



8th Fens Forum of Neuroscience  
Barcelona, Spain  
14 – 18 July 2012

Venue:

[CCIB](#)

Plaça de Willy Brandt, 11-14  
08019 Barcelona



Guidelines

Home page:

<http://fens2012.neurosciences.asso.fr/index.php>

Scientific program:

<http://fens2012.neurosciences.asso.fr/pages/index2.php?sub=10&left=105>

## **PROGRAMME OUTLINE**

Daily schedule of the scientific programme.

All sessions will take place at the **International Convention Center of Barcelona (CCIB)**

### **Saturday July 14, 2012**

12:30 - 15:30	Technical workshops
15:45 - 17:15	EJN Special Feature
17:30 - 18:00	Opening ceremony
18:00 - 19:00	Opening plenary lecture
19:00	Welcome reception

### **Sunday July 15 - Tuesday July 17, 2012**

08:00	Morning posters on display, to be removed at 13:15
08:30 - 09:30	Plenary lecture
09:30 - 13:15	Morning poster session
09:45 - 11:15	Parallel symposia
13:00 - 13:45	Special lectures
13:30	Afternoon posters on display, to be removed at 18:45
13:30 - 17:30	Afternoon poster session
15:45 - 17:15	Parallel symposia
17:30 - 18:30	Plenary lecture
18:45	Special events, scientific gatherings, socials, etc.

### **Wednesday July 18, 2012**

08:00	Morning posters on display, to be removed at 13:15
08:30 - 09:30	Plenary lecture
09:30 - 13:15	Morning poster session
09:45 - 11:15	Parallel symposia
11:45 - 12:45	Special lectures
13:00 - 14:00	Closing plenary lecture

**ENC-Network students are advised to attend as many 'Plenary lectures' as possible! Below is the list of 'must-attends'. It gives usually a good overview of a new field and these are presented by the most outstanding scientists of this time-era.**

## **PLENARY LECTURES**

### **Saturday, July 14, 2012**

18:00 - 19:00

L01 - **Matthew Rushworth** (Oxford, UK)

Reward-guided learning and decision making in the frontal lobe

*Kavli Foundation Lecture*

Reward guided decision making and learning depends on distributed neural circuits with many components. Recent evidence suggests four frontal lobe regions make distinct contributions to reward guided learning and decision making: the lateral orbitofrontal cortex, the ventromedial prefrontal cortex and adjacent medial orbitofrontal cortex, anterior cingulate cortex, and the anterior lateral prefrontal cortex. Common themes have emerged in experiments with human participants and in animal models that suggest the areas are important when learning about reward associations, selecting reward goals, choosing actions to obtain reward, and in monitoring the potential value of switching to alternative courses of action.

### **Sunday, July 15, 2012**

08:30 - 09:30

L02 - **Cori Bargmann** (New York, USA)

Genes, environment, and context: using fixed circuits to generate flexible behaviors

Which aspects of behavior are defined by fixed genetic and developmental programs? How does the brain generate flexible responses to the environment based on context and experience? The nematode *C. elegans* has a small, genetically hard-wired nervous system, yet its preferences for odors, food sources, and other animals vary based on environmental conditions, internal modulatory states, and genetic variation. The variable inputs converge on common neuronal circuits that coordinate behavior.

### **Sunday, July 15, 2012**

17:30 - 18:30

L03 - **Michael Häusser** (London, United Kingdom)

Dendritic computation

The computational power of dendrites has long been predicted using modelling approaches, but actual experimental examples of how dendrites solve computational problems are rare. In this lecture I will discuss experiments combining patch-clamp recordings with two photon imaging and glutamate uncaging that demonstrate how the dendrites of cortical pyramidal neurons can discriminate spatiotemporal sequences of synaptic inputs, and can implement different temporal coding strategies along single dendrites.

### **Monday, July 16, 2012**

08:30 - 09:30

L04 - **Masanobu Kano** (Tokyo, Japan)

Control of synaptic function by endogenous cannabinoids

Since the discovery of retrograde synaptic modulation by endogenous cannabinoids (endocannabinoids) in 2001, great advances have been made toward understanding the molecular basis and physiological significance of the endocannabinoid system. In this lecture, I describe how endocannabinoids are released from activated neurons, modulate synaptic transmission, cause transient and persistent changes in synaptic strength, and influence brain functions.

