



Hellenic Society
for Neuroscience



Israel Society
for Neuroscience



Serbian
Neuroscience
Society

**FENS
Featured**

Federation of
European
Neuroscience
Societies

Regional
Meeting
2015

*Nourishing Neuroscience
in the Cradle of Culture*



7-10 October 2015

«Ioannis Vellidis» Congress Center,
Thessaloniki, Greece

SCIENTIFIC PROGRAM

www.ffrm2015.com

**SCIENTIFIC PROGRAM**

Wednesday 7 October 2015

Thursday 8 October 2015

Friday 9 October 2015

Saturday 10 October 2015

Wednesday **7 October**

2 0 1 5

13:00- 14:40 **Symposium 1****ROOM I****Neuroengineering**Chair person: **Nicolaos Maglaveras**

- L1 **Nitish Thakor:** Frontiers of Neurotechnology: "Electroceutical" implantable neural interfaces
- L2 **Nitish Thakor:** Frontiers of Neuroengineering: from cells to cognition, and micro to machines
- L3 **Ioanna Chouvarda:** Computational methods for sleep microstructure analysis in normal and pathologic sleep
- L4 **O. Chetelaut:** New generation of micro and wearable sensors for telemonitoring of patients suffering from neurodisorders

13:00-14:40 **Symposium 2****ROOM II****Peripheral and central mechanisms of pain dependent plasticity**Chair person: **Alex Binshtok , Avi Priel**

- L1 **Avi Priel:** Deciphering the molecular basis of pain receptors polymodality.
- L2 **Alexander Binshtok:** Colouring labelled lines: Multispectral mapping of primary afferents as a tools to study their reorganization in chronic pain
- L3 **Menachem Hanani:** Satellite glial cells activation by systemic and local injuries and its contribution to chronic pain.
- L4 **Robert Goldstein:** Pain at its source: Signal transduction and propagation at the nociceptive peripheral terminals

13:00-14:40 **Symposium 3****ROOM III****Multisensory integration in movement, posture and locomotion**Chair persons: **Mouchnino Laurence, Blouin Jean**

- L1 **Vassilia Hatzitaki:** Exploring sensorial reweighting of posture in young and old adults by means of vestibular stimulation
- L2 **Charalambos Papaxanthis:** Mental actions: cortical plasticity, learning and performance
- L3 **Laurence Mouchnino:** Cortical facilitation of somatosensory inputs during the planning phase of gait initiation
- L4 **Cathy Craig:** Footstep sounds used as a sensory cue for improving gait in Parkinson's disease patients
- L5 **Marco Schieppati:** Body sway increases after theta-burst stimulation of the cerebellar vermis



13:00-14:40 **Symposium 4** **ROOM IV**

Novel treatments for traumatic brain injury

Chair persons: **Esther Shohami , Sanja Pekovic**

- L1 **Chaim G. Pick:** New remedies for treating traumatic brain injury
- L2 **Esther Shohami:**Endocannabinoids in TBI
- L3 **Sanja Pekovic:** Hyperbaric oxygen therapy in TBI – underlying mechanisms
- L4 **Natasa Loncarevic-Vasiljkovic:**Therapeutic potential of dietary restriction in TBI

14:40- 15:00 **Coffee Break**

15:00-16:40 **Symposium 5** **ROOM I**

Transcriptional regulation of neuronal identity

Chair persons: **Nissim Ben-Arie, Panagiotis Politis**

- L1 **Nissim Ben-Arie:** Ventral spinal cord patterning: from transcription regulation to a neurological disease
- L2 **Panagiotis Politis:** Novel gene regulatory networks in neural development
- L3 **Francois Guillemot:** Signals and factors controlling stem cell activity in the adult brain
- L4 **Federico Calegari:** Regulation of neural stem cell expansion in the mammalian brain
- L5 **Jovica Ninkovic:** Choroid plexus secreted microRNAs maintain neural stem cells by regulating neurogenic fate determinants

