

# **VINE SOS**

Mediterranean Neuroscience Society Conference

> 07-11 JUNE 2025 CHANIA, CRETE, GREECE





### **Scientific Program**

Saturday, June 7, 2025

Main Hall - 16:00-16:30

**Opening Ceremony** 

Main Hall - 16:30-17:30

Keynote Lecture 1

Chair: Giuseppe Di Giovanni | Magna Græcia University, Italy

#### How to make a Hippocampus

Shubha Tole | Tata Institute of Fundamental Research, Mumbai, India

### Main Hall - 17:30 - 19:00

ALBA Network-IBRO Keynote: Building resilience to sustain EDI efforts in neuroscience

Speakers:

Francesca Cirulli | Istituto Superiore Di Sanità, Italy Carmen Sandi | Epfl, Switzerland Shubha Tole | Tata Institute of Fundamental Research, Mumbai, India

### INTERNATIONAL BRAIN





### Sunday, June 8, 2025

#### Main Hall - 9:00-10:45

Symposium 01: Perinatal psychiatry meets immunology: From mechanisms to therapeutic frontiers

Chair: Annamaria Cattaneo | University of Milan/irccs, Italy

Impact of Stress in pregnancy on maternal and offspring behaviors: the key role of immune system and placenta functioning.

Annamaria Cattaneo | University of Milan/irccs, Italy

Role of maternal milk in the intergenerational transmission of maternal stress to her offspring

Aniko Korosi | University of Amsterdam, Netherlands

Differential embedding of psychological and metabolic stressors experienced during prenatal life in male and female offspring

Francesca Cirulli | Istituto Superiore Di Sanità, Italy

PUFA diet reverses prenatal THC-Induced deficits in rats

Cesare D'Amico | University of Palermo, Italy

#### Hall I - 9:00-10:45

Symposium 02: The intricate and charming cooperation between glial cells and neurons in neurodegeneration

Chair: Elena Marcello | Università Degli Studi Di Milano, Italy, Caterina Scuderi | Sapiena University of Rome, Italy

Lost Connections: the role of synapses in memory decline in Alzheimer's Disease Silvia Pelucchi | University of Milan, Italy

Oligodendrocyte lineage cells as gatekeepers of neuroinflammation

Alerie Guzmán De La Fuente | Institute For Neuroscience CSIC-UMH, Spain

Atp8a2 controls phosphatidylserine externalisation, structural integrity and survival in neurons

Daniela Mauceri | University of Marburg and Heidelberg University, Germany

The mGluR5 negative allosteric modulator CTEP reduces the aberrant activation and neurotoxicity of human-derived astrocytes differentiated from fibroblasts of ALS patients

Marco Milanese | University of Genoa, Italy

#### Hall II - 9:00-10:45

Symposium 03: Derangement in endocannabinoid trajectories during neurodevelopment: new targets, new perspectives

Chair: Carla Cannizzaro | University of Palermo, Italy

Impacts of Prenatal Cannabinoid Exposure on Psychiatric Risks: Exploring the Impacts of Dietary Omega-3 Interventions

Steven Laviolette | University of Western Ontario, Canada

Maternal exposure to THC disrupts spatial memory in the offspring via the hippocampal glucocorticoid/BDNF crosstalk.

Anna Brancato | University of Palermo, Italy

Exploring long-term effects of adolescent cannabidiol exposure

Erica Zamberletti | University of Insubria, Italy

Adolescent cannabinoid exposure as a gateway for psychopathologies: the usefulness of animal models

Alejandro Higuera-Matas | National University for Distance Learning (UNED), Spain

#### Hall III - 9:00-10:45

Symposium 04: Signalling at the neuronal membrane: role of receptor cross-talk and extracellular environment

Chair: Laurent Groc | Cnrs, France

Protein Complexes as Therapeutic Targets for the Treatment of Neuropsychiatric Diseases

Fang Liu | Centre For Addiction and Mental Health, Canada

Cannabinoid receptors regulate NMDAR activity in Alzheimer's disease.

Gemma Navarro Brugal | Universitat De Barcelona, Spain

On the Integrative Role of  $\alpha$ -Synuclein-GPCR and GPCR-GPCR Heterocomplexes in Parkinson's Disease: Lessons from the BSSG Rat Model

Dasiel Oscar Borroto Escuela | University of Malaga, Spain

Receptor organization outside synapses: should we care?

Laurent Groc | Cnrs, France

Human cerebrospinal fluid and neuronal excitability

Eric Hanse | Göteborgs Universitet, Sweden

#### Hall IV - 9:00-10:45

Symposium 05: The Peripheral Nervous System as a dynamic window to central pain mechanisms

Chairs: Otmane Bouchatta | Linköping University, Sweden, Sabatino Maione | Vanvitelli, Italy

Translational aspects of how the periphery talks to the spinal cord about pain *Anthony Dickenson | University College London, United Kingdom* 

Gut microbiome in pain regulation and neuroinflammation

Francesca Guida | University of Campania Luigi Vanvitelli, Italy

### Long-Term Neuropathy in a Mouse Model of Spared Nerve Injury: Electrophysiological and Behavioral Outcomes

Sabatino Maione | Vanvitelli, Italy

### Gain of function in human A-beta nociceptors during acute heat-induced inflammation

Otmane Bouchatta | Linköping University, Sweden

# Targeting peripheral transient receptor potential vanilloid 1 for osteoarthritis pain: innovative slow-release capsaicin hydrogel technology

Rosmara Infantino | University of Galway, Ireland

### Athina Hall - 9:00-10:45

Symposium 06: d-Serine amino acids at the heart of brain circuitries: What is going on?

Chair: Jean-Pierre Mothet | Ens Paris-Saclay, France

### Astrocyte d-serine is required for long-term depression

Antonio Rodriguez-Moreno | Universidad Pablo de Olavide, Spain

### A multi-OMICS approach in the investigation of serine metabolism

Silvia Sacchi | University of Insubria, Italy

### NMDA receptor regulation by the serine shuttle between glia and neurons

Herman Wolosker | Technion-Israel Institute of Technology, Israel

# d-Serine agonism of GluN1-GluN3 NMDA receptors regulates the activity of enteric neurons and gastrointestinal functions

Jean-Pierre Mothet | Ens Paris-Saclay, France

#### 10:45-11:15

Coffee Break & Poster Session 1

#### Main Hall - 11:15-13:00

Symposium 07: Preclinical dissection of psychedelic mechanisms of action in anxiety -and depression- like behaviors

Chair: Anna Beyeler | Inserm U1215, France

Targeting Adult Hippocampal Cytogenesis: Psilocybin's Role in Depression Therapy Luisa Pinto | ICVS, University of Minho, Portugal

"2B or not 2B" that is the question of its involvement in LSD's antidepressant action Amel Bouloufa | Inserm, France

# Not all serotonergic psychedelics are alike - they induce distinct patterns of altered metabolic activity and connectivity

Frederik Gudmundsen | University of Southern Denmark, Denmark

# Function of neural circuits of the insular cortex in the impact of a single dose of psychedelics on anxiety

Anna Beyeler | Inserm U1215, France

#### Hall I - 11:15-13:00

Symposium 08: Neurobiological mechanisms of excessive consumption of natural and drug rewards

Chairs: Yonatan Kupchik | The Hebrew University, Israel, Rami Yaka | Hebrew University Of Israel. Israel

# Recruitment of inhibitory neuronal pathways regulating dopaminergic activity for the control of cocaine reward and drug intake.

Rami Yaka | Hebrew University of Israel, Israel

### Mitochondrial dysfunction: a consequence of cocaine exposure.

Claire Thornton | Royal Veterinary College, United Kingdom

### Neural représentation of rewards and addictive substances in the nucleus accumbens.

Carina Soares-Cunha | Icvs, University of Minho, Portugal

# Ventral pallidal inhibition of the lateral hypothalamus is impaired in diet-induced obesity.

Yonatan Kupchik | The Hebrew University, Israel

#### Hall II - 11:15-13:00

Symposium 09: Neuroendocrine mechanisms and neuromodulation in non-traditional model species: monkeys, songbirds, zebrafish, and dromedary camels

Chairs: Lane Krejcova | Federal University of Pará, Brazil, Luke Remage Healey | University of Massachusetts, United States of America

### Exploring doxycycline's neuroprotective potential in a non-human primate model of Parkinsonism

Lane Krejcova | Federal University of Pará, Brazil

### Neurosteroidogenesis and neuroplasticity in zebrafish

Thierry Charlier | University of Rennes, France

### **Learning, cell-types, hormones, and modulation in the songbird auditory system** *Luke Remage Healey | University of Massachusetts, United States of America*

#### Hall III - 11:15-13:00

Symposium 10: Sex as a Biological Variable (SABV) in neuroscience: Addressing challenges, complexities, and overlooked factors

Chair: Ivana Jaric | University of Zurich, Switzerland

### Implementing Sex as a Biological Variable in Developmental Research

Cheryl McCormick | Brock University, Canada

# Impact of aromatase inhibition on hippocampal metabolomics in male and female young and aged rats

Nikolaos Kokras | National and Kapodistrian University of Athens, Greece

### **The 4 S's in neuroscience animal research: Species, Strain, Settings, and Sex** *Paola Palanza | Università of Parma, Italy*

### The importance of environmental and hormonal factors in implementing SABV in mouse neurobehavioral research

Ivana Jaric | University of Zurich, Switzerland

#### Hall IV - 11:15-13:00

Symposium 11: Exploring the intersection of stress, fear, and emotion regulation: molecular, neural and behavioral insights

Chair: Maria Morena | Sapienza University of Rome, Italy

Behavioral and neural predictors of extinction memory to fear, food, and alcohol cues Marissa Raskin | University of Texas at Austin, United States of America

#### The role of the medial habenula in emotional behavior.

Edgar Soria-Gomez | University of The Basque Country, Spain

Stress and fear extinction: exploring the role of amygdala-entorhinal cortex pathway Maria Morena | Sapienza University of Rome, Italy

# What makes the difference? Resilience versus vulnerability after highly stressful experiences – a longitudinal study in mouse

Beat Lutz | University Medical Center Mainz, Germany

### Athina Hall - 11:15-13:00

Symposium 12: Proteostasis-regulating mechanisms at the cellular and organismal levels Chair: Ehud Cohen | The Hebrew University, Israel

# Deciphering the nuclear roles of HSP70 and its carrier Hikeshi using C. elegans Anat Ben-Zvi | Ben-Gurion University of the Negev, Israel

