - 11:15	Room G104/105
010 - PLENARY LECTURE		029 - SYMPOSIUM S02	
<i>Support contributed by Dutch neuroscience schools and institutes</i>		SHAPING FUNCTIONAL ARCHITECTURE BY OSCILLATORY ALPHA ACTIVITY	
Introduced by: Caminiti R. (Milan, Italy)		Chaired by: Händel B. (Nijmegen, Netherlands)	
L02.1 - Abstract 010.1		Jensen O. (Nijmegen, Netherlands)	
Cortical interneuron development in health and disease		So2.1 - Abstract 029.1 - 09:50	
Marín O. (Sant Joan d'Alacant, Spain)		Firing dynamics of thalamic and cortical neurons during the alpha rhythm	
		Crunelli V. (Cardiff, United Kingdom)	
09:30 - 13:15	Hall 1	So2.2 - Abstract 029.2 - 10:10	
POSTER SESSION 1		Modulation in alpha activity can produce cognitive relevant evoked responses	
(see details on http://forum.fens.org/2010)		Jensen O. (Nijmegen, Netherlands)	
011 A Neurogenesis & gliogenesis 1		So2.3 - Abstract 029.3 - 10:30	
012 B Neurotransmitters & signaling molecules 1		Spontaneous EEG alpha rhythm of the human brain is negatively correlated with the fMRI signal and accounts for variability in the evoked fMRI response	
013 B Ion channels 1		Ritter P. (Berlin, Germany)	
014 B Synaptic plasticity 1		So2.4 - Abstract 029.4 - 10:50	
015 C Epilepsy 1		New insights into alpha activity from transcranial magnetic stimulation-electroencephalography studies	
016 C Ischemia 1		Thut G. (Glasgow, United Kingdom)	
017 C Mental disorders 1			
018 C Parkinson's 1		09:45 - 11:15	Room Forum
019 D Vision 1		030 - SYMPOSIUM S03	
020 D Pain 1		ENDOCANNABINOIDS IN THE SYNAPSE: MOLECULAR DIVERSITY AND DIVISION OF LABOR	
021 E Cardiovascular, respiratory & thermoregulation		Chaired by: Katona I. (Budapest, Hungary)	
022 E Biological rhythms and sleep 1		So3.1 - Abstract 030.1 - 09:50	
023 F Human cognition 1		Production and degradation of endocannabinoids mediating retrograde suppression of synaptic transmission	
024 F Learning 1		Kano M. (Tokyo, Japan)	
025 F Memory mechanisms 1		So3.2 - Abstract 030.2 - 10:10	
026 G History and teaching of neuroscience		Pathophysiology of neurolipid-mediated synaptic plasticity: food for thoughts	
027 G Neurotechniques 1		Manzoni O. (Bordeaux, France)	
		So3.3 - Abstract 030.3 - 10:30	
09:45 - 11:15	Room Elicium 1	Endocannabinoid signaling in spinal dorsal horn circuits	
028 - SYMPOSIUM S01		Zeilhofer H.U. (Zürich, Switzerland)	
ALZHEIMER'S DISEASE – TRANSLATION OF MOLECULAR MECHANISMS INTO DIAGNOSTIC AND THERAPEUTIC APPROACHES		So3.4 - Abstract 030.4 - 10:50	
Chaired by: Haass C. (Munich, Germany)		Compartmentalized distribution and functional segregation of distinct endocannabinoid signaling pathways at glutamatergic synapses of the central nervous system	
So1.1 - Abstract 028.1 - 09:50		Katona I. (Budapest, Hungary)	
Molecular mechanisms of Alzheimer's disease			
Haass C. (Munich, Germany)		09:45 - 11:15	Room Elicium 2
So1.2 - Abstract 028.2 - 10:10		031 - SYMPOSIUM S04	
Genome wide screens for Alzheimer modifying genes and generation of novel secretase inhibitors		NEUROBIOLOGY OF MOTOR LEARNING	
Rajendran L. (Zurich, Switzerland)		Chaired by: Rothwell J.C. (London, United Kingdom)	
So1.3 - Abstract 028.3 - 10:30		Nielsen J.B. (Copenhagen N, Denmark)	
Innovative imaging techniques for early diagnosis of Alzheimer's disease		So4.1 - Abstract 031.1 - 09:50	
Fox N.C. (London, United Kingdom)		The role of phasic dopamine signals in motor learning	
So1.4 - Abstract 028.4 - 10:50		Redgrave P. (Sheffield, United Kingdom)	
In vivo monitoring of Amyloid generation in animal models and human patients			
Holtzman D.M. (Saint Louis, USA)			

Sunday July 4

Scientific sessions (continued)

- So4.2 - Abstract 031.2 - 10:10
Motor learning in complex environments
Braun D.A. (Cambridge, United Kingdom)
- So4.3 - Abstract 031.3 - 10:30
Acquisition and recall in motor adaptation and skill tasks
Krakauer J.W. (New York, USA)
- So4.4 - Abstract 031.4 - 10:50
Motor learning in cerebellar disorder
Timmann D. (Essen, Germany)
- 09:45 - 11:15 Plenary Hall
032 - SYMPOSIUM S05
THE MAKING OF NEURONAL CIRCUITS: MECHANISMS PROMOTING AND PREVENTING SYNAPSE FORMATION
Chaired by: **Lohmann C.** (Amsterdam, Netherlands)
Gottmann K. (Düsseldorf, Germany)
- So5.1 - Abstract 032.1 - 09:50
Interacting extrinsic cues during dendrite patterning: interplay between guidance and self-avoidance signaling
Grueber W.B. (New York, USA)
- So5.2 - Abstract 032.2 - 10:10
Calcium signaling and the selection of synaptic partners
Lohmann C. (Amsterdam, Netherlands)
- So5.3 - Abstract 032.3 - 10:30
Molecular regulators of synapse formation in *C. elegans*
Shen K. (Stanford, USA)
- So5.4 - Abstract 032.4 - 10:50
N-cadherin's role in the formation, maturation and function of central mammalian synapses
Gottmann K. (Düsseldorf, Germany)
- 09:45 - 11:15 Room G102/103
033 - SYMPOSIUM S06
BRAIN TUMORS: RECENT INSIGHTS FROM STEM CELL RESEARCH
Chaired by: **Synowitz M.** (Berlin, Germany)
Savaskan N.E. (Berlin, Germany)
- So6.1 - Abstract 033.1 - 09:50
Ephrins regulate the activity of cancer stem cells from human glioblastomas
Vescovi A.L. (Milano, Italy)
- So6.2 - Abstract 033.2 - 10:10
Role of *Bmi1* in neural stem cells, glioma and medulloblastoma
Van Lohuizen M.M.S. (Amsterdam, Netherlands)
- So6.3 - Abstract 033.3 - 10:30
Endogenous neural precursors suppress glioma stem cells by releasing BMP7
Glass R. (Berlin, Germany)
- So6.4 - Abstract 033.4 - 10:50
The role of TGF-beta in glioma genesis and progression
Seoane J. (Barcelona, Spain)
- 09:45 - 11:15 Room Emerald
034 - SYMPOSIUM S07
THE NEUROBIOLOGY OF SYNTAX
Chaired by: **Petersson K.M.** (Nijmegen, Netherlands)
- So7.1 - Abstract 034.1 - 09:50
The neurobiology of syntax: recursion and dynamical systems
Petersson K.M. (Nijmegen, Netherlands)
- So7.2 - Abstract 034.2 - 10:10
The evolution of syntax: comparing human and animal pattern perception experimentally
Fitch W. T. (Vienna, Austria)
- So7.3 - Abstract 034.3 - 10:30
Neural network processing of nested structure in language and cognitive sequences
Dominey P.F. (Bron, France)
- So7.4 - Abstract 034.4 - 10:50
Processing hierarchical structures in the human brain
Friederici A.D. (Leipzig, Germany)
- 09:45 - 11:15 Auditorium
035 - SYMPOSIUM S08
MECHANISMS OF MEMORY STORAGE IN NEOCORTEX
Chaired by: **Finnerty G.T.** (London, United Kingdom)
- So8.1 - Abstract 035.1 - 09:50
The role of prefrontal cortex in consolidation of remote memory
Frankland P.W. (Toronto, Canada)
- So8.2 - Abstract 035.2 - 10:10
Does axonal rewiring of somatosensory connections constitute a neocortical memory trace?
Finnerty G.T. (London, United Kingdom)
- So8.3 - Abstract 035.3 - 10:30
Experience leaves a lasting structural trace in cortical circuits
Hofer S. (London, United Kingdom)
- So8.4 - Abstract 035.4 - 10:50
Maintenance of long-term associative taste memory in insular cortex
Dudai Y. (Rehovot, Israel)
- 12:30 - 14:00 Room Elicium 2
036 - SPECIAL EVENT SE02
EC SYMPOSIUM: "FP7: EU-DRIVEN FUNDING OPPORTUNITIES IN BRAIN RESEARCH"
Chaired by: **Tosetti P.** (Brussels, Belgium)
- SE02.1 - Abstract 036.1
The ERC grants: funding individual researchers
Marin O. (ERC Scientific Council)
- SE02.2 - Abstract 036.2
Marie Curie Actions: fostering career development
Berkouk K. (European Commission, "Individual Fellowships" Sector)

