**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. Chetelat:** 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 persons: **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**

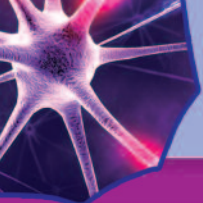
- L1 **Chaim G. Pick:** New remedies for treating traumatic brain injury
- L2 **Esther Shohami:** Endocannabinoids in TBI
- L3 **Sanja Pekovic:** Hyperbaric oxygen therapy in TBI – underlying mechanisms
- L4 **Natasa Loncarevic-Vasiljkovic:** Therapeutic potential of dietary restriction in TBI

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 **Noelia Urban:** 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: **Gabriel Amitai, Caterina Psarropoulou**

- L1 **Shani Shenhar-Tsarfaty:** Imbalanced cholinergic signaling contributes to cardio-vascular risks in health and disease
- L2 **Gabriel Amitai:** 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



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15:00-16:40

**Symposium 7**

**ROOM III**

**Body/action representations and potential clinical applications**

Chair persons: **Amir Amedi, Konstantinos Tsagaridis**

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

**Benedetta Heimler:** The origins of metamodality in visual tools area LO: Bodily topographical biases and increased functional connectivity to S1

L4

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

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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:** A novel approach to PTSD modeling in rats - alternating patterns of limbic activity in different types of stress reaction

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

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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 University of Thessaloniki**

**John O' Keefe:** Can Entorhinal Grid cells provide the metric for the Cognitive Map



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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 Kramarski:** Autophagy, Beclin 1 and neurodegeneration
- L2 **Cecilia Bucci:** 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:** GSK-3 interacts with lysosome networking and contributes to neurodegeneration

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 **Ami Citri:** Transcription networks provide insight into the neural circuitry of addiction
- L5 **Gilli Silberberg:** Striatal Microcircuits underlying sensory integration.

09:00-10:40 **Symposium 11****ROOM III****Neuroinflammation in neurodegenerative diseases**Chair persons: **Spiros Georgopoulos, Alon Monsonogo**

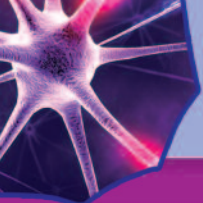
- L1 **Spiros Georgopoulos:** Microglia in Alzheimer's disease
- L2 **Alon Monsonogo:** Adaptive immunity in the progression and treatment of Alzheimer's Disease
- L3 **Ingo Bechmann:** Microglia in human Alzheimer's Disease and obesity

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09:00- 10:40

**Symposium 12**

**ROOM IV**

**Novel developments in spinal cord injury and repair**

Chair person: **Rebecca Matsas**

L1

**Michal Schwartz:** The immune system contribution to repair under acute and chronic CNS degeneration

L2

**Stefano Pluchino:** How stem cells speak with immune cells

L3

**Rebecca Matsas:** Cell therapy for CNS repair: interplay between transplanted and endogenous cells

L4

**Florentia Papastefanaki:** Functionalized gold nanoparticles as drug delivery systems

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

12:00-13:40

**Special Interest 2**

**ROOM II**

Chair person: **Monica di Luca**

**Roberto Caminiti:** Transparency in animal research and its cost

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

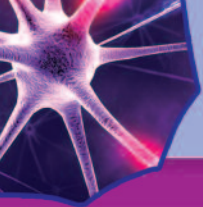
- L1 **Talma Brenner:**  $\alpha 7$  nicotinic acetylcholine receptor and RIC-3 in the cholinergic anti-inflammatory pathway
- L2 **Nadezda Nedeljkovic:** Ectonucleotidases in neuroinflammation
- L3 **Dimitrios Karussis:** Stem cell therapies in neuroinflammatory and neurodegenerative diseases: The evidence and the promise

12:00-13:40 **Symposium 14****ROOM IV****Development of the cerebral cortex and retina**Chair persons: **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 **Sanja Ivkovic:** Continuous EGF signaling in postnatal retina leads to the increase in the number of photoreceptor progenitors
- L4 **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, Urszula Slawinska**

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



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15:15-16:55 **Symposium 16** **ROOM II**

**Targeting Neurodegenerative diseases: from bench to bedside**

Chair persons: **Orly Weinreb, Illana Gozes**

- L1 **Ioannis Sotiropoulos:** A $\beta$  and Tau therapeutics in stress-driven brain pathology: exploring the path from depression to Alzheimer's disease
- L2 **Illana 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:** Gene therapy enhancing the glutamate uptake system delays symptom onset and prolonged survival in a mouse model of ALS

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15:15-16:55 **Symposium 17/** **ROOM III**

