## 14.10.2023. SATURDAY

12.00-18.00

19.00-21.00

## **REGISTRATION**



# **ELECTION COUNCIL MEMBERS (VOTE ONLINE)**

	9° Conference of the Mediterranean Islamenta Bacuty
13.30-14.20	OPENING CERIMONY
14.20-15.30	ALBA Network Event  ALBA's mission: Dubravka Svob Strac, Zagreb, Croatia  Osborne ALMEIDA, Munich, Germany  "A Bag of Thoughts on Diversity, Equity & Inclusivity"  Chair: Christina Dalla (Carthage room I)  PARALLEL SYMPOSIA
15.30-17.20	S1 "Stress and glucocorticoids: memory functions and implications for psychiatric disorders" (Carthage I room)  CHAIRS: Gina Lorena Quirarte (MX); Giulia Federica Mancini (IT)  S1.1 Giulia Federica Mancini (Sapienza University of Rome, IRCCS Santa Lucia Foundation, Rome, Italy): "Early-life stressful experiences in the susceptibility/resilience for psychiatric disorders development later in life"  S1.2 Gina Lorena Quirarte (Instituto de Neurobiología Queretaro, Universidad Nacional Autónoma de México, México): "Glucocorticoids-induced effects on memory functions of the striatum"  S1.3 Carrie Cuttler (Washington State University, Pullman, WA, USA): "A translational examination of the effects of cannabis use on diurnal cortisol rhythms"  S1.4 Patrizia Campolongo (Sapienza University of Rome, IRCCS Santa Lucia Foundation, Rome, Italy): "Arousal and stress effects on cannabinoid modulation of aversive memory: Insights into Post-Traumatic Stress Disorder Susceptibility"  S1.5 Tania Jovanovic (Wayne State University. Detroit. MI. USA): "Fear Conditioning and Extinction in Children with Trauma: Associations with Brain and S2 "Parkinson's disease as a conundrum: specific synucleinopathy or circuitry disease?" (Carthage II room)  CHAIRS: Alessandro Stefani (IT); Salvatore Galati (CH)  S2.1 Matteo Conti (University of Rome Tor Vergata, Rome, Italy): "Functional connectivity in PD patients"  S2.2 Marta Sciascia (Neurocenter of Southern Switzerland, Lugano, Switzerland): "The Impact of sleep mediated downscaling process on theta wake activity in Parkinson's disease"  S2.3 Alain Kaelin (Università della Svizzera Italiana, Lugano & Dept. Neurology, University of Bern, Switzerland): "Update on "peripheral" biomarkers in PD" S2.4 Di Maio Roberto (University of Pittsburgh, USA): "Exploring oxidative signaling in Parkinson's disease: uncovering complex pathways and potential therapeutic avenues"
	S3 "Senescence: Friend or foe for neurodevelopment, cancer and neurodegeneration" (Carthage III room)  CHAIRS: Isabel Varela-Nieto (ES); Manuel Collado (ES)  S3.1 José Marco-Contelles (Laboratory of Medicinal Chemistry (Institute of General Organic Chemistry, CSIC) -Madrid Spain): "Contilisant, a small molecule designed for Alzheimer's disease therapy"  S3.2 Dubravka Svob Strac (Department for Biological Psychiatry and Psychogeriatrics, University Psychiatric Hospital Vrapce, 10090 Zagreb, Croatia): "Potential protective role of dhea(s) in cellular and animal models and subjects with dementia"  S3.3 Isabel Varela-Nieto (Institute for Biomedical Research Alberto Sols, CSIC-UAM & CIBERER): "Cellular senescence from early inner ear development to age-associated hearing diseases"  S3.4 Manuel Collado (Health Research Institute of Santiago de Compostela, IDIS): "Time flies: Cellular senescence in aging CNS of Drosophila melanogaster"
17.20-17.40	COFFEE BREAK/POSTERS
17.40-18.40	KEYNOTE LECTURE: AMADI IHUNWO  Neurogenesis in avian species: a comparative approach  CHAIR: Giuseppe Di Giovanni  (Carthage room I)

**WELCOME COCKTAIL** 

	15.10.2023. SUNDAY		
8:00- 18:00	REGISTRATION ELECTION COUNCIL MEMBERS (VOTE ONLINE)		
	PARALLEL SYMPOSIA		
9:00- 10:50	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 S-H12A 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 Mineasota Medical School, Minneapolis, MN, USA): "β-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 S-H128 antagonist-S-H14 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): "Cackning neuron-astrocyce dee France, Paris, France): "A neuroglial circuit fo		
	S7 "New insights in Parkinson's disease and other motor disorders" (Majles room)  CHAIRS: Leonidas Stefanis (GR), Rosario Moratalla (ES)  57.1 Aurora Zilli (Sapienza University of Rome, Italy):  "Antibiotic-induced leaky gut syndrome promotes parkinsonism in mice: protective effects of rifaximin"  57.2 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"  57.3 Rosario Moratalla (Cajal Institute, Spain):  "The origin of comorbid anxiety and depression in Parkinson's disease"  57.4 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** Sabrine Bilel (University of Ferrara, Italy):

