



**Poster Session 1: Wednesday, 3rd November, From 15:30 To 19:00, Exhibition Hall.**

PS1-01

**Netrin-1/DCC Signaling System Differentially Regulates the Migration of Pax7, Nkx6.1, Irx2, Otp, and Otx2 Neuronal Populations in the Developing Interpeduncular Nucleus**

Ms. Isabel M. García-Guillén<sup>1</sup>, Dr. Antonia Alonso<sup>1</sup>, Dr. Nicanor Morales-Delgado<sup>2</sup>, Ms. Belén Andrés<sup>3</sup>, Dr. Luis Puelles<sup>1</sup>, Dr. Guillermo López-Bendito<sup>3</sup>, Dr. Faustino Marín<sup>1</sup>, Dr. Pilar Aroca<sup>1</sup>

<sup>1</sup>Universidad de Murcia, Murcia, Spain, <sup>2</sup>Universidad Miguel Hernández, Alicante, Spain, <sup>3</sup>Instituto de Neurociencias de Alicante, CSIC, Universidad Miguel Hernández, Alicante, Spain

PS1-02

**Characterization of different types of progenitor cells in the postnatal retina of sharks**

Mr. Ismael Hernández Núñez<sup>1</sup>, Dr. Alberto Docampo Seara<sup>1</sup>, Dr. Diego Robledo<sup>2</sup>, Dr. Sylvie Mazan<sup>3</sup>, Dr. Antón Barreiro Iglesias<sup>1</sup>, Dr. Fátima Adrio<sup>1</sup>, Dr. Eva Candal<sup>1</sup>

<sup>1</sup>Universidade de Santiago de Compostela. CIBUS. Faculty of Biology., Santiago de Compostela, Spain, <sup>2</sup>The Roslin Institute and Royal (Dick) School of Veterinary Studies, University of Edinburgh, Edinburgh, United Kingdom, <sup>3</sup>CNRS, Sorbonne Université, UPMC Univ Paris 06, UMR7232, Observatoire Océanologique, Banyuls-sur-mer, France

PS1-03

**Neurogranin-like expression in the zebrafish brain during early stages of development and changes induced by Mn<sup>2+</sup> exposure**

Ms. Anabel Alba-González<sup>1</sup>, Dr. Julián Yáñez-Sánchez<sup>1</sup>, Dra. Mónica Folgueira-Otero<sup>1</sup>

<sup>1</sup>University of A Coruña (CICA), A Coruña, Spain

PS1-04

**Intramodal functional plasticity in the developing somatosensory system**

Ms. Mar Aníbal-Martínez<sup>1</sup>, Mr. Luis Rodríguez-Malmierca<sup>1</sup>, Mr. Francisco José Martini<sup>1</sup>, Ms. Guillermo López-Bendito<sup>1</sup>

<sup>1</sup>Instituto De Neurociencias De Alicante. Universidad Miguel Hernández de Elche-CSIC, San Juan De Alicante, Spain

PS1-05

**APOE genotype and postnatal chlorpyrifos exposure affect mice cerebral lipid profile**

Dra. Laia Guardia-Escote<sup>1</sup>, Ms. Judit Biosca-Brull<sup>1,2</sup>, Ms. Mikaela Mladenova-Koleva<sup>1</sup>, Dra. Pia Basaure<sup>1</sup>, Dr. Jordi Blanco<sup>1,3</sup>, Dra. María Cabré<sup>1,4</sup>



<sup>1</sup>Universitat Rovira i Virgili, Research in Neurobehavior and Health (NEUROLAB), Tarragona, Spain, <sup>2</sup>Universitat Rovira i Virgili, Psychology, Research Center for Behavioral Assessment (CRAMC), Tarragona, Spain, <sup>3</sup>Universitat Rovira i Virgili, Basic Medical Science, Reus, Spain, <sup>4</sup>Universitat Rovira i Virgili, Biochemistry and Biotechnology, Reus, Spain

### PS1-06

#### The development of the cerebello-cortical connectivity

**Ms. Raquel Murcia-Ramón<sup>1</sup>, Ms Belén Andrés<sup>1</sup>, Dra Guillermina López-Bendito<sup>1</sup>, Dr. Juan Antonio Moreno-Bravo<sup>1</sup>**

<sup>1</sup>Instituto De Neurociencias, San Juan De Alicante, Spain

### PS1-07

#### Motor Neuronal Conversion of Human Mesenchymal Stem Cells by Application of Small Molecules

**Mr. Antonio Almenar<sup>1</sup>, Ms. Alicia Estirado<sup>1</sup>, Ms. Francisca Almagro<sup>1</sup>, Dr. Salvador Martínez<sup>1</sup>**

<sup>1</sup>Instituto De Neurociencias-CSIC-UMH, Alicante, Spain

### PS1-08

#### CHARACTERIZATION OF THE PARALAMINAR NUCLEUS IN THE MICE: AN AMYGDALAR REGION WITH PROTRACTED MATURATION

**Ms. Lucía Inés Torrijos Saiz<sup>1</sup>, Dr. Vicente Herranz Pérez<sup>1</sup>, Dr. Shawn Sorrells<sup>2</sup>, Professor Jose Manuel García Verdugo<sup>1</sup>**

<sup>1</sup>Instituto Cavanilles De Biodiversidad Y Biología Evolutiva, University Of Valencia-CIBERNED, Valencia, Spain, <sup>2</sup>University Of Pittsburgh, Pittsburgh, United States Of America

### PS1-09

#### Deregulation of the epithelial-to-mesenchymal transition process underlies Zic2-linked holoprosencephaly

Dra. Aida Giner de Gracia, Dra. Cruz Morenilla, **Ms. María Teresa López-Cascales**, Dr. Gerald Muça, Dr. Angel Barco, Dra. Eloisa Herrera

<sup>1</sup>Instituto De Neurociencias, Alicante, Spain

### PS1-10

#### The transcription factor Zic2 participates in adult neurogenesis at the hippocampal subgranular zone (SGZ)

**Dr. Carlos Sanchez Huertas<sup>1</sup>, Ivan Guzman<sup>1</sup>, Prof. Eloisa Herrera<sup>1</sup>**

<sup>1</sup>Instituto de Neurociencias (CSIC-UMH), Alicante , Spain



### PS1-11

#### IMPLICATION OF SFRP1 IN ALTERED SYNAPTIC PLASTICITY ASSOCIATED WITH ALZHEIMER'S DISEASE

**Ms. Guadalupe Pereyra Gómez<sup>1</sup>, Dr. Inés Mateo Ruiz<sup>1</sup>, Ms. María Jesús Martín Bermejo<sup>1</sup>, Mr. Jose María Delgado-García<sup>2</sup>, Ms. Pilar Esteve<sup>1,3</sup>, Ms. Paola Bovolenta<sup>1,3</sup>**

<sup>1</sup>Centro de Biología Molecular Severo Ochoa, UAM-CSIC, Madrid, Spain, <sup>2</sup>Universidad Pablo de Olavide, Sevilla, Spain,

<sup>3</sup>Centro de Investigación Biomédica en Red de Enfermedades Raras, CIBERER, Madrid, Spain

### PS1-12

#### HYPERAMMONEMIA ALTERS THE FUNCTION OF AMPA, NMDA AND GABA<sub>A</sub> RECEPTORS AND EXTRACELLULAR cGMP REVERSES SOME OF THESE ALTERATIONS

**Ms. María Sancho-Alonso<sup>1</sup>, Dr. Vicent Teruel<sup>2</sup>, Dr. Andrea Cabrera-Pastor<sup>3</sup>, Dr. Vicente Felipo<sup>1</sup>**

<sup>1</sup>Neurobiology Laboratory, Centro De Investigación Príncipe Felipe, Valencia, Spain, <sup>2</sup>Neuronal Circuits Laboratory, Universidad de Valencia, Valencia, Spain, <sup>3</sup>Neurological Impairment Group - INCLIVA, Valencia, Spain

