

# 15.10.2023. SUNDAY

8:00- 18:00

**REGISTRATION**

**ELECTION COUNCIL MEMBERS (VOTE ONLINE)**

## PARALLEL SYMPOSIA

### **S4 "Cells, Molecules, Circuits and Behaviors: The Future of Therapeutics in Substance Use Disorders" (Carthage I room)**

**CHAIRS: Kathryn A. Cunningham (USA); Marco Diana (IT)**

**S4.1** Kathryn A. Cunningham (University of Texas Medical Branch, Galveston, Texas, USA):

"Mining 5-HT<sub>2A</sub> receptor ligand discovery for substance use disorders"

**S4.2** John Neumaier (University of Washington, Seattle, Washington, USA):

"Neurocircuit control of oral fentanyl self-administration engages a novel role for the lateral habenula: Implications for SUD therapeutics"

**S4.3** Lauren M. Slosky (University of Minnesota Medical School, Minneapolis, MN, USA):

" $\beta$ -Arrestin-biased allosteric modulators of neurotensin receptor 1 for the treatment of cocaine use disorder"

**S4.4** Liana Fattore (CNR Institute of Neuroscience, National Research Council, Cagliari, Italy):

"Dual 5-HT<sub>2B</sub> antagonist-5-HT<sub>1A</sub> agonist for methamphetamine use disorder"

**S4.5** Noelle Anastasio (University of Texas Medical Branch, Galveston, Texas, USA):

"The nociceptin receptor as a target for opioid use disorder" therapeutics

### **S5 "Understanding the online and offline representation of complex stimuli: From behavioural performance to neural mechanisms" (Carthage II room)**

**CHAIRS: Carlo Sestieri (IT); Valerio Santangelo (IT)**

**S5.1** Emiliano Macaluso (Université Claude Bernard Lyon 1, Bron, France):

"Memory retrieval after the encoding of complex and naturalistic episodes"

**S5.2** Marco Sperduti (Université Paris Cité, Paris, France):

"The impact of editing on time perception for movie scenes"

**S5.3** Carlo Sestieri (University of Chieti, Italy):

"Cognitive mechanisms supporting temporal memory for movie scenes"

**S5.4** Valerio Santangelo (University of Perugia, Italy):

"The representation of saliency in complex visual scenes and cinematographic movies"

### **S6 "Neurotransmitter dynamics and actions in neuro-astroglial networks" (Carthage III room)**

**CHAIR: Dmitri Rusakov (UK)**

**S6.1** Marta Navarrete (Cajal Institute, Madrid, Spain):

"Catching neuron-astrocyte engrams"

**S6.2** Robert Zorec (University of Ljubljana, Ljubljana, Slovenia):

"Noradrenergic signalling and vesicle dynamics in reactive astrocytes"

**S6.3** Nathalie Rouach (College de France, Paris, France):

"A neuroglial circuit for maternal behaviors"

**S6.4** Dmitri Rusakov (University College London, UK):

"Brian rhythm regulation by extracellular GABA waves"

### **S7 "New insights in Parkinson's disease and other motor disorders" (Majles room)**

**CHAIRS: Leonidas Stefanis (GR), Rosario Moratalla (ES)**

**S7.1** Aurora Zilli (Sapienza University of Rome, Italy):

"Antibiotic-induced leaky gut syndrome promotes parkinsonism in mice: protective effects of rifaximin"

**S7.2** Alessandro Stefani (University of Rome Tor Vergata, Rome, Italy):

"Gut microbiota dysbiosis in Parkinson's disease patients: not only an early feature but a potential biomarker of disease severity and progression"

**S7.3** Rosario Moratalla (Cajal Institute, Spain):

"The origin of comorbid anxiety and depression in Parkinson's disease"

**S7.4** Ali Jahanshahi (Maastricht University, The Netherlands):

"Wireless deep brain stimulation in freely moving mice with nonresonant powering of magnetoelectric nanoparticles"

10:50-11:10

**COFFEE BREAK/POSTERS**

## PARALLEL SYMPOSIA

**S8 “Emerging trends in New Psychoactive Substances (NPS): From preclinical evidences to clinical perspectives” (Carthage I room)**

**CHAIRS: Matteo Marti (IT); Liana Fattore (IT)**

**S8.1** Eef Theunissen (Maastricht University, The Netherlands):

“Cognitive, psychomotor and psychotomimetic effects of a synthetic cannabinoid”