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

**\$8.4** 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"

\$9.2 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"

11:10-13:00 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)

**\$10.1** Giulia Salamanca (University of Bologna, Italy):

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

**\$10.2** Francesco Papaleo (Italian Institute of Technology, Genoa, Italy):

"Cortico-Cortical Transfer of Socially Derived Information Gates Emotion Discrimination"

\$10.3 Julia Sliwa (Sorbonne University, Institut du Cerveau, ICM, Inserm, CNRS, Paris, France): "Comparing human and monkey neural circuits for processing social scenes"

\$10.4 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)

\$11.1 Wenjing Sun (The Ohio State University, Columbus, OH, USA):

"New insights into activity-dependent myelination"

511.2 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"

\$11.4 Valerio Magnaghi (University of Milan, Italy):

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

#### 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) &

**14:00-15:20** Marc Landry (University of Bordeaux, CNRS Bordeaux, France):

"Do we need a legal framework for neuromarketing?"

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





## PARALLEL SYMPOSIA S12 "Non-neuronal mechanisms of motivated behavior" (Carthage I room) CHAIR: Debra Bangasser (USA) **\$12.1** Debra Bangasser (Georgia State University, Atlanta, GA, USA): "Early resource scarcity causes lasting effects on cognition and non-neuronal cortical cells" \$12.2 Pavel Ortinski (University of Kentucky, Lexington, KY, USA): "Cocaine self-administration increases voltage-gated signaling in accumbens astrocytes" \$12.3 Jared Young (University of California, San Diego, CA, USA): "Impact of HIV on motivation and risk-taking: Activated microglia as a potential treatment target" \$12.4 Michael Scofield (University of South Carolina, Columbia, SC, USA): "Ca2+ Activity Profiles of Cortical Astrocytes During Conditioned Reward Seeking" **\$12.5** Jill Turner (University of Kentucky, Lexington, KY, USA): "Glia mechanisms of drug withdrawal" S13 "Diverse Neurobiological Actions of Cannabinoids in the Brain" (Carthage II room) CHAIRS: Matthew Hill (CA); Roberto Colangeli (IT) \$13.1 Roberto Colangeli (Università Politecnica delle Marche, Ancona, Italy): "2-AG-mediated control of GABAergic plasticity in physiological and pathological condition" \$13.2 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" **\$13.3** Stephanie Borgland (University of Calgary, Canada): 15.20-17.10 "Sex differences in effects perinatal cannabis exposure on metabolism and emotional behaviour in adult offspring" \$13.4 Ryan McLaughlin (Washington State University, Pullmann, 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) **\$14.1** Polymnia Georgiou (University of Wisconsin Milwaukee, Milwaukee, WI, USA): "Estrogen Receptor β Modulates Depressive phenotypes via an Amygdala-Nucleus Accumbens Pathway" \$14.2 Elena Choleris (University of Guelph, Ontario, Canada): "Hormone regulation of brain circuits of social cognition in male and female mice" **\$14.3** Nikos Kokras (National and Kapodistrian University of Athens, Greece): "How to integrate sex in preclinical research of antidepressants: the role of estrogens" **\$14.4** Panos Zanos (University of Cyprus, Nicosia, Cyprus): "Mechanism of action of rapid acting antidepressants" **\$14.5** 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) \$15.1 Tommaso Pizzorusso (Institute of Neuroscience, CNR, Pisa, Italy): "An Atlas of Perineuronal Net Distribution and Colocalization with Parvalbumin in the Adult Mouse Brain" \$15.2 Alexander Dityatev (German Center for Neurodegenerative Diseases (DZNE), Magdeburg, Germany): "Neuromodulatory and neuroinflammatory mechanisms of ECM remodelling" \$15.3 Juan Nacher (University of Valencia, Spanish Research Network on Mental Health (CIBERSAM), Spain): "Perineuronal nets as emerging targets for the treatment of neuropsychiatric disorders" \$15.4 Laure Verret (Toulouse University and Research Center on Animal Cognition (CRCA-CBI), France): "Experience-dependent perineuronal net remodelling and memory in AD mice" 17:10-17:30 **COFFEE BREAK/POSTERS KEYNOTE LECTURE: RAJITA SINHA** Stress, Drugs, and Relapse: How can neuroscience help us in improving addiction 17:30-18:30 treatment? **CHAIR: Liana Fattore** (Carthage room I) 18.30-19.30 MNS GENERAL ASSEMBLY