### PS1-13

#### EARLY SYNAPTIC IMPAIRMENT IN THE HIPPOCAMPUS OF A RAT MODEL OF PROGRESSIVE PARKINSONISM

**Arantzazu Belloso-Iguerategui<sup>1</sup>, Marta Zamarbide-González<sup>1</sup>, Leyre Merino-Galan<sup>1</sup>, Aleph Prieto<sup>2</sup>, Carl W Cotman<sup>2</sup>, Joaquín Fernández-Irigoyen<sup>3</sup>, Enrique Santamaría-Martínez<sup>3</sup>, Ana Quiroga-Varela<sup>1,5</sup>, María Cruz Rodríguez-Oroz<sup>4,5</sup>**

<sup>1</sup>CIMA-Universidad de Navarra, Pamplona, Spain, <sup>2</sup>Institute for Memory Impairments and Neurological Disorders, University of California-Irvine, Irvine, USA, <sup>3</sup>Centro de Investigación Biomédica Navarrabiomed, Pamplona, Spain, <sup>4</sup>Clinica Universidad de Navarra, Pamplona, Spain, <sup>5</sup>Instituto de Investigación Sanitaria de Navarra (IdiSNA), Pamplona, Spain

### PS1-14

#### Astrocytes exert negative modulation on hippocampal neuron excitability

**Ms. Sara Expósito Reguero<sup>1</sup>, Mr. Samuel Alberquilla<sup>1</sup>, PhD Rosario Moratalla<sup>1</sup>, Mr. Alfonso Araque<sup>1</sup>, Mr. Eduardo D. Martín<sup>1</sup>**

<sup>1</sup>Instituto Cajal, CSIC, Madrid, Spain

### PS1-15

#### Modelling microscale diffusion in geometrically resolved brain extracellular space in live tissue

**Ms. Paula Giménez Mínguez<sup>1,2</sup>, Mr Konstantinos Chatzimichail<sup>2</sup>, Dr. Jan Tønnesen<sup>1,2</sup>**

<sup>1</sup>Universidad Del País Vasco, Getxo, España, <sup>2</sup>Achucarro Basque Center for Neuroscience, Leioa, España



PS1-16

**Cell to cell communication mediates the neurodegeneration caused by glioblastoma**

**Dr. Sergio Casas Tinto<sup>1</sup>**, Dr. María Losada-Pérez, Dr. Patricia Jarabo, Dr. Marta Portela, Dr. Francisco A Martín

<sup>1</sup>*Instituto Cajal CSIC, Madrid, Spain*

PS1-17

**GSK-3 $\beta$  S9A overexpression leads murine hippocampal neural precursors to acquire an astroglial phenotype in vivo.**

**Mr. Miguel Flor-García<sup>1,2,3</sup>**, Dr. Jesús Ávila<sup>1,3</sup>, Dr. María Llorens-Martín<sup>1,3</sup>

<sup>1</sup>*Department of Molecular Neuropathology, Centro de Biología Molecular "Severo Ochoa", CBMSO, CSIC-UAM, Madrid, Spain*, <sup>2</sup>*Department of Molecular Biology, Faculty of Sciences, Universidad Autónoma de Madrid, Madrid, Spain*, <sup>3</sup>*Center for Networked Biomedical Research on Neurodegenerative Diseases (CIBERNED), Madrid, Spain*

PS1-18

**Astroglial CB1 mediates synaptic plasticity in the Nucleus Accumbens**

**Dr. Ana Covelo<sup>1,2</sup>**, Ines Filipa Dinis<sup>1,3</sup>, Dr Giovanni Marsicano<sup>1,2</sup>

<sup>1</sup>*Inserm, Bordeaux, France*, <sup>2</sup>*University of Bordeaux, Bordeaux, France*, <sup>3</sup>*University of Lisbon, Lisbon, Portugal*

PS1-19

**In silico screening of GMQ-like compounds reveals guanabenz and sephin1 as new allosteric modulators of acid-sensing ion channel 3**

**Dr. G Callejo<sup>1,2</sup>**, Mr LA Pattison<sup>1</sup>, Mr JC Greenhalgh<sup>1</sup>, Dr S Chakrabarti<sup>1</sup>, Ms E Andreopoulou<sup>1</sup>, Dr JRF Hockley<sup>1</sup>, Dr E St. John Smith<sup>1</sup>, Dr T Rahman<sup>1</sup>

<sup>1</sup>*Department of Pharmacology, University of Cambridge, Cambridge, United Kingdom*, <sup>2</sup>*Institut de Neurociències, Universitat de Barcelona, Barcelona, Spain*

PS1-20

**Loss of TRESK background potassium channel enhances acute and chronic itch.**

Dr. Alba Andrés-Bilbé<sup>1</sup>, Dr. Aida Castellanos<sup>1</sup>, Ms. Anna Pujol<sup>1</sup>, Dr. Núria Comes<sup>1,2</sup>, Dr. Gerard Callejo<sup>1,2</sup>, **Prof. Xavier Gasull<sup>1,2</sup>**

<sup>1</sup>*Institute of Neurosciences, Universitat de Barcelona, Barcelona, Spain*, <sup>2</sup>*Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Barcelona, Spain*

PS1-21

**TRESK background K<sup>+</sup> channel regulates sensory neuron excitability and contributes to mechanical and cold pain**



Dr. Aida Castellanos<sup>1</sup>, Dr. Alba Andrés-Bilbé<sup>1</sup>, Dr. Ahmed Negm<sup>3,4</sup>, Dr. Gerard Callejo<sup>1,2</sup>, Prof. Jacques Noël<sup>3,4</sup>, Prof. Xavier Gasull<sup>1,2</sup>, **Dr. Núria Comes<sup>1,2</sup>**

<sup>1</sup>Institute of Neurosciences, Universitat de Barcelona, Barcelona, Spain, <sup>2</sup>Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Barcelona, Spain, <sup>3</sup>Université Côte d'Azur, CNRS UMR 7275, Institut de Pharmacologie Moléculaire et Cellulaire, Valbonne, France, <sup>4</sup>LabEx Ion Channel Science and Therapeutics, Valbonne, France

## PS1-22

### mGlu4 receptors rescue parallel fiber LTP and motor skilled reaching deficits in a mouse model of Fragile X Syndrome

**Dr. Ricardo Martín<sup>1,2,3</sup>**, Dr. Nuria García-Font<sup>1,2,3,4</sup>, Mr Alberto Samuel Suárez-Pinilla<sup>1,2,3</sup>, Dr David Bartolomé-Martín<sup>5</sup>, Dr María Jesús Oset-Gasque<sup>1,2,3</sup>, Dr Magdalena Torres<sup>1,2,3</sup>, Dr José Sánchez-Prieto<sup>1,2,3</sup>

<sup>1</sup>Universidad Complutense de Madrid, Madrid, España, <sup>2</sup>Instituto Universitario de Investigación en Neuroquímica, Madrid, España, <sup>3</sup>Instituto de Investigación Sanitaria del Hospital Clínico San Carlos, Madrid, España, <sup>4</sup>University of Edinburgh, Edinburgh, United Kingdom, <sup>5</sup>Universidad de La Laguna, San Cristóbal de La Laguna, España

## PS1-23

### IMPACT OF BRAIN STATE ON TRANSCRANIAL DIRECT-CURRENT STIMULATION (tDCS) EFFECTS IN MICE

**Mr. Guillermo Sánchez-Garrido Campos<sup>1</sup>**, Mrs. Ángela M. Zafra<sup>1</sup>, Dr. Isabel Cordones<sup>1</sup>, Mrs. Marta Estévez-Rodríguez<sup>1</sup>, Dr. Javier Márquez-Ruiz<sup>1</sup>

<sup>1</sup>Universidad Pablo De Olavide, Seville, Spain

## PS1-24

### Nutrient-mediated regulation of GluA1 surface levels

**Ms. Rocío Rojas Martín<sup>1</sup>**, Dr. Rut Fadó Andrés<sup>1</sup>, Dr. Alfredo Miñano Molina<sup>2,4</sup>, Dr. José Rodríguez Álvarez<sup>2,4,5</sup>, Dr. Núria Casals Farré<sup>1,3</sup>