**S8.2** Jakub Wojcieszak (Medical University of Łódź, Poland):

“Perinatal treatment with MDPV impairs cognitive functions in the adulthood of male but not female C57BL/6J mice”

**S8.3** Sabine Biele (University of Ferrara, Italy):

“In silico, in vitro and in vivo pharmacological characterization of emerging novel synthetic opioids: focus on sex differences”

**S8.4** Gunes Unal (Boğaziçi University, Istanbul, Turkey):

“Enhancing the antidepressant effect of ketamine via alternative routes of administration”

**S9 “The role of the amygdala in modulating negatively and positively valenced states” (Carthage II room)**

**CHAIRS: Andrew Holmes (USA); Maria Morena (IT)**

**S9.1** Bernard Balleine (University of NSW, Sydney, Australia):

“Amygdala-cortical control of striatal plasticity”

**S9.2** Maria Morena (Sapienza University & IRCSS Santa Lucia Foundation, Rome, Italy): “Amygdala regulation of stress effects on fear memory processes”

**S9.3** Cyril Herry (INSERM & University of Bordeaux, Bordeaux, France):

“Decoding fear in prefrontal-amygdala circuits”

**S9.4** Andrew Holmes (National Institute on Alcohol Abuse and Alcoholism, Rockville, MD, USA):

“Amygdala astrocytes gate the transformation of memory into action”

**S10 “Neurobiology of Social Cognition in Animal Kingdom” (Carthage III room)**

**CHAIR: Giulia Salamanca (IT)**

**S10.1** Giulia Salamanca (University of Bologna, Italy):

“Where do the atypical long-range somatostatin projections go in the brain? A neuroanatomical study”

**S10.2** Francesco Papaleo (Italian Institute of Technology, Genoa, Italy):

“Cortico-Cortical Transfer of Socially Derived Information Gates Emotion Discrimination”

**S10.3** Julia Sliwa (Sorbonne University, Institut du Cerveau, ICM, Inserm, CNRS, Paris, France): “Comparing human and monkey neural circuits for processing social scenes”

**S10.4** Gernot Ernst (University of Oslo, Norway):

“A translational perspective on opioids and social behaviour: from rodents to humans”

**S11 “Ion channels and receptors in myelin-forming glia cells” (Majles room)**

**CHAIRS: Valerio Magnaghi (IT)**

**S11.1** Wenjing Sun (The Ohio State University, Columbus, OH, USA):

“New insights into activity-dependent myelination”

**S11.2** Maria Kukley (University of Sciences and Technology Houari Boumediène, Algiers, Algeria):

“Glutamate receptors in the oligodendrocyte lineage cells: what is new?”

**S11.3** Aleksandra Rutkowska (Medical University of Gdańsk, Poland):

“Can we stimulate remyelination in vivo? A glance at GPR183 as novel therapeutic target”

**S11.4** Valerio Magnaghi (University of Milan, Italy):

“NKCC1 and GABA-A-receptor regulation of chloride flux in peripheral nerve: are Schwann cells engaged?”

11:10-13:00

13:00-14:00

LUNCH

**SPECIAL Event (SE): Neuroscience and Law: Lobes and Robes (Carthage I room)**

**SE.1** Marie Lamarche (Law clinic, Faculty of Law and Political Sciences, Bordeaux, France) & Cédric Brun (Bordeaux-Montaigne University, Bordeaux, France):

“The Legal and Ethical Implications of Neuroscience Discoveries: A Framework for Balancing Societal Interests and Individual Rights”

**SE.2** Ahmed Elkahwagy (Faculty of Law, Alexandria University, Alexandria, Egypt) &

Thomas Boraud (University of Bordeaux, CNRS Bordeaux, France):

“The contribution of neuroscience to Criminal Law”

**SE.3** Nihal Elbanna (Faculty of Law, Alexandria University, Alexandria, Egypt) &

Marc Landry (University of Bordeaux, CNRS Bordeaux, France):

“Do we need a legal framework for neuromarketing?”