### **Monday, July 16, 2012**

17:30 - 18:30

L05 - **Henry Markram** (Lausanne, Switzerland)

Brain simulation: the ultimate integration

### *Presidential Lecture*

The Blue Brain Project has pioneered a comprehensive biological strategy, enabled by the state of art in informatics, computational and computer science, to simulate the brain on supercomputers. An approach called Simulation Based Brain Research. This approach differs from computational neuroscience in that the models are zero tweak models - the brain is built bottom up from first principles and validated top down by comparing models with biological emergent properties. This approach involves a systematic integration of all biological data and knowledge of the brain as accurately as mathematically and technically possible. As new technical milestones are reached, more biological data can be accounted for and integrated - more accurately. Attempting this ultimate integration is revealing novel design principles of the brain. These principles are in turn helping to predict gaps in data and knowledge. Predictive Reverse Engineering promises that by measuring only the most fundamental properties of the brain, much of the rest can be predicted. As a proof of concept, the Blue Brain Facility was used to build and simulate the neocortical column of the somatosensory cortex of the young rat. This model cortical column reproduces much of the emergent properties found in experiments and can be used to make far-reaching predictions. Any microcircuit of the brain can now be built and simulated with as much detail as known biologically. The facility is currently capable of building and simulating a brain region and is expanding its capabilities to simulating the whole brain. A massive consortium has now coalesced in Europe to launch the Human Brain Project, which aims to build on such strategies, the data from lower species, non-invasive Human data, and all our knowledge of the brain, to build and simulate the Human brain and its diseases.

### **Tuesday, July 17, 2012**

08:30 - 09:30

L06 - **David Tank** (Princeton, USA)

Neural circuit dynamics in mice navigating in virtual reality

We have developed instrumentation and methods for applying cellular-resolution two-photon imaging and whole-cell patch recording to awake mice. Our behavioral apparatus is based on a wide-angle visual display that surrounds a spherical treadmill allowing mice to "navigate" while head fixed. Computer-generated virtual environments (mazes and arenas) created using modified second-generation gaming software ("Quake") are projected onto the display. Motion through the environment is controlled by the mouse, whose head remains fixed in space, using rotation of the treadmill as a control signal to the computer. Because the head is fixed, electrophysiological and imaging methods difficult to perform in mobile animals are facilitated. The use of this instrumentation will be illustrated with several examples of recent studies from my lab, including the measurement of intracellular dynamics and population activity of hippocampal place cells, grid cell firing fields in virtual environments, and neocortical neural coding during decisions.

### **Tuesday, July 17, 2012**

17:30 - 18:30

L07 - **Daphne Bavelier** (Geneva, Switzerland)

Learning to learn with action video games

Technology, from chatting on the internet to playing video games, has invaded all aspects of our lives and, for better or for worse, is changing who we are. Can we harness technology to effect more changes for the better? Yes, and not always in the way one might have expected. In a surprising twist, a mind-numbing activity such as playing action video games appears to lead to a variety of behavioral enhancements in young adults. Action video game players outperform their non-action-game playing peers on various sensory, attentional and cognitive tasks. They search for a target in a cluttered environment more efficiently, are able to track more objects at once, process rapidly fleeting images more accurately and switch between tasks more flexibly. In addition, action gamers manifest a large decrease in reaction time as compared to their non-action-game playing peers across many different tasks, without paying a price in accuracy. A common mechanism may be at the source of this wide range of skill improvement. In particular, improvement in performance following action video game play can be captured by more efficient integration of sensory information allowing action gamers to make more informed decision. This may be implemented by more faithful Bayesian inferences within neural networks, thanks to an enhanced ability to learn and adapt on the fly to task demands in action gamers.

### Wednesday, July 18, 2012

08:30 - 09:30

L08 - **Daniel Choquet** (Bordeaux, France)

Synapse function and organization at the nanoscale

Neurotransmitter receptors are concentrated in specialized membrane domains, the synapses. The number and organization of receptors at synapses determines the effectiveness of synaptic transmission. Recent developments in super resolution imaging now allow unraveling receptor nanoscale organization and traffic into and out synapses. Understanding these processes down to the molecular scale will help understand key features of synaptic function involved in the processes of memory and learning in normal and pathological states.

### Wednesday, July 18, 2012

13:00 - 14:00

L09 - **Barry Dickson** (Vienna, Austria)

Wired for sex: the neurobiology of *Drosophila* mating behaviours

Behaviour emerges from brain circuits that select specific motor actions according to external sensory information, internal physiological states, acquired knowledge, and desired goals. These neural circuits are shaped to select adaptive motor responses through repeated trial-and-error interactions with the environment - of the species over the course of evolution and of the individual during its own lifetime. The mating behaviours of *Drosophila* are an ideal model system to explore the operating principles of such circuits, as well as the genetic programs that have evolved to build these circuits and endow them with the plasticity needed to fine-tune behaviour according to individual experience.

