

19<sup>th</sup>  
MEETING

3-5 November 2021

Lleida



## SCIENTIFIC PROGRAMME

SPANISH SOCIETY OF  
NEUROSCIENCE





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## SENC COMMITTEES

### Organizing Committee - Executive Board of SENC

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**Vice-president**

Paola Bovolenta  
**President Elect**

Casto Rivadulla  
**Secretary**

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Casto Rivadulla  
Arantxa Taberero Urbieto  
José Luis Trejo



## GENERAL INFORMATION

### VENUE

#### La Llotja, Palau de Congressos

Address: Av. de Tortosa, 6-8

25005 Lleida

Tel. 973 22 11 55

[www.lalotjadelleida.com](http://www.lalotjadelleida.com)



### TECHNICAL SECRETARIAT

#### KENES SPAIN

Avda. Institución Libre de Enseñanza, 2, planta 4ª

28037 Madrid.

Tel: +34 91 361 26 00

[senc2021@kenes.com](mailto:senc2021@kenes.com)

<https://congresosenc.es/>

### LANGUAGE

The official language of the congress is English. No simultaneous translation will be provided.

### WIFI

WIFI: **SENC CONGRESS**

Password: **SENC2021**

### SCHEDULE

	TECHNICAL SECRETARIAT	COMMERCIAL EXHIBITION
<b>November 3<sup>rd</sup></b>	08:00 - 20:00	09:00 - 20:00
<b>November 4<sup>th</sup></b>	08:30 - 20:30	09:00 - 20:30
<b>November 5<sup>th</sup></b>	08:30 - 18:30	09:00 - 18:30



## POSTER SESSIONS

All posters will be presented in paper format.

Posters should be 90 cm in length and 120 cm in height, and they should be displayed by the authors in the poster area in the slot corresponding to the code number provided in the confirmation letter.

Presenting authors are expected to be in front of their posters on the day of the block session they have been assigned, (during the poster session slot) as follows:

**Poster Session 1:** Wednesday, 3<sup>rd</sup> November, from 15:30 to 19:00.

Authors with poster numbers PS1-01 to PS1-88

**Poster Session 2:** Thursday, 4<sup>th</sup> November, from 09:00 to 12:30.

Authors with poster numbers PS2-01 to PS2-89

**Poster Session 3:** Thursday, 4<sup>th</sup> November, from 15:00 to 18:30.

Authors with poster numbers PS3-01 to PS3-94

**Poster Session 4:** Friday, 5<sup>th</sup> November, from 09:00 to 12:30.

Authors with poster numbers PS4-01 to PS4-95

**Poster Session 5:** Friday, 5<sup>th</sup> November, from 15:00 to 18:30.

Authors with poster numbers PS5-01 to PS5-96

Setting-up and taking down times:

- The posters should be fixed on the corresponding board half an hour before their poster session begins and must be removed on at latest, half an hour later of the end of their corresponding poster session.
- Fixing tape to set up the posters will be provided by the organization.
- The Technical Secretariat is not responsible for those posters that will not be removed at the end of the Congress.

## CONGRESS BADGES

All participants, accompanying persons and exhibitors must wear the Congress identification badges. Entrance to meeting rooms, posters and exhibition area will not be allowed to any person without badge.

## CERTIFICATE OF ATTENDANCE

A certificate of attendance will be sent by email to each delegate at the end of the congress. For special requirements, please ask to the Technical Secretariat.