# Unraveling mitochondrial impairment in human tauopathy: lessons from the nematode C. elegans

Konstantinos Palikaras | Medical School, NKUA, Greece

# Impaired sphingolipid homeostasis exacerbates tau pathology by disrupting endolysosomal integrity through endomembrane rigidification

Carmen Nussbaum-Krammer | Ludwig Maximilians University of Munich, Germany

### A nucleolar mechanism suppresses organismal proteostasis by modulating $TGF\beta/ERK$ signalling.

Ehud Cohen | The Hebrew University, Israel

# Proteostatic function of the ER-resident Selenoprotein T in neuronal and neuroendocrine systems: role in physiology and pathophysiology

Youssef Anouar | Inserm, France

13:00-14:00

Lunch Break

#### Main Hall - 14:00-15:00

Special Event 01: Navigating Stress, Gender, and Cultural diversities: Building Inclusive

Careers in Neuroscience

Chair: Patrizia Campolongo | Sapienza University of Rome, Italy

#### **Opening Remarks**

Patrizia Campolongo | Sapienza University of Rome, Italy Marco Andrea Riva | University of Milan, Italy

### Opening perspectives on gender disparities in stress research and the Mediterranean neuroscience community

Christina Dalla | National and Kapodistrian University of Athens, Greece

#### **Rethinking Stress Through Biology and Culture**

George Chrousos | University of Athens, Greece

### Promoting diversity and global collaboration in neuroscience: lessons from major international initiatives

Carmen Sandi | Epfl, Switzerland

### Gender equity and stress research: bridging science and advocacy in Europe

Francesca Cirulli | Istituto Superiore Di Sanità, Italy

### Perspectives on structural and cultural challenges for women in science in North Africa

Olfa Masmoudi | Faculty of Sciences of Tunis, University Tunis El Manar, Tunisia

# The neuroepigenetics of early adversity and intergenerational trauma: integrating stress, equity, and translational neuroscience

Ali Jawaid | Lukasiewicz Research Network- PORT Polish Center for Technology Development, Poland

### Reflections on stress, cultural identity, and navigating academic systems from North Africa to USA and Europe

Youssef Anouar | Inserm, France

#### Open Discussion with the Audience

### Hall II - 14:00-15:00

Special Event 02: From Vision to Reality: Direct real time imaging biological events in real time and augmented by machine learning analysis

Chair: Nikos Hatzakis | University of Copenhagen, Denmark

#### Main Hall - 15:00-16:45

Symposium 13: Lifetime stress and brain pathology in cognitive disorders and dementia: from target identification to novel pharmacological strategies

Chairs: Filippo Caraci | Associazione Oasi Maria Ss. Onlus, Italy, Ioannis Sotiropoulos | NCSR "Demokritos", Greece

# Identifying the molecular "footprints" of chronic stress and its biomarker potential on Alzheimer's disease brain pathology

Ioannis Sotiropoulos | NCSR "Demokritos", Greece

# From Post-Traumatic Stress Disorder to memory deficits and cognitive disorders : a role for endocannabinoid system?

Patrizia Campolongo | Sapienza University of Rome, Italy

#### Neuroinflammation and serotoninergic system in AD

Philippe De Deurwaerdere | University of Bordeaux, France

#### Depression and AD: TGF-β1 as a common pharmacological target?

Filippo Caraci | Associazione Oasi Maria Ss. Onlus, Italy

#### Hall I - 15:00-16:45

Symposium 14: Microglia and drugs of abuse: Structural, functional, and behavioral implications

Chairs: Kathryn J. Reissner | University of North Carolina at Chapel Hill, United States of America, Jill Turner | University of Kentucky, United States of America

### The roles of dorsal striatum astrocyte Ca2+ in cocaine seeking

Pavel Ortinski | University of Kentucky, United States of America

# Abstinence from cocaine self-administration triggers microglia pruning of astrocytes which mediates incubation of cocaine seeking

Kathryn J. Reissner | University of North Carolina at Chapel Hill, United States of America

# Microglial Developmental, Homeostatic and Immune functions are Regulated by PROS1

Tal Burstyn-Cohen | The Hebrew University, Israel

# Cholesterol 24-hydroxylase overexpression in the dorsal striatum reduces relapse to cocaine-seeking

Nathalie Thiriet | Inserm U1084, France

#### Hall II - 15:00-16:45

Symposium 15: Unravelling the molecular mechanisms involved in the development of neuropsychiatric disorders for better pharmacological treatments

Chairs: Sâmia Joca | Aarhus University, Denmark, Vincenzo Micale | University Of Catania, Italy

### Impact of prenatal Cannabis exposure on neurodevelopment in rodents: from behavior to molecular mechanisms

Serena Di Martino | University of Catania, Italy

# Shedding light on the role of the endocannabinoid system in schizophrenia: from preclinical to human evidence

Magdalena Białoń | Maj Institute of Pharmacology, Polish Academy of Scien Es, Poland

# Role of the histone variant macroH2A1.1 in the central nervous system: potential involvement in neurodevelopmental disorder

Irene Coppola | Istituto Superiore Di Sanità, Italy

# Exploring the involvement of the endocannabinoid system in ketamine antidepressant properties

Sâmia Joca | Aarhus University, Denmark

#### Hall III - 15:00-16:45

Symposium 16: What's new on cerebral processing of multisensory input: From self-motion perception to action

Chair: Alexandra Séverac Cauquil | Université De Toulouse, France

### Diving into the cortical basis of forward self-motion

Sarah Marchand | Cnrs/université De Toulouse, France

### Visual motion processing in the dorsal stream when area V6 is damaged

Patrizia Fattori | University of Bologna, Italy

#### Sensorimotor integration in Egomotion-related visual areas

Sabrina Pitzalis | University of Rome "Foro Italico", Italy

#### Cortical integration processes in visually-guided walking

Francesca Strappini | University of "Foro Italico", Italy

### How multisensory integration and neuroplasticity interventions can help improve the health of neurodegenerative diseases patients

Amir Amedi | Reichman University, Israel

#### Hall IV - 15:00-16:45

Symposium 17: What's new from the bench: Classical and novel ion signaling pathways in the central nervous system

Chairs: Francesco Moccia | University of Molise, Italy, Teresa Soda | University Of Catanzaro, Italy

# Cortical interneurons: novel intracellular mediators of axonal outgrowth and migration

Domna Karagogeos | University of Crete, Greece

# NMDA receptors in Autism Spectrum Disorders: A focus on the cerebellum Teresa Soda | University of Catanzaro, Italy

#### STIM-mediated signaling in cortical neurons

Joanna Gruszczynska-Biegala | Mossakowski Medical Research Institute Polish Academy of Sciences, Poland

### Intracellular Ca2+ signaling and nitric oxide production in human brain microvascular endothelium

Francesco Moccia | University of Molise, Italy

### Athina Hall - 15:00-16:45

Symposium 18: Neural Control of Eating Behavior: From Brain Circuits to Innovative Therapies for Obesity and Eating Disorders

Chair: Adele Romano | Sapienza University of Rome, Italy

#### Gut hormone agonists in the treatment of eating disorders

Thomas Lutz | University of Zurich, Switzerland

# Unlocking the Potential of Oleoylethanolamide in Obesity and Binge Eating: Targeting Central Pathways for Innovative Therapies

Silvana Gaetani | Sapienza University of Rome, Italy, Italy

### Positive Allosteric Modulators of GLP1 and 5HT2c Serotonin Receptors for obesity disorders

Fernando Rodriguez de Fonseca | IBIMA Plataforma BIONAND, Spain

### Impaired microglia-driven synaptic pruning in anorexia nervosa-resultat from stem cell models

Ida Nilsson | Karolinska Institutet, Sweden

Identifying Novel Druggable Targets to Counteract Binge-Like Eating Behavior in Rats Marta Valenza | Sapienza University of Rome, Italy

Epigenetic Reprogramming of POMC Neurons: Can Caloric Restriction Reverse Obesity-Induced DNA Methylation?

Estefania Tarifeno-Saldivia | University of Concepción, Chile

#### 16:45-17:15

Coffee Break & Poster Session 1

### Main Hall - 17:15-18:15

Kevnote Lecture 2

Chair: Christina Dalla | National and Kapodistrian University of Athens, Greece

# Sex differences in the brain at the intersection of the nervous, immune and endocrine systems

Margaret M. McCarthy | University of Maryland, School of Medicine, United States of America

Athina Hall - 18:30-19:30

Workshop: Map train your brain & Stay fit for life!

Chair: Tracey Shors | Rutgers University, United States of America

### Monday, June 9, 2025

#### Main Hall - 9:00-10:45

Symposium 19: Practical translational approaches to improve women's mental health

Chair: Debra Bangasser | Georgia State University, United States of America

Sex differences in immune function contribute to stress and mood disorders, a translational tale.

Georgia Hodes | Virginia Tech, United States of America

Resource scarcity affects postpartum defensive and threat behaviors and related circuits

Debra Bangasser | Georgia State University, United States of America

Translational findings on PACAP regulation of threat processing in PTSD and fear in females across species

Kerry Ressler | Mclean Hospital / Harvard Medical School, United States of America

From neurogenesis to mental health: How bench work inspired an intervention for women with a history of sexual trauma

Tracey Shors | Rutgers University, United States of America

#### Hall I - 9:00-10:45

Symposium 20: Myelin pathophysiology and repair mechanisms in multiple sclerosis, Alzheimer's and Parkinson's diseases

Chair: Aleksandra Rutkowska | Medical University of Gdańsk, Poland

Effects of global chronic inflammation on behavioral changes during aging Eva Jimenez | Trinity College Dublin, Ireland

Alpha-Synuclein and White Matter Adaptations in Parkinson's Disease
Sinead O'Sullivan | German Center for Neurodegenerative Diseases (DZNE), Germany

#### The role of EBI2 in T cell-mediated neuroinflammation

Florian Kurschus | Hautklinik Heidelberg, Germany

# Oxysterols as Novel Therapeutic Targets for the Management and Treatment of Multiple Sclerosis

Aleksandra Rutkowska | Medical University of Gdańsk, Poland

#### Hall II - 9:00-10:45

Symposium 21: Peripheral biomarkers and protein aggregation in the prodromal phase of neurodegeneration

Chairs: Graziella Cappelletti | Università Degli Studi Di Milano, Italy, Antonella Scorziello | Fedrico II University of Naples, Italy