<sup>1</sup>Faculty of Medicine and Health Sciences, Universitat Internacional de Catalunya, Sant Cugat del Vallès, Spain, <sup>2</sup>Institute of Neurosciences (INc), Universitat Autònoma de Barcelona, Barcelona, Spain, <sup>3</sup>Centro de Investigación Biomédica en Red de Fisiopatología de la Obesidad y la Nutrición (CIBEROBN), Instituto de Salud Carlos III, Madrid, Spain, <sup>4</sup>Centro de Investigación Biomédica en Red sobre Enfermedades Neurodegenerativas (CIBERNED), Instituto de Salud Carlos III, Madrid, Spain, <sup>5</sup>Albert Einstein College of Medicine, New York, United States of America

## PS1-25

### Running and swimming dependent fast-to-slow BDNF/TrkB signalling optimisation at the NMJ

**Ms. Laia Just-Borràs<sup>1</sup>**, Mr. Víctor Cilleros-Mañé<sup>1</sup>, Ms. Erica Hurtado<sup>1</sup>, Ms. Aleksandra Polishchuk<sup>1</sup>, Ms. Maria Duran-Vigara<sup>1</sup>, Ms. Marta Balanyà-Segura<sup>1</sup>, Mr. Olivier Biondi<sup>2</sup>, Mr. Frédéric Charbonnier<sup>2</sup>, Ms. Marta Tomàs<sup>1</sup>, Ms. Neus Garcia<sup>1</sup>, Mr. Josep Tomàs<sup>1</sup>, Ms. Maria A. Lanuza<sup>1</sup>

<sup>1</sup>Unitat d'histologia i neurobiologia, Universitat Rovira i Virgili, Reus, Spain, <sup>2</sup>INSERM UMRS 1124, Université de Paris, Reus, España



## PS1-26

### Existence of FGFR1-5-HT1AR heteroreceptor complexes in hippocampal astrocytes. Putative link to 5-HT and FGF2 modulation of hippocampal gamma oscillations

**Dr. Manuel Narvaez**<sup>1,4</sup>, Dr. Yuniesky Andrade-Talavera<sup>8</sup>, D. Ramon Fores-Pons<sup>1,4</sup>, Dr. Ismael Valladolid-Acebes<sup>3</sup>, Dra. Pia Siegele<sup>4</sup>, Dr. Alejandro Hernandez-Sosa<sup>4</sup>, Dr. André Fisahn<sup>5</sup>, Dr. Alexander López-Salas<sup>4</sup>, Dr. Dasiel O. Borroto-Escuela<sup>4,6,7</sup>

<sup>1</sup>Instituto De Investigación Biomédica De Málaga, Facultad de Medicina, Universidad de Málaga, Málaga, Spain, <sup>2</sup>Laboratorio de Neurociencia Celular y Plasticidad, Universidad Pablo Olavide, Sevilla, Spain, <sup>3</sup>The Rolf Luft Research Center for Diabetes and Endocrinology, Karolinska Institutet, Karolinska University Hospital L1, SE-171 76, Stockholm, Sweden,

<sup>4</sup>Department of Neuroscience, Karolinska Institutet, Stockholm, Sweden, <sup>5</sup>Department of Neurobiology, Care Sciences and Society, Center for Alzheimer Research, Neuronal Oscillations Lab, Karolinska Institutet, Stockholm, Sweden, <sup>6</sup>Department of Biomolecular Science, Section of Physiology, University of Urbino, Urbino, Italy, <sup>7</sup>Grupo Bohío-Estudio, Observatorio Cubano de Neurociencias, Yaguajay, Cuba, <sup>8</sup>Department of Neurobiology, Care Sciences and Society, Center for Alzheimer Research, Neuronal Oscillations Lab, Karolinska Institutet, Stockholm, Sweden

## PS1-27

### Activity-Dependent Reconnection of Adult-Born Dentate Granule Cells in a Mouse Model of Frontotemporal Dementia

**Ms. Julia Terreros-Roncal**<sup>1,2,3</sup>, Ms. Elena P. Moreno-Jiménez<sup>1,2,3</sup>, Mr. Miguel Flor-García<sup>1,2,3</sup>, Dr. Jesús Ávila<sup>1,2</sup>, Dr. María Llorens-Martín<sup>1,2</sup>

<sup>1</sup>Department of Molecular Neuropathology, Centro de Biología Molecular "Severo Ochoa", CBMSO, CSIC-UAM, Madrid, Spain, <sup>2</sup>Centre for Networked Biomedical Research on Neurodegenerative Diseases (CIBERNED), Madrid, Spain,

<sup>3</sup>Department of Molecular Biology, Faculty of Sciences, Universidad Autónoma de Madrid, Madrid, Spain

## PS1-28

### CANNABINOID RECEPTOR TYPE 1 (CB1R) EXPRESSION IN THE BRAIN STRUCTURES OF GENETIC MODELS OF EPILEPSY

PhD Rui Milton Patrício Da Silva Júnior<sup>1,2</sup>, PhD Willian Lazarini-Lopes<sup>2</sup>, Dr Alejandro Fuerte-Hortigón<sup>3</sup>, PhD Laura Zeballos<sup>1</sup>, **Prof M<sup>a</sup>. Dolores E. López García**<sup>1</sup>, Prof Norberto Garcia-Cairasco<sup>2</sup>

<sup>1</sup>Neuroscience Institute of Castilla y León (INCyL, Faculty of Medicine. University of Salamanca (USAL), Salamanca, Spain,

<sup>2</sup>Neuroscience and Behavioral Sciences Department, Ribeirão Preto School of Medicine, Ribeirão Preto, Brazil, <sup>3</sup>Department of Neurology, Virgen Macarena Hospital, Sevilla, Spain

## PS1-29

### Simultaneous encoding of fear state and threat identity in prefrontal cortex neuronal populations.

**Dr. Mario Martin-Fernandez**<sup>1,2</sup>, Ana Paula Mengolla<sup>1,2</sup>, Guillem Lopez-Fernandez<sup>1,2</sup>, Dr. Cyril Herry<sup>1,2</sup>

<sup>1</sup>Université de Bordeaux, Neurocentre Magendie, Bordeaux, France, <sup>2</sup>INSERM, Neurocentre Magendie, Bordeaux, France



### PS1-30

#### Using Hippocampome.org to investigate hippocampal circuit dynamics

Dr. Alberto Sanchez-Aguilera<sup>1</sup>, Dr. Diek W Wheeler<sup>2</sup>, Dr. Teresa Jurado-Parras<sup>1</sup>, Dr. Elena Cid<sup>1</sup>, Dr Nate Sutton<sup>2</sup>, Dr Giorgio G Ascoli<sup>2</sup>, Dr Liset Menendez de la Prida<sup>1</sup>

<sup>1</sup>Instituto Cajal - Csic, Madrid, Spain, <sup>2</sup>George Mason University, Fairfax, United States of America

### PS1-31

#### Pre-training RNNs on ecologically relevant tasks explains sub-optimal behavioral reset

Dr. Manuel Molano-mazón<sup>1</sup>, Dr. Daniel Duque<sup>1</sup>, Dr Guangyu Robert Yang<sup>2</sup>, Dr Jaime de la Rocha<sup>1</sup>

<sup>1</sup>IDIBAPS, Barcelona, Spain, <sup>2</sup>Center for Theoretical Neuroscience, Columbia University, New York, USA

### PS1-32

#### Using Uniform Manifold Approximation and Projection (UMAP) for unsupervised sorting of sharp-wave ripples

Mr. Enrique R. Sebastian<sup>1</sup>, Dr. María Teresa Jurado-Parras<sup>1</sup>, Dr. Alberto Sánchez-Aguilera<sup>1</sup>, Dr. Liset Menendez de la Prida<sup>1</sup>