15:00-16:40 **Symposium 6** **ROOM II**

The Cholinergic system - Physiology, neuroimmunology and toxicology

Chair persons: **NTBA**

- L1 **Shani Shenhar-Tsarfaty:**Imbalanced cholinergic signaling contributes to cardio-vascular risks in health and disease
- L2 **NTBA:** Novel hybrid small molecule scavengers for mitigating the toxicity of organophosphates
- L3 **Israel Silman:** Structure/Function relationships in the interaction of toxic and therapeutic anticholinesterases with acetylcholinesterase
- L4 **Yoav Paas:** Subunit stoichiometry and organization in a chloride selective Cys-loop receptor
- L5 **Caterina Psarropoulou :**Immature seizures and plasticity of CNS cholinergic neurotransmission

**SCIENTIFIC PROGRAM**

Wednesday 7 October 2015

15:00-16:40

Symposium 7**ROOM III****Body/action representations and potential clinical applications**Chair persons: **Amir Amedi, Konstantinos Tsagkaridis**

L1

Noa Zeharia: Somatotopic information in the human brain

L2

Martin Edwards: Action observation priming facilitates action execution and spatial perception in healthy and brain-damaged participants

L3

Zohar Tal: The origins of metamodality in visual tools area LO: Bodily topographical biases and increased functional connectivity to S1

L4

Konstantinos Tsagkaridis: How can we boost action semantics in healthy controls and impaired patients to facilitate perception?

Thursday 8 October 2015

15:00-16:40

Symposium 8**ROOM IV****The vulnerability to the traumatic consequences of stress**Chair persons: **Martine Ammassari-Teule, Jelena Radulovic**

L1

Harm J. Krugers: Stress-hormones, early life adversity and fear memory formation

L2

Pascale Gisquet-Verrier: Post traumatic stress disorder and Substance used disorder: Two pathologies of memory due to dysfunction of memory reactivation?

L3

Gal Richter Levin: Extensive analysis of the factors promoting individual differences in vulnerability across distinct animal models of PTSD.

L4

Martine Ammassari-Teule: The efficacy of propranolol in decreasing fear memory and resetting neuronal connectivity to pre-trauma levels depends on the genotype-predominant memory system.

Friday 9 October 2015

16:40-17:40

Plenary Lecture 1**ROOM I**Chair persons: **Selma Kanazir, Fotini Stylianopoulou****Carmen Sandi:** The neurobiology of social hierarchies: from rodents to neuroeconomics

Saturday 10 October 2015

17:40-18:40

Welcome Cocktail

19:30

Presidential Lecture**Aristotle's University of Thessaloniki****John O'Keefe:** Can Entorhinal Grid cells provide the metric for the Cognitive Map



Thursday

8 October

2 0 1 5

09:00- 10:40

Symposium 9**ROOM I****Autophagy and lysosomes in the nervous system**Chair persons: **Hagit-Eldar Finkelman , Silva Hecimovic**

- L1 **Ronit Pinkas:** Autophagy, Beclin 1 and neurodegeneration
- L2 **Cecilia Buccì:** Role of Rab7 in autophagy: implications for Charcot-Marie. Tooth type 2b neuropathy
- L3 **Fiona Menzies:** Autophagy as a therapeutic target for neurodegenerative diseases.
- L4 **Hagit Eldar-Finkelman:** Lysosome as a therapeutic target in Alzheimer's disease and its regulation by GSK-3

09:00- 10:40

Symposium 10**ROOM II****Drug Addiction: reward, memory and addiction**Chair persons: **Rami Yaka , Ami Citri**

- L1 **Segev Barak:** Memory replacement by post-retrieval counterconditioning: a new approach of relapse prevention in substance use disorders
- L2 **Rainer Spanagel:** A common molecular mechanism for drug and natural reward-seeking
- L3 **Rami Yaka:** Targeting drug-cue associations to prevent cocaine reward
- L4 **Oliver M. Schlüter:** The fate of silent synapses in cocaine-induced neuronal circuit alterations
- L5 **Ami Citri:** Transcription networks provide insight into the neural circuitry of addiction
- L6 **Gilli Silberberg:** Striatal Microcircuits underlying sensory integration.