Sunday July 4

Scientific sessions (continued)

SE02.3 - Abstract 036.3

Collaborative grants: building research networks

Tosetti P. (European Commission, area "Brain and related diseases")

12:30 - 14:00

Room Elicium 1

037 - SPECIAL LECTURE SL01

FONDATION IPSEN NEURONAL PLASTICITY PRIZE AWARD LECTURES: "NEUROENDOCRINE CONTROL OF BEHAVIOUR"

Chaired by: **Singer W.** (Frankfurt, Germany)**Christen Y.** (Paris, France)

SL01.1 - Abstract 037.1

Neuropeptides and social behavior

Insel T. (Bethesda, USA)

SL01.2 - Abstract 037.2

Stress, sex, cognition and emotion: Role of neuronal remodeling and resilience

McEwen B. (New York, USA)

SL01.3 - Abstract 037.3

Generalized CNS arousal, sexual arousal and their relations to behavior

Pfaff D. (New York, USA)

13:00 - 13:45

Auditorium

038 - SPECIAL LECTURE SL02**EBBS / BEHAVIOURAL BRAIN RESEARCH PRIZE LECTURE**Chaired by: **Frackowiak R.** (Lausanne, Switzerland)

SL02.1 - Abstract 038.1

Bridging the gap between temporal lobe and diencephalic memory systems

Aggleton J.P. (Cardiff, United Kingdom)

13:00 - 13:45

Room Forum

039 - SPECIAL LECTURE SL03**GERTRUD REEMTSMA FOUNDATION - K.J. ZUELCH LECTURE**Chaired by: **Reifenberger G.** (Düsseldorf, Germany)

SL03.1 - Abstract 039.1

Malignant gliomas: Small steps and giant leaps

Louis D.N. (Boston, USA)

13:30 - 17:30

Hall 1

POSTER SESSION 2(see details on <http://forum.fens.org/2010>)**040** A Transplantation & regeneration**041** A Stem cells 1**042** A Epigenetic factors**043** B Synaptic plasticity 2**044** B Glia-neuron interactions 1**045** B GPCR 1**046** C Repeat expansion diseases**047** C Ataxias**048** C Neuromuscular diseases**049** C Developmental disorders**050** C Neurotoxicity & inflammation 1**051** D Visuomotor processing**052** D Cerebellum 1**053** D Rhythm & pattern generation 1**054** E Stress 1**055** E Neuroendocrine 1**056** F Human cognition 2**057** F Memory mechanisms 2**058** F Neuroethology**059** G Neurotechniques 2

15:45 - 17:15

Plenary Hall

060 - SYMPOSIUM S09

TRACKING THE FATE OF MEMORIES: NETWORKS OF MEMORY CONSOLIDATION AND RECONSOLIDATION IN THE BRAIN

Chaired by: **Battaglia F.P.** (Amsterdam, Netherlands)**Wiener S.I.** (Paris, France)

S09.1 - Abstract 060.1 - 15:50

Memory updating: the role of reconsolidation in the modification of consolidated memories

Lee J.L.C. (Birmingham, United Kingdom)

S09.2 - Abstract 060.2 - 16:10

Brain oscillations and the formation and replay of transient cortical synchronous activity states in rats

Battaglia F.P. (Amsterdam, Netherlands)

S09.3 - Abstract 060.3 - 16:30

Selective suppression of hippocampal ripples impairs spatial memory

Zugaro M.B. (Paris, France)

S09.4 - Abstract 060.4 - 16:50

Sleep and the reorganization of the neural basis of long-term memories

Peigneux P. (Bruxelles, Belgium)

15:45 - 17:15

Room G104/105

061 - SYMPOSIUM S10

INTERPLAY BETWEEN RABS AND SNARES IN NEURONAL VESICULAR TRAFFICKING

Chaired by: **Galli T.** (Paris, France)

S10.1 - Abstract 061.1 - 15:50

A molecular link between TI-VAMP/VAMP7 and Rab21 in vesicular trafficking mediating neurite growth

Galli T. (Paris, France)

S10.2 - Abstract 061.2 - 16:10

Rab-dependent regulation of signalling endosome transport: from in vitro screens to in vivo assays

Schiavo G. (London, United Kingdom)

S10.3 - Abstract 061.3 - 16:30

Multiple actions of v-SNARE proteins in Ca²⁺-triggered exocytosis**Bruns D.** (Homburg, Germany)

S10.4 - Abstract 061.4 - 16:50

Higher-order SNARE complex interactions in vitro and in vivo

Hilfiker S. (Granada, Spain)

Sunday July 4

Scientific sessions (continued)

- 15:45 - 17:15 Room Forum
- 062 - SYMPOSIUM S11**
TARGETING PROTEIN-PROTEIN INTERACTIONS IN NEUROLOGICAL DISORDER THERAPY
 Chaired by: **Bockeaert J.** (Montpellier, France)
Marin P. (Montpellier, France)
- S11.1 - Abstract 062.1 - 15:50
 Protein-protein interactions in the NMDA receptor complex as targets for therapeutic intervention
Salter M.W. (Toronto, Canada)
- S11.2 - Abstract 062.2 - 16:10
 Targeting serotonin 2A receptor/PDZ protein interactions in neuropathic pain
Marin P. (Montpellier, France)
- S11.3 - Abstract 062.3 - 16:30
 Addressing protein - protein interaction in Alzheimer Disease
Di Luca M. (Milan, Italy)
- S11.4 - Abstract 062.4 - 16:50
 Cell Permeable JNK inhibitory-peptide as a novel strategy against neurodegeneration
Borsello T. (Milan, Italy)
- 15:45 - 17:15 Room G102/103
- 063 - SYMPOSIUM S12**
IMPAIRMENT AND REPAIR OF MOTOR NETWORKS AFTER SPINAL CORD INJURY
 Chaired by: **Deliagina T.G.** (Stockholm, Sweden)
- S12.1 - Abstract 063.1 - 15:50
 Motoneurons after spinal cord injury
Hultborn H. (Copenhagen, Denmark)
- S12.2 - Abstract 063.2 - 16:10
 Plastic changes at cellular and network levels caused by spinal cord injury
Vinay L. (Marseille, France)
- S12.3 - Abstract 063.3 - 16:30
 Acutely and chronically reformulated spinal networks for locomotion
Edgerton R. (Los Angeles, USA)
- S12.4 - Abstract 063.4 - 16:50
 Impairment and repair of postural networks after spinal cord injury
Deliagina T.G. (Stockholm, Sweden)
- 15:45 - 17:15 Room Elicium 2
- 064 - SYMPOSIUM S13**
THE MICROCIRCUITRY OF SELECTIVE ATTENTION: PHYSIOLOGY, PHARMACOLOGY AND MODELLING
 Chaired by: **Chelazzi L.** (Verona, Italy)
- S13.1 - Abstract 064.1 - 15:50
 Neuronal mechanisms underlying the emergence of attentional control signals in prefrontal and anterior cingulate cortex
Womelsdorf T. (London, Canada)
- S13.2 - Abstract 064.2 - 16:10
 Spatial attention decorrelates low frequency activity fluctuations in extrastriate visual cortex
Reynolds J.H. (La Jolla, USA)
- S13.3 - Abstract 064.3 - 16:30
 Low frequency neuronal oscillations as instruments of attentional selection
Schroeder C.E. (Orangeburg, USA)
- S13.4 - Abstract 064.4 - 16:50
 Neuropharmacology of attention in visual cortex
Thiele A. (Newcastle Upon Tyne, United Kingdom)
- 15:45 - 17:15 Room Elicium 1
- 065 - SYMPOSIUM S14**
DEVELOPMENT OF NEURAL MAPS – FROM SPECIFICATION TO FUNCTION
 Chaired by: **Harris W.A.** (Cambridge, United Kingdom)
- S14.1 - Abstract 065.1 - 15:50
 Development and connectivity of a dendritic myotopic map in the Drosophila motor system
Landgraf M. (Cambridge, United Kingdom)
- S14.2 - Abstract 065.2 - 16:10
 Olfactory map formation in the Drosophila brain
Hummel T. (Münster, Germany)
- S14.3 - Abstract 065.3 - 16:30
 Olfaction targeted
Mombaerts P. (Frankfurt, Germany)
- S14.4 - Abstract 065.4 - 16:50
 Development and function of neural maps in the visual system of larval zebrafish
Engert F. (Cambridge, USA)
- 15:45 - 17:15 Auditorium
- 066 - SYMPOSIUM S15**
EMERGING MECHANISMS IN NEURODEGENERATIVE DISORDERS - THE ROLE OF SPREADING DEPRESSION (SD)
 Chaired by: **Lauritzen M.** (Copenhagen, Denmark)
Bari F. (Szeged, Hungary)
- S15.1 - Abstract 066.1 - 15:50
 Mechanisms of sustained depolarization during spreading depression: from membrane channels to macroscopic fields
Herreras O. (Madrid, Spain)
- S15.2 - Abstract 066.2 - 16:10
 Aging and chronic cerebral hypoperfusion alter the pattern of cortical spreading depression in the rat
Farkas E. (Szeged, Hungary)
- S15.3 - Abstract 066.3 - 16:30
 Cortical spreading ischaemia in patients after subarachnoid haemorrhage
Dreier J.P. (Berlin, Germany)
- S15.4 - Abstract 066.4 - 16:50
 Multimodal imaging of cortical spreading depression in experimental neurology
Obrenovitch T.P. (Bradford, United Kingdom)