# Alpha-synuclein and Tau aggregates polymorphism in distinct synucleinopathies and tauopathies

Ronald Melki | CEA - CNRS, France

### **Investigating Parkinson's disease in skin biopsies**

Milo Jarno Basellini | University of Milan, Italy

#### A role of the lysosome in the pathogenesis of alpha-Synucleinopathies.

Maria Xilouri | Biomedical Research Foundation of The Academy of Athens, Greece

### Sex Differences in Circulating Biomarkers of patients with Alzheimer's disease

Carmela Matrone | University of Naples Federico II, Italy

### Hall III - 9:00-10:45

Symposium 22: Perturbations of Serotoninergic Circuitry: From Brain Development to Adult Behavior

Chair: Nuno Dinis Alves | ICVS | University of Minho, Portugal, Joana Gonçalves | University of Coimbra, Portugal

### Role of serotonin brain circuit in the development emergence of innate fear across species

Giulia Zanni | RFMH/Columbia University, United States of America

### Development and plasticity of the serotonergic circuit

Massimo Pasqualetti | University of Pisa, Italy

### Sex-Dependent Serotonergic Modulation in Autism Spectrum Disorder: Insights from pre-clinical view

Joana Gonçalves | University of Coimbra, Portugal

#### Serotonin Contribution to Cognitive Flexibility and Emotional Behavior

Nuno Dinis Alves | ICVS | University of Minho, Portugal

#### Hall IV - 9:00-10:45

Symposium 23: Rethinking the role of the external globus pallidus in basal ganglia functions Chair: Marc Deffains | Cnrs - Bordeaux University, France

# **Contribution of the non-human primate external globus pallidus in decision-making.** *Thomas Boraud | IMN, France*

#### Entrainment and synchrony of globus pallidus neurons

Joshua Goldberg | Hebrew University of Jerusalem, Israel

### Dichotomic activity and function of the low and high frequency discharge neurons of the of the non-human primate external globus pallidus.

Shiran Katabi | Hadassah University Hospital, Israel

# Anatomical and functional connectivity of arkypallidal and prototypic neurons of the rodent external globus pallidus

Maya Ketzef | Karolinska Institutet, Sweden

### Neuronal multidimensionality of the rodent external globus pallidus

Dana Cohen | Bar-ilan University, Israel

#### Athina Hall - 9:00-10:45

Symposium 24: When neuronal firing fails: Epilepsy and its neurobiological consequences Chair: Roberto Colangeli | Università Politecnica delle Marche, Italy

# **Absence Seizures and Cognitive Impairment in Neurodevelopment of GAERS Rats** *Tatiana Morais | Icvs, Portugal*

### Cannabinoids and comorbidities in epilepsy

Roberto Colangeli | Università Politecnica delle Marche, Italy

#### Postictal hypoxia as a mechanism of SUDEP

Gordon Campbell Teskey | University of Calgary, Canada

### Somatostatin effect on GABAergic Function in Tuberous Sclerosis Complex Eleonora Palma | Sapienza University of Rome, Italy

# Targeted over-expression of multiple GABAA receptor subunits increases the sensitivity to GABAergic anti-seizure medications

Gabriele Ruffolo | Sapienza University of Rome, Italy

#### 10:45-11:15

Coffee Break & Poster Session 2

#### Main Hall - 11:15-13:00

Symposium 25: The role of the hippocampus in normal and pathological cognitive aging Chair: Victor Luna | Temple University, United States of America

#### Role of adult-born dentate neurons in successful cognitive aging

Nora Abrous | Inserm U1215, France

### Hippocampal mechanisms underlying sex differences in cognitive aging

Victor Luna | Temple University, United States of America

### Primary cilia-authophagy axis in hippocampal neurons is essential to maintain cognitive resilience

Franck Oury | Institut Necker Enfants-malades (inem), France

### Activity dependent synapse elimination in glial cells in Alzheimer's disease

Won-Suk Chung | KAIST, Republic of Korea

#### Hall I - 11:15-13:00

Symposium 26: Challenges and benefits in promoting adult neurogenesis and central myelination: State of the art with natural compounds and chemically-designed small molecules

Chair: Fernando De Castro | Instituto Cajal-csic, Spain, Hiroko Isoda | University of Tsukuba, Japan

#### Casc15 lncRNA in regulation of neuroblast migration

Jemima Becker | University of Oxford, United Kingdom

### Unexpected targets for adult CNS (re)myelination approached with new small molecules

Fernando De Castro | Instituto Cajal-csic, Spain

Regulation of neurogenesis and myelination by antioxidant natural compounds Hiroko Isoda | University of Tsukuba, Japan

Inhalation of Mirtille essential oil with 1,8-cineole as a major constituent induces antidepressant-like effect via enhancement of olfactory bulb neurogenesis Kazunori Sasaki | University of Tsukuba / Aist, Japan

Anti-Stress and Anxiolytic Effects of Standardized Rosemary Extract: Materialization of Functional Food Ingredients and Clinical Evidence
Satoshi Fukumitsu | Nippon Corporation, Japan

# Rosemary as an anxiolytic and antidepressant: findings from preclinical studies and a pilot clinical trial

Mariem Achour | Alliance For Research On The Mediterranean and North Africa (ARENA), University of Tsukuba, Tsukuba, Japan

# Physico-chemical Study on Inhalation of Terpene Compounds in the Diffusor for Animal Test

Mitsutoshi Nakajima | University of Tsukuba, Japan

#### Hall II - 11:15-13:00

Symposium 27: Neurobiology of stress across the lifespan: From resilience to transmission Chair: Ali Jawaid | Lukasiewicz Research Network- PORT Polish Center for Technology Development, Poland, Giulia Federica Mancini | Sapienza University of Rome, Italy

### The impact of early-life stress on vulnerability and resilience to psychiatric disorders later in life

Giulia Federica Mancini | Sapienza University of Rome, Italy

#### Molecular and cellular signature of early life trauma

Harmen Krugers | University of Amsterdam, Netherlands

### Prenatal stress rewires adult-born dentate granule neurons connectivity Aroa Manas-Ojeda | INSERM U1215, France

### Towards the biological plausibility and biomarkers of intergenerational trauma in humans

Ali Jawaid | Lukasiewicz Research Network- PORT Polish Center For Technology Development, Poland

#### Hall III - 11:15-13:00

Symposium 28: Neural correlates of perceptual decision-making

Chair: Ourania Semelidou | INSERM U1215, France

### Neural underpinnings of altered perceptual decision-making in autism *Ourania Semelidou | INSERM U1215, France*

### Dynamics of Decision-Making in the Prefrontal Cortex under Opposed Emotional States

Anass El Azraoui | Inserm U1215, France

### Dynamic spine turnover and clustering in the mouse frontal cortex facilitate behavioral flexibility

Ioanna Pandi | Forth, Greece

### **Neural Correlates of Social Categorization**

Omar Ahmed | Center for Economics and Neurosciences, Egypt

#### Hall IV - 11:15-13:00

#### Symposium 29: More than neurons: key roles of glial cells in CNS and PNS

Chairs: Mariagrazia Grilli | University of Piemonte Orientale, Italy, Valerio Magnaghi | Università Degli Studi Di Milano, Italy

### Astrocytes in the tale of aging, neurodegeneration and stress response

Mariagrazia Grilli | University of Piemonte Orientale, Italy

#### Glial cells at the crossroad of gut-to-brain communication

Cristina Limatola | Sapienza University, Italy

### $Neurotransmitter-dependent\ modulation\ of\ Schwann\ cells\ and\ axonal\ crosstalk$

Valerio Magnaghi | Università Degli Studi Di Milano, Italy

### Programmed cell death of oligodendroglia regulates cognitive flexibility in mice Cristobal Ibaceta Gonzalez | Ipnp, France

#### Athina Hall - 11:15-13:00

Symposium 30: Deciphering functional specificity of the cannabinoid type 1 receptor in the brain: mechanistic insights and therapeutic implications

Chairs: Rosmara Infantino | University of Galway, Ireland, Antonio C Pagano Zottola | Bordeaux Institute of Oncology, France

Learning from CB1 Receptors in the Brain: Potentiation of Mitochondrial Activity as a Therapeutic Tool Against Pharmacological and Neurodegenerative Impairment of Cognition

Luigi Bellocchio | Inserm U1215, France

Astrocyte Cannabinoid CB1 Receptor-Mediated Signaling During Autoimmune Inflammation: Mechanisms and Implications in Multiple Sclerosis

Ana Bernal Chico | UPV/EHU, Achucarro Basque Center For Neuroscience and IIS Biobizkaia, Spain

Molecular mechanism of cannabinoids in glioblastoma: a new insight

Antonio C Pagano Zottola | Bordeaux Institute of Oncology, France

Mitochondrial dysfunction in cognitive deficits: bridging prenatal THC exposure and bioenergetic pathways

Gianluca Lavanco | Università degli Studi di Palermo, Italy

Targeting sub-cellular CB1 specificity to enhance analgesic efficacy: characterization of the novel cannabinoid  $\Delta 9$ -Tetrahydrocannabiphorol

Rosmara Infantino | University of Galway, Ireland

13:00-14:00 Lunch Break

Main Hall - 14:00-15:00

Special Event 03: How should the neuroscience community deal with pressure to reduce the use of animals in research?

Chairs: Suzanne Dickson, The Sahlgrenska Academy at the University of Gothenburg, Sweden, Cristina Limatola | Sapienza University, Italy

Misconceptions about animal experimentation, new animal ethics and transformative governance

Roger Adan | Umc Utrecht, Netherlands

**Leading Advocacy in Animal Research within the National Italian Committee** *Cristina Limatola | Sapienza University, Italy* 

A journey of animal neuroscience research advocacy in the Netherlands Monica Wolvekamp | Radboud University, Netherlands

Perception of animal experimentation in Switzerland: From popular vote to popular vote.

Thorsten Buch | University of Zurich, Switzerland

#### Hall I - 14:00-15:00

Special Event 04: Improving the role of Community Pharmacists to deliver advanced pharmaceutical care in neuropsychiatric disorders through innovative educational programs Chairs: Christina Dalla | National And Kapodistrian University Of Athens, Greece, Aristotelis Skountakis, President of the Board of Community Pharmacists Association of Heraklion, Crete, Greece

#### **Opening Remarks**

Christina Dalla | National and Kapodistrian University of Athens, Greece

#### **Case Study - Educational program**

Marios Spanakis | Φαρμακευτικός Σύλλογος Ηρακλείου, Greece

#### **Future Directions & Educational Initiatives**

Ioannis Charalampopoulos | Φαρμακευτικός Σύλλογος Ηρακλείου, Greece



Special Event 06: European Journal of Neuroscience Workshop Chair: Yoland Smith | Emory University, United States of America

### Hall II - 14:00-16:45

Special Event 05: Workshop on open-source tools for behavioral quantification

Chairs: Charis Brakatselos | Columbia University, United States of America, Stephanie Miller | Gladstone Institutes, United States of America, Matt Whiteway | Columbia University, United States of America

# Lightning Pose: efficient animal pose estimation via semi-supervised learning and Bayesian ensembling

Matt Whiteway | Columbia University, United States of America

VAME behavioral segmentation identifies prominent behavioral changes and treatment efficacy in humanized and transgenic Alzheimer's disease models Stephanie Miller | Gladstone Institutes, United States of America

Using Lightning Pose and VAME for the deep phenotyping of mouse models of schizophrenia risk and the evaluation of novel therapeutic approaches.