09:00-10:40

Symposium 11**ROOM III****Neuroinflammation in neurodegenerative diseases**Chair persons: **Spiros Georgopoulos, Alon Monsonego**

- L1 **Spiros Georgopoulos:** Microglia in Alzheimer's disease
- L2 **Alon Monsonego:** Adaptive immunity in the progression and treatment of Alzheimer's Disease
- L3 **Ingo Bechmann:** Microglia in human Alzheimer's Disease and obesity

Wednesday 7 October 2015

Thursday 8 October 2015

Friday 9 October 2015

Saturday 10 October 2015



SCIENTIFIC PROGRAM

Wednesday 7 October 2015

09:00- 10:40

Symposium 12

ROOM IV

Novel developments in spinal cord injury and repair

Chair person: **Rebecca Matsas**

L1

Michal Schwartz: Immune-mediated recovery following spinal cord injury is orchestrated by the brain's remote choroid plexus

L2

Stefano Pluchino: How stem cells speak with immune cells

L3

Miodrag Stojkovic: Spinal cord injury and cell therapy. Models and mechanisms.

L4

Florentia Papastefanaki: Functionalized gold nanoparticles as drug delivery systems

Thursday 8 October 2015

10:40- 11:00

Coffee Break

11:00-12:00

Plenary Lecture 2

ROOM I

Chair persons: **George Kostopoulos, Costas Papatheodoropoulos**

Nikos Logothetis: NET-fMRI of Large-Scale brain networks: Mapping dynamic connectivity during epochs of synaptic and system consolidation

12:00-13:40

Special Interest 1

ROOM I

Chair person: **Esty Shohami**

Rafi Aviram: Neuro for the Naïve – Developing Outreach Programs at the Edmond and Lily Safra Center for Brain Science

Friday 9 October 2015

12:00-13:40

Special Interest 2

ROOM II

Chair persons: **Monica di Luca, Michalis Koutsilieris**

Roberto Caminiti: Transparency in animal research and its cost

Saturday 10 October 2015

12:00-13:40 **Symposium 13****ROOM III****Neuroinflammation and neuroprotection in the CNS**Chair person: **Marianne Schultzberg , Nadezda Nedeljkovic**

- L1 **Marianne Schultzberg:** Inflammation and its resolution – studies in Alzheimer's disease
- L2 **Talma Brenner:** $\alpha 7$ nicotinic acetylcholine receptor and RIC-3 in the cholinergic anti-inflammatory pathway
- L3 **Probert Lesley:** The multifaceted contribution of TNF-NF- κ B signaling in CNS during health and disease.
- L4 **Nadezda Nedeljkovic:** Ectonucleotidases in neuroinflammation
- L5 **Dimitrios Karussis:** Affecting neuroinflammation and inducing neuroprotection in CNS diseases through stem cell therapies

12:00-13:40 **Symposium 14****ROOM IV****Development of the cerebral cortex and retina**Chair person: **Nada Zecevic , Sanja Ivkovic**

- L1 **Nada Zecevic:** Cortical Interneuron development in primates
- L2 **Nevena Radonjic:** Sonic hedgehog: The role of ventral morphogen in the developing human cortex?
- L3 **Desanka Milanovic:** Elucidation of molecular mechanisms underlying propofol-anesthesia toxicity in the developing brain
- L4 **Sanja Ivkovic:** Continuous EGF signaling in postnatal retina leads to the increase in the number of photoreceptor progenitors
- L5 **Pavle Andjus:** Enriched environment, brain plasticity and the role of tenascin C in postnatal development

13:40- 15:15 **Lunch Break – Poster Session 1**15:15-16:55 **Symposium 15****ROOM I****Spinal Cord circuitry and Locomotion**Chair persons: **Maria Albani, Ursula Slawinska**

- L1 **Athanasios Chatzisitiriou:** Improving locomotion after spinal cord injury
- L2 **Ursula Slawinska:** How to activate the spinal circuitry for walking in paraplegic rats?
- L3 **Maria Knikou:** Metamorphosis of human spinal neuronal networks after locomotor training

**SCIENTIFIC PROGRAM**

Wednesday 7 October 2015

15:15-16:55 Symposium 16 ROOM II**Targeting Neurodegenerative diseases: from bench to bedside.**Chair person: **Orly Weinreb**

- L1 **Ioannis Sotiropoulos:** Ab and Tau therapeutics in stress-driven brain pathology: exploring the path from depression to Alzheimer's disease
- L2 **Ilana Gozes:** Tau protein as a converging target of synaptic protection and pathology: novel evidence beyond Alzheimer's disease.
- L3 **Orly Weinreb:** Multimodal neuroprotective iron chelators: Novel therapeutic strategy for Parkinson's disease
- L4 **Danny Offen:** Cell and gene therapy in ALS