<sup>1</sup>Instituto Cajal - Csic, Madrid, Spain

### PS1-33

#### Using 1D-convolutional neural networks to detect and interpret sharp-wave ripples

Ms. Andrea Navas-Olive<sup>1</sup>, Mr. Rodrigo Amaducci<sup>2</sup>, Dr. Maria Teresa Jurado-Parras<sup>1</sup>, Mr. Enrique R. Sebastian<sup>1</sup>, Dr. Liset Menendez de la Prida<sup>1</sup>

<sup>1</sup>Instituto Cajal - CSIC, Madrid, Spain, <sup>2</sup>Grupo de Neurocomputación Biológica (GNB), UAM, Madrid, Spain

### PS1-34

#### STUDY OF THE ANTIDEPRESSANT EFFECT OF NEW GENERATION DRUGS BASED ON GLUTAMATERGIC TRANSMISSION.

Mr. Esteban Merino<sup>1</sup>, Dr. Vicent Teruel-Martí<sup>1</sup>, Dra Ana Cervera-Ferri<sup>1</sup>, Mrs. Anna Teruel-Sanchís<sup>1,2</sup>, Dr. Sergio Martínez-Bellver<sup>1</sup>, Mrs. Maria Villafranca-Faus<sup>1</sup>, Mrs. Alicia González-Martínez<sup>1</sup>, Mrs. Hanna Vila-Merkle<sup>1</sup>, Mr. Manuel Esteban Vila-Martin<sup>1,2</sup>, Dr. Enrique Lanuza<sup>2</sup>, Dr. Albert Adell<sup>3</sup>, Dr. Joana Martínez-Ricós<sup>1</sup>, PhD Sharon Cabanu<sup>3</sup>

<sup>1</sup>University of Valencia, Valencia, Spain, <sup>2</sup>University of Valencia, Burjassot, Spain, <sup>3</sup>Institute of Biomedicine and Biotechnology of Cantabria, IBBTEC (CSIC University of Cantabria), Cantabria, Spain



### PS1-35

#### Functional diversity of motoneurons innervating extraocular muscle fibers

**Dr. R. G. Hernández<sup>1</sup>, Ms. P. M. Calvo<sup>1</sup>, Ms. G. Carrero-Rojas<sup>1,2</sup>, Prof. R. Blumer<sup>2</sup>, Prof. R. R. de la Cruz<sup>1</sup>, Prof. A. M. Pastor<sup>1</sup>**

<sup>1</sup>Facultad de Biología, Universidad De Sevilla, Sevilla, Spain, <sup>2</sup>Center of Anatomy and Cell Biology, Medical University Vienna, Wien, Austria

### PS1-36

#### Thyroid hormone transporters MCT8 and OATP1C1 are expressed in neurons in the human and monkey basal ganglia and motor thalamus.

**Ms. Ting Wang<sup>1,2,3</sup>, Mr. Yu Wang<sup>1,2</sup>, Prof. Lucía Prensa<sup>1</sup>, Prof. Ana Guadaño<sup>2</sup>, Prof. Estrella Rausell<sup>1</sup>**

<sup>1</sup>School of Medicine, The Autonomous University of Madrid., Madrid, Spain, <sup>2</sup>The Instituto de Investigaciones Biomédicas "Alberto Sols" (IIBM), Madrid, Spain, <sup>3</sup>Xi'an Lintong Shiyoucheng General Clinic, Xi'an, China, <sup>4</sup>PhD Program in Neuroscience, Autonoma de Madrid University, Madrid, Spain

### PS1-37

#### Cortical pyramidal cells express thyroid hormone transporters MCT8 and OATP1C1 in human and monkey brain.

**Mr. Yu Wang<sup>1,2</sup>, Ms. Ting Wang<sup>1,2,3</sup>, Prof. Lucía Prensa<sup>1</sup>, Prof. Ana Guadaño-Ferraz<sup>2</sup>, Prof. Estrella Rausell<sup>1</sup>**

<sup>1</sup>School Of Medicine, The Autonomous University Of Madrid, Madrid, Spain, <sup>2</sup>The Instituto de Investigaciones Biomédicas "Alberto Sols" (IIBM), Madrid, Spain, <sup>3</sup>Xi'an Lintong Shiyoucheng General Clinic, Xi'an, China, <sup>4</sup>PhD Program in Neuroscience, Autonoma de Madrid University, Madrid, Spain

### PS1-38

#### Retrieval under different conditions: it is always easy to recover the spatial information?

**Ms. Candela Zorzo<sup>1</sup>, Jorge L. Arias<sup>1</sup>, Marta Méndez<sup>1</sup>**

<sup>1</sup>Laboratory of Neuroscience, Department of Psychology, University of Oviedo, Plaza Feijóo, s/n, E-33003. Instituto de Neurociencias del Principado de Asturias (INEUROPA)., Oviedo, Spain

### PS1-39

#### Synchronized eye blinks predict narrative content in videos

**Dr. Celia Andreu-Sánchez<sup>1</sup>, Dr. Miguel Ángel Martín-Pascual<sup>1,2</sup>, Prof. José María Delgado-García<sup>3</sup>, Prof. Agnès Gruart<sup>3</sup>**

<sup>1</sup>Universitat Autònoma De Barcelona, Cerdanyola Del Vallès (Barcelona), Spain, <sup>2</sup>Instituto Radio Televisión Española, Sant Cugat del Vallès (Barcelona), Spain, <sup>3</sup>Universidad Pablo de Olavide, Sevilla, Spain



## PS1-40

### Cognitive neurodynamics during audiovisual cuts in media professionals

**Dr. Miguel Ángel Martín-Pascual**<sup>1,2</sup>, Dr. Celia Andreu-Sánchez<sup>2</sup>, Prof. Agnès Gruart<sup>3</sup>, Prof. José María Delgado-García<sup>3</sup>

<sup>1</sup>Instituto Radio Televisión Española, Sant Cugat del Vallès (Barcelona), Spain, <sup>2</sup>Universitat Autònoma de Barcelona, Cerdanyola del Vallès (Barcelona), Spain, <sup>3</sup>Universidad Pablo de Olavide, Sevilla, Spain

## PS1-41

### Spatial memory evaluated by low anxiogenic Barnes Maze is preserved in the 3xTg-AD mice model of Alzheimer's disease following a cannabinoid treatment

**Mr. Iker Bengoetxea de Tena**<sup>1</sup>, Dr. Marta Moreno-Rodríguez<sup>1</sup>, Dr. Jonatan Martínez-Gardeazabal<sup>1</sup>, Mr. Gorka Pereira-Castelo<sup>1</sup>, Dr. Iván Manuel<sup>1,2</sup>, Dr. Lydia Giménez-Llort<sup>3</sup>, Dr. Rafael Rodríguez-Puertas<sup>1,2</sup>

<sup>1</sup>Dept. Pharmacology, Fac. of Medicine and Nursing, University of the Basque Country (UPV/EHU), Leioa, Spain,

<sup>2</sup>Neurodegenerative Diseases, BioCruces Bizkaia Health Research Institute, Barakaldo, Spain, <sup>3</sup>Dept. Psychiatry and Forensic Medicine, School of Medicine & Institute of Neuroscience, Autonomous University of Barcelona (UAB), Barcelona, Spain

## PS1-42

### Evaluation of the neuroprotective activity of the ethanolic extract of Myrciaria dubia HBK McVaugh "camu camu" in a murine model of Parkinson's disease.