	16.10.2023. MONDAY		
8:00-18:00	REGISTRATION		
	PARALLEL SYMPOSIA		
	S16 "The intertwining of inflammatory pathways in the central nervous system: physiological versus pathological		
	implications" (Carthage I room)		
	CHAIRS: Amira Zaky (EG); Youssef Anouar (FR)		
	<b>16.1</b> Youssef Anouar (INSERM, University of Rouen Normandy, France): "Role of a selenoprotein in neuroprotection: application to Parkinson's disease after intranasal"		
	<b>16.2</b> Nermeen Z. Abuelezz (Misr University for Science and Technology Giza, Egypt):		
	"MicroRNAs as Potential Orchestrators in Alzheimer's related inflammatory Pathology: An experience from Egypt"		
	16.3 Marc Landry (University of Bordeaux; IMN, CNRS, France):		
	"Analgesic effects of the relaxin family peptides in inflammatory pain"  16.4 Amira Zaky (Alexandria University, Alexandria, Egypt):		
	"Implication of the pleiotropic APE1/Ref-1 Redox activity in pain sensitization mechanism"		
	<b>16.5</b> Elena Lucarini (University of Florence, Italy):		
	"Efficacy and pharmacodynamic profile of Brassicaceae constituents in the management of chronic pain"		
	S17 "From neuronal plasticity to glia protection: mapping the path of resilience and vulnerability to stress" (Carthage		
	room) CHAIRS: Marta Valenza (IT); Carla Nasca (USA)		
	\$17.1 Barbara di Benedetto (University of Regensburg Regensburg, Germany):		
	"Molecular and morphological signatures of astroglial responses to social and emotional dysfunctions"		
	<b>S17.2</b> Benedetta Bigio (New York University School of Medicine, New York, NY, USA): "Computational approaches and exosomes to identify		
	modifiable targets for stress-related disorders" <b>\$17.3</b> Roberta Facchinetti (Sapienza University of Rome, Italy):		
	"Molecular changes of glia and neurons in the maladaptive response to acute stress are prevented by a single administration of ketamine in a		
	rodent model of PTSD"		
:00-10:50	\$17.4 Laura Musazzi (University of Milano Bicocca, Milan, Italy):		
	"Mechanisms of resilience and vulnerability to chronic mild stress in rats: a role for inflammation?"  S17.5 Carla Nasca (New York University School of Medicine, New York, NY, USA):		
	"Epigenetic mechanisms of neuroplasticity to stress: emerging role of mitochondria"		
	S18 "New Perspectives in Mechanisms of Neurodegeneration" (Carthage III room)		
	CHAIR: Alexia Polissidis (USA)		
	\$18.1 Aaron Gitler (Stanford University, CA USA): "Two New ALS Targets (and one New Drug)"  \$18.2 Hills Lachurd (Fools Polytochnique Fédérale de Laurenne, Switzerland): "Unrevelling the Complex Pole of Protein Aggregation in Parkinson's		
	<b>\$18.2</b> Hilal Lashuel (Ecole Polytechnique Fédérale de Lausanne, Switzerland): "Unraveling the Complex Role of Protein Aggregation in Parkinson's Disease; From mechanisms to diagnostics and therapeutic strategies"		
	\$18.3 Siham Boumhaouad (Mohammed V University of Rabat, Rabat, Morocco): "The Impact of Melatonin on Diurnal Variation of Extracellular		
	Dopamine in CBA/CaJ and C57BL/6 Mice: A Comparative Study"		
	<b>S18.4</b> Harry Alexopoulos (University of Athens, Greece): "Drosophila Melanogaster As A Model System For Drug Discovery In Neurodegenerative Disorders"		
	<b>S18.5</b> Alexia Polissidis (Deree- American College Of Greece) Alpha-synuclein-induced stress sensitivity renders the Parkinson's disease brain		
	susceptible to neurodegeneration		
	S19 "New insights into activated kinases, multiple sclerosis and receptors mechanisms" (Majles room) CHAIR: Lamia Bouslama-Oueghlani (FR)		
	S19.1 Lamia Bouslama-Oueghlani (Sorbonne University, Paris, France):		
	"Pak1 inactivation triggers myelin formation through actin disassembly in oligodendrocytes"		
	<b>S19.2</b> Meriam Belghith (Institut Pasteur de Tunis, Tunisia):		
	"The fine tuning of infiltrated t cells in multiple sclerosis"  S10.3 Erika Biotár (University of Pács, Pács, Hungary):		
	<b>\$19.3</b> Erika Pintér (University of Pécs, Pécs, Hungary): "Determination of the binding sites of organic polysulfides on human trpa1 by mutant variants of the receptor"		
	<b>\$19.4</b> Rafika Ben Laamari (Institut Pasteur de Tunis, Tunisia):		
	"Study of the Correlation between Herpesvirus Infection and T CD8+ Effector Cells in Patients with Multiple Sclerosis and Neuro-Behçet's Disease"		
10:50-11:10	COFFEE BREAK/POSTERS		
	PARALLEL SYMPOSIA		