## LIABILITY

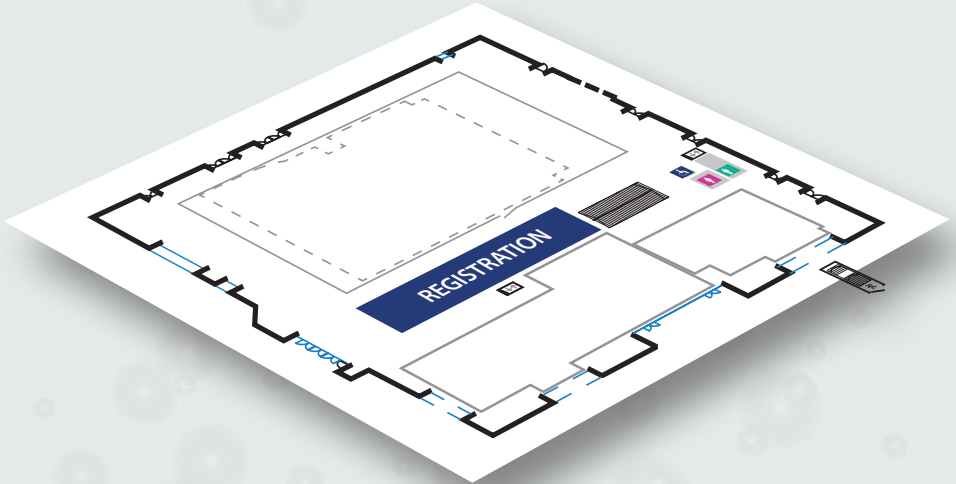
Upon registration, participants agree that neither the Organizing Committee nor the Technical Secretariat assume any liability. Participants should, therefore, organize their own health and travel insurance.

## FLOOR PLANS

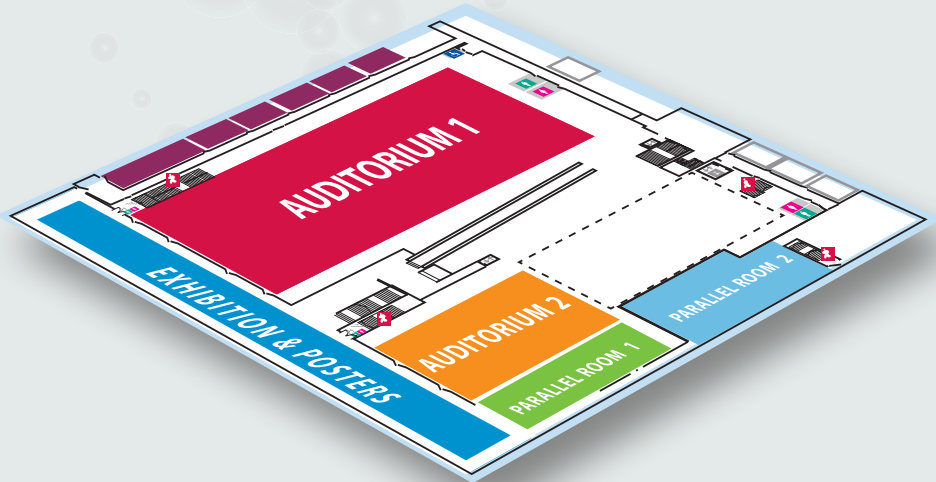
- **Floor 0** – Technical Secretariat
- **Floor 2** – Rooms, Exhibition Hall, Posters display, Neuroart Exhibition, coffee breaks, etc.



## GROUND FLOOR PLAN



## SECOND FLOOR PLAN





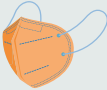
## COVID 19 PROTOCOL

The health and safety of every attendee is our main concern during the 19th Meeting of the Spanish Society of Neuroscience – SENC2021. The following instructions will ensure everyone's safety. Please make sure you read carefully and follow these rules. Thank you very much for your cooperation.



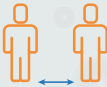
### CERTIFICATE OR TEST PROOF

Each attendee will be required to **present at the entrance the certificate of vaccination, or the proof of a negative test carried out in the 72 hours prior to arrival** at the congress.



### MASKS

The use of a mask will be mandatory during the entire Meeting. Please make sure both your mouth and nose are covered at all times.



### SOCIAL DISTANCING

Please make sure you respect the social distancing recommended by the Health Authorities.



### HAND SANITISING

We recommend using hand sanitisers before entering a new room and/or touching any equipment. There will be hand sanitising dispensers located at different points of the venue.



### DATA REGISTRATION

Your registration details might be used to control and monitor possible spreads if needed, in alignment to the current sanitary regulations.



### FACILITY CLEANING

Facilities will be constantly cleaned to make sure hygiene, sterilisation and quality standards are always met.