**Brain signal analysis**

Chair persons: **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 GABA<sub>A</sub>R 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 GABA(B) receptor function by obesity-associated metabolic stress
- L4 **Theofilos Papadopoulos:** Phosphoinositide-dependent activation of Collybistin - from inhibitory postsynapse formation to epilepsy and mental retardation

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16:55- 17:35 **Hot Topic 1** **ROOM I**

Chair persons: **Spyros Efthimiopoulos, Gabriel Amitai**

**Moussa Youdim:** Why multi target neurorestorative drugs for Parkinson's and Alzheimer's diseases

17:35-18:35 **HSN General Assembly** **ROOM II**



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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

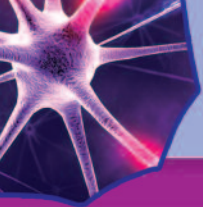
09:00- 10:40 **Symposium 20****ROOM II****Cellular and molecular mechanisms of synaptic plasticity and memory**Chair persons: **Mike Stewart, Peter Giese**

- L1 **Kasia Radwanska:** Mechanism for long-term memory formation when synaptic strengthening is impaired
- L2 **Kobi Rosenblum:** 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 persons: **Jelena Radulovic, Shlomo Wagnert**

- 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





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

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

**ROOM I**

Chair persons: **Efstratios K. 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 Maria Sacheli:** Social grasps along development: a joint-action study on preschooler and adults

L4 **Vincent Paget Blanc:** The state-of-the-art tools to assess behaviour - insights from the Behaviour and Neural Systems CAJAL course

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

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

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

**ROOM II**

**History of Neuroscience: Understanding the origins and the development of Neuroscience from the Ancient Greek era till today**

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 **Richard Brown, Laura Sand:** Sherrington's box of wonders: the recently rediscovered histological slides of Sir Charles

L5 **Shaul Hochstein:** History of Neuroscience in Israel

L6 **Ljubisav Rakic:** History of Neuroscience in Serbia

L7 **George Kostopoulos:** History of Neuroscience in Greece

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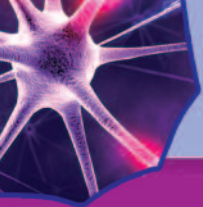
12:00- 13:40 **Symposium 22****ROOM III****The brainstem - from development to function**Chair persons: **Dalit Sela-Donenfeld, Yosef Yarom**

- L1 **David Wilkinson:** Roles and regulation of boundary formation in the zebrafish hindbrain
- 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: **Menahem Segal**

- L1 **Menahem 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 II**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



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#### Symposium 24

ROOM I

**Behavioral aspects in animal models. Environmental manipulations and pharmacological interventions**

Chair persons: **Brenda J. Anderson, Despina A. Tata**

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 A. 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

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15:55- 17:35

#### Symposium 25

ROOM II

**Nicotinic acetylcholine receptors: From genes and synapses to networks and cognition**

Chair persons: **Eleni Konsolaki, Irini Skaliara**

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

**Fani Koukoulis:** Crucial role of CHRNA5 in drug addiction and cognition

L4

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

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15:55- 17:35

#### Symposium 26

ROOM III

**The impact of receptor-receptor interactions on brain plasticity**

Chair persons: **Dasiel O. Borroto-Escuela, Kjell Fuxe**

L1

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

L2

**Marc Flajolet:** When G-protein coupled receptors and tyrosine kinase receptors collide into one world of signaling

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

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

L1

**Anthony Tzarbopoulos:** 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 <sup>15</sup>N metabolic labeling and multi-isotope imaging MS

L3

**Evangelos Gikas:** Metabolism and metabolomics using MS: a powerful tool for neuroscience

L4

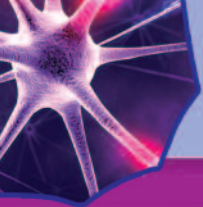
**Michalis Aivaliotis:** Decoding systems-wide signaling pathways by MS-based quantitative phosphoproteomics to unravel disease mechanisms17:35-18:15 **Hot Topic 3****ROOM I**Chair persons: **Dejan Zecevic, Efstratios K. Kosmidis****Lawrence Cohen:** Imag(in)ing the future of optical recording of membrane potential18:15- 19:15 **Special Interest 5****ROOM I****EJN BEST PUBLICATION AWARD**Chair person: **Paul Bolam****Silvina Diaz:** Paradoxical increase in survival of newborn neurons in the dentate gyrus of mice with constitutive depletion of serotonin