Thursday 8 October 2015

15:15-16:55 Symposium 17/ ROOM III**Brain signal analysis**Chair person: **Gary Green, Panos Bamidis**

- L1 **Gary Green:** MEG analysis of brain activity: IT tools, methodologies and recent results
- L2 **Tal Dotan Ben-Soussan:** From sensorimotor activation and connectivity to cognition: The Quadrato motor training model
- L3 **Panos Bamidis:** Analysing data from affective neuroscience protocols
- L4 **Nikos Laskaris:** MINeD Graphs from time-resolved functional brain connectomics'

Friday 9 October 2015

15:15-16:55 Symposium 18 ROOM IV**Inhibitory synaptic plasticity and its role in CNS pathologies**Chair persons: **Miho Terunuma, Stephen Moss**

- L1 **Stephen Moss:** Neurosteroid regulation of GABAAR membrane trafficking and its contribution to autism spectrum disorders
- L2 **Sabine Lévi:** Rapid control of KCC2 co-transporter membrane dynamics, stability and function by excitation and inhibition
- L3 **Miho Terunuma:** Altered GABAB receptor function by obesity-associated metabolic stress
- L4 **Theofilos Papadopoulos:** Phosphoinositide-dependent activation of Collybistin - from inhibitory postsynapse formation to epilepsy and mental retardation.

Saturday 10 October 2015

16:55- 17:35 Hot Topic 1 ROOM IChair person: **Spyros Efthymiopoulos****Moussa Youdim:** Why multi target neurorestorative drugs for Parkinson's and Alzheimer's diseases



Friday

9 October

2 0 1 5

09:00- 10:40 **Symposium 19 / ROOM I****Animal models in CNS**Chair person: **Maria Albani**

- L1 **Hans Lassmann:** Animal models for CNS demyelinating disorders
- L2 **Linda Greensmith:** Animal models of amyotrophic lateral sclerosis
- L3 **Ada Mitsacos:** Receptor studies and transplantations in mouse models of Parkinson's disease
- L4 **Nikolaos Grigoriadis:** CNS stem cells

09:00- 10:40 **Symposium 20****ROOM II****Cellular and molecular mechanisms of synaptic plasticity and memory**Chair person: **Mike Stewart**

- L1 **Kasia Radwanska:** Mechanism for long-term memory formation when synaptic strengthening is impaired
- L2 **Kobi Rozenblum:** From molecular and cellular mechanisms Underlying Cortical-Dependent Memories to Cognitive Enhancers
- L3 **Mike Stewart:** Morphological alterations in spines and synapses following behavioural manipulations in young and old mice
- L4 **Peter Giese:** A Novel Mechanism Underlying Long-term Memory Formation: Generation of Multi-Innervated Dendritic Spines

09:00- 10:40 **Symposium 21****ROOM III****Molecular mechanisms of social behavior**Chair person: **Jelena Radulovic , Evan Elliott**

- L1 **Inga Neumann:** Brain oxytocin in rodent social behaviours: from social preference to social fear"
- L2 **Jelena Radulovic:** Role of oxytocin receptors in the regulation of discrete social behaviors: Relationship to mGluR5
- L3 **Fotini Stylianopoulou:** Denial of the reward of maternal contact affects social behavior and the serotonergic system of the adult rat brain
- L4 **Miroslav Adzic:** Effects of social stress and antidepressants on the glucocorticoid receptor phosphorylation status: linking stress to depression
- L5 **Shlomo Wagner:** Interaction between oxytocin and urocortin-3 in the medial amygdala determines synaptic plasticity and social recognition memory

Wednesday 7 October 2015

Thursday 8 October 2015

Friday 9 October 2015

Saturday 10 October 2015



SCIENTIFIC PROGRAM

Wednesday 7 October 2015

10:40- 11:00 **Coffee Break**

11:00 -12:00 **Plenary Lecture 3** **ROOM I**

Chair person: **Efstratios Kosmidis , Panayiota Poirazi**

Sean Hill: The Human Brain Project

12:00- 13:40 **Special Interest 3** **ROOM I**

What does FENS for you? Meeting on excellent training opportunities

L1 **Menno Witter:** Welcome and introduction

L2 **Alicja Puścian:** Better together - efficient assessment of social interactions in rodents

L3 **Lucia Sacheli:** Social grasps along development: from Italy to The Netherlands, a joint-action study on preschooler and adults