S20 "Novel approaches in preclinical neuroscience" (Carthage I room) CHAIR: Christina Dalla (GR), Olfa Masmoudi-Kouki (TN) \$20.1 Christina Dalla (National and Kapodistrian University of Athens, Greece): "Sex as a biological variable in preclinical neuropsychopharmacology" **\$20.2** Panagiotis Politis (Biomedical Research Foundation of the Academy of Athens, Greece): "Gene regulation networks in nervous system cancers: identification of novel pharmacological targets" \$20.3 Elias Pavlopoulos (Velocigene Regeneron Pharmaceuticals, New York, NY, USA): "Human in vitro systems for CNS disease modelling, drug discovery, and drug development" \$20.4 Yosra Hamdi (University of Tunis El Manar, Tunis, Tunisia): "Cytoprotective and Neurotrophic Effects of neuropeptide ODN and PACAP in in vitro and in vivo Models of Neurodegenerative Diseases" S20.5 Rafael Madonado (University Pompeu Fabra, Barcelona, Spain): "Involvement of gut microbiota and epigenetic factors in food addiction" S21 "Fighting neurological diseases from the intestine: impact of enteric microbiota, immune and nervous system on the gut-brain axis" (Carthage II room) CHAIRS: Luisa Seguella (IT), Lorenzo Di Cesare Mannelli (IT) S21.1 Matteo Fornai (University of Pisa, Italy): "Intestinal epithelial barrier at the crossroads between the microbiota-gut-brain axis and neurodegenerative disorders." S21.2 Giuseppina D'Alessandro (Sapienza University of Rome, Italy): "Gut microbiota alterations affect glioma growth and innate immune cells." **S21.3** Malvyne Derkinderen (UMR Inserm, Faculté de Médecine, Nantes, France): "Can probiotics modulate gut inflammation and induce gut-brain axis remodelling?" **S21.4** Aitak Farzi (Otto Loewi Research Center, Medical University of Graz, Austria): "Gut-brain communication in bipolar disorder." 11:10-13:00 **S21.5** Jacques Gonzales (Michigan State University, East Lansing, USA): "Early life adversity disrupts intestinal function by remodelling the enteric nervous system." S22 "The role of nitric oxide signalling in brain pathologies. Therapeutic implications and their limit. (Carthage III room) CHAIR: Joanna M. Wierońska (PL) S22.1 Vicente Felipo (Centro de Investigación Príncipe Felipe, Valencia, Spain): "Differential role of nitric oxide signalling in the deleterious effects of acute and chronic hyperammonemia" **\$22.2** Nikolaos Pitsikas (University of Thessaly, Volos, Greece): "Nitric oxide (NO) donors. Potential candidates for the treatment of anxiety disorders?" **S22.3** Joanna M Wierońska (Maj Institute of Pharmacology Polish Academy of Sciences, Poland): "The role of nitric oxide dependent pathways in the precognitive activity of metabotropic glutamate receptors ligands" **S22.4** Fella Tounsi (Mouloud Mammeri University of Tizi Ouzou, Algeria): "The role of nitric oxide signalling in brain pathologies. Therapeutic implications and their limits." S22.5 Paulina Bastian (Medical University of Gdansk, Poland): "2-methoxyestradiol – mediated control of nNOS and Heat Shock Proteins affects DNA in glioblastoma cells" S23 "Novel insights into alpha-synuclein pathology and toxicity in neurodegenerative diseases" (Majles room) CHAIR: Arianna Bellucci (IT) S23.1 Luigi Bubacco (University of Padua, Italy): "Dopamine metabolites initiate αSynuclein-mediated impaired proteostasis and degeneration in neuronal projections" **S23.2** Leonidas Stefanis (University of Athens Medical School, Athens 11527, Greece): "Alpha-synuclein interplay with protein degradation systems" **S23.3** Sarah-Anna Hescham (Maastricht University Medical Center, The Netherlands): "Magnetothermal nanoparticle technology alleviates parkinsonian-like symptoms in mice." S23.4 Arianna Bellucci (University of Brescia, Italy): "Synaptic alpha-synuclein microaggregates in synucleinopathies: engine of neurodegeneration and key therapeutic targets" 13:00-14:00 LUNCH PARALLEL SYMPOSIA S24 "Sex differences in translational mechanisms of fear-based disorders" (Carthage I room) CHAIR: Raül Andero Galí (ES) 524.1 Joanna Dabrowska (Rosalind Franklin University of Medicine and Science, Chicago, IL, USA): "The integration of interoceptive signals and defensive behaviors via oxytocin receptor-expressing neurons in the bed nucleus of the stria **S24.2** Arnau Ramos Prats (Medical University of Innsbruck, Austria): "Sex differences in mglu5 receptor-mediated control of negative valence in mice" 524.3 Hanna Hörnberg (Max Delbrück Center for Molecular Medicine, Berlin, Germany): "Sex differences in translational mechanisms of fear-based **S24.4** Raül Andero Galí (Autonomous University of Barcelona, Spain): "Sex differences in neural mechanisms of the NK3 receptor modulating fear"

# S25 "Non-neuronal cells as guardians of CNS homeostasis: relevance in brain development and diseases" (Carthage II

#### CHAIRS: Mariagrazia Grilli (IT); Roberta Facchinetti (IT)

\$25.1 Marta Valenza (Sapienza University of Rome, Italy):