Charis Brakatselos | Columbia University, United States of America

### Main Hall - 15:00-16:45

Symposium 31: Neuroactive steroids and mental health: Widespread impact on cognition, neuroprotection, and neuropsychiatric disorders

Chair: Elena Choleris | University of Guelph, Canada

#### Menopausal Hormone Therapy: One Size Does Not Fit all

Liisa Galea | University of Toronto, Camh, Canada



### The role of the ovary in ischemic stroke: impact of aging

Farida Sohrabji | Texas A&m University College of Medicine, United States of America

# Rapid Hormone actions on the mouse brain: implications for social and non-social cognition in males and females

Elena Choleris | University of Guelph, Canada

The Combined Influence of Earlier Menopause and Cardiac Function on Brain Health Tallinn Splinter | University of Toronto, Canada

**X** chromosome inactivation related mechanisms in neurodevelopmental disabilities Rajesh Miranda | Texas A&m University College of Medicine, United States of America

### Hall I - 15:00-16:45

Symposium 32: Endocannabinoid signaling dysregulation in CNS-related disorders Chairs: Eva De Lago Femia | Complutense University, Spain, Javier Fernandez-Ruiz | Complutense University, Spain

### Endocannabinoids in pediatric epileptic encephalopathies

Onintza Sagredo | Complutense Universitu, Spain

### Endocannabinoids and eating behavior

Claudio D'Addario | University of Teramo, Italy

FAAH inhibition as a therapeutic strategy for neurochemical alterations induced by social isolation: involvement of endocannabinoid and oxytocinergic systems

Barbara Eramo | Sapienza university of Rome, Italy

#### Endocannabinoids and congeners in pathological pain

Livio Luongo | University of Campania "L. Vanvitelli", Italy

#### Endocannabinoids in amyotrophic lateral sclerosis

Eva De Lago Femia | Complutense University, Spain

#### Hall III - 15:00-16:45

Symposium 33: Oxytocin and vasopressin in the brain: new roles and functions in health and pathology

Chair: Bice Chini | Cnr, Italy

# Microglia contribute to altered vasopressin-mediated neurovascular coupling in the hypothalamus of heart failure rats

Javier Stern | Georgia State University, United States of America

#### Oxytocin: Roles in Brain Microvasculature Development

Marta Busnelli | National Research Council, Italy

Hormonal imprinting in early life: a role of oxytocin is suckling.

Francoise Muscatelli | Inserm U1249, France

# Targeting the central oxytocinergic system in humans: therapeutic potential and pitfalls.

Yannis Paloyelis | King's College London, United Kingdom

### Hall IV - 15:00-16:45

Symposium 34: The social wrap: do we need oligodendrocytes and myelin for social behaviour?

Chairs: Giulia Poggi | University of Mainz, Germany, Giulia Treccani | University of Marburg, Germany

# Stress, Glucocorticoids and the Impact of Early Social Experience: deciphering the role of NG2+ glia

Giulia Poggi | University of Mainz, Germany

# Social aversive experience during adulthood: what happens to oligodendrocyte and myelin?

Giulia Treccani | University of Marburg, Germany

# **Shank3 and Myelination Dysfunction in Autism: Exploring Oligodendrocyte Roles** *Boaz Barak | Tel Aviv University, Israel*

### Promoting myelination reverses myelin deficits and social impairment incntnap2-/-mice

Maria Domercq | Achucarro Basque Center For Neuroscience, Spain

#### Athina Hall - 15:00-16:45

#### Symposium 35: Mitochondrial homeostasis in neuronal physiology

Chair: Thomas McWilliams | University of Helsinki, Finland, Konstantinos Palikaras | Medical School, NKUA, Greece

### Appetitive and aversive stimuli alter mitochondrial dynamics in the nucleus accumbens

Ana Joao Rodrigues | University of Minho, Portugal

### Mitochondrial dynamics in synaptic plasticity

Matteo Bergami | Uniklinik Köln, Germany

#### Mitochondria-ER contacts as centers for local translation in neurons

Angelika Harbauer | MPI for Biological Intelligence, Germany

### Mitophagy in neural space and time

Thomas McWilliams | University of Helsinki, Finland

#### Mitophagy in age-related neurodegeneration

Konstantinos Palikaras | Medical School, NKUA, Greece

16:45-17:15

Coffee Break & Poster Session 2

Main Hall - 17:15-18:15

Keynote Lecture 3

Chair: Youssef Anouar | Inserm, France

A cannabinoid way to understanding brain complexity

Giovanni Marsicano | University of Bordeaux, France

### Tuesday, June 10, 2025

### All Day:

Online MNS Election

#### Main Hall - 9:00-10:45

Symposium 36: Novel Psychoactive Substances (NPS): new exciting findings. Shaping the Future of Novel Psychoactive Substances (NPS): New Findings and Perspectives

Chair: Liana Fattore | IN-CNR, Italy, Aviv Weinstein | Ariel University, Israel

Novel findings on repeated exposure to JWH-018 (a major synthetic cannabinoid) in adult and adolescent rats and mice.

Maria Antonietta De Luca | University of Cagliari, Italy

Xylazine amplifies behavioral and cardio-respiratory impairments induced by fentanyl in mice

Sabrine Bilel | Ferrara, Italy

The effects of synthetic fentanyl on executive cognitive function and mental health Aviv Weinstein | Ariel University, Israel

Detection of New Psychoactive Substances (NPS) in conventional and nonconventional biological specimens

Vassiliki Boumba | University of Ioannina Faculty of Medicine, Greece

#### Hall I - 9:00-10:45

Symposium 37: Dopamine-driven maladaptive plasticity: from pathological traits to treatment targets

Chair: Lucia Caffino | University of Milan, Italy

Memantine-induced functional rewiring of the glutamate synapse in the striatum of dopamine transporter knockout rats

Damiana Leo | Université De Picardie Jules Verne, France

Excitatory and inhibitory unbalance as molecular fingerprint of vulnerable phenotype for cocaine addiction in sensory processing sensitivity rats Francesca Mottarlini | University of Milan, Italy

DOI modulates striatal plasticity by inducing ERK phosphorylation through cortical 5-HT2A receptors

Stefano Espinoza | Università Del Piemonte Orientale, Italy

Hemispheric lateralization of the effect of psilocybin on both the modulation of dopamine release and the control over alcohol consumption in a rat model of operant binge drinking.

Jerome Jeanblanc | Université De Picardie Jules Verne, France

#### Hall II - 9:00-10:45

Symposium 38: Environmental neurotoxicity: focus on contaminants in the Mediterranean Chairs: Marc Landry | University Of Bordeaux, France, Jacques Noel | Cnrs, Inserm, Université Côte D'Azur, France

# Impact on the peripheral nervous system of early life exposure to plastic nanoparticles and phthalates

Jacques Noel | Cnrs, Inserm, Université Côte D'Azur, France

Intranasal administration of PACAP promotes protection of neuronal cells against oxidative damage, inflammation and apoptosis induced by prenatal glyphosate exposure

Olfa Masmoudi | Faculty of Sciences of Tunis, University Tunis El manar, Tunisia

Neuroprotective Potential of Olive Leaf Polyphenols: Antioxidant Activity and Impact on Induced Protein Aggregation in Parkinson's Disease Cellular Model

Taoufik Ghrairi | University Tunis El Manar, Tunisia

Pupillometry to evaluate descending noradrenergic control of nociceptive transmission in an Attention Deficit Hyperactivity Dissorder (ADHD) mouse model Maria-Carmen Medrano | Université De Bordeaux, France

#### Hall III - 9:00-10:45

Symposium 39: Bridging Science and Practice: Advances in PTSD Research Across Translational and Clinical Frontiers

Chair: Vasiliki Michopoulos | Emory University, United States of America

# Translational research understanding the contribution of stress and trauma to health inequities

Vasiliki Michopoulos | Emory University, United States of America

Intergenerational and developmental mechanisms of long-term impacts of trauma Tanja Jovanovic | Wayne State University, United States of America

### Epigenetic mechanisms underlying PTSD and its response to treatment.

Alicia Smith | Emory University, United States of America

#### Innovations in the Treatment of PTSD: From Virtual Reality to MDMA

Barbara Rothbaum | Emory University, United States of America

#### Hall IV - 9:00-10:45

Symposium 40: Impacts of environmental factors on the neuroendocrine regulation of biological rhythms

Chair: Etienne Challet | CNRS, France

### Synergy between time-restricted feeding and running is necessary to shift the muscle clock

Andries Kalsbeek | Amsterdam Umc, Netherlands

Assessing neuroendocrine impacts of bisphenol A exposure in a seasonal rodent Marie-Azélie Moralia | University of Liège, Belgium

### Impact of irregular light conditions on sleep-wake cycle and energy metabolism in a diurnal animal model

Etienne Challet | CNRS, France

### Athina Hall - 9:00-10:45

Symposium 41: Molecular and Circuitry Insights into Cognitive Function and Therapeutic Advances in Neurodegenerative Disorders

Chair: Lucy Privitera | Queen Mary University of London, Malta Campus, Malta

# Synaptic Tagging and Capture in Living Rats: Exploring the Contributions from the Locus Coeruleus to Hippocampal Memory Consolidation

Lucy Privitera | Queen Mary University of London, Malta Campus, Malta

### Changes in adrenergic and cholinergic receptors on human cerebral vessels. Implications for new therapeutic strategies in Alzheimer's Disease

Roxi Carare | The University of Southampton, United Kingdom

How the Brain Distinguishes 'Me' and 'Mine' from 'Others': An EEG and fMRI Study Ilona Kotlewska | Jagiellonian University, Poland

# **Sexual dimorphism of prefrontal CB1 receptors on emotional and cognitive processes** *Maria Ceprian | Pais Vasco University, Spain*

#### 10:45-11:15

Coffee Break & Poster Session 3

#### Main Hall - 11:15-13:00

#### Symposium 42: Neuronal and Neuroglia Metabolism in Health and Disease

Chairs: Natalie Rasgon | Stanford University, United States of America, Robert Zorec | University of Ljubljana, Faculty of Medicine, Slovenia

#### Regulated exocytosis in human glioblastoma

Vladimir Parpura | Zhejiang Chinese Medical University, China

# Determinant role of AQP4ex in anchoring AQP4 at the Blood-Brain Barrier: physiopathological consequences

Antonio Frigeri | University of Bari, Italy

### Adrenergic control of astrocyte function in cognitive decline

Robert Zorec | University of Ljubljana, Faculty of Medicine, Slovenia

#### Neuronal energy metabolism in neuropsychiatric disorders

Natalie Rasgon | Stanford University, United States of America

### Hall I - 11:15-13:00

Symposium 43: Developing olfaction: Cell types, circuits, and the effects of sensory experience

Chair: Paolo E. Forni | University At Albany, United States of America

#### Transgenerational inheritance of olfactory experiences

Bianca Jones Marlin | Columbia University, United States of America

### Egg-laying behaviour and its neuronal substrates at the abdominal ganglion

Maria Luisa Vasconcelos | Champalimaud Foundation, Portugal

The Diversity of the Endoplasmic Reticulum and the Combinatorial Expression of Adhesion Molecules in Vomeronasal Sensory Neurons: New Perspectives on Cell Identity and Connectivity Rules.