Sunday July 4

Scientific sessions (continued)

15:45 - 17:15	Room Emerald	18:45 - 20:15	Room Emerald
067 - SYMPOSIUM S16		070 - SPECIAL EVENT SE04	
THE TEMPORO-AMMONIC PATHWAY: WHAT DOES IT DO AND WHY IS IT IMPORTANT?		EDAB/NEUROETHICS SOCIETY/INTERNATIONAL NEUROETHICS NETWORK SYMPOSIUM: "GLOBAL CHALLENGES IN NEUROETHICS"	
Chaired by: Thompson S. (Baltimore, USA)		Chaired by: Blakemore C. (Oxford, United Kingdom)	
S16.1 - Abstract 067.1 - 15:50		SE04.1 - Abstract 070.1	
Persistent firing initiated in the axon of hippocampal interneurons innervated by the temporo-ammonic pathway		Too busy for neuroethics?	
Spruston N. (Evanston, USA)		Illes J. (Vancouver, Canada)	
S16.2 - Abstract 067.2 - 16:10		SE04.2 - Abstract 070.2	
Differential regulation of proximal and distal temporo-ammonic CA1 synapses by neuromodulators and experience		Cognitive enhancing drugs for young and old brains	
Ito H.T. (Trondheim, Norway)		Sahakian B.J. (Cambridge, United Kingdom)	
S16.3 - Abstract 067.3 - 16:30		SE04.3 - Abstract 070.3	
Selective potentiation of temporo-ammonic synapses in area CA1 by serotonin and its dysregulation in depression		Neurotechnology inside and outside the laboratory	
Thompson S.M. (Baltimore, USA)		Magistretti P. (Lausanne, Switzerland)	
S16.4 - Abstract 067.4 - 16:50		SE04.4 - Abstract 070.4	
Frequency of gamma oscillations in CA1 routes inputs from entorhinal cortex and CA3		Neuroethics in the media	
Colgin L.L. (Trondheim, Norway)		Snell E. (London, United Kingdom)	
17:30 - 18:30	Plenary Hall	18:45 - 20:15	Room G104/105
068 - PLENARY LECTURE		071 - SPECIAL EVENT SE05	
<i>Support contributed by Dutch neuroscience schools and institutes</i>		NENS SYMPOSIUM	
Introduced by: Stylianopoulou F. (Athens, Greece)		Chaired by: Manahan-Vaughan D. (Bochum, Germany)	
L03.1 - Abstract 068.1		SE05.1 - Abstract 071.1	
The human adaptation for culture		The Network of European Neuroscience Schools (NENS): a FENS initiative to foster communication, mutual support and exchange at the graduate training level	
Tomasello M. (Leipzig, Germany)		Manahan-Vaughan D. (Bochum, Germany)	
18:45 - 20:15	Auditorium	SE05.2 - Abstract 071.2	
069 - SPECIAL EVENT SE03		The network of european funding for neuroscience research: Transnational activities for young investigator support	
ECNP SYMPOSIUM: "IS DEPRESSION A NEURODEGENERATIVE DISORDER?"		Raulo E. (Helsinki, Finland)	
Chaired by: Wittchen H.U. (Dresden, Germany)		SE05.3 - Abstract 071.3	
Deakin J.W. (Manchester, United Kingdom)		German research foundation-funded international research training groups: strategies and implementation	
SE03.1 - Abstract 069.1		Granderath S. (Bonn, Germany)	
Depression over the life span: a major societal burden and research challenge			
Wittchen H.U. (Dresden, Germany)			
SE03.2 - Abstract 069.2			
Cognitive neurobiology of gene-environment interactions in depression			
Deakin W. (Manchester, United Kingdom)			
SE03.3 - Abstract 069.3			
Neuroimaging and neuropsychological evidence of cognitive deficits in depression			
Fossati P. (Paris, France)			
SE03.4 - Abstract 069.4			
Neuronal plasticity, epigenetics, neurotrophic factors and depression			
Castrén E. (Helsinki, Finland)			

Monday July 5

 Scientific sessions

08:30 - 09:30	Plenary Hall	09:45 - 11:15	Room Elicium 2
072 - PLENARY LECTURE		090 - SYMPOSIUM S18	
<i>Support contributed by Dutch neuroscience schools and institutes</i>		NEW DEVELOPMENTS IN BRAIN PROTECTION AND REPAIR AFTER CEREBRAL ISCHEMIA?	
Introduced by: Morris R.G. (Edinburgh, United Kingdom)		Chaired by: Vivien D. (Caen, France)	
Lo4.1 - Abstract 072.1		S18.1 - Abstract 090.1 - 09:50	
Brain changes due to reading: mapping literate and illiterate brains		Protecting the brain by targeting systemic complications of stroke	
Dehaene S. (Gif Sur Yvette, France)		Dirnagl U. (Berlin, Germany)	
		S18.2 - Abstract 090.2 - 10:10	
09:30 - 13:15	Hall 1	Activation of innate immune response after stroke	
POSTER SESSION 3		Planas A.M. (Barcelona, Spain)	
(see details on http://forum.fens.org/2010)		S18.3 - Abstract 090.3 - 10:30	
073 A Neurogenesis & gliogenesis 2		Stem cell therapy after stroke – how can we make it possible ?	
074 A Synaptogenesis 1		Lindvall O. (Lund, Sweden)	
075 B Ligand gated ion channels 1		S18.4 - Abstract 090.4 - 10:50	
076 B Neurotransmitter release		Immunotherapy for stroke	
077 B GPCR 2		Vivien D. (Caen, France)	
078 C Alzheimer's 1			
079 C Mental disorders 2		09:45 - 11:15	Room Elicium 1
080 C Gene therapy		091 - SYMPOSIUM S19	
081 D Vision 2		THE BAD COP AND THE GOOD COP: REGULATION OF NEURONAL FUNCTION BY THE IMMUNE SYSTEM	
082 D Chemical senses		Chaired by: Wolf S.A. (Zürich, Switzerland)	
083 D Vestibular		S19.1 - Abstract 091.1 - 09:50	
084 D Multisensory		Cytokines: potential pathogenic substances from within	
085 E Neuroendocrine 2		Becher B. (Zürich, Switzerland)	
086 E Brain blood flow 1		S19.2 - Abstract 091.2 - 10:10	
087 F Memory mechanisms 3		The prenatal immunological environment modulates hippocampal neuronal stem cell fitness	
088 F Motivation and emotion 1		Wolf S.A. (Zürich, Switzerland)	
		S19.3 - Abstract 091.3 - 10:30	
09:45 - 11:15	Auditorium	Axon regeneration in the CNS: Help from the immune system	
089 - SYMPOSIUM S17		Nitsch R. (Mainz, Germany)	
MOLECULAR MECHANISMS CONTROLLING STEM AND PROGENITOR CELLS IN CNS DEVELOPMENT		S19.4 - Abstract 091.4 - 10:50	
Chaired by: Atanasoski S. (Basel, Switzerland)		Immunology of the mind: Intracranial protective autoimmunity is part of the functioning brain and links physiology to pathology	
S17.1 - Abstract 089.1 - 09:50		Schwartz M. (Rehovot, Israel)	
The cell biology of neural stem and progenitor cells			
Huttner W.B. (Dresden, Germany)		09:45 - 11:15	Room G102/103
S17.2 - Abstract 089.2 - 10:10		092 - SYMPOSIUM S20	
Dual role of Intermediate (basal) progenitor cells in promoting cerebral cortex expansion during vertebrate evolution and embryogenesis		BIOMARKERS IN ATTENTION-DEFICIT/HYPERACTIVITY DISORDER: INATTENTIVE AND COMBINED TYPES	
Broccoli V. (Milan, Italy)		Chaired by: Oades R.D. (Essen, Germany)	
S17.3 - Abstract 089.3 - 10:30		S20.1 - Abstract 092.1 - 09:50	
Insm1, a key factor in development of many neuronal cell types		Comparative behaviour and genetics in the animal model and in ADHD: neuromodulation in subgroups	
Birchmeier C. (Berlin-Buch, Germany)		Sagvolden T. (Oslo, Norway)	
S17.4 - Abstract 089.4 - 10:50		S20.2 - Abstract 092.2 - 10:10	
Graded sonic hedgehog signaling and the control of neuronal cell type identity		The genetics of serotonin in impulsivity and ADHD: Do glial and cytokine functions contribute?	
Briscoe J. (London, United Kingdom)		Oades R.D. (Essen, Germany)	