"The role of astrocytes in mediating oligodendrocyte maturation and function: evidence with co-ultramicronized palmitoylethanolamide/luteolin in models of beta-amyloid toxicity"

S25.2 Rosa Chiara Paolicelli (University of Lausanne, Switzerland):

"The Alzheimer's disease risk gene Inpp5d modulates synaptic pruning by microglia in the developing hippocampus"

**S25.3** Mariagrazia Grilli (University of Piemonte Orientale, Novara, Italy):

"Multifaceted non-neuronal dysfunction as a novel pharmacological target in neurodevelopmental and neuropsychiatric disorders"

S25.4 Neibla Priego (Spanish National Cancer Research Centre (CNIO), Madrid, Spain):

"TIMP1 mediates astrocyte-dependent local immunosuppression in brain metastasis"

## S26 "Dissecting the complexity of neurodevelopmental disorders: from pathophysiology to novel therapeutic approaches" (Carthage III room)

#### 14:00-15:50

#### CHAIRS: Antonia Manduca (IT) and Anna Maria Tartaglione (IT)

26.1 Marco Segatto (University of Molise, Italy):

"Disruption of cholesterol homeostasis in Rett syndrome: a new role for BET proteins"

S26.2 Elena Martín-García (Universitat Pompeu Fabra, Barcelona, Spain):

"THC exposure during adolescence increases impulsivity-like behavior in adulthood in a WIN 55,212-2 self-administration mouse model"

**S26.3** Tibor Stark (Masaryk University, Brno, Czech Republic):

"Role of the endocannabinoid system in the pathophysiology and treatment of schizophrenia: the emerging potential of preventive approach"

S26.4 Anna Maria Tartaglione (Italian National Institute of Health, ISS, Rome, Italy):

"Exploring the role of endogenous retroviruses in Autism Spectrum Disorder: evidence from preclinical models"

## S27 "Therapeutic Use of Cannabinoids in Neurodegenerative Disorders" (Majles room)

CHAIRS: Alessia Ligresti (IT); Eva De Lago (ES)

**S27.1** Alessia Ligresti (National Research Council of Italy (ICB-CNR, Italy):

"Targeting cannabinoid receptor 2 in neurodegenerative diseases: recent efforts from a medicinal chemistry perspective"

**S27.2** Julian Romero (Universidad Francisco de Vitoria, Madrid, Spain):

"Cannabinoid modulation of microglial function in the context of neuroinflammation"

**S27.3** Eva De Lago (Universidad Complutense de Madrid, Spain):

"Preclinical development of cannabinoid-based therapies in pathologies related to TDP-43 dysregulation: Amyotrophic lateral sclerosis and frontotemporal dementia"

**\$27.4** Mario Van Der Stelt (Leiden University, The Netherlands):

"Controlling and Visualizing Lipid Signaling in the Brain"

## S28 "Chemical and Molecular Tools to Understand the Brain in Health and Disease" (Carthage VII) CHAIRS: Ismail Ahmed (USA); Hilal Lashuel (CH)

S28.1 Ismail Ahmed (New York University School of Medicine, NY, USA):

"Optopharmacological tools for spatiotemporal control of neurohormone signaling and social behavior"

\$28.2 Eleonora Palma (Sapienza University of Rome):

"The imbalance between pro-epileptogenic and protective cytokines in human epilepsies"

S28.3 Leena Ali Ibrahim (Harvard Medical School, MA, USA):

"Developmental dynamics of bottom-up and top-down input integration onto L1 interneurons in the sensory cortex"

S28.4 Ines El Bini Dhouib (Pasteur Institute of Tunisia, Tunisia)

"Insights into Parkinson's with Potassium Channels at the Forefront"

S28.5 Hilal Lashuel (Swiss Federal Institute of Technology Lausanne, Switzerland):

Post-translational Modifications in Parkinson's disease and Synucleinopathies: From mechanisms to novel targets and therapeutic opportunities

## 15:50-16:50

## **KEYNOTE LECTURE: TRACEY SHORS**

## Everyday trauma – and how not to ruminate on it so much

**CHAIR: Christina Dalla** 

(Carthage room I)

VISIT to Sidi Bou Said (18.00)