Paolo E. Forni | University At Albany, United States of America

### Mechanisms Underlying Mesenchymal Stem Cell-Derived Extracellular Vesicle Modulation of Sensory Neuron Excitability

Lanhui Qiu | University of Cambridge, United Kingdom

### Hall II - 11:15-13:00

Symposium 44: Decoding Neurodegeneration: Insights into mechanisms and emerging therapies

Chairs: Maya Maor-Nof | The Technion, Israel, Alexia Polissidis | Deree, The American College of Greece, Greece

### **Expanding mechanisms and therapeutic targets for neurodegenerative disease** *Aaron Gitler | Stanford University, United States of America*

**Neurodegeneration: intra-Lysosomal lipid metabolism in the driver's seat** *Monther Abu-Remaileh | Stanford University, United States of America* 

#### Mechanisms governing neuronal survival and degeneration

Maya Maor-Nof | The Technion, Israel

### Dynamic metabolic profiling of microglia in an acute murine viral model of G2019S LRRK2 Parkinson's disease

Eirini Maria Tzermpou | Deree-the American College of Greece, Greece

### Hall III - 11:15-13:00

Symposium 45: Advances in rTMS: targeting neuroplasticity and neural circuitry in addiction

Chairs: Pauline Belujon | Université De Poitiers, France, Marco Diana | University of Sassari, Italy

#### Long-lasting efficacy of rTMSin Cocaine Use Disorder

Angela Maria Sanna | SS Trinità Hospital, ASL Cagliari, Italy

Steps Toward Individualization of Transcranial Magnetic Stimulation in a Methadone-Maintained Opioid Use Disorder Sample.

Vaughn R. Steele | Yale School of Medicine, United States of America

Modulating reward pathways: preclinical advances in rTMS for addiction Pauline Belujon | Université De Poitiers, France

Targeting the medial prefrontal and anterior cingulate cortices with Deep TMS in alcohol use disorder: Clinical, fMRI, DTI, and EEG outcomes

Abraham Zangen | Ben Gurion Univeristy, Israel

### Hall IV - 11:15-13:00

Symposium 46: Ovarian hormones in brain plasticity, disease risk, and resilience: from single-cell multiomics to neuroimaging insights

Chair: Marija Kundakovic | Fordham University, United States of America

# Ovarian hormones in brain plasticity and disease risk: the insights from multiomic single-cell approaches

Marija Kundakovic | Fordham University, United States of America

**Ovarian hormone fluctuations and stress resilience across the adult lifespan** *Liisa Galea | University of Toronto, Camh, Canada* 

# Brain rhythms of risk and resilience: Ovarian hormones influence brain chemistry and structure across the menstrual cycle

Julia Sacher | MPI-CBS and University of Leipzig, Germany

# Exploring Sex Differences and Estradiol's Impact on Early Neurodevelopment Using Brain Organoids

Lucia Dutan Polit | King College London, United Kingdom

#### Athina Hall - 11:15-13:00

Symposium 47: Habenular function: From neurobiology to psychiatric implications Chairs: Emmanuel Darcq | INSERM U1329 Eq Addictions, France, Susanna Molas | University of Colorado Boulder, United States of America

### Running from Shadows: The Role of the Interpeduncular Nucleus in Innate Threat Processing

Susanna Molas | University of Colorado Boulder, United States of America

### Study of the prefronto-habenular network implication in cocaine relapse.

Victor Mathis | Inserm, France

#### Hormone sensitive network shape aversive states.

Daniela Calvigioni | Karolinska Institutet, Sweden

# Habenula and midbrain contributions to aversive effects of cocaine and addiction propensity

Thomas Jhou | University of Maryland School of Medicine, United States of America

### Implications of Habenular Opioid Responsive Neurons in Negative Affect of Opioid Withdrawal.

Emmanuel Darcq | INSERM U1329 Eq Addictions, France

13:00-14:00 Lunch Break

#### Main Hall - 14:00-15:00

Special Event 07: Women's Brain-Healthy Ageing, Hellenic Initiative for Women's Brain Health: HIWOMB, MENTOR Healthy Ageing Institute

Chair: Antonios Politis | National and Kapodistrian University of Athens, Greece



### Presentation of the Hellenic Initiative for Women's Brain Health: HIWOMB

Eleni Metaxa | Pharmaceutical Chemistry & Technology (CTF), Greece

#### The role of sex and gender in brain research

Christina Dalla | National and Kapodistrian University of Athens, Greece

#### Open discussion with worldwide experts and with the audience

#### Hall I - 14:00-15:00

Special Event 08: Getting published: An editor's perspective

Chair: Ioannis Bakogiannis | Springer Nature, Germany

#### Main Hall - 15:00-16:45

Symposium 48: Sex differences in effects of environmental factors on indices of addiction and mental health

Chair: Jill Becker | University of Michigan, United States of America

# Adversity early in life alters addiction-related behaviors and produces sex-specific transcriptional changes in the basolateral amygdala

Amelia Cuarenta | Georgia State University, United States of America

### Social housing differentially affects addiction liability and dopamine release in nucleus accumbens of male and female rats.

Jill Becker | University of Michigan, United States of America

Sex differences in the effect of altitude on indices of depression and addiction in rodents.

Shami Kanekar | University of Utah, United States of America

Sex differences in stress response and neuro-estrogens: insights from animal models. Christina Dalla | National and Kapodistrian University of Athens, Greece

#### Hall I - 15:00-16:45

Symposium 49: Decoding pain: Mechanisms, modulators, and neural networks

Chairs: Bonnie Firestein | Rutgers University, United States of America, Ana María Sanchez-Perez | Universitat Jaume I, Spain

### Anterior cingulate cortex hyperexcitability in a mouse model of ADHD and pain comorbidity

Sandra Sanchez-Sarasua | University of Bordeaux, France

Environmental Pollutants and Synaptic Decline: The Role of Coding and Non-coding RNAs in Cholinergic Neuron Impairment, Pain, and Neurodegenerative Risk.

Aldo Donizetti | University of Naples Federico II, Italy

### **Concept of Pain: Central or peripheral**

Guldal Inal Gultekin | Istanbul Okan University Faculty of Medicine, Turkey

### Mediodorsal Thalamus: A Key Node in the Neural Circuitry of Pain

Hanane Iben Daoudi | University of Cadi Ayyad, Faculty of Sciences Semlalia, Morocco

Neuroprotection and repair following daily oral administration of 3,5-Diiodothyropropionic acid (DITPA) in experimental autoimmune encephalomyelitis Steven Petratos | Monash University, Australia

#### Hall II - 15:00-16:45

Symposium 50: NMDA Receptors: A Classic focus with modern implications in neuropsychiatric disorders

Chairs: Joana Ferreira | University of Coimbra, Portugal, Mónica Santos | Cnc-uc, Portugal

### NMDA receptor-dependent Regulation of Synaptic Adaptation

Joana Ferreira | University of Coimbra, Portugal

NMDA receptor complex in Neurodevelopmental and Neurodegenerative Diseases Fabrizio Gardoni | Disfeb - Università Degli Studi Di Milano, Italy

# Neurotrophins modulation of NMDA receptors in Fear Extinction and implications for Anxiety Disorders

Mónica Santos | Cnc-uc, Portugal

# Comprehensive delineation and personalised medicine of NMDAR-related developmental encephalopathies

Xavier Altafaj | Universitat De Barcelona, Spain

#### Hall III - 15:00-16:45

Symposium 51: Monoamines in brain function and dysfunction: Insights into epilepsy, addiction, and neurotoxicity

Chairs: Stephanie Caille-Garnier | University Of Bordeaux, France, Giuseppe Di Giovanni | Magna Græcia University, Italy

### The 5-HT2C Receptor-Positive Allosteric Modulator CYD-1-79 Does Not Affect Anxiety but Halts Absence Seizures in GAERS

Tatiana Morais | Icvs, Portugal

# The Coronaridine Derivatives Catharanthine and 18-MC Exert Anti-Epileptic Activities and Alter Monoaminergic Systems Activity

Chloé Aman | University of Bordeaux, France

# Modulation of GABAA Receptor Tonic Inhibition and GAT1 Function by 5-HT2A Receptors with a Focus on Absence Epilepsy

Giuseppe Di Giovanni | Magna Græcia University, Italy

### Monoamine Functional Connectivity at Rest and Its Link to Inter-Individual Differences in Behavioral Performances

Stephanie Caille-Garnier | University of Bordeaux, France

#### Hall IV - 15:00-16:45

Symposium 52: Unraveling ketamine's rapid antidepressant mechanisms: From neural circuits to clinical implications

Chair: Panos Zanos | University of Cyprus, Cyprus

# NMDA receptor activity and canonical NMDAR-dependent LTP is required for ketamine's rapid antidepressant efficacy

Panos Zanos | University of Cyprus, Cyprus

### Ketamine's antidepressant response is mediated by a corticotropin-releasing factordependent mechanism

Polymnia Georgiou | University of Wisconsin-Milwaukee, United States of America

### Hippocampal multiomic profiling of ketamine rapid antidepressant mechanisms in the chronic mild stress rat model

Laura Musazzi | University of Milano-Bicocca, Italy

### Esketamine modulates dopamine neurotransmission: therapeutic potential or pathway to abuse?

Jordi Bonaventura | Universitat de Barcelona, Spain

#### Athina Hall - 15:00-16:45

Symposium 53: Metabolic individuality in brain disorders

Chairs: Francesca Calabrese | University of Milan, Italy, Freddy Jeanneteau | CNRS INSERM University of Montpellier, France