**Bach. Marco Peña**<sup>1</sup>, M.Sc. Roy Andrade<sup>2</sup>, Eng. Richard Cisneros<sup>3</sup>, M.Sc. Luis Baquerizo<sup>4</sup>, Ph.D. Fernando Ramos<sup>4</sup>, Ph.D. Ivan Best<sup>4</sup>, Ph.D. Ana Muñoz<sup>4</sup>, Ph.D. Luis Aguilar<sup>4</sup>

<sup>1</sup>San Marcos University, Lima, Peru, <sup>2</sup>Cayetano Heredia University, Lima, Peru, <sup>3</sup>National University of Huancavelica, Huancavelica, Peru, <sup>4</sup>San Ignacio de Loyola University, Lima, Peru

## PS1-43

### Maternal separation alters working memory and brain function of male Wistar rats

**Ms. Alba Gutiérrez-Menéndez**<sup>1</sup>, María Banqueri<sup>2</sup>, Marta Méndez<sup>1</sup>, Nélida M. Conejo<sup>1</sup>, Jorge L. Arias<sup>1</sup>

<sup>1</sup>University Of Oviedo, Plaza Feijóo, s/n, E-33003, Oviedo, Asturias, Spain, <sup>2</sup>Nencki Institute of Experimental Biology, Ludwika Pasteura 3, 02-093 Warsaw, Poland

## PS1-44

### Role of Astrocyte-Neuron signaling in Major Depressive Disorder

**Candela González Arias**<sup>1</sup>, Cristina Sánchez-Puelles<sup>1</sup>, Julio Esparza<sup>1</sup>, Gertrudis Perea<sup>1</sup>

<sup>1</sup>Instituto Cajal (CSIC), Madrid, Spain



## PS1-45

### Learning of allocentric and egocentric strategies in an automatized maze

**Mr. Juan P. Quintanilla<sup>1,2</sup>, Dr. Jorge R. Brotons-Mas<sup>2,3</sup>, Dr. Liset Menéndez de la Prida<sup>1</sup>**

<sup>1</sup>Instituto Cajal. CSIC., Madrid, Spain, <sup>2</sup>Universidad Cardenal Herrera CEU, Elche, Spain, <sup>3</sup>Instituto de Neurociencias, UMH-CSIC, Alicante, Spain

## PS1-46

### Transcranial magnetic stimulation reveals the experience-dependent role of the prefrontal cortex in making decisions based on abstract rules.

**Ms. Jennifer Paz Canosa<sup>1,2,3</sup>, Dr. Jose L. Pardo-Vazquez<sup>1,2,3</sup>, Dr. Carmen De Labra<sup>1,2,3</sup>, Dr. Javier Cudeiro<sup>1,2,3,4</sup>, Dr. Casto Rivadulla<sup>1,2,3</sup>**

<sup>1</sup>NEUROcom, Departamento de Fisioterapia, Medicina e Ciencias Biomédicas, Facultad de Ciencias da Saúde, Universidade da Coruña (UDC), A Coruña, Spain, <sup>2</sup>Instituto de Investigación Biomédica de A Coruña (INIBIC), A Coruña, Spain, <sup>3</sup>Centro de Investigacións Científicas Avanzadas (CICA), Universidade da Coruña (UDC), A Coruña, Spain, <sup>4</sup>Centro de Estimulación Cerebral de Galicia, A Coruña, Spain

## PS1-47

### The role of Akkermansia muciniphila and environmental enrichment in reversing cognitive impairment associated with high-fat high-cholesterol consumption in rats

**Dr. Natalia Arias<sup>2,4</sup>, Dr Sara G Higarza<sup>1,2</sup>, Dr Silvia Arboleya<sup>3</sup>, Prof Jorge L Arias<sup>1,2</sup>, Dr Miguel Gueimonde<sup>3</sup>**

<sup>1</sup>Laboratory of Neuroscience, Department of Psychology. University of Oviedo, Oviedo, Spain, <sup>2</sup>Instituto de Neurociencias del Principado de Asturias (INEUROPA), Oviedo, Spain, <sup>3</sup>Department of Microbiology and Biochemistry of Dairy Products, Instituto de Productos Lácteos de Asturias (IPLA-CSIC), Villaviciosa, Spain, <sup>4</sup>Department of Basic and Clinical Neuroscience, Institute of Psychiatry, Psychology and Neuroscience, London, Spain

## PS1-48

### Assessment of social behaviors in C57BL/6 mice exposed to chlorpyrifos: An association with autistic-like behaviors

**Ms. Judit Biosca-Brull<sup>1,2</sup>, Dra. Laia Guardia-Escote<sup>1</sup>, Dra. Pia Basaure<sup>1</sup>, Dr. Jordi Blanco<sup>1,3</sup>, Dra. Maria Cabré<sup>1,4</sup>, Dra. María Teresa Colomina<sup>1,2</sup>**

<sup>1</sup>Universitat Rovira i Virgili, Research in Neurobehavior and Health (NEUROLAB), Tarragona, Spain, <sup>2</sup>Universitat Rovira i Virgili, Psychology, Research Center for Behavioral Assessment (CRAMC), Tarragona, Spain, <sup>3</sup>Universitat Rovira i Virgili, Basic Medical Science, Reus, Spain, <sup>4</sup>Universitat Rovira i Virgili, Biochemistry and Biotechnology, Reus, Spain

## PS1-49

### Genomic Basis of Drosophila Social Memory



**Dr. Francisco A Martin<sup>1</sup>, Beatriz Gil-Martí<sup>1</sup>, Dr Abhijit Das<sup>2</sup>, Celia G Barredo<sup>1</sup>, Carmen Rodriguez-de Navas<sup>1</sup>, Dr Enrique Turiegano<sup>3</sup>, Prof Andrea H Brand<sup>4</sup>**

<sup>1</sup>Cajal Institute (csic), Madrid, Spain, <sup>2</sup>b School of Bioscience, Indian Institute of Technology , Kharagpury, India,

<sup>3</sup>Autonomous University of Madrid , Madrid, Spain, <sup>4</sup>The Gurdon Institute and Department of Physiology, Development and Neuroscience, University of Cambridge, Cambridge, UK

### PS1-51

#### Joint replay of correlated place maps in hippocampus

**Dr. Emma Roscow<sup>1</sup>, Dr Alex Roxin<sup>1</sup>**

<sup>1</sup>Centre de Recerca Matemàtica, Bellaterra, Barcelona, Spain

### PS1-52

#### A computational model of Slow Wave Oscillation propagation across cortical and striatal networks

**Dr. Javier Alegre-Cortés<sup>1</sup>, Dr Maurizio Mattia<sup>2</sup>, Dr Ramón Reig<sup>1</sup>**

<sup>1</sup>Instituto de Neurociencias UMH-CSIC, San Juan de Alicante, Spain, <sup>2</sup>Instituto Superiore di Sanità, Rome, Italy

### PS1-53

#### GENE EXPRESSION PATTERN OF HNS1 HUMAN NEURAL STEM CELLS IN DIFFERENTIATION TO APPLICATIONS IN NEUROSCIENCE

**Ms. Rosa González<sup>1</sup>, Ms. Raquel Coronel<sup>2</sup>, Ms. Andreea Rosca<sup>2</sup>, Ms. Patricia Mateos<sup>2</sup>, Dr. Isabel Liste<sup>2</sup>, Dr. Victoria López<sup>1</sup>**

<sup>1</sup>Unidad de Biología Computacional, Unidad Funcional de Investigación de Enfermedades Crónicas (UFIEC), Instituto De Salud Carlos III, Madrid, Spain, <sup>2</sup>Unidad de Regeneración Neural, Unidad Funcional de Investigación de Enfermedades Crónicas (UFIEC), Madrid, Spain

### PS1-54

#### Lactoperoxidase might be a pathogenic factor in Parkinson's disease

**Dr. Emilio Fernández Espejo<sup>1,3</sup>, Dr Fernando Rodríguez de Fonseca<sup>2,3</sup>, Dr Juan Suárez<sup>2,3</sup>**

<sup>1</sup>Reial Academia De Medicina De Catalunya, Barcelona, Spain, <sup>2</sup>Instituto de Biomedicina, Málaga, Spain, <sup>3</sup>Red Andaluza Neuro-RECA, Málaga, Spain

### PS1-55

#### Native and nitrated α-synuclein, and patterns of nitro-α-synuclein-positive inclusions in saliva and submandibular gland in idiopathic Parkinson's disease