### SEATING CAPACITY RESTRICTIONS

Room capacities will be reduced according to the current Health Authorities regulations.



### SIGNALLING AND SUPPORT STAFF

Signalling systems will be displayed around the venue to guarantee the correct flow of attendees and their social distancing.



### CATERING

All the catering provided during the Meeting, inside and outside the venue, will meet the current action protocols established in the sector, regarding COVID19.



## PROGRAMME AT A GLANCE

Tuesday, November 2<sup>nd</sup> 2021

OTHER VENUE	
16:00-16:30	<p><b>Satellite Event 1</b> The ins and outs of Parkinson's disease <i>Ariadna Laguna and Analia Bortolozzi</i></p>
16:30-17:00	
17:00-17:30	
17:30-18:00	
18:30-19:30	<p><b>Conference</b> La interacción nervio-músculo y los fundamentos de la neurociencia <i>Josep Esquerda</i></p>

Wednesday, November 3<sup>rd</sup> 2021

	Auditorium 1	Auditorium 2	Parallel Room 1	Parallel Room 2	EXHIBITION HALL
8:30-9:00					NeuroART Exhibition
9:00-9:30	<p>Excellent Rita Levi-Montalcini Award (Part I)</p>	<p>11<sup>th</sup> Meeting of the Spanish Glial Network (RGE) (Part I)</p>	<p>Red NeuroEvoDevo Pedro Ramón y Cajal (Part I)</p>	<p>3<sup>rd</sup> Symposium of the Spanish Network for the Interaction between Computational and Cognitive Neuroscience (SINC2)(Part I)</p>	
9:30-10:00					
10:00-10:30					
10:30-11:00					
11:00-11:30	Coffee break				
11:30-12:00	<p>Excellent Rita Levi-Montalcini Award (Part II)</p>	<p>11<sup>th</sup> Meeting of the Spanish Glial Network (RGE) (Part II)</p>	<p>Red NeuroEvoDevo Pedro Ramón y Cajal (Part II)</p>	<p>3<sup>rd</sup> Symposium of the Spanish Network for the Interaction between Computational and Cognitive Neuroscience (SINC2)(Part II)</p>	
12:00-12:30					
12:30-13:00					
13:00-14:00					
14:00-14:30	Opening ceremony				
14:30-15:00	<b>Opening Lecture</b>				
15:00-15:30	VALENTINA EMILIANI				
15:30-16:00	<p><b>S01</b> - Binding cell assemblies into memory engrams</p>	<p><b>S02</b> - Deciphering brain circuits: insights from reward and neuronal excitability</p>			
16:00-16:30					
16:30-17:00					
17:00-17:30					
17:30-18:00	Coffee break				
18:00-18:30					
18:30-19:00					
19:00-19:30	<p><b>Iberian Neuroscience Lecture</b> MARTA MOITA</p>				
19:30-20:00					
20:00-20:30					
20:30-21:00					



### Thursday, November 4<sup>th</sup> 2021

	Auditorium 1	Auditorium 2	Parallel Room 1	EXHIBITION HALL	
8:30-9:00					
9:00-9:30				NeuroART Exhibition	
9:30-10:00	<b>S03</b> - Inhibitory cells throughout brain circuits	<b>S04</b> - Understanding quiescence in adult neurogenic niches			Poster Session 2
10:00-10:30					
10:30-11:00					
11:00-11:30	Coffee break				
11:30-12:00					
12:00-12:30					
12:30-13:00	Olympus Award Talk				
13:00-13:30					
13:30-14:00	<b>Satellite Event 2</b> Submitting your work to an international journal: the peer review and what we expect in a good paper	<b>Satellite Event 3</b> La retina de los vertebrados (por Santiago Ramón y Cajal)	Commercial Session Miltenyi		
14:00-14:30					
14:30-15:00					
15:00-15:30	<b>S05</b> - Modeling behavior during decision making	<b>S06</b> - Tracing cell lineages in the brain		Poster Session 3	
15:30-16:00					
16:00-16:30					
16:30-17:00	Coffee break				
17:00-17:30					
17:30-18:00					
18:00-18:30					
18:30-19:00	<b>Honorary Lecture "María Teresa Miras Portugal"</b> JOSE MARIA DELGADO				
19:00-19:30					
19:30-20:00			<b>Satellite Event 4</b> A neuroscientific dialog on lucid dreaming		
20:00-20:30					