The Early Medication Change trial: Epigenomics and metabotypes in antidepressant treatment response

Stephanie Witt | Central Institute of Mental Health, Germany

**Defining metabotypes in animal models of resilience and vulnerability to stress** *Francesca Calabrese | University of Milan, Italy* 

**Ketogenic approach to correct metabotypes in neurological disorders** *Beat Lutz | University Medical Center Mainz, Germany* 

Intermittent fasting approach to correct metabotypes in neurological disorders
Freddy Jeanneteau | CNRS INSERM University of Montpellier, France

16:45-17:15

Coffee Break & Poster Session 3

Main Hall - 17:15-18:15

Keynote Lecture 4

Chair: Ioannis Sotiropoulos | NCSR "Demokritos", Greece

**How dendrites empower biological and artificial brains** *Panagiota Poirazi | IMBB-forth, University of Crete, Greece* 



Main Hall - 18:30-19:30 MNS General Assembly

### Wednesday, June 11, 2025

#### Main Hall - 9:00-10:45

Symposium 54: Regulation of neuronal function by astroglia-enriched synaptic environment in health and disease

Chair: Dmitri Rusakov | University College London, United Kingdom

Molecular and cellular dysfunction of NMDA receptors in developmental and epileptic encephalopathies: Insights from a GRIN2B C-terminal variant *Julie Perroy | CNRS, France* 

**Control of dendritic integration by converging D-serine and glycine signalling** *Christian Henneberger | University of Bonn, Germany* 

Astrocyte Kir4.1 expression locally controls use-dependent changes in synaptic fidelity

Dmitri Rusakov | University College London, United Kingdom

Functional astrocyte diversity in the adult dentate gyrus

Ruth Beckervordersandforth-Bonk | University Clinics Erlangen, Germany

SHANK3 scaffold proteins in astrocytes regulate postnatal maturation of striatal circuits: Implications for Phelan-McDermid Syndrome

Laurine Gonzalez | University of Lausanne, Switzerland

#### Hall I - 9:00-10:45

Symposium 55: The relaxin3 neuropeptidergic system and modulation of cognition and pain

Chairs: Mónica Navarro Sánchez | Universitat Jaume I, Spain, Francisco Eliseo Olucha Bordonau | Universitat Jaume I, Spain

The general organization of the relaxin3 system/RXFP3 system and is evolutive arrangement.

Francisco Eliseo Olucha Bordonau | Universitat Jaume I, Spain

The modulatory role of relaxin3 in the amygdala and anterior cingulate cortex on chronic pain

Marc Landry | University of Bordeaux, France

The putative modulatory role of relaxin3 in aggression induced by alcohol withdrawal

Mohamed Zahran | Universitat Jaume I, Spain

The role of the relaxin3/RXFP3 system in theta rhythm and contextual fear memories Mónica Navarro Sánchez | Universitat Jaume I, Spain

# Exploring Sodium Channels and Acetylcholine Receptors Through X-ray Crystallography, AlphaFold 3, Cryo-EM, and Ligand Interactions: Advancing Neurobiology Education

Paraskevi Papadopoulou | The American College of Greece, Greece

#### Hall II - 9:00-10:45

Symposium 56: Genetic and environmental influences on the developing young brain and risk for neuropsychiatric disorders: from synapse to behavior

Chairs: Antonia Manduca | Sapienza University of Rome, Italy, Aurore Thomazeau | CNRS, France

# Mechanistic dissociation of functional and structural plasticity of dendritic spines in Fragile X Syndrome

Miquel Bosch | Universitat Internacional De Catalunya, Spain

# Neuroplastic mechanisms underlying sex-dependent vulnerability to social reward deficits following early life social isolation

Antonia Manduca | Sapienza University of Rome, Italy

# Effects of gestational THC exposure on neurobehavioral outcomes in the offspring Valentina Castelli | University of Palermo, Italy

### Nucleus Accumbens Core Dysfunction in Fragile X Syndrome Gabriele Giua | Inserm, France

# Neuroplasticity as a therapeutic target for intellectual disability in Down syndrome and Fragile X syndrome

Mara Dierssen | Center For Genomic Regulation, Spain

#### Hall III - 9:00-10:45

Symposium 57: Central integration of environmental cues regulating energy and glucose metabolism

Chairs: Nicolas Chartrel | Inserm, France, Carole Rovere-Jovene | Université Côte d'Azur, Ipmc, Cnrs, Inserm, France

### Role of the ghrelin/LEAP2 balance on feeding and metabolic adaptations to undernutrition in anorexia nervosa

Virginie Tolle | Inserm, France

The Role of Mitochondrial Function in Hypothalamic Astrocytes in Regulating Hunger Ophélia Le Thuc | Helmholtz Zentrum München, Germany

# POMC neurons and control of energy and glucose homeostasis: role played by EphrinBs molecules

Sophie Croizier | University of Lausanne, Switzerland

# The surprising hypothalamic regulation of glucose homeostasis by a key subpopulation of insulin-sensitive neurons, expressing 26RFa and orexins

Marie Picot | Université De Rouen, France

#### Hall IV - 9:00-10:45

#### Oral Communications 1

Chairs: Harris Alexopoulos | National and Kapodistrian University of Athens, Greece, Alexia Polissidis | Deree, The American College of Greece, Greece

### OP01: Orexin deficiency alters the regulation of energy and glucose homeostasis in a sex-dependent manner

Mélodie Devère | Inserm U1239, France

### OP02: The gut-brain communication axis: a promotor of mental health vs. precipitator of brain pathology

Ioannis Sotiropoulos | NCSR "Demokritos", Greece

**OP03: Tau Deficiency Enhances Mitochondrial Function and Stress Resilience** *Eleni Tsakiri | National and Kapodistrian University of Athens Medical School, Greece* 

**OP04: Time dependent peripheral versus central distribution of intranasal insulin** *Jelena Osmanovic Barilar | University of Zagreb School of Medicine, Croatia* 

# OP05: Time-dependent distribution of FITC-labeled vs. regular insulin in rat brain following intranasal administration

Ana Knezovic | University of Zagreb School of Medicine, Croatia

#### Athina Hall - 9:00-10:45

### Oral Communications 2

Chairs: Panagiotis Politis | Biomedical Research Foundation Academy of Athens, Greece, Ourania Semelidou | INSERM U1215, France

# OP06: Effects of prenatal $\Delta 9$ -tetrahydrocannabinol exposure on the endocannabinoid and dopaminergic system gene expression in adolescent rats

Martina Di Bartolomeo | University of Teramo, Italy

# **OP07: Neurocircuitry and Neuroanatomy in Panic Disorder: A Systematic Review** *Peter (Panos) Kyriakoulis | Positive Psychology Centre, Australia*

### OP08: New treatment for depression and anxiety disorders based on Crataegus Pinnatifada

Ravid Doron | The Open University, Israel

# OP09: Proteostasis Network Response to Chronic Environmental Stress: linking survival to protein aggregation in a human neuroblastoma cellular model

Niccolò Candelise | Italian National Institute of Health - Istituto Superiore Di Sanità (iss), Italy

# OP10: Identification of a Novel Kv7.3 Mutation Associated with Autism and Schizophrenia Causing Abnormal Excitability in Reprogrammed Neurons Mauro Pessia | United Arab Emirates, United Arab Emirates

OP11: Semaphorin 3A and Its Impact on Blood-Brain Barrier Integrity: A Potential Mechanism for Neurodevelopmental Risk in Pregnancy Complications

Carmela Matrone | University of Naples Federico II, Italy

10:45-11:15

Coffee Break

#### Main Hall - 11:15-13:00

Symposium 58: Challenges and Opportunities in Neuroscience in the Mediterranean area - Career Development Round Table

Chair: Tatiana Morais | Icvs, Portugal

Panelists:

Marc Landry | University of Bordeaux, France

Hanane Iben Daoudi | University of Cadi Ayyad, Faculty of Sciences Semlalia, Morocco

Nuno Dinis Alves | ICVS | University of Minho, Portugal

Giuseppe Di Giovanni | Magna Græcia University, Italy

Taoufik Ghrairi | University Tunis El Manar, Tunisia

Elbini Ines | Pasteur Institute, Tunisia

Shubha Tole | Tata Institute of Fundamental Research, Mumbai, India

#### Hall I - 11:15-13:00

Symposium 59: Decoding cholinergic signals in the brain: New technologies and behavioral insights

Chair: Ana Joao Rodrigues | University Of Minho, Portugal

The impact of chronic nicotine consumption on mesopontine cholinergic transmission and motivation for natural rewards

Jacques Barik | Cnrs, France

Cholinergic mesopontine signals are selectively affected by cocaine and bidirectionally mediate cocaine reinforcing effects

Bárbara Coimbra | Barbara Coimbra, Portugal

A specific cholinergic pathway from the basal forebrain to the ventromedial prefrontal cortex modulates attention

Karine Guillem | Université De Bordeaux / Cnrs, France

Precise manipulation of endogenous nicotinic receptors and associated behaviors Alexandre Mourot | ESPCI, France

#### Hall II - 11:15-13:00

Symposium 60: Approaches to facilitate causative therapies of neurodegenerative diseases Chairs: Ivana Delalle | Boston University, United States of America

### Potential of non-coding RNAs as theragnostic biomarkers for neurodegenerative diseases

Ivana Delalle | Boston University, United States of America

### Targeting inflammatory pathways in neurodegenerative disorders

Ena Španić Popovački | School of Medicine, University of Zagreb, Croatia

# Lactate mitigates the phenotype of Alzheimer's disease through the AMPK-RAB3A signaling pathway to promote mitophagy and synaptic function

Haijun He | National & Kapodistrian University of Athens, Greece

### Impact of $\beta\textsc{-}Amyloid\textsc{-}induced$ astrocyte reactivity on oligodendrocyte maturation

Claudia Ciarla | Sapienza University of Rome, Italy

### Zebrafish as a Versatile Model in Neurobiological a Research

Barbara Budzynska | Medical University of Lublin, Poland

#### Hall III - 11:15-13:00

Symposium 61: Regulatory mechanisms in neural stem cells: Insights into brain physiology, aging, and glioblastoma dynamics