**Dr. Emilio Fernández Espejo<sup>1,6</sup>, Dr. Fernando Rodríguez de Fonseca<sup>2,6</sup>, Dr. Juan Suárez<sup>2,6</sup>, Dr. Eduardo Tolosa<sup>3,5</sup>, Dr. Dolores Vilas<sup>4</sup>, Dr. Iban Aldecoa<sup>3</sup>, Dr. Joan Berenguer<sup>3</sup>**



<sup>1</sup>Reial Academia De Medicina De Catalunya, Barcelona, Spain, <sup>2</sup>Instituto de Biomedicina de Málaga, Málaga, Spain,  
<sup>3</sup>Hospital Clinic, Barcelona, Spain, <sup>4</sup>Hospital Universitari Germans Trias i Pujol, Badalona, Spain, <sup>5</sup>CIBERNED, Madrid, Spain,  
<sup>6</sup>Red Andaluza Neuro-RECA, Málaga, Spain

### PS1-56

#### Functional epi-genomics unveils new risk genes and treatments for Alzheimer's disease

Dr. Jose Vicente Sanchez Mut<sup>1</sup>

<sup>1</sup>Instituto De Neurociencias De Alicante, San Juan De Alicante, Spain

### PS1-57

#### CERKL, a retinitis pigmentosa gene, is involved in the regulation of mitochondrial dynamics in retinal and hippocampal neurons

Ms. Rocío García-Arroyo<sup>1,2</sup>, Dr. Gemma Marfany<sup>1,2,3</sup>, Dr. Serena Mirra<sup>1,2</sup>

<sup>1</sup>Universitat De Barcelona, Barcelona, Spain, <sup>2</sup>CIBERER- ISCIII, Barcelona, Spain, <sup>3</sup>IBUB-IRSJD, Barcelona, Spain

### PS1-58

#### Rifaximin prevents motor incoordination in rats with mild liver damage by preventing immune cell infiltration and neuroinflammation in the cerebellum

Ms. Gergana Ivaylova<sup>1</sup>, Dr. Paola Leone<sup>1</sup>, Dr. Tiziano Balzano<sup>2</sup>, Dr. Michele Malaguarnera<sup>3,4</sup>, Dr. Vicente Felipo<sup>1</sup>, Dr. Marta Llansola<sup>1</sup>

<sup>1</sup>Centro de Investigación Príncipe Felipe, Valencia, Spain, <sup>2</sup>HM Hospital Universitario Puerta del Sur, Móstoles, Spain,

<sup>3</sup>Universitat de Valencia, Valencia, Spain, <sup>4</sup>Universidad Nacional de Educación a Distancia, Valencia, Spain

### PS1-59

#### Sphingomyelin 16:0 is a specific target for brain pathology in the acid sphingomyelinase deficiency

Dr. Angel Gaudioso<sup>1</sup>, Dr. Josefina Casas<sup>2</sup>, Dr. Edward Schuchman<sup>3</sup>, Dr. Maria Dolores Ledesma<sup>1</sup>

<sup>1</sup>Centro De Biología Molecular Severo Ochoa, Madrid, Spain, <sup>2</sup>Catalan Institute of Advanced Chemistry (IQAC/CSIC), CIBEREHD, Barcelona, Spain, <sup>3</sup>Icahn School of Medicine at Mount Sinai, New York, USA

### PS1-60

#### STIMULATION OF MICROVESICLE/EXOSOME SECRETION BY POLYPHENOLS FOR THE TREATMENT OF NIEMANN PICK DISEASES

Ms. Beatriz Soto Huelin<sup>1</sup>, PhD. Rebeca Bustó<sup>2</sup>, PhD. Mª Dolores Ledesma<sup>1</sup>

<sup>1</sup>Centro de Biología Molecular Severo Ochoa, Madrid, España, <sup>2</sup>Instituto Ramón y Cajal de Investigación Sanitaria, Madrid, España



PS1-61

**ROLE OF mGLUR5 IN THE PSYCHIATRIC ALTERATIONS OF NIEMANN PICK DISEASE TYPE C.**

**Ms. Ana Toledano-Zaragoza<sup>1</sup>, Mr. Miguel Parra<sup>1</sup>, Dr. Víctor Briz<sup>1</sup>, Ms. Rocío Alfaro<sup>2</sup>, Dr. Rafael Luján<sup>2</sup>, Dr. José Antonio Esteban<sup>1</sup>, Dr. María Dolores Ledesma<sup>1</sup>**

<sup>1</sup>*Centro De Biología Molecular "Severo Ochoa", Madrid, Spain, <sup>2</sup>Instituto de Investigación en Discapacidades Neurológicas (IDINE), Albacete, Spain*

PS1-62

**Nrg1 haploinsufficiency alters inhibitory cortical circuits**

**Dr Carmen Navarro-Gonzalez<sup>1</sup>, Yaiza Domínguez Canterla<sup>1</sup>, Dr Ángela Rodríguez-Prieto<sup>1</sup>, Ana González-Manteiga<sup>1</sup>, PhD Marta Navarrete-Llinás<sup>2</sup>, PhD Marina Benito Vicente<sup>3</sup>, Dr. Pietro Fazzari<sup>1</sup>**

<sup>1</sup>*Cipf, Centro De Investigacion Principe Felipe, Valencia, Spain, <sup>2</sup>CSIC, Madrid, Spain, <sup>3</sup>Hospital Nacional de Parapléjicos, Toledo, Spain*

PS1-63

**Aluminum Profiles in the Cerebrospinal Fluid during Alzheimer's Disease development. Relation to Pathological Biomarkers**

**Prof. Raquel Marin<sup>1</sup>, Dr. Fátima Mesa-Herrera<sup>2</sup>, Dr. Eduardo Torrealba<sup>3</sup>, Prof. Mario Diaz<sup>1</sup>**

<sup>1</sup>*Universidad De La Laguna, Santa Cruz De Tenerife, Spain, <sup>2</sup>Centro Atlántico del Medicamento, La Laguna, Spain, <sup>3</sup>Hospital Universitario de Gran Canaria Dr. Negrín, , Spain*

PS1-64

**FUSΔ14 mutation causes changes in lipid metabolism in mice with motor and cognitive alterations**

**Mr. Juan Miguel Godoy Corchuelo<sup>1</sup>, Ms Zeinab Ali<sup>2</sup>, Mr Luis C. Fernández-Beltrán<sup>1</sup>, Mr Jordi Matias-Guiu Antem<sup>1</sup>, Mr Thomas Cunningham<sup>2</sup>, Ms Silvia Corrochano<sup>1</sup>**

<sup>1</sup>*Fundación Para La Investigación Sanitaria Del Hospital Clínico San Carlos, Madrid, Spain, <sup>2</sup>MRC Harwell Institute , Oxfordshire, United Kingdom*

PS1-65

**E2F4DN-based gene therapy recovers long-term potentiation and hippocampal-dependent memory in homozygous 5xFAD mice.**

**Dr. Cristina Sánchez-Puelles<sup>1,2</sup>, Dr. Gertrudis Perea<sup>2</sup>, Dr. José María Frade<sup>2</sup>**

<sup>1</sup>*Tetraneuron, Valencia, Spain, <sup>2</sup>Cajal Institute (CSIC), Madrid, Spain*

PS1-66

**The matricellular protein hevin's expression in nucleus accumbens is altered by alcohol chronic treatment and administration after withdrawal**



Ms. Amaia Nuñez-delMoral<sup>1</sup>, Dr. Bianchi P.C.<sup>2</sup>, Augusto Anesio<sup>2</sup>, Paola Palombo<sup>2</sup>, Dr. Cruz F.C.<sup>2</sup>, Dr. Vincent Vialou<sup>3</sup>, Dr. Callado L.F.<sup>1</sup>, Dr. Erdozain A.M.<sup>1</sup>