L4 **NTBA:** Cajal training course awardee:

L5 **Marija Stanojevic:** ELECTRAIN 2015 – dulce cum utili

L6 **Menno Witter:** What are the training activities of FENS

Thursday 8 October 2015

12:00- 13:40 **Special Interest 4** **ROOM II**

Chair persons: **Lorenzo Lorusso, Lazaros C. Triarhou**
History of Neuroscience

L1 **Lorenzo Lorusso:** Chairman’s introductory remarks

L2 **Marco Piccolino:** Sands, stars and visions between Archimedes and Galileo

L3 **Lazaros C. Triarhou:** Curtailed aspects of Cajal’s tips on scientific research: including an audio documentary

L4 **Zoltán Molnár:** Sherrington’s box of wonders: the recently rediscovered histological slides of Sir Charles

L5 **Regional Society Presidents**

Friday 9 October 2015

Saturday 10 October 2015

12:00- 13:40 **Symposium 22****ROOM III****The brainstem - from development to function**Chair person: **Dalit Sela-Donenfeld , Yosef Yarom**

- L1 **David Wilkinson:** Regulation of hindbrain boundary formation and neurogenesis
- L2 **Dalit Sela-Donenfeld:** Decoding the connectome formation of the auditory and ION hindbrain neurons
- L3 **Hans Gerd Nothwang:** Evolutionary development of sound localization circuits
- L4 **Eyal Wigderson:** Early multimodal integration in the auditory brainstem
- L5 **Yosef Yarom:** Timing in the ION-cerebellar circuit

12:00- 13:40 **Symposium 23****ROOM IV****Locus Coeruleus: new light on old neurons**Chair person: **Menaheem Segal**

- L1 **Menaheem Segal:** Noradrenergic modulation of Hippocampal plasticity
- L2 **Yuval Nir:** The locus coeruleus-noradrenaline system and sensory processing in sleep/wakefulness
- L3 **Ofer Yizhar:** Noradrenergic modulation of prefrontal cortical function
- L4 **Antoine Adamantidis:** Optogenetic dissection of arousal circuits in the brain
- L5 **Susan Sara:** Locus coeruleus in time with forebrain oscillations: implication for memory processing.

13:40- 15:15 **Lunch Break – Poster Session 2**15:15-15:55 **Hot Topic 2****ROOM I**Chair person: **Illana Gozes****Marshall Devor:** Neural basis for loss of consciousness during anesthesia and anesthesia-like states

**SCIENTIFIC PROGRAM**

Wednesday 7 October 2015

15:55- 17:35

Symposium 24**ROOM I****Behavioral aspects in animal models. Environmental manipulations and pharmacological intervention.**Chair person: **Brenda J Anderson**

L1

Brenda J Anderson: Adaptations to repeated unpredictable threats in a chronic living environment: A double edged sword

L2

Philippos Karalis: Cognitive and behavioral consequences of neonatal hypoxia-ischemia of the brain: the effect of therapeutic interventions

L3

Despina Tata: Interaction of postnatal stress and neonatal hypoxia-ischemia on behavior and markers of brain plasticity

L4

Evgenia Dandi: The role of environmental enrichment on stress reactivity and behaviour following maternal separation

Thursday 8 October 2015

15:55- 17:35

Symposium 25**ROOM II****Nicotinic acetylcholine receptors: From genes and synapses to networks and cognition**Chair persons: **Eleni Konsolaki, Irimi Skaliora**

L1

Huibert Mansvelder: Nicotinic receptors in rodent and human cortical circuits

L2

Mario Marchi: Functional interaction between nicotinic and glutamatergic receptors at nerve terminal level: a fine tuning of synaptic signals

L3

Uwe Maskos: Crucial role of CHRNA5 in drug addiction and cognition

L4

Charalambos Sigalas: Nicotinic modulation of cortical network activity and cognitive processes

Friday 9 October 2015

15:55- 17:35

Symposium 26**ROOM III****The impact of receptor-receptor interactions on brain plasticity**Chair person: **Dasiel O. Borroto-Escuela**

L1

Fang Liu: Targeting protein-protein interaction to develop novel therapeutics for the treatment of schizophrenia

L2

Marc Flajolet: When GPCRs meet growth factor receptors

L3

Eero Castrén: Neurotrophin receptor TrkB interacting proteins in neuronal plasticity