Monday July 5

Scientific sessions (continued)

S20.3 - Abstract 092.3 - 10:30
Identifying electrophysiological markers specific to ADHD: A comparison with early-onset psychosis
Groom M.J. (Nottingham, United Kingdom)

S20.4 - Abstract 092.4 - 10:50
Imaging genetics in ADHD: towards biological specificity with the diagnosis
Durston S. (Utrecht, Netherlands)

09:45 - 11:15 Plenary Hall

093 - SYMPOSIUM S21

LARGE SCALE INTERACTIONS IN BRAIN NETWORKS AND NEW WAYS TO STUDY THEM

Chaired by: **Fries P.** (Frankfurt, Germany)

S21.1 - Abstract 093.1 - 09:50
Brain-wide networks studied with fMRI and MEG
Corbetta M. (Saint Louis, USA)

S21.2 - Abstract 093.2 - 10:10
Brain-wide interaction through brain-wide synchronization
Fries P. (Frankfurt, Germany)

S21.3 - Abstract 093.3 - 10:30
Stimulating brain-wide networks in monkeys
Vanduffel W. (Leuven, Belgium)

S21.4 - Abstract 093.4 - 10:50
Stimulating brain-wide networks in humans; examples from concurrent Transcranial magnetic stimulation-fMRI studies of selective attention
Driver J. (London, United Kingdom)

09:45 - 11:15 Room Emerald

094 - SYMPOSIUM S22

VISUALIZING HEARING

Chaired by: **Borst J.G.G.** (Rotterdam, Netherlands)

S22.1 - Abstract 094.1 - 09:50
Imaging the function of individual hair cell active zones
Moser T. (Göttingen, Germany)

S22.2 - Abstract 094.2 - 10:10
Formation of the calyx of Held synapse
Borst J.G.G. (Rotterdam, Netherlands)

S22.3 - Abstract 094.3 - 10:30
Optical pharmacology of sound localization
Grothe B. (Martinsried-Planegg, Germany)

S22.4 - Abstract 094.4 - 10:50
In vivo two photon imaging of the mouse auditory cortex
Mizrahi A. (Jerusalem, Israel)

09:45 - 11:15 Room Forum

095 - SYMPOSIUM S23

NOGO RECEPTOR SIGNALING AND SYNAPTIC PLASTICITY IN HEALTH AND DISEASE

Chaired by: **Shatz C.** (Stanford, USA)
Olson L. (Stockholm, Sweden)

S23.1 - Abstract 095.1 - 09:50
Releasing the brakes on synaptic plasticity: PirB, MHCI and NgR
Shatz C.J. (Stanford, USA)

S23.2 - Abstract 095.2 - 10:10
Nogo receptor limits anatomical plasticity in adult brain
Strittmatter S.M. (New Haven, USA)

S23.3 - Abstract 095.3 - 10:30
Molecular convergence of the mechanisms that regulate neuronal growth and synaptic plasticity
Giger R. (Ann Arbor, USA)

S23.4 - Abstract 095.4 - 10:50
Nogo receptor regulation and the formation of lasting memories
Olson L. (Stockholm, Sweden)

09:45 - 11:15 Room G104/105

096 - SYMPOSIUM S24

COGNITION IN A MINI-BRAIN: SYSTEMS NEUROSCIENCE IN DROSOPHILA

Chaired by: **Miesenböck G.** (Oxford, United Kingdom)

S24.1 - Abstract 096.1 - 09:50
Memories all over - oriented locomotion and climbing in fruitflies
Strauss R. (Mainz, Germany)

S24.2 - Abstract 096.2 - 10:10
Neural circuits for optic flow based navigation in Drosophila
Borst A. (Martinsried, Germany)

S24.3 - Abstract 096.3 - 10:30
A neural circuit mechanism integrating nutritional state with memory expression in Drosophila
Waddell S. (Worcester, USA)

S24.4 - Abstract 096.4 - 10:50
Signals and noise in olfactory circuits
Miesenböck G. (Oxford, United Kingdom)

13:00 - 13:45 Room Elicium 2

097 - SPECIAL LECTURE SL04

DARGUT AND MILENA KEMALI FOUNDATION LECTURE

Chaired by: **Kemali D.** (Napoli, Italy)
Belmonte C. (San Juan De Alicante Alicante, Spain)

SL04.1 - Abstract 097.1
Neural stem cells and neurogenesis in the adult central nervous system
Frisén J. (Stockholm, Sweden)

13:00 - 13:45 Auditorium

098 - SPECIAL LECTURE SL05

FENS INVITED LECTURE

Chaired by: **Grillner S.** (Stockholm, Sweden)

SL05.1 - Abstract 098.1
Extrageniculate visual system in the control of visually guided saccades
Isa T. (Okazaki, Japan)

13:00 - 13:45 Room Forum

099 - SPECIAL LECTURE SL06

ERA-NET NEURON EXCELLENT PAPER IN NEUROSCIENCE AWARD

Chaired by: **Manahan-Vaughan D.** (Bochum, Germany)

SL06.1 - Abstract 099.1
Mutations in mRNA export mediator GLE1 result in a fetal motoneuron disease
Nousiainen H.O. (Helsinki, Finland)

Monday July 5

❖ Scientific sessions (continued)

13:30 - 17:30

Hall 1

POSTER SESSION 4(see details on <http://forum.fens.org/2010>)

- 100 A Neurogenesis & gliogenesis 3
- 101 A Systems development 1
- 102 A Developmental cell death
- 103 B Synaptic plasticity 3
- 104 B Neurotransmitters & signaling molecules 2
- 105 B Synapses 1
- 106 C Epilepsy 2
- 107 C Parkinson's 2
- 108 C Mental disorders 3
- 109 C Demyelinating disorders 1
- 110 D Tactile/somatosensory
- 111 D Pain 2
- 112 D Auditory 1
- 113 E Stress 2
- 114 F Human cognition 3
- 115 F Learning 2

15:45 - 17:15

Plenary Hall

116 - SYMPOSIUM S25**THE STRESSED BRAIN: WHAT MAKES US VULNERABLE?**Chaired by: **De Quervain D.J.F.F.** (Basel, Switzerland)

S25.1 - Abstract 116.1 - 15:50

Equipped to survive: How stress affects human brain function

Fernandez G. (Nijmegen, Netherlands)

S25.2 - Abstract 116.2 - 16:10

When memories become maladaptive: Genetic and hormonal risk factors

De Quervain D.J.F. (Basel, Switzerland)

S25.3 - Abstract 116.3 - 16:30

Transgenerational transmission of stress vulnerability

Yehuda R. (New York, USA)

S25.4 - Abstract 116.4 - 16:50

Developmental programming of stress vulnerability

Seckl J.R. (Edinburgh, United Kingdom)

15:45 - 17:15

Room Emerald

117 - SYMPOSIUM S26**CROSS-MODAL REORGANIZATION IN DEAFNESS**Chaired by: **Kral A.** (Hannover, Germany)

S26.1 - Abstract 117.1 - 15:50

Development and cross-modal plasticity in the deaf primary auditory cortex

Kral A. (Hannover, Germany)

S26.2 - Abstract 117.2 - 16:10

Contributions of auditory cortex to the superior visual abilities of congenitally deaf cats

Lomber S.G. (London, Canada)

S26.3 - Abstract 117.3 - 16:30

Cortical re-organization and multimodal processing in children with cochlear implants

Sharma A. (Boulder, USA)

S26.4 - Abstract 117.4 - 16:50

Brain imaging and recovery of speech comprehension in cochlear implanted deaf subjects

Barone P. (Toulouse, France)

15:45 - 17:15

Auditorium

118 - SYMPOSIUM S27**SYSTEMS BIOLOGY OF THE SYNAPSE: CONCEPTS TO UNDERSTAND THE COMPLEXITY OF BRAIN SYNAPTIC SIGNALING**Chaired by: **Gundelfinger E.D.** (Magdeburg, Germany)

S27.1 - Abstract 118.1 - 15:50

Synapse complexity

Grant S.G.N. (Hinxton, United Kingdom)

S27.2 - Abstract 118.2 - 16:10

Dissecting the synapse in animal models of disease

Smit A.B. (Amsterdam, Netherlands)

S27.3 - Abstract 118.3 - 16:30

Exploring synapse-to-nucleus signaling using proteomics

Jordan B.A. (Bronx, USA)

S27.4 - Abstract 118.4 - 16:50

Mathematics for experimental life sciences

Weismantel R. (Magdeburg, Germany)

15:45 - 17:15

Room G104/105

119 - SYMPOSIUM S28**NAVIGATION AND THE HEAD DIRECTION SYSTEM: INSIGHTS FROM ANIMALS, HUMANS AND COMPUTATIONAL MODELS**Chaired by: **Wolbers T.** (Edinburgh, United Kingdom)

S28.1 - Abstract 119.1 - 15:50

Processing landmark information: a prominent role for the postsubiculum

Taube J.S. (Hanover, USA)