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09:00- 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 a-synuclein mutations on Serine 129 phosphorylation
- L2 **Leonidas Stefanis:** Alpha-synuclein degradation: an opportunity for therapeutic intervention
- L3 **Ivanka Markovic:** The protective role of AMP-activated protein kinase in alpha-synuclein neurotoxicity in vitro
- L4 **Kostas Vekrellis:** Extracellular alpha-synuclein: the spreading menace
- L5 **Nadia Stefanova:** Animal models of Multiple System Atrophy based on the alpha-synucleinopathy concept: Insights into pathophysiology and treatment

09:00- 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 disorders
- L2 **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 sclerosis
- L4 **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 networks
- L2 **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 Karagogeos:** Genetic models of decreased GABAergic inhibition in the mouse & postnatal development of prefrontal cortical structure and function 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**

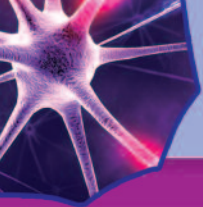
Chair persons: **Natan Bornstein, Milija Mijajlovic**

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

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

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

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



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**12:00-13:40   Symposium 33   ROOM III****From genes to behavior: putting together the puzzle pieces of treatment of mood disorders**Chair persons: **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 GABA<sub>A</sub> 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 III****15:15-16:55   Symposium 34   ROOM I****Aging and aging-associated diseases**Chair persons: **Selma Kanazir, Efstathios Gonos**

- L1 **Silva Hecimovic:** Lysosomal dysfunction in neurodegenerative diseases
- L2 **Roosmarijn Vandenbroucke:** The role of the 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 **Panayiota 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

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|--------------|--|-----------------|
| 15:15-16:55  | <b>Symposium 36</b>  | <b>ROOM III</b> |
|              | <b>Computational neuroscience: From systems to molecules</b><br>Chair persons: <b>Alain Destexhe, Khashayar Pakdaman</b>   |                 |
| L1           | <b>Dora Angelaki:</b> Multisensory integration for heading perception and spatial navigation   |                 |
| L2           | <b>Alain Destexhe:</b> Relating multiple scales of neuronal activity, from cellular to mesoscopic levels   |                 |
| L3           | <b>Khashayar Pakdaman:</b> Stochasticity in single neuron models   |                 |
| L4           | <b>Efstratios K. Kosmidis:</b> Modeling intracellular pathways   |                 |
| 16:55- 17:55 | <b>Hot Topic 4</b>   | <b>ROOM I</b>   |
|              | Chair person: <b>Sabera Ruzdijic</b><br><b>Marian Joëls:</b> Emerging role of brain mineralcorticoid receptors   |                 |
| 17:55-18:55  | <b>Oral Presentation of Posters Winners</b>  | <b>ROOM I</b>   |
|              | Chair person: <b>Rami Yaka</b>   |                 |
|              | <b>OS1-NC7: A gating role of mediodorsal thalamus for ripple-associated hippocampal-cortical information transfer</b><br><i>M.Yang, N.K. Logothetis, O.Eschenko</i>  |                 |
|              | <b>OS2-CL8: Gene Expression Profiling Identifies Blood Glucocorticoid Receptor Signaling as a Biomarker of Brain Signaling and Treatment Target in PTSD</b><br><i>Nikolaos P. Daskalakis, Hagit Cohen, Rasha Hammamieh, Guiqing Cai, Marti Jett, Janine Flory, Charles Marmar, Joseph D. Buxbaum, Bin Zhang, Rachel Yehuda</i> |                 |
|              | <b>OS3-NE1: Quantitative Analysis of Pyramidal Cells Morphologies: From Rat to Human</b><br><i>Deitcher Y., Eyal G., Atenekeng Kahou G.A., Telefont M., Mansvelder H.D., de Kock C.P.J., Segev I.</i>  |                 |
|              | <b>OS4-MO72: Age-associated immunological dysfunction of the brain's choroid plexus negatively affects cognition and hippocampal neurogenesis</b><br><i>Baruch K., Deczkowska A., Schwartz M.</i>  |                 |
|              | <b>OS5-DE20: A dynamic Unfolded Protein Response controls cortical neurogenesis</b><br><i>Creppe C., Laguesse S., Nedialkova D.D., Prévot P.-P., Borgs L., Huyseune S., Franco B., Duysens G., Kruzy N., Lee G., Thelen N., Thiry M., Close P., Chariot A., Malgrange B., Leidel A.S., Godin D.J., and Nguyen L.</i>           |                 |
|              | <b>OS6-CO60: Non-visual Obstacle Detection and Avoidance Using the 'EyeCane' sensory substitution</b><br><i>Behor T., Buchs G., Maidenbaum Sh., Simon N., Heimler B., Amedi A.</i>   |                 |