L4

Kjell Fuxe: Changes in GPCR heteroreceptor complexes as a molecular basis for schizophrenia and depression and their treatment

L5

Dasiel O. Borroto-Escuela: Allosteric receptor-receptor interactions in GPCR-RTK heteroreceptor complexes. Relevance for brain plasticity

Saturday 10 October 2015

15:55- 17:35 **Symposium 27****ROOM IV****Innovative technologies for biomarker discovery in neuroscience**Chair persons: **Anthony Tsarbopoulos, Michaela Filiou**

- L1 **Anthony Tsarbopoulos:** Use of MS-based methodologies for screening bioactive compounds as anti-amyloidogenic agents and identifying new AD biomarkers
- L2 **Michaela Filiou:** Revealing protein expression and turnover changes in psychiatric disorders by ¹⁵N metabolic labeling and multi-isotope imaging MS.
- L3 **Evangelos Gikas:** Metabolism and metabolomics using MS: a powerful tool for neuroscience
- L4 **Michalis Aivaliotis:** Decoding systems-wide signaling pathways by MS-based quantitative phosphoproteomics to unravel disease mechanisms

17:35-18:15 **Hot Topic 3****ROOM I**Chair person: **Dejan Zecevic, Efstratios Kosmidis****Lawrence Cohen:** Imag(in)ing the future of optical recording of membrane potential18:15- 19:15 **Special Interest 5****ROOM I****EJN BEST PUBLICATION AWARD**Chair person: **NTBA****Silvina Diaz:** Paradoxical increase in survival of newborn neurons in the dentate gyrus of mice with constitutive depletion of serotonin.

Wednesday 7 October 2015

Thursday 8 October 2015

Friday 9 October 2015

Saturday 10 October 2015

**SCIENTIFIC PROGRAM**

Wednesday 7 October 2015

Thursday 8 October 2015

Friday 9 October 2015

Saturday 10 October 2015

Saturday **10 October** 2 0 1 509:00- 10:40 **Symposium 28** **ROOM I****Mechanisms of alpha-synuclein-mediated neurotoxicity and therapeutic implications**Chair persons: **Leonidas Stefanis, Ivanka Markovic**L1 **Katerina Paleologou:** The effect of α -synuclein mutations on Serine 129 phosphorylationL2 **Leonidas Stefanis:** Alpha-synuclein degradation: an opportunity for therapeutic interventionL3 **Ivanka Markovic:** The protective role of AMP-activated protein kinase in alpha-synuclein neurotoxicity in vitroL4 **Kostas Vekrellis:** Extracellular alpha-synuclein: the spreading menaceL5 **Nadia Stefanova:** Animal models of Multiple System Atrophy based on the alpha-synucleinopathy concept: Insights into pathophysiology and treatment09:00- 10:40 **Symposium 29** **ROOM II****Common mechanisms in pathophysiology of neurodegenerative disorders**Chair persons: **Christina Dalla, Ioannis Sotiropoulos**L1 **Christina Dalla:** Sex-dependent brain vulnerability to neuropsychiatric and neurodegenerative disordersL2 **Ehud Cohen:** Cyclophilin malfunction underlies the development of distinct late-onset, neurodegenerative maladies"L3 **Adrian Israelson:** Misfolded SOD1 as a therapeutic target in amyotrophic lateral sclerosisL4 **Ioannis Charalampopoulos:** Novel synthetic microneurotrophins as neuroprotective and neurogenic agents"09:00- 10:40 **Symposium 30** **ROOM III****GABA circuits in embryonic and postnatal development of the central nervous system**Chair persons: **Domna Karagogeos, Kyriaki Sidiropoulou**L1 **Myrto Denaxa:** Molecular cascades controlling the development and function of inhibitory cortical networksL2 **Christin Metin:** Molecular control of interneuron migration: signaling in the leading edge and in the primary cilium.L3 **Rhiannon Meredith:** Maturation of GABA-A inhibition in both 'neurotypical' wildtype mice and mouse models for neurodisorders.