S28.2 - Abstract 119.2 - 16:10

Behavioural effects of lesions within the head direction system

Vann S.D. (Cardiff, United Kingdom)

S28.3 - Abstract 119.3 - 16:30

Heading vectors, the hippocampus and navigation

Kubie J. L. (Brooklyn, USA)

S28.4 - Abstract 119.4 - 16:50

Head direction computations in the human brain

Wolbers T. (Edinburgh, United Kingdom)

15:45 - 17:15

Room Forum

120 - SYMPOSIUM S29**STATE DEPENDENT CORTICAL PROCESSING**Chaired by: **Crochet S.** (Lyon, France)**Poulet J.** (Berlin-Buch, Germany)

S29.1 - Abstract 120.1 - 15:50

State dependent regulation of cortical membrane potential synchrony during behaviour

Poulet J. (Berlin-Buch, Germany)

Monday July 5

Scientific sessions (continued)

- S29.2 - Abstract 120.2 - 16:10
State-dependent computations in neocortical neurons and networks
Destexhe A. (Gif Sur Yvette, France)
- S29.3 - Abstract 120.3 - 16:30
Organization of neuronal assembly activity across cortical layers
Harris K.D. (London, United Kingdom)
- S29.4 - Abstract 120.4 - 16:50
Information integration in human thalamocortical circuits during different states of consciousness
Massimini M. (Milan, Italy)
- 15:45 - 17:15 Room Elicium 1
121 - SYMPOSIUM S30
INVESTIGATING GLIA FUNCTION IN VIVO
Chaired by: **Fellin T.** (Genova, Italy)
- S30.1 - Abstract 121.1 - 15:50
Neuron and astrocyte activity during interictal and ictal discharges in vivo and in the isolated guinea pig brain preparation
Ratto G.M. (Pisa, Italy)
- S30.2 - Abstract 121.2 - 16:10
Impact of glial glutamate receptors to brain function in situ and in vivo
Kirchhoff F. (Goettingen, Germany)
- S30.3 - Abstract 121.3 - 16:30
Glia modulation of network activity in vivo
Fellin T. (Genova, Italy)
- S30.4 - Abstract 121.4 - 16:50
Astrocytic modulation of sleep homeostasis and cognitive consequences of sleep loss
Haydon P. (Boston, USA)
- 15:45 - 17:15 Room Elicium 2
122 - SYMPOSIUM S31
ACT AND SELECT: THE ROLE OF THE STRIATUM IN SELECTION OF BEHAVIOUR
Chaired by: **Bolam J.P.** (Oxford, United Kingdom)
- S31.1 - Abstract 122.1 - 15:50
Dynamic interaction within the striatal microcircuit
Silberberg G. (Stockholm, Sweden)
- S31.2 - Abstract 122.2 - 16:10
Synchronised oscillations in the striatopallidal network
Magill P.J. (Oxford, United Kingdom)
- S31.3 - Abstract 122.3 - 16:30
Correlation studies of the reinforcement learning network of the striatum
Bergman H. (Jerusalem, Israel)
- S31.4 - Abstract 122.4 - 16:50
The function of the striatal microcircuit - a modelling approach
Hellgren-Kotaleski J. (Stockholm, Sweden)
- 15:45 - 17:15 Room G102/103
123 - SYMPOSIUM S32
MORPHOGENS IN NEURAL CIRCUIT FORMATION
Chaired by: **Bovolenta P.** (Madrid, Spain)
- S32.1 - Abstract 123.1 - 15:50
Sonic hedgehog plays a dual role in postcommissural axon guidance
Stoeckli E.T. (Zurich, Switzerland)
- S32.2 - Abstract 123.2 - 16:10
Sonic hedgehog signaling in vertebrate visual circuit formation
Bovolenta P. (Madrid, Spain)
- S32.3 - Abstract 123.3 - 16:30
Wnt signaling in the regulation of neuronal circuit formation
Salinas P.C. (London, United Kingdom)
- S32.4 - Abstract 123.4 - 16:50
Transforming growth factor-beta signals in Drosophila brain wiring
Ng J. (London, United Kingdom)
- 17:30 - 18:30 Plenary Hall
124 - PRESIDENTIAL LECTURE
Support contributed by Dutch neuroscience schools and institutes
Introduced by: **Kettenmann H.** (Berlin, Germany)
- Lo5.1 - Abstract 124.1
Recognition molecules in synaptic plasticity and regeneration
Schachner M. (Hamburg, Germany)
- 18:45 - 20:45 Auditorium
125 - SPECIAL EVENT SE06
COST ACTION SYMPOSIUM: "HISTAMINERGIC SYSTEM AND PAIN - THERAPEUTIC OPPORTUNITIES FOR H3 AND H4 RECEPTOR ANTAGONISTS"
Chaired by: **Chazot P.** (Durham, United Kingdom)
Smit M. (Amsterdam, Netherlands)
- SE06.1 - Abstract 125.1
Histaminergic system and the CNS
Passani B. (Florence, Italy)
- SE06.2 - Abstract 125.2
Histamine H₃ receptors and pain - a conflicting story
Medhurst A.D. (Harlow, United Kingdom)
- SE06.3 - Abstract 125.3
A novel Histamine 4 receptor antagonist for asthma devoid of CNS side effects in rat
Alfón J. (Palau-Solita I Plegamans, Spain)

Tuesday July 6

 Scientific sessions

08:30 - 09:30	Plenary Hall	09:45 - 11:15	Room Forum
126 - PLENARY LECTURE		148 - SYMPOSIUM S34	
<i>Support contributed by Dutch neuroscience schools and institutes</i>		NEUROBIOLOGICAL FACTORS DETERMINING HIGH VULNERABILITY TO DRUG SEEKING AND RELAPSE	
Introduced by: Caroni P. (Basel, Switzerland)		Chaired by: De Vries T.J. (Amsterdam, Netherlands)	
Lo6.1 - Abstract 126.1		S34.1 - Abstract 148.1 - 09:50	
The brain's mechanisms for mapping and remembering space		Biological factors associated with transition of addiction	
Moser M.B. (Trondheim, Norway)		Piazza P.V. (Bordeaux, France)	
9:30 - 13:15	Hall 1	S34.2 - Abstract 148.2 - 10:10	
POSTER SESSION 5		Incubation of cocaine craving: behavioral and neuronal mechanisms	
(see details on http://forum.fens.org/2010)		Shaham Y. (Baltimore, USA)	
127 A CNS patterning		S34.3 - Abstract 148.3 - 10:30	
128 A Stem cells 2		Role of NMDA and AMPA receptors within the dopaminergic system in cocaine reinforcement	
129 A Systems development 2		Spanagel R. (Mannheim, Germany)	
130 B Network interactions 1		S34.4 - Abstract 148.4 - 10:50	
131 B Ligand gated ion channels 2		Prefrontal cortex plasticity mechanisms in heroin seeking and relapse	
132 C Ischemia 2		Spijker S. (Amsterdam, Netherlands)	
133 C Neuro-oncology		09:45 - 11:15	Room Elicium 2
134 C Alzheimer's 2		149 - SYMPOSIUM S35	
135 C Mental disorders 4		RAPID NEUROENDOCRINE RESPONSE AND SYNAPTIC PLASTICITY	
136 C Motor neuron diseases		Chaired by: Lightman S.L. (Bristol, United Kingdom)	
137 C Sensory disorders		S35.1 - Abstract 149.1 - 09:50	
138 C Trauma 1		Oscillatory regulation of endocrine gene expression	
139 D Vision 3		Davis J.R.E. (Manchester, United Kingdom)	
140 D Pain 3		S35.2 - Abstract 149.2 - 10:10	
141 D Cerebellum 2		Ultradian pattern dependent regulation of hippocampal glucocorticoid responses	
142 D Basal ganglia 1		Lightman S.L. (Bristol, United Kingdom)	
143 E Biological rhythms and sleep 2		S35.3 - Abstract 149.3 - 10:30	
144 E Food intake regulation 1		Glucocorticoid regulation of synaptic efficacy and plasticity	
145 F Human cognition 4		Krugers H.J. (Amsterdam, Netherlands)	
146 F Learning 3		S35.4 - Abstract 149.4 - 10:50	
09:45 - 11:15	Auditorium	The role of glucocorticoid receptors in AMPA and NMDA receptor trafficking in the brain	
147 - SYMPOSIUM S33		Cho K. (Bristol, United Kingdom)	
FINE-TUNING THE BRAIN: MICRORNAs		09:45 - 11:15	Room Elicium 1
Chaired by: Vreugdenhil E. (Leiden, Netherlands)		150 - SYMPOSIUM S36	
Schratt G. (Heidelberg, Germany)		PREFRONTAL AND PARIETAL-PREMOTOR CONTRIBUTIONS TO FREE CHOICE SELECTION	
S33.1 - Abstract 147.1 - 09:50		Chaired by: De Jong B.M. (Groningen, Netherlands)	
miR-124 influences "clock" that controls changes in growth cone behaviour		S36.1 - Abstract 150.1 - 09:50	
Holt C.E. (Cambridge, United Kingdom)		Decision making at early stages of action preparation	
S33.2 - Abstract 147.2 - 10:10		Cisek P. (Montreal, Canada)	
microRNA function in dendritic and synaptic plasticity		S36.2 - Abstract 150.2 - 10:10	
Schratt G. (Heidelberg, Germany)		Free selection of self-referenced and target-based movement	
S33.3 - Abstract 147.3 - 10:30		De Jong B.M. (Groningen, Netherlands)	
microRNA-regulated glucocorticoid receptor levels may shape hippocampal networks regulating memory consolidation		S36.3 - Abstract 150.3 - 10:30	
Vreugdenhil E. (Leiden, Netherlands)		How the human brain represents and drives the pursuit of concurrent goals simultaneously?	
S33.4 - Abstract 147.4 - 10:50		Koechlin E. (Paris, France)	
Deregulation of the microRNA network in Alzheimer and Parkinson disease			
De Strooper B. (Leuven, Belgium)			