14:00-15:20

**EJN Wiley/FENS WORKSHOP on Publishing (Carthage II room)**

**Bernard Balleine**

**FENS**



## PARALLEL SYMPOSIA

### S12 “Non-neuronal mechanisms of motivated behavior” (Carthage I room)

#### CHAIR: Debra Bangasser (USA)

S12.1 Debra Bangasser (Georgia State University, Atlanta, GA, USA):

“Early resource scarcity causes lasting effects on cognition and non-neuronal cortical cells”

S12.2 Pavel Ortinski (University of Kentucky, Lexington, KY, USA):

“Cocaine self-administration increases voltage-gated signaling in accumbens astrocytes”

S12.3 Jared Young (University of California, San Diego, CA, USA):

“Impact of HIV on motivation and risk-taking: Activated microglia as a potential treatment target”

S12.4 Michael Scofield (University of South Carolina, Columbia, SC, USA):

“Ca<sup>2+</sup> Activity Profiles of Cortical Astrocytes During Conditioned Reward Seeking”

S12.5 Jill Turner (University of Kentucky, Lexington, KY, USA):

“Glial mechanisms of drug withdrawal”

### S13 “Diverse Neurobiological Actions of Cannabinoids in the Brain” (Carthage II room)

#### CHAIRS: Matthew Hill (CA); Roberto Colangeli (IT)

S13.1 Roberto Colangeli (Università Politecnica delle Marche, Ancona, Italy):

“2-AG-mediated control of GABAergic plasticity in physiological and pathological condition”

S13.2 Matthew Hill (Hotchkiss Brain Institute, University of Calgary, Canada):

“Endocannabinoid signaling governs stress induced activation and termination of neural activity within corticotropin releasing hormone neurons in the paraventricular nucleus of the hypothalamus”

S13.3 Stephanie Borgland (University of Calgary, Canada):

“Sex differences in effects perinatal cannabis exposure on metabolism and emotional behaviour in adult offspring”

S13.4 Ryan McLaughlin (Washington State University, Pullman, WA, USA):

“Using rodent models to identify behavioral and biological predictors of problematic cannabis use”

### S14 “Interplay of estrogens, antidepressants and behavior: classical and rapid effects” (Carthage III room)

#### CHAIR: Nikolaos Kokras (GR)

S14.1 Polymnia Georgiou (University of Wisconsin Milwaukee, Milwaukee, WI, USA):

“Estrogen Receptor  $\beta$  Modulates Depressive phenotypes via an Amygdala-Nucleus Accumbens Pathway”

S14.2 Elena Choleris (University of Guelph, Ontario, Canada):

“Hormone regulation of brain circuits of social cognition in male and female mice”

S14.3 Nikos Kokras (National and Kapodistrian University of Athens, Greece):

“How to integrate sex in preclinical research of antidepressants: the role of estrogens”

S14.4 Panos Zanos (University of Cyprus, Nicosia, Cyprus):

“Mechanism of action of rapid acting antidepressants”

S14.5 Charis Brakatselos (University of Ioannina, Greece):

“Targeting affective disorders: synergies of cannabidiol and antidepressants”

### S15 “Brain extracellular matrix: organization, remodelling, and functions in health and disease” (Majles room)

#### CHAIRS: Tommaso Pizzorusso (IT); Alexander Dityatev (DE)

S15.1 Tommaso Pizzorusso (Institute of Neuroscience, CNR, Pisa, Italy):

“An Atlas of Perineuronal Net Distribution and Colocalization with Parvalbumin in the Adult Mouse Brain”

S15.2 Alexander Dityatev (German Center for Neurodegenerative Diseases (DZNE), Magdeburg, Germany):

“Neuromodulatory and neuroinflammatory mechanisms of ECM remodelling”

S15.3 Juan Nacher (University of Valencia, Spanish Research Network on Mental Health (CIBERSAM), Spain):

“Perineuronal nets as emerging targets for the treatment of neuropsychiatric disorders”

S15.4 Laure Verret (Toulouse University and Research Center on Animal Cognition (CRCA-CBI), France):

“Experience-dependent perineuronal net remodelling and memory in AD mice”

15.20-17.10

17:10-17:30

## COFFEE BREAK/POSTERS

17:30-18:30

### KEYNOTE LECTURE: RAJITA SINHA

*Stress, Drugs, and Relapse: How can neuroscience help us in improving addiction treatment?*

(Carthage room I)

CHAIR: Liana Fattore

18.30-19.30

## MNS GENERAL ASSEMBLY