**ENC-Network student should also motivate themselves to visit one additional 'special lecture' a day. Having the series of special topics outlined below and collected in one meeting here in Europe, is challenge and pure scientific celebration!**

### SPECIAL LECTURES

#### Sunday, July 15, 2012

12:30 - 14:00

SL01 - The Brain Prize 2011

*Grete Lundbeck European Brain Research Foundation*

The Brain Prize 2011 was jointly awarded to three Hungarian scientists, Péter Somogyi, Tamás Freund and György Buzsáki, "for their wide-ranging, technically and conceptually brilliant research on the functional organization of neuronal circuits in the cerebral cortex, especially in the hippocampus, a region that is crucial for certain forms of memory". The three scientists are all native Hungarians, who from their current locations in Europe and the USA share an interest in the way in which circuits of nerve cells process information in the brain.

SL01.1 - **Peter Somogyi** (Oxford, United Kingdom)

Brain rhythms: chronocircuits in the cerebral cortex

The explanation of normal and pathological events in the brain requires the definition of the spatial and temporal organisation of neuronal circuits. I will explore how specific neuronal connections, their molecular constituents and dynamics contribute to the temporal organisation of neuronal events in the hippocampus in different brain and behavioural states.

SL01.2 - **György Buzsáki** (Newark, USA)

Brain rhythms: organization of cell assemblies serving memories

Brain rhythms (frequency, dynamics) have been preserved throughout the mammalian evolution. Segmentation of information in the brain is often performed by the multiple rhythms the brain creates. Cross-frequency coupling creates a hierarchy of neuronal oscillations. Inhibitory interneurons are involved in the generation of most rhythms. Internally generated cell assembly sequences support memory, planning and other cognitive acts.

SL01.3 - **Tamas Freund** (Budapest, Hungary)

Brain rhythms: endocannabinoid signalling, anxiety and epilepsy

Endogenous cannabinoids are retrograde mediators implicated in several forms of synaptic plasticity, acting mostly via the presynaptic regulation of both GABAergic and glutamatergic transmission.

Malfunctioning of this control machinery in the cerebral cortex results in impaired rhythmic activities, and lead to brain disorders such as anxiety and epilepsy. Identification of the molecular architecture of this signaling system may shed light on its functional roles, and point to new drug targets in pharmacotherapy.

### Sunday, July 15, 2012

13:00 - 13:45

EBBS / Behavioural Brain Research Prize

SL02 - **Trevor W. Robbins** (Cambridge, United Kingdom)

Neural basis of impulsivity and compulsivity: neuropsychiatric implications

The lecture will be concerned with 'behavioural neuroendophenotypes' of relevance to neuropsychiatry. The focus is on impulsivity and compulsivity, and their utility for understanding the aetiology and possible treatment of drug addiction, attention deficit hyperactivity disorder and obsessive-compulsive disorder. The ultimate aim is to identify impairments in specific behavioral processes that can be linked to the aberrant functioning of discrete neural circuitry, for example within the cortico-striatal pathways.

### Monday, July 16, 2012

13:00 - 13:45

Host Society Special Lecture

SL03 - **José M. Delgado García** (Sevilla, Spain)

Learning as a functional state of the brain: Studies in wild type and transgenic animals

*Sociedad Española de Neurociencia*

The complexity of brain functions can only be approached by a multidisciplinary and comparative approach. The availability of genetically manipulated mammals (mice and rats) and of sophisticated electrophysiological techniques, susceptible of being applied in behaving animals during the acquisition of new motor abilities, have largely facilitated this approach. Our group has studied for years the contribution of sensory, motor, premotor, hippocampal, and prefrontal circuits to non-associative, pavlovian, and instrumental learning paradigms. For this, we have recorded activity dependent changes in strength in cortical and subcortical synapses during the acquisition process. Until now, we have studied the contribution of many different neurotransmitters and related receptors in selected transgenic animals, as well as using in vivo si-RNA injections and pharmacogenetic procedures. The main output of our studies is that learning is the result of the activity of wide cortical and subcortical circuits activating particular functional properties of involved synaptic nodes and that brain functions during learning processes have to be studied at live.