Tuesday July 6

❖ Scientific sessions (continued)

S36.4 - Abstract 150.4 - 10:50

Free will and the delusion of alien action control

Nachev P. (London, United Kingdom)

09:45 - 11:15

Room G104/105

151 - SYMPOSIUM S37**SENSORIMOTOR INTEGRATION IN THE WHISKER SYSTEM**Chaired by: **Groh A.** (Munich, Germany)**Krieger P.** (Stockholm, Sweden)

S37.1 - Abstract 151.1 - 09:50

The cortical representation of active sensing in the vibrissa system

Kleinfeld D. (La Jolla, USA)

S37.2 - Abstract 151.2 - 10:10

Thalamocortical convergence on object location

Ahissar E. (Rehovot, Israel)

S37.3 - Abstract 151.3 - 10:30

Active perception in the rat's whisker system

Schwarz C. (Tübingen, Germany)

S37.4 - Abstract 151.4 - 10:50

Adaptive coding in somatosensory cortex

Fairhall A.L. (Seattle, USA)

09:45 - 11:15

Room Emerald

152 - SYMPOSIUM S38**NITRIC OXIDE IN SLEEP AND SLEEP DISORDERS**Chaired by: **Porkka-Heiskanen T.** (Helsinki, Finland)

S38.1 - Abstract 152.1 - 09:50

Nitric-oxide mediated neurotransmission in brain

Garthwaite J. (London, United Kingdom)

S38.2 - Abstract 152.2 - 10:10

Sleep homeostasis: A (non-pathological) role of iNOS induced NO in brain

Porkka-Heiskanen T. (Helsinki, Finland)

S38.3 - Abstract 152.3 - 10:30

Activation of cortical nNOS neurons during sleep: an anatomical link to homeostatic sleep regulation?

Kilduff T.S. (Menlo Park, USA)

S38.4 - Abstract 152.4 - 10:50

Role of nitric oxide in obstructive sleep apnea

Veasey S.C. (Philadelphia, USA)

09:45 - 11:15

Room G102/103

153 - SYMPOSIUM S39**CELL-SPECIFIC REGULATION OF VISUAL CORTICAL PLASTICITY**Chaired by: **Pizzorusso T.** (Pisa, Italy)**Maffei A.** (Stony Brook, USA)

S39.1 - Abstract 153.1 - 09:50

GABA circuit control of visual cortical plasticity

Hensch T.K. (Cambridge, USA)

S39.2 - Abstract 153.2 - 10:10

Extracellular environment and visual cortical plasticity

Pizzorusso T. (Pisa, Italy)

S39.3 - Abstract 153.3 - 10:30

A role for class III semaphorins in the function of perineuronal nets?

Verhaagen J. (Amsterdam, Netherlands)

S39.4 - Abstract 153.4 - 10:50

Experience-dependent plasticity in developing visual cortex

Maffei A. (Stony Brook, USA)

09:45 - 11:15

Plenary Hall

154 - SYMPOSIUM S40**NEURON-MICROGLIA INTERACTIONS: A FAMILY MATTER FROM MARRIAGE TO DIVORCE**Chaired by: **Bentivoglio M.** (Verona, Italy)

S40.1 - Abstract 154.1 - 09:50

Immune molecules in neurons and glia – implications for synaptic plasticity after nerve lesion

Cullheim S. (Stockholm, Sweden)

S40.2 - Abstract 154.2 - 10:10

Microglia directly monitor the functional state of synapses and determine the fate of damaged axon terminals: In vivo observations

Nabekura J. (Okazaki, Japan)

S40.3 - Abstract 154.3 - 10:30

The functions of macrophages in the grip of neurons

Nataf S. (Lyon, France)

S40.4 - Abstract 154.4 - 10:50

Role of microglial immunoreceptor tyrosine-based inhibitory (ITIM) and activation (ITAM) motif signaling receptors in homeostatic clearance function and neurodegeneration

Neumann H. (Bonn, Germany)

13:00 - 13:45

Room Elicium 2

155 - SPECIAL LECTURE SL07**HERTIE FOUNDATION LECTURE**Chaired by: **Leinders-Zufall T.** (Homburg, Germany)

SL07.1 - Abstract 155.1

Mechanisms of odor and pheromone sensing in mammals

Buck L.B. (Seattle, USA)

13:00 - 13:45

Room Forum

156 - SPECIAL LECTURE SL08**BOEHRINGER INGELHEIM FENS RESEARCH AWARD**Chaired by: **Pflüger H.J.** (Berlin, Germany)**Sommer B.** (Biberach, Germany)

SL08.1 - Abstract 156.1

Unraveling synapse specificity using genetically modified mice

Selimi F. (Paris, France)

Tuesday July 6

❖ Scientific sessions (continued)

13:00 - 13:45	Auditorium	15:45 - 17:15	Room G102/103
157 - SPECIAL LECTURE SL09 EDAB - MAX COWAN LECTURE Chaired by: Joels M. (Utrecht, Netherlands)		178 - SYMPOSIUM S41 IN VITRO STUDY OF HUMAN EPILEPTOGENIC CELLS AND NETWORKS Chaired by: Bartolomei F. (Marseille, France) Kahane P. (Grenoble, France)	
SL09.1 - Abstract 157.1 Death and transfiguration in the development and function of the brain Blakemore C. (Oxford, United Kingdom)		S41.1 - Abstract 178.1 - 15:50 Initiation of epileptiform discharges in human dysplastic tissues: neuronal signaling Avoli M. (Roma, Italy)	
13:00 - 14:00	Room Elicium 1	S41.2 - Abstract 178.2 - 16:10 Epileptiform activities generated in juvenile malformed epileptic tissue Khazipov R. (Marseille, France)	
158 - SPECIAL EVENT SE07 NEW EUROPEAN DIRECTIVE ON ANIMAL RESEARCH: IMPACT ON EUROPEAN NEUROSCIENCE Chaired by: Lemon R. (London, United Kingdom)		S41.3 - Abstract 178.3 - 16:30 Neurogenesis and angiogenesis in human epileptic tissue: which consequences on excitability? Lerner-Natoli M. (Montpellier, France)	
SE07.1 - Abstract 158.1 Background to the EU Directive and its current status Festing S. (London, United Kingdom)		S41.4 - Abstract 178.4 - 16:50 Cellular and network properties of the genesis of ictal discharges in human epileptic tissue Huberfeld G. (Paris, France)	
SE07.2 - Abstract 158.2 Impact of the new EU directive on neuroscience research in Europe Treue S. (Goettingen, Germany)		15:45 - 17:15	Room G104/105
SE07.3 - Abstract 158.3 US perspective: Society for Neuroscience and the use of animals in neuroscience research Goldberg M. (New York, USA)		179 - SYMPOSIUM S42 THE CHOROID PLEXUS: A GATE FOR SIGNALLING INTO THE BRAIN Chaired by: Palha J.A. (Braga, Portugal) Torres Aleman I. (Madrid, Spain)	
SE07.4 - Abstract 158.4 The FENS policy on the use of animals in scientific research Caminiti R. (Rome, Italy)		S42.1 - Abstract 179.1 - 15:50 Can the choroid plexus influence brain neurogenesis? Johansson P.A. (Neuherberg/münich, Germany)	
13:30 - 17:30	Hall 1	S42.2 - Abstract 179.2 - 16:10 The choroid plexus - the secret entry site of autoaggressive T cells into the CNS? Engelhardt B. (Bern, Switzerland)	
POSTER SESSION 6 (see details on http://forum.fens.org/2010)		S42.3 - Abstract 179.3 - 16:30 Choroid plexus receptors and transporters-targets for amyloid beta peptide clearance in Alzheimer's disease Carro E. M. (Madrid, Spain)	
159 A Axon growth and guidance		S42.4 - Abstract 179.4 - 16:50 The choroid plexus as a conveyor of immune signals into the brain Marques F. (Braga, Portugal)	
160 A Synaptogenesis 2		15:45 - 17:15	Room Emerald
161 B Synapses 2		180 - SYMPOSIUM S43 MOLECULAR, CELLULAR AND NETWORK BASIS OF THALAMOCORTICAL DYNAMICS Chaired by: Leresche N. (Paris, France)	
162 B Glia-neuron interactions 2		S43.1 - Abstract 180.1 - 15:50 Molecular controls over somatosensory cortex patterning during development Jabaudon D. (Geneva, Switzerland)	
163 B Neurotransmitters & signaling molecules 3			
164 C Neurotoxicity & inflammation 2			
165 C Demyelinating disorders 2			
166 C Mental disorders 5			
167 C Alzheimer's 3			
168 C Trauma 2			
169 D Auditory 2			
170 D Motor neurons and muscle			
171 D Posture and voluntary movements			
172 D Rhythm & pattern generation 2			
173 D Pain 4			
174 E Stress 3			
175 E Food intake regulation 2			
176 F Learning 4			
177 F Motivation and emotion 2			