<sup>1</sup>University of the Basque Country (UPV/EHU) and Centro de Investigación Biomédica en Red de Salud Mental (CIBERSAM), Leioa, Spain, <sup>2</sup>Universidade Federal de São Paulo - UNIFESP, São Paulo, Brazil, <sup>3</sup>Neurosciences Paris Seine - Institut de Biologie Paris Seine (NPS – IBPS), Sorbonne Université, INSERM U1130, CNRS UMR8246, Paris, France

PS1-67

**Lipid metabolism dysregulation is an early and progressive pathological mechanism in the spinal cord of transgenic SOD1 mice.**

Mr. Luis Carlos Fernandez-Beltran<sup>1</sup>, Mr. Juan Miguel Godoy Corchuelo<sup>1</sup>, Ms. Maria Losa-Fontangordo<sup>1</sup>, Dr. Jorge Matias-Guiu Guia<sup>1</sup>, Dr. Silvia Corrochano Sánchez<sup>1</sup>

<sup>1</sup>Instituto de Investigación Sanitaria del Hospital Clínico San Carlos (IdISSC), Madrid, Spain

PS1-68

**Understanding the role of pre-conditioning inflammation on the onset of Alzheimer's Disease**

Ms. Monica Guerrero Carrasco<sup>1</sup>, Ms. Imogen Targett<sup>1</sup>, Mr. Adrian Olmos-Alonso<sup>1</sup>, Dr. Mariana Vargas-Caballero<sup>1</sup>, Dr. Diego Gomez-Nicola<sup>1</sup>

<sup>1</sup>University Of Southampton, Southampton, United Kingdom

PS1-69

**Morphological and stereological study of neurons and interneurons in the non-human primate striatum**

Ms. Natalia López-González del Rey<sup>1,2</sup>, Dr. Carmen Cavada<sup>3</sup>, Dr. José Ángel Obeso<sup>1,4</sup>, Dr Javier Blesa<sup>1,4</sup>

<sup>1</sup>HM CINAC (Centro Integral de Neurociencias Abarca Campal), Hospital Universitario HM Puerta del Sur, HM Hospitales, Móstoles, Spain, <sup>2</sup>PhD Program in Neuroscience, Autonoma de Madrid University, , Spain, <sup>3</sup>School of Medicine, Universidad Autónoma de Madrid, , Spain, <sup>4</sup>CIBERNED (Center for Networked Biomedical Research on Neurodegenerative Diseases), Instituto Carlos III, , Spain

PS1-70

**Proteomic and stereological study of human amygdala in Parkinson's disease**

Ms. Sandra Villar-conde<sup>1</sup>, Ms. Melania Gonzalez-Rodriguez<sup>1</sup>, Ms. Veronica Astillero-Lopez<sup>1</sup>, Ms. Patricia Villanueva-Anguita<sup>1</sup>, Dr. Daniel Saiz-Sanchez<sup>1</sup>, Dr. Isabel Ubeda-Banon<sup>1</sup>, Prof. Alino Martinez-Marcos<sup>1</sup>, Dr. Alicia Flores-Cuadrado<sup>1</sup>

<sup>1</sup>Ciudad Real Medical School/CRIB, University of Castilla-La Mancha., Ciudad Real, Spain

PS1-71

**The genetic load determines behavioural phenotype and gut microbiota composition in the 5xFAD mouse model of Alzheimer's Disease**



**Ms. Dina Medina-Vera<sup>1,2,3,4</sup>, Dr. Cristina Rosell-Valle<sup>1</sup>, Dr. Emma N. Zambrana-Infantes<sup>5</sup>, Antonio J. López-Gambero<sup>1,2</sup>, Mr. Andrés Gonzalez-Jimenez<sup>6</sup>, Mr. Juan A. Navarro<sup>1,3</sup>, Dr. Francisco J. Pavon<sup>1,4</sup>, Dr. Luis J. Santín<sup>5</sup>, Dr. Juan Suarez<sup>1,3</sup>, Dr. Fernando Rodríguez de Fonseca<sup>1</sup>**

<sup>1</sup>Instituto de Investigación Biomédica de Málaga-IBIMA, Unidad de Gestión Clínica de Salud Mental, Hospital Regional Universitario de Málaga, Malaga, Spain, <sup>2</sup>Facultad de Ciencias, Universidad de Málaga, Malaga, Spain, <sup>3</sup>Facultad de Medicina, Universidad de Málaga, Malaga, Spain, <sup>4</sup>Instituto de Investigación Biomédica de Málaga-IBIMA, Unidad de Gestión Clínica del Corazón, Hospital Universitario Virgen de la Victoria, Malaga, Spain, <sup>5</sup>Facultad de Psicología, Universidad de Málaga, Malaga, Spain, <sup>6</sup>Bioinformatic ECAI, Instituto de Investigación Biomédica de Málaga-IBIMA, Malaga, Spain

### PS1-72

#### Neuronal expression of E2F4DN attenuates the immune response observed in the cerebral cortex and hippocampus of 5xFAD mice

**Ms. Morgan Ramón-Landreau<sup>1,2</sup>, Dr. Noelia López-Sánchez<sup>1,2</sup>, Dr. José María Frade<sup>1</sup>**

<sup>1</sup>Cajal Institute (CSIC), Madrid, Spain, <sup>2</sup>TetraNeuron S.L., Valencia, Spain

### PS1-73

#### The role of brain synaptic dysfunction in the progression of C9orf72-ALS/FTD

**Dr. Natalia Arias<sup>1,2</sup>, Mrs Dhruv Sigh<sup>1</sup>, Ms Aleksandra Kaliszewska<sup>1</sup>, Mrs Joseph Allison<sup>1</sup>, Ms Barbora Vidimova<sup>1</sup>, Ms Sara Ketola<sup>1</sup>, Ms Megan Tomlin<sup>1</sup>, Prof Christopher Shaw<sup>1</sup>**

<sup>1</sup>UK Dementia Research Institute at King's College London, Institute of Psychiatry, Psychology and Neuroscience, Department of Basic & Clinical Neuroscience, London, United Kingdom, <sup>2</sup>INEUROPA, Instituto de Neurociencias del Principado de Asturias, Oviedo, Spain

### PS1-74

#### Trophic dependence of abducens motoneurons on muscle VEGF

**Ms. P. M. Calvo<sup>1</sup>, Dr. R. G. Hernández<sup>1</sup>, Prof. R. R. de la Cruz<sup>1</sup>, Prof. A. M. Pastor<sup>1</sup>**

<sup>1</sup>Facultad de Biología, Universidad de Sevilla, Sevilla, Spain

### PS1-75

#### The increase in doublecortin-immunoreactive immature neurons in the olfactory cortex is linked to symptom onset in a mouse model of Rett syndrome

Ms Paloma Sevilla-Ferrer<sup>1</sup>, Mr Josep Pardo-García<sup>1</sup>, Ms Elena Martínez-Rodríguez<sup>1</sup>, Dr María Abellán-Álvaro<sup>1</sup>, Dr Mónica Santos<sup>2</sup>, Dr Enrique Lanuza<sup>1</sup>, **Dr. Carmen Agustín-Pavón<sup>1</sup>**

<sup>1</sup>Universitat De València, València, Spain, <sup>2</sup>Center for Neuroscience and Cell Biology, University of Coimbra, Coimbra, Portugal



PS1-76

FAMILIAL ALZHEIMER'S DISEASE GENE MUTATIONS REGULATE MITOCHONDRIAL DNA REPLICATION, TRANSCRIPTION AND RELEASE.

Margalida Puigròs<sup>1,3</sup>, Verónica Pablo-Fontecha<sup>1,3</sup>, Andrea Reparaz<sup>1,3</sup>, Petar Podlesniy<sup>1,3</sup>, Dr. Ramon Trullas<sup>1,2,3</sup>

<sup>1</sup>Neurobiology Unit, IIBB/CSIC, Barcelona, Spain, <sup>2</sup>IDIBAPS, Barcelona, Spain, <sup>3</sup>CIBERNED, Barcelona, Spain

PS1-77

Cellular plasticity of neuropeptidergic systems in the mouse hypothalamus.