### Monday, July 16, 2012

13:00 - 13:45

EDAB - Max Cowan Lecture

SL04 - **Peter H. Seeburg** (Heidelberg, Germany)

Behavioural correlates of hippocampal and hypothalamic functions studied in rodents

The hippocampus plays a key role in the acquisition of long-term spatial memory. We have gained new insight into this role by selective ablation of hippocampal NMDA receptors and NMDA receptor-dependent synaptic plasticity in the mouse. The hypothalamic neuropeptide oxytocin controls parturition and lactation by neuroendocrine mechanisms but also prominently acts in the brain to modulate fear and trust behavior. By directing gene expression specifically in these neurons we show that such behavior is modulated by oxytocin release from local axonal fibers in the responsive forebrain structures.

### Monday, July 16, 2012

13:00 - 13:45

Boehringer-Ingelheim / FENS Research Award

SL05 - **Ilka Diester** (Stanford, USA)

Unraveling neural circuits with optogenetics in rodents and primates

Optogenetics combines genetic techniques with optical engineering to manipulate specific cell types

and neural circuits with light. It enables writing in of signals into the brain with the same temporal precision with which electrophysiological recordings allow reading out of neural responses. While rodents are particularly well suited for fast screening of new applications, monkeys resemble humans in their cognitive abilities and fine motor skills as well as anatomical features more than any other standard animal model. These similarities make monkeys essential for translating scientific knowledge gained in rodents, to humans. Combining the precise optogenetic neural probe with an animal model possessing an intricacy of neural circuits which resembles the human brain has the potential to revolutionize our understanding of the complexities of the mind and propel forward medical developments.

### Tuesday, July 17, 2012

12:30 - 14:00

SL06 - Fondation IPSEN Neuronal Plasticity prize - Epigenetics and brain function

The 17th annual Neuronal Plasticity prize is being awarded by the Fondation IPSEN to three prominent scientists for their outstanding contributions in the domain of "Epigenetics and Brain Function":

Catherine Dulac, Prof. of Molecular and Cellular Biology and HHMI Investigator at Harvard University (research interests: molecular architecture of neuronal circuits underlying sex- and species- specific behaviors), Michael Meaney, Director of the research program on behaviour, genes and environment at the Douglas Institute of McGill University (research interests: maternal care, stress, gene expression and epigenetics), and J. David Sweatt, Director of the E. F. McKnight Brain Research Institute at the University of Alabama at Birmingham (research interests: signal transduction mechanisms in learning and memory).

SL06.1 - **Catherine Dulac** (Cambridge, USA)

Chromatin and Neuronal Life Span

SL06.2 - **Michael Meaney** (Montreal, Canada)

No title given

Our studies examine the epigenetic mechanism mediating the influence of environmental signals on the structure and function of the genome. We focus on instances in which specific environmental signals (i. e., variations in maternal care) stably alter transcriptional activity from specific regions of the genome, this providing the basis for stable influences on neuronal phenotype. Recent studies examine such effects within the context of the transgenerational transmission of individual differences in specific traits.

SL06.3 - **J. David Sweatt** (Birmingham, USA)

Epigenetic mechanisms in memory formation

An emerging idea is that the regulation of chromatin structure, mechanistically via histone modification and DNA methylation, may mediate long-lasting behavioural change and learning and memory. This idea is intriguing because similar mechanisms are used for triggering and storing long-term "memory" at the cellular level, for example when cells differentiate. This presentation will address the idea that conservation of epigenetic mechanisms for information storage represents a unifying model in biology, with epigenetic mechanisms being utilized for cellular memory at levels from behavioural memory to development to cellular differentiation.

### Tuesday, July 17, 2012

13:00 - 13:45

Dargut and Milena Kemali Prize

SL07 - **Eleanor A Maguire** (London, United Kingdom)

Space, memory and the hippocampus

A major focus for memory researchers is the hippocampus, a structure deep in the brain's temporal lobes. Damage to the hippocampus is known to have a devastating impact on the ability to form new memories as well as compromising recollection of the past. Most recently the hippocampus has also been implicated in helping us imagine and plan for the future. Despite many decades of research, significant gaps in our knowledge remain, and we still do not know exactly how activity across millions of hippocampal neurons supports a person's lifetime of experiences. In this talk I will briefly consider some new data that may provide clues about our capacity for mental time travel.