Tuesday July 6

Scientific sessions (continued)

S43.2 - Abstract 180.2 - 16:10
Thalamocortical synaptic plasticity and the development of layer 4 barrel cortex circuits
Isaac J.T. (Bethesda, USA)

S43.3 - Abstract 180.3 - 16:30
Nucleus specific control of relay cell activity in the somatosensory thalamus
Bokor H. (Budapest, Hungary)

S43.4 - Abstract 180.4 - 16:50
Replaying thalamocortical interactions via artificial conductance injections in biological neurons
Bal T. (Gif-Sur-Yvette, France)

15:45 - 17:15 Room Elicium 2

181 - SYMPOSIUM S44
STRIATAL PLASTICITY: FROM HEALTH TO PARKINSON'S DISEASE
Chaired by: **Calabresi P.** (Perugia, Italy)
Hirsch E.C. (Paris, France)

S44.1 - Abstract 181.1 - 15:50
Molecular and cellular mechanisms of presynaptic plasticity in cortex, hippocampus and striatum
Fejtova A. (Magdeburg, Germany)

S44.2 - Abstract 181.2 - 16:10
Structural modification of glutamatergic synapse in the striatum after dopamine denervation
Gardoni F. (Milano, Italy)

S44.3 - Abstract 181.3 - 16:30
Characterization of the morphological changes underlying altered corticostriatal plasticity in experimental animal models and in Parkinson's disease patients
Ortega-Perez I. (Paris, France)

S44.4 - Abstract 181.4 - 16:50
The ERK1/2 signaling pathway: a mediator of maladaptive plasticity in the pharmacotherapy of Parkinson's disease
Cenci M.A. (Lund, Sweden)

15:45 - 17:15 Room Forum

182 - SYMPOSIUM S45
THE RELATION OF ONGOING BRAIN ACTIVITY, STIMULUS EVOKED RESPONSES AND PERCEPTUAL DECISIONS
Chaired by: **Kleinschmidt A.** (Gif/yvette, France)

S45.1 - Abstract 182.1 - 15:50
From perception to action: the role of ongoing and evoked activity
Arieli A. (Rehovot, Israel)

S45.2 - Abstract 182.2 - 16:10
Neural oscillations, slow fluctuations, and human perceptual performance
Palva J.M. (Helsinki, Finland)

S45.3 - Abstract 182.3 - 16:30
The impact of spontaneous human brain activity on perceptual detection and decisions
Kleinschmidt A. (Gif/yvette, France)

S45.4 - Abstract 182.4 - 16:50
A neurocomputational framework for understanding the dynamics and consequences of ongoing activity
Deco G. (Barcelona, Spain)

15:45 - 17:15 Auditorium

183 - SYMPOSIUM S46
STRESS AND THE AMYGDALA: FROM ANIMAL MODELS TO CLINICAL IMPLICATIONS
Chaired by: **Chattarji S.** (Bangalore, India)

S46.1 - Abstract 183.1 - 15:50
Adrenal stress hormones, amygdala activation, and memory for emotionally arousing experiences
Roosendaal B. (Groningen, Netherlands)

S46.2 - Abstract 183.2 - 16:10
The impact of stress on neurons in the amygdala: implications for anxiety disorders
Chattarji S. (Bangalore, India)

S46.3 - Abstract 183.3 - 16:30
Neural systems regulating anxious states
Lowry C.A. (Boulder, USA)

S46.4 - Abstract 183.4 - 16:50
Stress-induced regulation of endocannabinoid signaling in the amygdala: contributions to HPA axis activity and emotionality
Hill M.N. (New York, USA)

15:45 - 17:15 Room Elicium 1

184 - SYMPOSIUM S47
INTERNEURON DEVELOPMENT AND FUNCTION
Chaired by: **Butt S.** (London, United Kingdom)

S47.1 - Abstract 184.1 - 15:50
Genetic approaches for unraveling the neural networks that control locomotion
Goulding M. (La Jolla, USA)

S47.2 - Abstract 184.2 - 16:10
Switching gears: new perspectives on motor control from the zebrafish
McLean D. (Evanston, USA)

S47.3 - Abstract 184.3 - 16:30
Neuroepithelial patterning regulates cortical interneuron identity
Kessaris N. (London, United Kingdom)

S47.4 - Abstract 184.4 - 16:50
Finding the source of inhibition in the cerebral cortex
Butt S.J. (London, United Kingdom)

Tuesday July 6

... Scientific sessions (continued)

15:45 - 17:15

Plenary Hall

185 - SYMPOSIUM S48**PRESYNAPTIC SHORT-TERM PLASTICITY: MOLECULES, MECHANISMS AND FUNCTIONS**Chaired by: **Brose N.** (Goettingen, Germany)

S48.1 - Abstract 185.1 - 15:50

Control of presynaptic short term plasticity by synaptic vesicle priming proteins

Brose N. (Goettingen, Germany)

S48.2 - Abstract 185.2 - 16:10

The role of SNARE regulatory proteins in short-term plasticity

Rosenmund C. (Berlin, Germany)

S48.3 - Abstract 185.3 - 16:30

Activity-dependent switch from short-term to long-term endocannabinoid-dependent synaptic plasticity in the hippocampus

Castillo P.E. (New York, USA)

S48.4 - Abstract 185.4 - 16:50

Molecular determinants of SNARE function

Jahn R. (Goettingen, Germany)

17:30 - 18:30

Plenary Hall

186 - PLENARY LECTURE*Support contributed by the Kavli Foundation*Introduced by: **Saria A.** (Innsbruck, Austria)

L07.1 - Abstract 186.1

How activity changes synapses in the mammalian brain

Bonhoeffer T. (Martinsried, Germany)

18:45 - 20:15

Auditorium

187 - SPECIAL EVENT SE08**FENS/IBRO ALUMNI SYMPOSIUM: "ENCODING DYNAMIC INFORMATION IN NEURONAL CIRCUITS"**Chaired by: **Stewart M.** (Milton Keynes, United Kingdom)**Sara S.J.** (Paris, France)

SE08.1 - Abstract 187.1

Temporal framing of thalamic relay-mode firing by phasic inhibition during the alpha rhythm

Lorincz M.L. (Oeiras, Portugal)

SE08.2 - Abstract 187.2

Encoding of associative fear memory in identified neuronal circuits of auditory cortex

Letzkus J.J. (Basel, Switzerland)

SE08.3 - Abstract 187.3

Optogenetic dissection of the role of spinal neurons in locomotion

Wyart C. (Berkeley, USA)

SE08.4 - Abstract 187.4

Long term network plasticity in cortical and hippocampal assemblies

Massobrio P. (Genova, Italy)