\*\* frontiersALA DINNER (20.00-23.00)+A1:B27

	17.10.2023. TUESDAY		
8:00-18:00	REGISTRATION		
9:00-10:50	PARALLEL SYMPOSIA		
	S29 "Clinical, behavioral and neurodevelopmental effects of stress life span: can we identify biomarkers of vulnerability?" (Carthage I room)		
	CHAIR: Annamaria Cattaneo (IT)  S29.1 Annamaria Cattaneo (University of Milan, Italy):  "Inflammatory biomarkers for an early screening of vulnerability and for a personalized intervention"  S29.2 Valentina Zonca (King's College London, UK):  "Impairment of social behavior is associated with a different transcriptomic profile of the Habenula in vulnerable and resilient rats exposed to prenatal		
	stress"  S29.3 Hannah Juncker (Amsterdam University Medical Center, The Netherlands):  "From maternal psychopathology to child neurodevelopment: the role of early-life nutrition, mechanisms and promising targets for intervention"  S29.4 Claudio D'Addario (University of Teramo, Italy):  "Impact of stress on mental health: epigenetic biomarkers"		
	S30 "Precipitants of brain (mal)plasticity and pathology in the new era of precision medicine" (Carthage II room) CHAIR: Ioannis Sotiropoulos (GR) S30.1 Farida Sohrabji (Texas A&M University School of Medicine, TX, USA): "The expected and the unexpected: neuroprotective effects of estrogens for stroke diverge dependent on reproductive age" S30.2 Ioannis Sotiropoulos (Institute of Biosciences & Applications, RCSR Demokritos, Greece):		
	"The stressed brain: a gate along the path from depression to Alzheimer's disease"  \$30.3 Liisa Galea (Centre for Addiction and Mental Health, Toronto, ON, Canada):  "Sex differences in Negative Cognitive Bias"  \$30.4 Iva D. Tzvetanova (European University Cyprus, Cyprus):  "Oligodendroglial Support of Axonal Function in Health and Disease"		
	S31 "Preclinical study of the mechanism of action of psychedelics" (Carthage III room)  CHAIRS: Nasser Haddjeri (FR), Philippe De Deurwaerdère (FR)  S31.1 Bruno P Guiard (Centre de Recherches sur la Cognition Animale (CRCA), Toulouse, France): "Influence of the context of administration in the psychopharmacological profile of the psychedelic 5-MeO-DMT"  S31.2 Amel Bouloufa (University of Lyon, France): "The prototypical hallucinogen LSD produces rapid antidepressant effects via 5-HT2B receptor activation"  S31.3 Jasmine J Butler (University La Charité, Berlin, Germany): "The 5-HT2A receptor agonist TCB-2 disrupts the correlative links between numerous classical neurotransmitters in the mouse brain"  S31.4 Danilo De Gregorio (San Raffaele University, Milan, Italy): "Role of LSD in anxiety and social behavior"		
	S32 "Neurobiology of alcohol and opiates use disorders" (Majles room)  CHAIR: Sami Ben Hamida (FR)  S32.1 Mickael Naassila (Université de Picardie Jules Verne, Amiens, France):  "Effectiveness of psychedelics on alcohol use disorders"  S32.2 Eric Augier (Center for Social and Affective Neuroscience, CSAN, Sweden):  "the GABA transporter GAT-3 and GABAergic transmission in the CeA: a common role in alcohol and drug use disorder?"  S32.3 Emmanuel Darq (Interdisciplinary Cluster for Applied Genoproteomics (GIGA-R), Belgium):  "Unveiling the consequences of adolescent alcohol exposure on prefrontal cortex maturation"  S32.4 Sami Ben Hamida (Université de Picardie Jules Verne, Amiens, France):  "mPFC and alcohol related-behaviors"		
10:50- 11:10	COFFEE BREAK/POSTERS		
	PARALLEL SYMPOSIA		