Friday, November 5<sup>th</sup> 2021

	Auditorium 1	Auditorium 2	EXHIBITION HALL	
8:30-9:00				
9:00-9:30	<b>S07 - Motor circuits and motor control from a basic and clinical view</b>	<b>S08 - Origin and expansion of the neocortex</b>	Poster Session 4	
9:30-10:00				
10:00-10:30				
10:30-11:00				
11:00-11:30				Coffee break
11:30-12:00				
12:00-12:30				
12:30-13:00	<b>Presidential Lecture</b> MICHAEL HENKA		NeuroART Exhibition	
13:00-13:30				
13:30-14:00	<b>Satellite Event 5</b> From Alzheimer's disease to vascular dementia: different roads leading to cognitive decline	<b>Satellite Event 6</b> Data-Driven Computational Neuroscience		
14:00-14:30				
14:30-15:00				
15:00-15:30	<b>S09 - Understanding the neuroimmune axis in health and disease: myeloid and lymphoid cells in the Central Nervous System</b>	<b>S10 - Rethinking the epigenetic landscape in the intellectual disability</b>		Poster Session 5
15:30-16:00				
16:00-16:30				
16:30-17:00				
17:00-17:30	Coffee break			
17:30-18:00				
18:00-18:30				
18:30-19:00				
19:00-19:30		<b>SENC Assembly</b>		
19:30-20:00				
20:00-20:30				
20:30-21:00				
21:30-24:00				



## NOVEMBER 2<sup>ND</sup>, TUESDAY

**16:00 - 18:00**

Sala Audiovisuals,  
Edifici Transfronterer,  
Campus de Capponet,  
Universitat de Lleida

### SATELLITE EVENT 1

#### The ins and outs of Parkinson's disease

#### Ariadna Laguna

Senior researcher at the Neurodegenerative Diseases Research Group of the Vall d'Hebron Research Institute (VHIR)-Network Center for Biomedical Research in Neurodegenerative Diseases (CIBERNED).

#### Analia Bortolozzi

Senior scientist at Spanish Research Council (CSIC) and leads group CB/07/09/0034 of the Center for Networked Biomedical Research on Mental Health (CIBERSAM).

*Sponsored by:*



**18:30 - 19:30**

Sala Audiovisuals,  
Edifici Transfronterer,  
Campus de Capponet,  
Universitat de Lleida

### CONFERENCE

*Speaker:* **La interacción nervio-músculo y los fundamentos de la neurociencia.**

Josep Esquerda

Universitat de Lleida (UdL), Institut de Recerca Biomèdica de Lleida (IRBLLEIDA), Lleida, Spain.



## NOVEMBER 3<sup>RD</sup>, WEDNESDAY

08:30-11:00  
Auditorium 2

**11<sup>TH</sup> MEETING OF THE SPANISH GLIAL NETWORK (RGE) (PART I)**  
*Organized by RGE*

09:00-11:00  
Auditorium 1

**EXCELLENT RITA LEVI-MONTALCINI AWARD (PART I)**  
*Organized by SENC Young Researcher's Committee*

*Co-financed  
by IBRO-PERC  
/ SENC*



09:00-11:00  
Parallel room 1

**XII MEETING OF THE RED NEUROEVODEVO PEDRO RAMÓN  
Y CAJAL (PART I)**

*Organized by Pedro Ramón y Cajal Network*

09:00-11:00  
Parallel room 2

**3<sup>RD</sup> SYMPOSIUM OF THE SPANISH NETWORK FOR THE  
INTERACTION BETWEEN COMPUTATIONAL AND COGNITIVE  
NEUROSCIENCE (SINC2) (PART I)**