Wednesday July 7

 Scientific sessions

08:30 - 09:30	Plenary Hall	09:45 - 11:15	Room Elicium 1
188 - PLENARY LECTURE		209 - SYMPOSIUM S50	
<i>Support contributed by Dutch neuroscience schools and institutes</i>		DOPAMINERGIC MODULATION OF HUMAN DECISION MAKING	
Introduced by: Pitkänen A. (Kuopio, Finland)		Chaired by: Cools R. (Nijmegen, Netherlands)	
Lo8.1 - Abstract 188.1		Ullsperger M. (Cologne, Germany)	
What can protein aggregates tell us about neurodegenerative diseases?		S50.1 - Abstract 209.1 - 09:50	
Spillantini M.G. (Cambridge, United Kingdom)		Neurogenetic and pharmacological influences on learning and executive control over learning	
		Frank M. (Providence, USA)	
		S50.2 - Abstract 209.2 - 10:10	
9:30 - 13:15	Hall 1	How experience improves our choices: Evidence from neuroimaging and neuropsychology	
POSTER SESSION 7		Pessiglione M. (Paris, France)	
(see details on http://forum.fens.org/2010)		S50.3 - Abstract 209.3 - 10:30	
189 A Synaptogenesis 3		Genetic variation in dopaminergic modulation influences adaptive decision making and associated neural activity	
190 A Dendrite growth		Heekeren H. (Berlin, Germany)	
191 A Systems development 3		S50.4 - Abstract 209.4 - 10:50	
192 B Network interactions 2		Role of dopamine and serotonin in outcome-specific learning and shifting. Evidence from pharmacological neuroimaging and patient work	
193 B Synapses 3		Cools R. (Nijmegen, Netherlands)	
194 B Ion channels 2			
195 B Transporters		09:45 - 11:15	Room Emerald
196 B Intrinsic membrane properties		210 - SYMPOSIUM S51	
197 C Parkinson's 3		RECIPE FOR SOLVING THE CEREBELLAR MYSTERY: 2 PHOTONS, 1 LIVE MOUSE AND A DASH OF OREGON GREEN BAPTA	
198 C Trauma 3		Chaired by: Yarom Y. (Jerusalem, Israel)	
199 C Alzheimer's 4		Konnerth A. (Munich, Germany)	
200 D Basal ganglia 2		S51.1 - Abstract 210.1 - 09:50	
201 D Brain-machine interface		Widespread discrete activity shifts in cerebella of locomoting mice: an optical view	
202 E Brain blood flow 2		Wang S.S.H. (New Jersey, USA)	
203 E Food intake regulation 3		S51.2 - Abstract 210.2 - 10:10	
204 F Learning 5		Dendritic calcium signaling in cerebellar Purkinje cells in vivo	
205 F Human cognition 5		Häusser M. (London, United Kingdom)	
206 F Attention		S51.3 - Abstract 210.3 - 10:30	
207 G Neurotechniques 3		Ataxia and olivo-cerebellar circuit disruption by Purkinje-cell specific ablation of calcium-activated potassium BK channels	
		Konnerth A. (Munich, Germany)	
		S51.4 - Abstract 210.4 - 10:50	
09:45 - 11:15	Plenary Hall	Dissecting calcium transients in the cerebellar cortex	
208 - SYMPOSIUM S49		Yarom Y. (Jerusalem, Israel)	
DYNAMIC PROCESSES UNDERLYING SYNAPTIC PLASTICITY			
Chaired by: Choquet D. (Bordeaux, France)		09:45 - 11:15	Room Elicium 2
Kneussel M. (Hamburg, Germany)		211 - SYMPOSIUM S52	
S49.1 - Abstract 208.1 - 09:50		NEURONAL CELL DEATH IN MOTOR NEURON DISEASES	
Fast receptor diffusion for a fast excitatory neurotransmission: Single molecule tracking of Glutamate receptors		Chaired by: Poletti A. (Milano, Italy)	
Choquet D. (Bordeaux, France)		Miller C. (London, United Kingdom)	
S49.2 - Abstract 208.2 - 10:10		S52.1 - Abstract 211.1 - 09:50	
Intracellular cytoskeleton transport of synaptic proteins		Molecular mechanisms of motor neuron degeneration and death in ALS: lessons from mutant SOD1	
Kneussel M. (Hamburg, Germany)		Pasinelli P. (Philadelphia, USA)	
S49.3 - Abstract 208.3 - 10:30			
La nouvelle vague: superresolution imaging of synapse dynamics using STED microscopy			
Nägerl V. (Bordeaux, France)			
S49.4 - Abstract 208.4 - 10:50			
Mechanisms of regulation of individual synapses in the mammalian brain			
Sabatini B.L. (Boston, USA)			

Wednesday July 7

Scientific sessions (continued)

S52.2 - Abstract 211.2 - 10:10

Defective protein and organelle trafficking in motor neuron disease

Miller C. (London, United Kingdom)

S52.3 - Abstract 211.3 - 10:30

Motor neuron alteration in spinal and bulbar muscular atrophy: the neurotoxicity of the elongated polyglutamine tract of the androgen receptor

Poletti A. (Milano, Italy)

S52.4 - Abstract 211.4 - 10:50

The role of a shorter variant of the Survival motor neuron protein (a-SMN) on axonal functions in Spinal Muscular Atrophy

Battaglia G. (Milano, Italy)

09:45 - 11:15

Room Forum

212 - SYMPOSIUM S53**HOW WE COME TO EXPERIENCE THAT WE OWN OUR BODY: FROM FULL-BODY ILLUSIONS TO CORTICAL MAPPING**Chaired by: **Ehrsson H.H.** (Stockholm, Sweden)

S53.1 - Abstract 212.1 - 09:50

Brain mechanisms of body ownership

Ehrsson H.H. (Stockholm, Sweden)

S53.2 - Abstract 212.2 - 10:10

Spatial aspects of bodily self-consciousness: Cognitive Neurology and Neuroscience

Blanke O. (Lausanne, Switzerland)

S53.3 - Abstract 212.3 - 10:30

The role of body representations in somatosensory processing

Haggard P. (London, United Kingdom)

S53.4 - Abstract 212.4 - 10:50

A brain full of body maps: cortical mapping of the somatosensory, visual, motor and mental imagery representations of our body scheme using fMRI

Amedi A. (Jerusalem, Israel)

09:45 - 11:15

Room G102/103

213 - SYMPOSIUM S54**NEUREGULIN SIGNALING IN NEURAL DEVELOPMENT, FUNCTION AND DISEASE**Chaired by: **Buonanno A.** (Bethesda, USA)**Neddens J.** (Graz-Grambach, Austria)

S54.1 - Abstract 213.1 - 09:50

Role of Neuregulin- ErbB interactions in cerebral cortical development

Anton E.S. (Chapel Hill, USA)

S54.2 - Abstract 213.2 - 10:10

Neuregulin signaling in cortico-limbic circuit physiology and behavior

Role L.W. (Stony Brook, USA)

S54.3 - Abstract 213.3 - 10:30

Regulation of synaptic plasticity and neuronal network activity by the Neuregulin-1-ErbB4 signaling pathway: Possible relevance for psychiatric disorders

Buonanno A. (Bethesda, USA)

S54.4 - Abstract 213.4 - 10:50

Neuregulin signaling in neural development, brain function and schizophrenia: From ligands to receptor

Law A.J. (Bethesda, USA)

09:45 - 11:15

Room G104/105

214 - SYMPOSIUM S55**TEMPORAL CONTROL OF NEURONAL DIVERSITY**Chaired by: **Tarabykin V.** (Goettingen, Germany)**Vanderhaeghen P.** (Brussels, Belgium)

S55.1 - Abstract 214.1 - 09:50

Generation of unique neuronal cell fates by temporal, sub-temporal and positional cues

Thor S. (Linkoping, Sweden)

S55.2 - Abstract 214.2 - 10:10

Regulating the order of cell birth in the developing mouse retina: importance of cell-intrinsic mechanisms

Cayouette M. (Montreal, Canada)

S55.3 - Abstract 214.3 - 10:30

Mechanisms of specification of cortical neurons from pluripotent stem cells

Vanderhaeghen P. (Brussels, Belgium)

S55.4 - Abstract 214.4 - 10:50

Postmitotic feedback and control of cell fate specification in the neocortex

Tarabykin V. (Goettingen, Germany)

09:45 - 11:15

Auditorium

215 - SYMPOSIUM S56**DELETION OF MEMORY**Chaired by: **Hucho T.** (Berlin, Germany)

S56.1 - Abstract 215.1 - 09:50

Memory Loss during reconsolidation - from whole brain to molecular mechanisms

Nader K. (Montreal, Canada)

S56.2 - Abstract 215.2 - 10:10

Pharmacological memory deletion in the CNS through inhibition of the memory maintenance molecule PKMzeta

Sacktor T.C. (Brooklyn, USA)

S56.3 - Abstract 215.3 - 10:30

Genetic/pharmacological deletion in the CNS through activation of the protein kinase CaMKII

Tsien J.Z. (Augusta, USA)

S56.4 - Abstract 215.4 - 10:50

Stimulus context deletes pain sensitization in the peripheral sensory neuron

Hucho T. (Berlin, Germany)

Wednesday July 7

❖ Scientific sessions (continued)

12:00 - 13:00

Room Elicium 1

216 - SPECIAL LECTURE SL10

FENS EJN AWARDS

Chaired by: **Fritschy J.M.** (Zürich, Switzerland)

Sarter M. (Ann Arbor, USA)

FENS EJN AWARD 2010

SL10.1 - Abstract 216.1

Subjective risky rewards

Schultz W. (Cambridge, United Kingdom)

FENS EJN YOUNG INVESTIGATOR AWARD 2010

SL10.2 - Abstract 216.2

Control of NMDA receptor activity: from molecular mechanisms to synaptic modulation

Paoletti P. (Paris, France)

12:00 - 13:00

Auditorium

217 - SPECIAL EVENT SE09

BREAKING NEWS IN NEUROSCIENCE

Chaired by: **Caroni P.** (Basel, Switzerland)

Recent hot results that have been/or are being published following the abstract deadline will be briefly presented. The printed programme of the session will be available at the meeting.

13:05 - 14:05

Plenary Hall

218 - PLENARY LECTURE

Support contributed by Dutch neuroscience schools and institutes

Introduced by: **Epelbaum J.** (Paris, France)

Log.1 - Abstract 218.1

Regional specification of adult neural stem cells

Alvarez-Buylla A. (San Francisco, USA)

14:05 - 14:10

Plenary Hall

CLOSURE AND FAREWELL WORDS

By: **Grillner S.** (Stockholm, Sweden)