## Tuesday, July 17, 2012

13:00 - 13:45

Hertie Foundation Lecture

SL08 - **Mu-Ming Poo** (Berkeley, USA)

Activity- and neurotrophin-dependent synaptic plasticity

Neurotrophin BDNF is known to be required for activity-dependent long-term modification of excitatory synapses in many regions of the brain. I will address how BDNF secretion is regulated by pre- and postsynaptic neuronal activity, how secreted BDNF can act locally at both pre- and postsynaptic neurons in modulating synaptic plasticity, and how locally secreted BDNF may also rapidly modulate distance synapses, through trans-cellular and trans-synaptic transport of endocytosed BDNF. These studies illustrate how cellular protein trafficking may allow crosstalks between the input and output synapses of a neuron as well as molecular communication among neurons of an active circuit.

## Wednesday, July 18, 2012

11:45 - 12:45

SL09 - FENS-EJN Awards Lectures

The FENS-EJN Award and the FENS-EJN Young Investigator Award are biennial awards attributed by FENS and the Editors in Chief of EJN, FENS official scientific journal, to a senior and a junior scientists respectively, in recognition of their outstanding scientific work in all areas of neuroscience. The awards are made possible thanks to a donation by Wiley-Blackwell, publishers of EJN. Each award-winner is invited to give a special lecture at the FENS Forum and write a review to be published in EJN (see <http://www.fens.org/awards/> for more information).

SL09.1 - **Barry Everitt** (Cambridge, United Kingdom)

Dynamically shifting neural circuitries underlie addictive behaviour

Interactions between the protracted self-administration of addictive drugs, such as cocaine, and the brain's pavlovian and instrumental learning mechanisms, lead to the emergence of compulsive drug seeking that characterise the pathological and maladaptive state of drug addiction. Novel models of drug seeking behaviour have revealed the dynamically altered functional relationships between corticostriatal circuitries that result in a shift from controlled and goal-directed, to compulsive and persistent, drug seeking that is both difficult to relinquish and is associated with the long-term propensity to relapse.

SL09.2 - **Oscar Marin** (Alicante, Spain)

New vistas for neuronal migration

Neuronal migration is one of the fundamental mechanisms underlying the wiring of the brain. From cell polarization to target identification, neuronal migration integrates multiple cellular and molecular events that enable neuronal precursors to move across the brain to reach their final destination. In this talk I will summarize our recent progress identifying the key mechanisms that govern neuronal migration in the developing cerebral cortex. I will also describe how this basic knowledge may contribute to a better understanding of individual variability and disease.

## Wednesday, July 18, 2012

11:45 - 12:45

SL10 - ERA-NET NEURON Excellent Paper in Neuroscience Awards

The ERA-NET NEURON (Network of European Funding for Neuroscience Research) partner countries issue an Excellent Paper In Neuroscience Award to recognize the most remarkable and outstanding scientific publications by young researchers in the field of disease related neurosciences.

SL10.1 - **Fanie Barnabé-Heider** (Stockholm, Sweden)

Origin of new glial cells in intact and injured adult spinal cord

The discovery of stem cells in the central nervous system has raised great hope for regenerative medicine to promote functional recovery upon diseases and injuries. Using new transgenic models, we showed that the three main proliferating cell populations of the adult spinal cord are actively recruited and contribute to the lesion site upon injury, and that all stem cell potential is confined to one cell population: ependymal cells. Fanie Barnabé-Heider et al. : Cell Stem Cell 7, 470–482, October 8, 2010.



SL10.2 - **Fernando Kasanetz** (Bordeaux, France)

Synaptic plasticity associated with the transition to cocaine addiction

One of the major challenges in the field of drug abuse is the understanding of the biological basis of the transition to addiction in vulnerable individuals. Identifying which of the countless drug-induced neurobiological changes are specifically associated with the behavioral manifestation of addiction has proven to be extremely challenging, but the recent development of adequate animal models will allow rapid progress. By differentiating between individuals (the vast majority) maintaining control of their drug-related behaviors from those few that lose control over drug consumption, we addressed the synaptic modifications specifically associated with the transition to cocaine-addiction. Fernando Kasanetz et al. : Science. 2010 Jun 25; 328(5986):1709-12.

## [SPECIAL EVENTS](#)

### **More input on the training of your transferable skills: ENC-Network student may want to attend one or more 'special events' as listed below!**

#### **Saturday, July 14, 2012**

15:30 - 17:00

**SE01** - EJM Special Feature - The ever changing brain oscillates

The EJM Special Event "The Ever-Changing Brain" is a regular feature at the FENS Forum. Speakers at this event address timely and exciting aspects of neuroplasticity. Themes and speakers reflect important trends in neuroscience research published in EJM. The EJM Special Event at the 8th FENS forum in Barcelona will focus on brain oscillations. The speakers, Massimo Scanziani (UCSD/HHMI), Nancy J. Kopell (Boston University) and Charles E. Schroeder (Nathan S. Kline Psychiatric Research Institute, NY) will discuss the role of neuronal oscillations in microcircuits and distributed brain systems, and in perception, cognition, and action.