*Organized by SINC<sup>2</sup>*

11:00-11:30 Coffee Break

11:30-13:00  
Auditorium 1

**EXCELLENT RITA LEVI-MONTALCINI AWARD (PART II)**  
*Organized by SENC Young Researcher's Committee*

*Co-financed  
by IBRO-PERC  
/ SENC*





11:30-13:00  
Auditorium 2

**11<sup>TH</sup> MEETING OF THE SPANISH GLIAL NETWORK (RGE) (PART II)**  
*Organized by RGE*

11:30-13:00  
Parallel room 1

**XII MEETING OF THE RED NEUROEVODEVO PEDRO RAMÓN Y CAJAL (PART II)**  
*Organized by Pedro Ramón y Cajal Network*

11:30-13:00  
Parallel room 2

**3RD SYMPOSIUM OF THE SPANISH NETWORK FOR THE INTERACTION BETWEEN COMPUTATIONAL AND COGNITIVE NEUROSCIENCE (SINC2) (PART II)**  
*Organized by SINC<sup>2</sup>*

13:00-14:00 Welcome Cocktail

14:00-14:30  
Auditorium 1

**OPENING CEREMONY**

14:30-15:30  
Auditorium 1

**OPENING LECTURE**

*Chair:* Eloisa Herrera  
President of SENC's Programme Committee.

*Speaker:* **All-optical interrogation of brain circuits using optogenetics and holography.**

*Sponsored by:* Valentina Emiliani  
Institute de la Vision, Paris, France.



FUNDACION  
RAMÓN ARECES



15:30-17:30

Auditorium 1

## S01 - BINDING CELL ASSEMBLIES INTO MEMORY ENGRAMS

*Chairs:*

**Santiago Canals**

Instituto de Neurociencias de Alicante, Consejo Superior de Investigaciones Científicas (CSIC)-Universidad Miguel Hernández de Elche (UMH), Alicante, Spain.

**Claudio Mirasso**

Instituto de Física Interdisciplinaria y Sistemas Complejos (CSIC-UIB), Campus Universitat de les Illes Balears, Spain.

*Speakers:*

**The hippocampus converges volatile entorhinal inputs in stable spatial maps.**

**Marlene Bartos**

Institute for Physiology, Dept. I, Cellular and Systemic Neurophysiology, University of Freiburg, Freiburg, Germany.

**Active dendrites and their role in memory assemblies.**

**Panayiota Poirazi**

Institute of Molecular Biology and Biotechnology (IMBB), Foundation of Research and Technology-Hellas (FORTH), Crete, Greece.

**Regulation of inhibitory circuits in the dentate gyrus: role on temporal coding and pattern separation.**

**Claudio Mirasso**

Instituto de Física Interdisciplinaria y Sistemas Complejos (CSIC-UIB), Campus Universitat de les Illes Balears, Spain.

**The dentate gyrus coordinates brain-wide functional networks during memory formation.**

**Santiago Canals**

Instituto de Neurociencias de Alicante, Consejo Superior de Investigaciones Científicas (CSIC)-Universidad Miguel Hernández de Elche (UMH), Alicante, Spain.



### Short Oral Poster Teaser Presentations

- **SP3-51 S01 - Exploring network coding strategies that could be essential for the proper execution of behavioural sequences during an operant conditioning task.** Raudel Sánchez-Campusano. *Division of Neurosciences, Universidad Pablo de Olavide, Sevilla, Spain.*
- **SP3-55 S01 - Specialized prefrontal circuits explain population dynamics during working memory encoding and maintenance.** Nicolás Pollán. *Centre De Recerca Matemàtica, Barcelona, Spain.*
- **SP5-48 S01 - Learning conditions influence hippocampal-dependent memory and context discrimination.** Nuria Cano-Adamuz. *Cajal Institute (CSIC), Madrid, Spain.*

15:30-17:30  
Auditorium 2

### S02 - DECIPHERING BRAIN CIRCUITS: INSIGHTS FROM REWARD AND NEURONAL EXCITABILITY

**Chairs:** Marta Navarrete Llinás  
Instituto Cajal, CSIC, Madrid, Spain.

Juliana Martins Da Rosa  
Hospital Nacional de Paraplégicos, Toledo, Spain.