Dr. Pilar Madrigal<sup>1</sup>, Dr. Sandra Jurado<sup>1</sup>

<sup>1</sup>CSIC, San Juan de Alicante, Spain

PS1-78

FUNCTIONAL PROPERTIES AND MOLECULAR MACHINERY UNDERLYING OXYTOCIN RELEASE

Ms. Beatriz Aznar-Escalon<sup>1</sup>, Dr. M. P. Madrigal<sup>1</sup>, Dr. Sandra Jurado<sup>1</sup>

<sup>1</sup>Instituto De Neurociencias De Alicante, San Juan de Alicante, España

PS1-79

Mitochondrial fission factor (MFF) regulates mitochondrial dynamics and excitability of Agouti related peptide (AgRP)-expressing neurons

Ms. Almudena-Rosa Del Río Martín<sup>1,2,3</sup>, Ms. Marie H. Solheim<sup>1,2,3</sup>, Mr. Gagik Yeghiazaryan<sup>2,4</sup>, Mr. Alain J. de Solis<sup>1,2,3</sup>, Mr. Paul Mirabella<sup>1,2,3</sup>, Mr. Henning Fenselau<sup>1,2,3</sup>, Mr. Peter Kloppenburg<sup>2,4</sup>, Mr. Jens C. Brüning<sup>1,2,3</sup>

<sup>1</sup>Max Planck Institute For Metabolism Research, Cologne, Germany, <sup>2</sup>Excellence Cluster on Cellular Stress Responses in Aging Associated Diseases (CECAD), Cologne, Germany, <sup>3</sup>Center of Molecular Medicine Cologne (CMMC), University of Cologne, Cologne, Germany, <sup>4</sup>Institute for Zoology, Biocenter, University of Cologne, Cologne, Germany

PS1-80

Fabrication of Pine oil loaded Donepezil and TPGS stabilized ultra-fine nanoemulsion via Intranasal route for Alzheimer's disease

Mr. Mayank Handa<sup>1</sup>, Dr. Rahul Shukla<sup>1</sup>

<sup>1</sup>National Institute Of Pharmaceutical Education And Research-raebareli, Lucknow, India

PS1-81

Scaffolds of Mobile Extracellular Matrix Molecules Enhance Maturation of Human Stem Cells-Derived Neurons

Alberto Ortega<sup>1</sup>, Zaida Alvarez<sup>1</sup>, Kohei Sato<sup>1</sup>, Ivan Sasselli<sup>1</sup>, Alexandra Edelbrock<sup>1</sup>, Katherine Quinlan<sup>2</sup>, Chiara Mussumucei<sup>1</sup>, Samuel Stupp<sup>1</sup>, Evangelos Kiskinis<sup>1</sup>

<sup>1</sup>Northwestern University, Chicago, USA, <sup>2</sup>University of Rhode Island, USA



PS1-82

## SELF-ASSEMBLED HYBRID HYDROGELS BASED ON GRAPHENE DERIVATES AND CERIUM OXIDE NANOPARTICLES AS THREE-DIMENSIONAL SUBSTRATES FOR NEURAL STEM CELLS.

Yurena Polo<sup>1,3</sup>, Jon Luzuriaga<sup>1</sup>, Sergio Gonzalez de Langarica<sup>1</sup>, Beatriz Pardo Rodriguez<sup>1</sup>, Edurne Marin<sup>1</sup>, Daniel E. Martinez-Tong<sup>4</sup>, Gaskon Ibarretxe<sup>1</sup>, Fernando Unda<sup>1</sup>, JR Sarasua<sup>1,3</sup>, Aitor Larrañaga<sup>1,3</sup>, **JR Pineda<sup>1,2</sup>**

<sup>1</sup>University of the Basque Country (UPV/EHU), Leioa, Spain, <sup>2</sup>Achucarro Basque Center for Neuroscience Fundazioa, Leioa, Spain, <sup>3</sup>Polimerbio S.L., Donostia-San Sebastian, Spain, <sup>4</sup>University of the Basque Country (UPV/EHU), Donostia, San Sebastián, Spain

PS1-83

## Modulating corticostriatal activity with transcranial static-magnetic-field stimulation

**Mr. Jaime Caballero-Insaurriaga<sup>1,2</sup>**, Dr. José Ángel Pineda-Pardo<sup>1</sup>, Dr. Guglielmo Foffani<sup>3</sup>

<sup>1</sup>Centre for Integrative Neuroscience AC (HM CINAC), Madrid, Spain, <sup>2</sup>Polytechnical University of Madrid (UPM), Madrid, Spain, <sup>3</sup>Hospital Nacional de Parapléjicos, Toledo, Spain

PS1-84

## Situation of university biotheriums and research centers using murine systems in Peru

**Eng. Richard Cisneros<sup>1</sup>**, M.Sc. Roy Andrade<sup>2</sup>, Ph.D. Elmer Chávez<sup>1</sup>, Ph.D Luis Aguilar<sup>3</sup>

<sup>1</sup>National University of Huancavelica, Huancavelica, Peru, <sup>2</sup>Cayetano Heredia University, Lima, Peru, <sup>3</sup>San Ignacio de Loyola University, Lima, Peru

PS1-85

## Acetylcholinesterase in cortical neurons derived from patient-derived iPS.

**Ms. María-Ángeles Cortés-Gómez<sup>1,2,3</sup>**, Dr. Lotta Agholme<sup>4</sup>, Prof. Henrik Zetterberg<sup>4</sup>, Dr Javier Sáez-Valero<sup>1,3</sup>, Dr. María-Salud García-Ayllón<sup>1,2,3</sup>

<sup>1</sup>Instituto de Neurociencias de Alicante - UMH - CSIC, San Juan de Alicante, Spain, <sup>2</sup>Hospital General Universitario de Elche - FISABIO, Elche, España, <sup>3</sup>Centro de Investigación Biomédica en Red sobre Enfermedades Neurodegenerativas (CIBERNED), Madrid, España, <sup>4</sup>University of Gothenburg, Gothenburg, Sweden

PS1-86

## Genomic imprinting of Dlk1 is altered during adult neural stem cells (NSCs) reprogramming into pluripotent stem cells (iPSCs)

**Dr. Anna Lozano-Ureña<sup>1</sup>**, Esteban Jiménez-Villalba<sup>1</sup>, Dr. Mitsuroto Ito<sup>2</sup>, Dr. Sacri R. Ferrón<sup>1</sup>



<sup>1</sup>Universitat De València, Valencia, Spain, <sup>2</sup>University of Cambridge, Cambridge, United Kingdom

PS1-87

### ANALYSIS OF HIPPOCAMPAL PARTICIPATION IN SOCIAL INTERACTIONS IN A GENETIC MODEL OF AUTISTIC SPECTRUM DISORDER

Pilar Rodríguez-Martín<sup>1</sup>, Almudena Sanz<sup>1</sup>, Eva Monserrat<sup>1</sup>, Inés Colmena<sup>1</sup>, Cristina Medina-Menéndez<sup>1</sup>, Véronique Lefebvre<sup>2</sup>, Aixa V. Morales<sup>1</sup>

<sup>1</sup>Instituto Cajal (C.S.I.C.), Madrid, Spain, <sup>2</sup>Children's Hospital of Philadelphia, Philadelphia, PA 19104, USA

PS1-88

### Effect of the transplant type on RGC neuroprotection and axonal regeneration after optic nerve crush

Ms. María Norte Muñoz<sup>1</sup>, Dr. Fernando Lucas Ruiz<sup>1</sup>, Mr. Alejandro Gallego Ortega<sup>1</sup>, Dr. David García Bernal<sup>1</sup>, Prof. Manuel Vidal Sanz<sup>1</sup>, Dr. Marta Agudo Barriuso<sup>1</sup>

<sup>1</sup>Universidad De Murcia, Murcia, Spain