Chairs: Yassemi Koutmani | Biomedical Research Foundation Of The Academy Of Athens, Greece, Panagiotis Politis | Biomedical Research Foundation Academy of Athens, Greece

### Genetic Barcoding to Trace Glioblastoma Stem Cells

Paolo Malatesta | Università Di Genova, Italy

#### Gene Regulation Networks in Neural Stem Cells and Glioblastoma tumor cells

Panagiotis Politis | Biomedical Research Foundation Academy of Athens, Greece

### Aging-like Mechanisms Regulate Neurogenesis in Depression

Lida Katsimpardi | Inserm, France

# Neural Stem Cells in Health and Disease: When Developmental Cornerstones are Hijacked by Cancer

Maria A. Tsiarli | Brown University, United States of America

# The Impact of Stress Hormone CRH in Human Neural Stem Cells and Brain Development

Yassemi Koutmani | Biomedical Research Foundation of The Academy of Athens, Greece

### Hall IV - 11:15-13:00

Symposium 62: Common ground and deviations in neurodegenerative diseases

Chairs: Faisal Alosaimi | Kind Abdulaziz University, Saudi Arabia

### The Role of Deep Brain Stimulation in Modulating Neuroinflammation in Parkinson's Disease

Talal Alshalwi | Maastricht University, Netherlands

# The Role of DBS in Inducing Neuroplastic Cellular Changes in Parkinson's Disease: Why It Matters

Faisal Alosaimi | Kind Abdulaziz University, Saudi Arabia

### Investigating sex differences in Parkinson's disease

Vincent Harley | Hudson Institute of Medical Research, Australia

# Exploring the neurotoxic effects of A30G a-synuclein mutation in Caenorhabditis elegans

Christina Ploumi | National and Kapodistrian University of Athens, Greece

### Athina Hall - 11:15-13:00

#### Symposium 63: Mechanisms, therapeutics, and immune insights in chronic pain

Chairs: Natalia Malek | Wroclaw University of Science and Technology, Poland, Katarzyna Starowicz | Maj Institute of Pharmacology Pas, Poland

### Mechanisms underlying stress-pain interactions in rats and humans

David Finn | University of Galway, Ireland

# Effect of conditioned diet in a model of early life-induced widespread pain: potential role of HCAR2 receptors

Livio Luongo | University of Campania "L. Vanvitelli", Italy

### Effects of chronic CBD administration in neuropathic pain models

Katarzyna Starowicz | Maj Institute of Pharmacology Pas, Poland

## Immune Profiling in Chronic Neuropathic Pain: Insights from Mass Cytometry and Clinical Correlations

Natalia Malek | Wroclaw University of Science and Technology, Poland

13:00-14:00 Lunch Break

#### Main Hall - 14:00-15:00

Book Presentation: A river divided

Chair: George Panagis | University of Crete, Greece

Speaker: George Paxinos | Neuroscience Research Australia, Australia

Main Hall- 15:00-16:00

**Awards & Conclusion** 

## Acknowledgements

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# ELAVATES THE TASTE!



## **Posters**

### Sunday, June 8, 2025 - Poster Session 1

- PP101. Rescue of epilepsy-linked variants of the human GABA transporter 1 by small molecules Nikita Shah | Medical University of Vienna, Austria
- **PP102.** Identifying novel and effective treatments to prevent negative affect and relapse during opioid abstinence Andria Michael | University of Cyprus, Cyprus
- **PP103.** Development and investigation of the flexible behavioral phenotype in **rodents** Elissavet Anna Petsalaki | Foundation for Research and Technology, Greece
- **PP104. Object discrimination and generalization in a novel open field** setup Zoi Dogani | Foundation for Research and Technology-Hellas, 71003 Heraklion, Greece
- PP105. Mechanisms Underlying Estrogen's Rapid Facilitative Effects on Social Recognition in the Medial Amygdala of Female Mice Elena Choleris | University of Guelph
- **PP106.** Neurochemical and genetic factors in panic disorder: a systematic **review** Peter Kyriakoulis | Federal University of Rio de Janeiro, Brazil
- PP107. Supercritical CO<sub>2</sub> Tomato Extract: Antioxidant and Anti-Inflammatory Effect in Human Neuroblastoma and Glioblastoma Cells Serena Recalchi | "La Sapienza" University of Rome, Italy
- **PP108.** The Medial Prefrontal Cortex and the Rapid Effects of Estradiol on Cognition in Male Mice Elena Choleris | University of Guelph, Canada
- **PP110.** Endocannabinoid system and D-serine interaction in the modulation of fear memory dynamics under stress Federica Mariani | Sapienza University of Rome, Italy
- **PP111.** Targeting sex-dependent biobehavioral profile in Fragile X Syndrome: the therapeutic potential of cannabidiol Alexandros Messinis, | University of Ioannina, Greece
- **PP112. GABAergic transmission during epileptogenesis in a rat model of post-traumatic epilepsy** Alessandro Gaeta | University of Rome, Sapienza, Italy

- **PP113.** Diazepam treatment in a Lurcher mouse model of cerebellar motor and cognitive affective syndrome Nilpawan Roy Choudhury | Charles University, Pilsen, Czechia
- **PP114. 5-HT2B receptors are critical for the antidepressant response of the psychedelic LSD in rat but not in mice** Amel Bouloufa | Université Claude Bernard Lyon, Inserm, Stem Cell and Brain Research Institute, France
- PP115. Artificial Intelligence and Play Therapy in Maritime Mental Health: A Neuroscience-Informed Framework for Stress and Emotion Regulation and Psychological Support Evangelia Dimoula | Institute of Stress of Biology and Medicine
- **PP116.** Disrupted neuron-glia differentiation and memory deficits following prenatal THC exposure: a mitochondrial perspective Francesca Puleo | University of Palermo, Italy
- PP117. Integrating the sex-specific alterations in spatial memory of rats prenatally exposed to THC with diffusion tensor imaging analysis Giovanna Chiara Gambino | University of Palermo, Italy
- PP118. Voluntary Wheel Running prevented the negative consequences of Vicarious Social Defeat in female mice María Asunción Aguilar | University of Valencia, Spain.
- PP119. Regional effects of the Iboga Alkaloids catharanthine and 18-MC on monoamines in mice; interaction with the convulsivant and anxiogenic drug PTZ Chloé Amana | Institut des Neurosciences Intégratives et Cognitives d'Aquitaine, France
- **PP120.** Autophagy-dependent protective activity of Neuroglobin in spheroids of human neuroblastoma cell line SH-SY5Y Daniela Caissutti | Sapienza University of Rome, Italy
- PP121. Continuous brain-derived neurotrophic factor biodelivery in the prefrontal cortex rescues depression-like phenotype and neuroplasticity in a rat model of treatment-resistant depression Martina Cicero | University of Palermo, Italy
- **PP122.** Modulation of anxiety by nicotinic receptors of the interpeduncular **nucleus** Maria Ciscato | PSL Research University, France

- **PP123. Divergent involvement of the serotonergic system of ventral and dorsal hippocampus in the emergence of symptoms in schizophrenia** Charalampos Kandilakis | University of Patras, Greece
- PP124. Proteomics profiling of antidepressant response in the nucleus accumbens reveals protein signature associated with unsuccessful response to venlafaxine in stress-induced depression rat model Edoardo Lo Coco | University of Palermo, Italy
- **PP125.** Psychostimulant actions on executive dysfunction and prefrontal catecholamine dysregulation following traumatic brain injury Rachel L Navarra | Stratford, NJ, USA
- PP126. Preclinical Validation of a Serotonergic Modulator for Treating Methamphetamine Addiction Without Reward System Disruption Augusta Pisanu | CNR Institute of Neuroscience-Cagliari, National Research Council, Italy
- **PP127.** High CRP is Associated with Dimensional Model of Anxiety but not Categorical Model in Context of Child Abuse and Real World Population Alex O. Rothbaum | Emory University, Atlanta, GA & Skyland Trail, Atlanta, GA
- PP128. Evaluation of central neuroinflammation and its cognitive consequences in a murine model of anorexia nervosa at acute and chronic phases Léna Rousseau | Univ Rouen Normandie, INSERM, France
- PP129. N-oleoyl Glycine and N-oleoyl Alanine Attenuate Alcohol Self-Administration and Preference in Mice Samah Shahen-Zoabi |The Hebrew University of Jerusalem, Israel
- PP130. Sex Differences and Intrasexual Variability in Oxycodone-Induced Alterations of Brain Stimulation Reward and Neurochemistry in Sprague-Dawley Rats Elena Solakidou | University of Crete, Greece & Northeastern University, Boston, USA
- **PP131.** Detrimental effects of prenatal THC exposure on declarative memory and mitochondrial bioenergetics: a rescue hypothesis Francesca Vaccaro | University of Palermo, Italy
- **PP132. Casc15 IncRNA in regulation of neuroblast migration** Jemima Becker | University of Oxford, UK

PP133. Altered socio-affective communication in Tph2-deficient rat pups: Communal nesting aggravates growth retardation despite ameliorating maternal affiliation deficits - Tianhua Wang | Philipps-Universität Marburg, Germany

PP134. Effect of the dual serotonergic compound DDD-024 on methamphetamine-induced alterations on cognitive functions and anxiety-like behavior in male and female rats - Liana Fattore | CNR Institute of Neuroscience-Cagliari, National Research Council, Italy

## Monday, June 9, 2025 - Poster Session 2

PP201. Neuroinflammatory and structural changes in the anterior cingulate cortex in monosodium iodoacetate-induced osteoarthritis in mice - Oumaima Moutayb | Cadi Ayyad University, Morocco

PP202. Modulation of the Immune Response Improves Outcomes in the 3xTg mouse model of Alzheimer's Disease - Rafaela Mostallino | University of Cagliari, Italy

PP203. Multi-Omics Characterization of LRRK2 G2019S in Parkinson's disease: From Molecular Interactions to Therapeutic Insights - Hiba Midouane | Mohammed VI Polytechnic University, Morocco

**PP204.** Metabolic and Mitochondrial Dysregulation in the Hypothalamus: Unveiling a Novel Pathway in ALS Progression - Christina Valle | University of Rome "Foro Italico" & National Research Council, Institute of Translational Pharmacology (IFT), Rome, Italy

PP205. Unraveling the Mechanisms of Eucalyptus citriodora Essential Oil in 6-Hydroxydopamine-Induced Parkinson's Disease: Proteomic Insights into Metabolic and Proteostasis Modulation - Amel Abidi | University of Tunis El Manar, Tunisia & University of Siena, Italy