#### **Sunday, July 15, 2012**

11:15 - 12:15

**SE02** - European Commission / FENS round-table

#### **Sunday, July 15, 2012**

18:45 - 20:30

**SE03** - EDAB - The William Safire seminar on neuroethics

European Dana Alliance for the Brain and International Neuroethics Society

Invading the brain: what are the ethical issues on invasive treatments for brain disorders?

Deep brain stimulation has transformed the lives of many people with Parkinson's disease and dystonia in recent years, and now neurologists, neurosurgeons and neuroscientists are investigating this same technique for a range of psychiatric disorders. But can a surgical procedure effectively treat disorders where genetic susceptibility, developmental abnormalities, and environmental stressors all play a part? Stem cell transplantation generates public hope and fear in equal measures whilst the research itself continues to challenge scientists. Is it right to offer vulnerable patients experimental forms of treatment? Promising new therapies can be controversial. In this session we will explore how the ethical and practical limits of innovation might change in the future.

This event is named after William Safire, chairman of the Dana Foundation from 2000 until his death in 2009, who considered neuroethics an integral and vital component of brain research.

The formal presentation will be followed by an informal get-together.

#### **Sunday, July 15, 2012**

18:45 - 20:30

**SE04** - "Building your career" - a NENS workshop

YOUNG INVESTIGATOR TRAINING PROGRAMME "Building your career": a workshop organized by the Network of European Neuroscience Schools (NENS) committee of FENS, in collaboration with the committee for Young Investigator Training Programme, to offer information and interaction with partners from the academia, industry, public services and publishers, about career profiles and job opportunities for young investigators in neuroscience.

**Sunday, July 15, 2012**

18:45 - 20:30

**SE05** - The Falck-Hillarp histofluorescence method: 50 year anniversary

In 2012, it is 50 years since the publication of the Falck-Hillarp histofluorescence method (Falck, Hillarp, Thieme and Torp, J. Histochem. Cytochem, 10: 348-354, 1962). This method was the first approach that allowed visualization of transmitter-specific systems at the microscopic level, and had a ground-breaking impact on the development of our understanding of the anatomy, pharmacology and function of the monoamine systems in the CNS and PNS. In the early 1960s, dopamine, noradrenaline, adrenaline and serotonin were known to be present in the brain, but it was the application of the new formaldehyde histofluorescence method that made it possible to link these putative transmitters to specific neuronal systems and map their distribution and anatomical projections in great detail. In the 1980s the Falck-Hillarp method was superseded by more flexible and accessible microscopic techniques, in particular the powerful immunohistochemical method and the in situ hybridization technique.

Leading scientists who played a central role in the study of catecholamine and serotonin systems during this dynamic period will give a brief personal account of selected key events, followed by an open Q&A session with participation of members in the audience.

**Tuesday, July 17, 2012**

18:45 - 20:30

**SE06** - CARE: The implementation of the EU Directive on animals in research and the future of neuroscience research in Europe

This session will present the actions of the FENS Committee on the use of animals in Research (CARE) in the past years, and the FENS strategic plan in order to support the responsible and transparent use of animals in research. Topics include the use of non-human primates, the challenge of establishing a platform for informing the public and politicians, the progress of implementation of the EU Directive 63-2010 in the East European countries, the use of training, skills and accreditation acquired in one country in other countries, the specific national adaptations where there exists a specific regulatory system exists.

The formal discussion will be followed by an informal get-together.

**Tuesday, July 17, 2012**

18:45 - 20:30

**SE07** - FENS-IBRO Alumni Symposium - The role of body image and peripersonal space in pain

The experience of pain is closely related to the way we perceive our body. Patients with Complex Regional Pain Syndrome suffer from intense pain in their hand and often perceive them as being larger than they actually are. Back pain patients have problems in delineating the outline of their backs and their body image is distorted in the painful area. We present recent clinical evidence on the relationship between body perception and pain and then discuss psychological and neurophysiological mechanisms potentially underlying the interplay between body perception and pain. Finally, we provide perspectives on diagnostics and treatment of chronic pain.

AND:

**SYMPOSIA AND POSTERS AD LIBITUM !!**