## S33 "EpiEpiNetwork MNS Symposium: Next steps on epilepsy research: from brain dysfunction and immunity to comorbidities" (Carthage I room) CHAIRS: Sandra H Vaz (ES); Tatiana P. Morais (MT) **S33.1** Gabriele Ruffolo (Sapienza University of Rome, Italy): "GABAergic neurotransmission: a common hallmark of neurodevelopmental impairment" \$33.2 Cristina Limatola (Sapienza University of Rome, Italy): "GABAergic modulation by immune cells and effects on memory" S33.3 Marco Ledri (Lund University Hospital, Sölvegatan, Sweden): "Early postnatal transplantation of human stem cell-derived GABAergic interneurons alters the adult epileptic phenotype of Cntnap2 knock-out mice" \$33.4 Sandra Vaz (Universidade de Lisboa, Portugal): "Cognitive comorbidities of absence seizures" **S34.5** Tatiana Morais (Malta University, Malta): "Absence Seizures Comorbidities and Their Pharmacological Modulation" S34 "Regulation of cognitive control from rodents to primates and humans" (Carthage II room) CHAIR: Radwa Khalil (DE) S34.1 Emiliano Macaluso (Université Claude Bernard Lyon 1, Bron, France): "Combining external and internal signals for attentional selection: from simple visual displays to active behavior in complex virtual environments" S34.2 Zakria Ouhaz (University of Oxford, UK): "Unravelling the contribution of the mediodorsal thalamus in reward-guided decision making: insights from rodents and primates' studies" \$34.3 Sarah Bou Sader Nehme (Holy Spirit University of Kaslik, Lebanon): "Neuroinflammatory Mechanisms of Pain Hypersensitization In A Mouse Model Of Attention-Deficit/Hyperactivity Disorder (ADHD)" 11:10-**S34.4** Ilona Kotlewska (Jagiellonian University, Kraków, Poland): 13:00 "Evidence for two sources of EEG theta-band activity during proactive action control: midfrontal and right lateral-prefr**ontal**" S34.5 Radwa Khalil (Constructor University, Bremen, Germany): "Inhibitory control and creative performance in humans" S35 "Molecular targets in alcoholism and associated neuropsychiatric disorders" (Carthage III room) CHAIR: Mohamed Kabbaj (USA) **\$35.1** Mohamed Kabbaj (Florida State University, FL, USA): "Effects of ketamine on alcohol drinking in rats" S35.2 Mickael Naassila (Université de Picardie Jules Verne, Amiens, France): "Targeting epigenetic mechanisms to treat alcohol use disorder: insights from animal models" 35.3 Stefania Maccari (Campus Cité Scientifique, CNRS, Lille, France): "Perinatal stress and alcohol drinking on sleep cycle: role of metabotropic receptors" 35.4 Nazzareno Cannella (University of Camerino, Italy): "A reverse translational approach to evaluate individual variability in treatment response in alcoholism" S36 "New insights in brain homeostasis" (Majles room) CHAIR: Thiriet Nathalie (FR) S36.1 Thiriet Nathalie (INSERM, University of Poitiers, Poitiers, France): "Acute and chronic cocaine and nicotine change the expression of genes involved in cholesterol homeostasis in the rat dorsal striatum" **S36.2** Mélodie Devère (INSERM, Normandie University, Rouen, France): "The chemogenetic activation of a novel key subpopulation of neurons, expressing 26rfa and orexins, elucidates part of the fine and complex hypothalamic regulation of glucose and energy homeostasis" \$36.3 Laila Berroug (Sultan Moulay Slimane University. Beni Mellal, Morocco): "Sex-specific neurobehavioral and biochemical effects of developmental exposure to malathion in offspring mice" \$36.4 Meriem Laaroussi (Sultan Moulay Slimane University. Beni Mellal, Morocco): "Chronic exposure to inorganic mercury affects neurobehavioral and oxidative stress in female mice" 13.00-LUNCH 14:00 Experimental Design and Reporting WORKSHOP Nathalie Percie du Sert, Esther 14:00-National Centre for the Replacempearl & Stephen Turnock (VIRTUAL) 15:20

PARALLEL SYMPOSIA

00	(Carthage I room)
00-	KEYNOTE LECTURE: DANIELE PIOMELLI  The long-term impact of cannabis use in adolescence: it's time to take a fresh look  CHAIR: Patrizia Campolongo
10- 00	COFFEE BREAK/POSTERS IN PRESENCE
	S40.2 Taoufik Ghrairi (University of Tunis El-Manar, Tunisia):  "Characterization of neurotrophic potentials of Imine Analogs of Trans-Resveratrol"  S40.3 James Olopade (University of Ibadan, Nigeria):  "Surveillance of neurotropic viruses in Nigeria: What are plans to develop novel therapies?"  S40.4 Georgios S. Kogias (Louisiana State University, New Orleans, LA, USA):  "Activation of cerebellar PCs disrupts reconsolidation of associative emotional memory"  S40.5 Latifa Dorbani-Mamine (University of Science and Technology Houari Boumediene. Bab Ezzouar, Algeria):  "Cellular and molecular aspects of neurotoxicity induced in rats and rabbits by pesticides: thiamethoxam and voliam-targo"
	S40 "New insights in neuroprotection, learning and memory mechanisms" (Majles room)  CHAIR: Aldo Donizetti (IT); James Olopade (NG)  S40.1 Aldo Donizetti (Universita' degli studi di Napoli Federico II, Naples, Italy):  "In vitro model of synaptic activity for the investigation of molecular mechanisms of synaptic plasticity and neuroprotection"
	"Lipid droplet homeostasis under stress and ageing" \$39.3 Robert Zorec (University of Ljubljana, Slovenia): "Astroglial mechanisms of neurodegeneration and viral infection" \$39.4 Natalie Rasgon (Stanford University School of Medicine, USA): "A neuroglial circuit for maternal behaviour"
	S39 "Neural Cell Metabolism in Health and Disease" (Carthage III room)  CHAIR: Natalie Rasgon (USA)  S39.1 Mark Rasenick (University of Illinois College of Medicine, Chicago, IL, USA)  "A biosignature for depression and antidepressant response: Roles of G proteins, lipid rafts, and the cytoskeleton"  S39.2 Nina Vardjan (University of Ljubljana, Slovenia):
15.20- 17.10	\$38.2 Oumaima Essaidi (Sultan Moulay Slimane University, Beni Mellal, Morocco):  "Prenatal restraint stress affects maternal behavior, early neurobehavioral response and oxidative stress in mice pups"  \$38.3 Roberta Haddad-Tovolli (Institut d'Investigacions Biomèdiques August Pi i Sunyer, IDIBAPS), Barcelona, Spain):  "Neuronal circuits underlying maternal dietary habits and the programming of offspring health"  \$38.4 Stefania Maccari (University of Lille, France):  "The intergenerational inheritance of early life stress is transmitted by maternal oxytocin"
	S38 "Maternal environment during perinatal life affects offspring brain development and life-long brain functions" (Carthage II room) CHAIR: Marialetizia Rastelli (FR); Sebastien Bouret (FR) S38.1 Laura Dearden (University of Cambridge, UK): "Early life programming of obesity via a hypothalamic miRNA involved in fatty acid sensing"
	"Potential role of the hydroxyl carboxylic acid receptor type 2 (HCAR2) in microglia pathophysiology and pain implications"  \$37.3 Cristiano Bombardi (University of Bologna, Bologna, Italy):  "5-HT2CR endocannabinoids interaction in absence epilepsy"  \$37.4 Rosmara Infantino (University of Campania Luigi Vanvitelli, Naples, Italy):  "Old skulls tie new tricks: the therapeutic potential of the novel cannabimimetic substance Δ9-Tetrahydrocannabiphorol in the Central Post-Stroke P  \$37.5 Alon Friedman (Dalhousie University, Halifax, Canada):  "Neuro-glia-vascular interactions in health and disease: Time for translation"
	CHAIR: Katarzyna Starowicz (PL); Livio Luongo (IT)  \$37.1 Katarzyna Starowicz (Maj Institute of Pharmacology Polish Academy of Sciences, Kraków, Poland):  "Therapeutic potential of endocannabinoids for the treatment of chronic pain and associated cognitive impairment"  \$37.2 Livio Luongo (University of Campania Luigi Vanvitelli, Naples, Italy):