L4 **Kyriaki Sidiropoulou & Domna Karagozeos:** Genetic models of decreased GABAergic inhibition in the mouse

09:00- 10:40 **Symposium 31**

ROOM IV

Real-time optical Imaging; from a single spine to the intact brain

Chair persons: **Dejan Zecevic, Amiram Grinvald**

L1 **Dejan Zecevic:** Subthreshold electrical signaling in dendritic spines: a voltage-imaging study

L2 **Amiram Grinvald:** Real-time VSD based optical Imaging revealed the bi-directional interactions of on-going activity and sensory-evoked activity.

L3 **Bradley Baker:** Mechanistic studies of the fluorescence change of a genetically encoded voltage indicator

L4 **Marco Canepari:** The physiological synergistic activation of dendritic voltage-gated calcium channels

10:40- 11:00 **Coffee Break**

11:00- 12:00 **Plenary Lecture 4**

ROOM I

Chair person: **Nikos Grigoriadis**

Evan Snyder: Cross-talk between stem cells and the neurodegenerative environment

12:00-13:40 **Special Interest 6**

ROOM I

IBRO Alumni Lecture

Chair person: **Susan J. Sara**

Einat Shetreet: fMRI contribution to theories of language acquisition

12:00-13:40 **Symposium 32**

ROOM II

Diabetes and vascular neurological diseases

Chair persons: **Natan Bornstein, Milija Mijajlovic**

L1 **Milija Mijajlovic:** Insulin resistance and carotid disease

L2 **Natan Bornstein:** Glycemic control in acute stroke

L3 **David Tanne:** Diabetes and stroke & cognitive impairment

L4 **George Ntaios:** Ischaemic stroke in diabetes: is it really a macrovascular complication?

**SCIENTIFIC PROGRAM**

Wednesday 7 October 2015

Thursday 8 October 2015

Friday 9 October 2015

Saturday 10 October 2015

12:00-13:40

Symposium 33**ROOM III****From genes to behavior: putting together the puzzle pieces of treatment of mood disorders**Chair person: **Claude Brodski , Miroslav Savic**

L1

Claude Brodski: Abnormal development of monoaminergic neurons is implicated in mood fluctuations and bipolar disorder

L2

Miroslav Savic: Pharmacological elucidation of the role of GABAA receptors in anxiety

L3

Marin Jukic: The involvement of CYP2C19 in stress-induced despair

L4

Galila Agam: Some of lithium's neuroprotective effects are mediated via its modulation of inositol metabolism and autophagy

13:40- 15:15

Lunch Break – Poster session 3

15:15-16:55

Symposium 34**ROOM I****Aging and aging-associated diseases**Chair person: **Selma Kanazir , Efsthios Gonos**

L1

Silva Hecimovic: Lysosomal dysfunction in neurodegenerative diseases

L2

Roosmarijn Vandenbroucke: The role of blood-cerebrospinal fluid barrier in aging and Alzheimer's disease

L3

Efstathios Gonos: Proteasome activation as a novel anti-ageing strategy.

L4

Selma Kanazir: Therapeutic interventions to postpone brain aging

15:15-16:55

Symposium 35**ROOM II****Active dendritic integration: from computation to behaviour**Chair persons: **Christian Wozny, Stephen R. Williams**

L1

Yiota Poirazi: Linking memories across time via synapse clustering in nonlinear dendrites

L2

Christian Wozny: Role of dendrite-targeting interneurons in shaping dendritic Integration

L3

Stephen R. Williams: Physiologically engaged active dendritic integration in the retina and neocortex

L4

Jackie Schiller: Participation of active dendritic processing in selectivity tuning of cortical neurons

15:15-16:55 **Symposium 36****ROOM III****Computational neuroscience: From systems to molecules**Chair person: **Alain Destexhe**

- L1 **Dora Angelaki:** Optimal integration in multisensory decisions
- L2 **Alain Destexhe:** Relating multiple scales of neuronal activity, from cellular to mesoscopic levels
- L3 **Khashayar Pakdaman:** Stochasticity in single neuron models
- L4 **Efstratios Kosmidis:** Modeling intracellular pathways

16:55- 17:55 **Hot Topic 4****ROOM I**Chair person: **Sabera Ruzdijic, Kiki Thermos****Marian Joëls:** Emerging role of brain mineralcorticoid receptors17:55-18:55 **Oral Presentation of Posters Winners****ROOM I**Chair person: **Rami Yaka**

Wednesday 7 October 2015

Thursday 8 October 2015

Friday 9 October 2015

Saturday 10 October 2015