**Speakers:** **Neurobiological basis of reward and aversion: a focus on the nucleus accumbens circuitry.**

Co-financed  
by IBRO-PERC  
/ SENC

Ana João Rodrigues  
University of Minho, ICVS; School of Medicine, Campus Gualtar, Braga, Portugal.



**Revealing the functional anatomy of synaptic partners using super-resolution STED microscopy.**

Jan Tonnesen  
Achucarro Basque Center for Neuroscience, Science Park of the UPV/EHU, Leioa, Spain.

**Astrocytic Network Heterogeneity in the Nucleus Accumbens.**

Marta Navarrete Llinás  
Instituto Cajal, CSIC, Madrid, Spain.



**On the road map of astrocyte functional heterogeneity: implications in sensory processing and spontaneous activity.**

Juliana Martins da Rosa

Hospital Nacional de Paraplégicos, Toledo, Spain.

**Short Oral Poster Teaser Presentations**

- **PS1-22 S02** - mGlu4 receptors rescue parallel fiber LTP and motor skilled reaching deficits in a mouse model of Fragile X Syndrome. Ricardo Martín Herranz. *Universidad Complutense de Madrid, Madrid, Spain.*
- **PS4-23 S02** - Afferent synaptic terminals on spinal cord motor neurons are acutely disrupted after peripheral nerve transection: involvement of necroptotic pathway and microglial piecemeal phagocytosis. Sara Salvany. *Universitat de Lleida / IRBLleida, Lleida, Spain.*
- **PS5-25 S02** - Dissociation of functional and structural plasticity of dendritic spines during NMDAR and mGluR-dependent long-term synaptic depression in wild-type and fragile X model mice. Miquel Bosch. *Universitat Internacional de Catalunya, Sant Cugat del Vallès, Spain.*

15:30-19:00  
Exhibition hall

**POSTER SESSION 1**  
PS1-01 to PS1-88

17:30-18:00 Coffee break

19:00-20:00  
Auditorium 1

**PLENARY LECTURE**  
**Iberian Neuroscience Lecture**

*Chair:* Paola Bovolenta  
Elected SENC President.

*Speaker:* **On the complexities of immobility.**  
Marta Moita

*Sponsored by:* Champalimaud Centre for the Unknown, Lisbon, Portugal.





## NOVEMBER 4<sup>TH</sup>, THURSDAY

09:00-11:00

Auditorium 1

Chair:

Sara Mederos  
Sainsbury Wellcome Centre (UCL), London.

Speakers:

Co-financed  
by IBRO-PERC  
/ SENC



**Interneuron regulation of early developmental dynamics.**

Laura Modol  
King's College London, London, UK.

**The role of inhibition in hippocampal place cells.**

Manuel Valero  
NYU Neuroscience Institute, New York, USA.

**Pathways for modulating escape decisions through the inhibitory ventral lateral geniculate nucleus.**

Sara Mederos  
Sainsbury Wellcome Centre (UCL), London, UK.

**Two tunable inhibitory systems govern the activity of neocortical layer 1 (L1).**

Bernardo Rudy  
NYU Neuroscience Institute, New York, USA.

### Short Oral Poster Teaser Presentations

- **PS3-39 S03 - Neuronal activity reflecting sensory and behavioural variables in the mouse somatosensory and posterior parietal cortex.** Miguel Maravall. *University of Sussex, Brighton, UK.*
- **PS3-40 S03 - Neural probes for multimodal interrogation of brain lamination.** María Teresa Jurado Parras. *Instituto Cajal, CSIC, Madrid, Spain.*
- **PS5-37 S03 - M1- muscarinic control of slow oscillations and epileptiform discharges by light.** José Manuel Sánchez Sánchez. *Instituto De Investigaciones Biomédicas August Pi I Sunyer (idibaps), Barcelona, Spain.*



09:00-11:00

Auditorium 2

**S04 - UNDERSTANDING QUIESCENCE IN ADULT NEUROGENIC NICHES**

*Chairs:*

Aixa V. Morales  
Instituto Cajal (CSIC), Madrid, Spain.