	18.10.2023. WEDNESDAY		
9.00-10:00	KEYNOTE LECTURE: RIADH GOUIDER  How Homozigosity impact our clinical Neurology practice (VIRTUAL)  CHAIR: Olfa Masmoudi  (Carthage I room)		
	PARALLEL SYMPOSIA		
10:00-11.50	S41 "Preclinical and clinical novel insights on the mechanisms underlying human obesity and eating disorders" (Carthage I room)  CHAIR: Mariangela Pucci (SW), Paola Fadda (IT)  S41.1 Mariangela Pucci (Karolinska Institute, Huddinge, Sweden): "Preclinical and clinical evidence of dopaminergic system regulation in Binge Eating"  S41.2 Maria Scherma (University of Cagliari, Italy): "Neurobiological and molecular mechanisms implicated in the development of anorexia nervosa: focus on the experimental model of Activity-Based-Anorexia (ABA)"  S41.3 Marianna Rania (University Magna Graecia of Catanzaro, Catanzaro, Italy): "Feeding the gut, feeding the host: insights on the interplay between gut microbiome and eating behaviours in eating disorders and obesity"  S41.4 Florijan Jalsevac (Universitat Rovira i Virgili, Tarragona, Spain): "Profile of Bitter Taste Receptors in the Jejunum of Morbid Obese Patients that undergo Bariatric Surgery"  S41.5 Bourdy Romain (CNRS/Université de Strasbourg, France): "Endocannabinoid system regulations in the reward system in obesity and binge eating disorder"  S42 "Sensory alterations in autism: From preclinical models to human studies" (Carthage II room)  CHAIR: Ourania Semelidou (FR)  S42.1 Ryan Stevenson (Western University, London, Ontario, Canada): "Sensory phenotypes in Autism: From neural networks to clinical profiles"  S42.2 Aline Lefebvre (Institut Pasteur, UMR 3571 CNRS, University Paris Diderot, Paris, France): "Tackling hypo and hyper sensory processing heterogeneity in Autism: from clinical stratification to genetic pathways"  S42.3 Benjamin D. Auerbach (University of Illinois, Urbana, Illinois, USA): "Auditory Hypersensitivity and Processing Deficits in a Rat Model of Fragile X Syndrome"  S42.4 Ourania Semelidou (Inserm, Bordeaux, France): "Altered detection of tactile stimuli in a mouse model of autism during a translational task"  S43 "Understanding the role of neuronal integrative processing through oligomeric receptor complexes in health and brain disorders" (Carthage		
	CHAIR: Dasiel O. Borroto-Escuela (SW)  \$43.1 Fang Liu (University of Toronto, Canada):  "Dual effects of α7nAChR-NR2A receptor complex on nicotine addiction and major depression"  \$43.2 Ramon Fores-Pons (University of Malaga, Malaga, Spain):  "The mGlu5 receptor protomer-mediated dopamine D2 receptor trans-inhibition is dependent on the adenosine A2A receptor protomer: implications for Parkinson's disease"  \$43.3 Dasiel O. Borroto-Escuela (Karolinska Institutet, Stockholm, Sweden):  "Dysfunctional serotonin heteroreceptor complexes as novel targets for the treatment of Major Depressive Disorders"		
11.50-12:10	COFFEE BREAK		
12:10-13:20	AWARDS & CONCLUSION Journal Neuroscience Methods, Elsevier, CNS Neuroscience and Therapeutics Wiley, The Receptors Springer/Nature Best Paper Awards Olfa Masmoudi, Taoufik Ghrairi and Giuseppe Di Giovanni (Carthage room I)		