PP206. The Endocannabinoid System and Neuroinflammation in Bipolar Disorder: CNR1 and Cytokine Expression Patterns - Francesca Martella | University of Teramo, Italy

PP207. Retinal alterations resemble brain pathology in a rat model of Parkinson's disease induced by intranigral infusion of  $\alpha$ -synuclein oligomers - Chiara Burgaletto | University of Catania, Italy

PP208. Exploring BDNF as a Biomarker of Peripheral Nutritional Adaptation in an Anorexia Nervosa-Like Model: Insights into the Brain-Muscle Axis - Odile Viltart | Univ Paris Cité, INSERM France & Université de Lille, France

PP209. Implication of potassium channels in the progression of Parkinson's disease: study of the mechanisms of action of sea anemone biomolecules and their therapeutic potential - Sarra Hjaij | Pasteur Institute of Tunis, Tunisia

- PP210. The effects of methylphenidate, an ADHD drug, on learning and executive functions in a rat model of sporadic Alzheimer's disease Davor Virag | University of Zagreb, Croatia
- PP211. Exploring the Effects of Intracerebroventricular Streptozotocin and Transthyretin on Hippocampal Neuroinflammation, Tau Pathology, and Cognitive Function in C57BL6 Mice Ana Babić Perhoč | University of Zagreb, Croatia
- **PP212.** Involvement of the direct subthalamic nucleus M1 cortex pathway in parkinsonian motor and nociceptive impairments Elba Molpeceres-Sierra | University of Bordeaux, France
- PP213. Identifying Multiple Sclerosis Risk Groups in the Egyptian Population: A Cross-Sectional Study Noha Al-Ziny | The American University in Cairo, Egypt
- **PP214.** Immaturity of GABAergic Transmission in Tuberous Sclerosis Complex Lilian J. Lissner | University of Rome, Sapienza, Italy
- **PP215.** Green chemistry: from agro-food waste to bioactive molecules for the treatment of neurodegenerative diseases Giulia Di Benedetto | University of Catania, Italy
- **PP216.** Rethinking Parkinson disease beyond motor phenomenology: Cognitive symptoms and gender-based differences of dopaminergic dysfunction Leila Ali | University of Pegaso, Italy & University of Camerino, Italy
- PP217. Neuroprotective Effects of Lithium on Myelin Development and Behavioral Outcomes Following Preterm Intraventricular Hemorrhage Changlian Zhu | University of Gothenburg, Göteborg, Sweden & Institute of Neuroscience and The Third Affiliated Hospital of Zhengzhou University, China
- **PP218.** Association between circulating cell-free DNA and inflammatory cytokines in bipolar disorder Mariangela Pucci | Agriculture and Environment University of Teramo, Italy
- PP219. Neuroprotective effects of the endozepine neuropeptide ODN against neuroinflammation, Oxidative stress, and metabolic dysregulation Induced by diabetes-like conditions Mariem Sallemi | University Tunis El Manar, Tunisia,
- **PP220.** Pancreatic Cancer-Associated Depression (PCAD) is linked to adult neurogenesis impairment Dimitrios Troumpoukis | Biomedical Research Foundation of the Academy of Athens, Greece

- **PP221. Anti-tumoral effect of Octadecaneuropeptide combined with 5-Fluorouracil on glioblastoma cell line U87 MG** Marwen Ben Fdilen | University of Tunis El Manar, Tunisia
- PP222. MicroRNA-Driven Molecular Targeting in Glioblastoma: The Role of the Neuropeptide PACAP as a Potential Therapeutic Regulator in Tumor Suppression Ibtihel Chatti | University Tunis El Manar, Tunisia
- **PP223. Sexual Dimorphism and Cognitive Domains: Unravelling Sex Differences in Ageing** Torre, Vittoria | University of Catania, Italy
- **PP224.** Genetic Variants and Epigenetic Modifications of CNR1 and FAAH Genes in the Pathophysiology of Anorexia Nervosa Federica Gilardini | University of Teramo, Italy & University of Camerino, Italy
- PP225. Increased aggregation propensity of transthyretin in a mouse model of sporadic Alzheimer's disease might contribute to disease progression by increasing susceptibility to oxidative stress Jan Homolak | University of Zagreb, Croatia & University of Tübingen, Germany
- PP226. Effect of intranasally administered galantamine on hippocampal neurogenesis in the TgF344-AD transgenic rat model of Alzheimer's disease Trochopoulou Maria | AuTh, Thessaloniki, Greece
- **PP227.** Neuroplastic Effects of an Intervention Combining Physical Exercise and tDCS in frailty adults Cristina Nombela | Autonomous University of Madrid, Spain
- **PP228.** Investigating a newly-discovered extrathalamic excitatory pathway of posterior thalamic nucleus Olivér Nagy | University of Szeged Szeged, Hungary

## Tuesday, June 10, 2025 - Poster Session 3

**PP301.** The pathogenic **P31L** mutation in the human creatine transporter **1** impairs transport kinetics and substrate affinity - Didem Ün | Medical University of Vienna, Austria

**PP302.** Chromogranin a / phosphatidic interaction modulates neurotransmitter release dynamics - Maité Montero-Hadjadje | Inserm Strasbourg, France

**PP303.** Investigating the origin of Notch-induced epithelial-like tumors in the **Optic Lobe of Drosophila melanogaster** - Alexandra Tsakalidou-Rafailidou | University of Crete, Greece

**PP304.** Natural disruption of the estrous cycle alters hippocampal structural and molecular plasticity in female mice - Rachel Manfrè | University of Zurich, Switzerland

**PP305.** Characterizing the role of Claudins in primary cortical neuronal cultures - Tripti Seth | Indian Institute of Science

**PP306.** Investigating the role of PLPPR3 in synaptic lipid signaling - Alexandra Polyzou | University of Ioannina, Greece

PP307. Rab5a and Rab11a are not involved in VE-cadherin trafficking, internalisation or recycling in human cerebral microvascular endothelial cell (hCMEC/D3) - Fawza Alenazi |Trinity College Dublin

**PP308.** A spherical code of retinal orientation selectivity - Dimitrios Daniel Laniado National and Kapodistrian University of Athens, Greece & The Hebrew University of Jerusalem, Israel

**PP309. Neuronal networking and function of the PVT MC3R neurons** - Rachel N. Lippert | German Institute of Human Nutrition Potsdam-Rehbrücke, Germany & University of Potsdam & Charité-Universitätsmedizin, Berlin, Germany & German Center for Diabetes Research, Neuherberg, Germany

**PP310. Stress Induced Morphological Alterations to Layer II/III Pyramidal Cells in Mouse Visual Cortex** - Reem Khalil | American University of Sharjah, United Arab Emirates

PP311. Gene expression of immune checkpoints in LPS-induced neuroinflammation in organotypic hippocampal cultures: Implications for

- **depression** Kinga Kamińska | Maj Institute of Pharmacology Polish Academy of Sciences, Poland
- PP312. Regionally dependent effect of intranasal insulin on activity of proteins involved in energy homeostasis Antonia Krsnik | University of Zagreb, Croatia
- **PP313.** Exocyst Assembly is Essential for the Proper Membrane Targeting of the **Dopamine Transporter in Drosophila melanogaster** Ameya Kasture | Medical University of Vienna, Austria
- **PP314.** Neurotoxic impact of Glyphosate and its metabolites: A novel analytical and cellular approach Yasmine Limam | National Institute of Neurology Mongi Ben Hmida, Tunisia & University of Tunis El Manar, Tunisia
- **PP315.** How do neurones communicate their metabolic needs to astrocytes? Sergey Kasparov | University of Bristol, UK
- PP316. Cortical Dynamics of Symbolic and Non-Symbolic Numerical Representations in Young and Older Adults: An EEG Study Beniamina Mercante | National Research Council, Palermo, Italy
- PP317. Immunological Profiling in Chronic Neuropathic Pain: The Role of Mass Cytometry in Biomarker Identification and Targeted Therapies Natalia Malek | Wrocław University of Technology, Poland
- **PP319.** Housing at Moderate Altitude Elevates Striatal Dopamine and Increases **Methamphetamine Preference in Female Rats, but not Males** Shami Kanekar | University of Utah, USA.
- PP320. Upregulation of K+ currents by Ibuprofen: efficacy in a mini-sleep Drosophila Shaker model Maria Antonietta Casu | CNR-Institute of Translational Pharmacology, UOS of Cagliari, Italy
- PP321. Investigating the Impact of Stimulation Intensity on Eye Movements Induced by Binaural Monopolar Galvanic Vestibular Stimulation Alba Langlade | CNRS Université de Toulouse, France
- **PP322.** Behavioral characterization of a model of diabetes type 2 in middle-aged Sprague-Dawley rats of both sexes Jovana Aranđelović | University of Belgrade, Serbia
- PP323. Investigation of the Rapid Effects of Locally-Synthesized Estrogens in the Bed Nucleus of Stria Terminalis (BNST) in Male Mice Elena Choleris | University of Guelph, Canada

- PP324. Deficiency of the new ER thioredoxin-like protein, SELENOT, in POMC neurons alters metabolic parameters in male and female mice Azénor Abgrall | Institute for Research and Innovation in Biomedicine (IRIB), Rouen, France
- **PP325. Normalization methods for immunofluorescence** Stefano Morara | National Research Council of Italy (CNR), Italy
- **PP326.** The Need to Prioritize Female Mental Health in Canada Tallinn F.L. Splinter | Sunnybrook Research Institute, Canada & The University of Toronto, Canada & The Centre for Addiction and Mental Health, Canada
- PP327. Psilocybin and Neuroplasticity: Mechanisms, Therapeutic Potential, and Future Directions Sogol Fereydouni Balangani | National Kapodistrian University of Athens, Greece
- PP329. Forebrain organoids in disease modeling: a lab-friendly protocol for mini-brains at your fingertips Eleonora Grecu | University of Cagliari, Italy
- **PP330.** Harnessing Digital Music Platforms for Emotional Support in Pediatric Cancer: A Neuroscientific Perspective Evangelia Dimoula | Institute of Stress of Biology and Medicine
- PP331. Improving the role of Community Pharmacists to deliver advanced pharmaceutical care in neuropsychiatric disorders through innovative educational programs Marios Spanakis | University of Crete, Greece & Community Pharmacists Association of Heraklion & Centre for Training and Lifelong Learning, University of Crete, Heraklion, Greece & Institute of Computer Science, Foundation for Research & Technology Hellas (FORTH), Crete