Helena Mira  
Instituto de Biomedicina de Valencia (IBV), CSIC, Valencia, Spain.

*Speakers:*

**Progressive changes in hippocampal stem cell properties ensure lifelong neurogenesis.**

François Guillemot  
The Francis Crick Institute, London, UK.

**Injury-induced activation of quiescent neural progenitors in the adult fly brain.**

Christa Rhiner  
Champalimaud Foundation, Champalimaud Centre for the Unknown, Lisbon, Portugal.

**Coming from within: cell-intrinsic modulators of quiescent neural stem cells.**

Helena Mira  
Instituto de Biomedicina de Valencia (IBV), CSIC, Valencia, Spain.

**From quiescence to proliferation and back: the active life of neural stem cells.**

Aixa V. Morales  
Instituto Cajal (CSIC), Madrid, Spain.

**Short Oral Poster Teaser Presentations**

- **PS2-02 S04 - Chromatin signatures of neuronal subpopulations with divergent projection at the midline identify novel wiring regulators.** Marta Fernández-Nogales. *Instituto de Neurociencias, Alicante, Spain.*
- **PS3-10 S04 - Microglia gradually acquire their mature phenotype in the developing hippocampus.** Marta Pereira. *Achucarro Basque Center For Neuroscience, Leioa, Spain.*
- **PS3-11 S04 - The sound of sight: mapping crossmodal circuits of audio-visual connectivity in the mammalian brain.** Irene Varela Martínez. *Centro Nacional De Biotecnología (CNB-CSIC), Madrid, Spain.*



09:00-12:30  
Exhibition hall

**POSTER SESSION 2**  
**PS2-01 to PS2-89**

11:00-11:30

Coffee break

12:30-13:30  
Auditorium 1

**OLYMPUS AWARD TALK**

**OLYMPUS**

12:30-12:45 **Olympus.**

Josep Molist  
SSD Regional Representative South

12:45-12:55 **SENC-Olympus Award.**

Ángel Acebes  
SENC Young Researcher's Committee

12:55-13:25 **From commissural axon guidance to cerebellar circuits.**

Juan Antonio Moreno Bravo  
Instituto de Neurociencias de Alicante. CSIC-UMH  
2021 VII SENC-Olympus Award winner.

13:25-13:30 **Closing remarks.**

Paola Bovolenta  
Elected SENC President.

13:30-14:30  
Auditorium 1

**SATELLITE EVENT 2**

**Submitting your work to an international journal: The peer review and what we expect in a good paper**

Juan Lerma  
Editor in Chief of Neuroscience. Instituto de Neurociencias,  
CSIC-UMH, San Juan de Alicante, Alicante, Spain.

13:30-14:30  
Auditorium 2

**SATELLITE EVENT 3**

**La retina de los vertebrados (por Santiago Ramón y Cajal)**

*Speakers:*

Nicolás Cuenca Navarro  
Universidad de Alicante, Alicante, Spain.

Pedro de la Villa Polo  
Universidad de Alcalá, Alcalá de Henares, Madrid, Spain.

Fernando de Castro Soubriet  
Instituto Cajal, CSIC, Madrid, Spain.

Xabier Sánchez Sáez  
Universidad de Alicante, Alicante, Spain.



Mateo Pazo González  
Universidad de Murcia, Murcia, Spain.

Manuel Vidal Sanz  
Universidad de Murcia, Murcia, Spain.

13:30-14:30  
Parallel room 1

### COMMERCIAL SESSION - MILTENYI BIOTEC

**Live Demo: UltraMicroscope Blaze for 3D automated imaging of large samples in neuroscience**

*Speakers:*



Christine Ahlert  
Application Specialist, Miltenyi Biotec, Bielefeld, Germany.

Luis Muñiz Menéndez  
Imaging Sales Specialist, Miltenyi Biotec, Madrid, Spain.

15:00-17:00  
Auditorium 1

### S05 - MODELING BEHAVIOR DURING DECISION MAKING

*Chairs:*

Alfonso Renart Fernandez  
Champalimaud Neuroscience Program, Lisbon, Portugal.

Jaime de la Rocha  
Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS),  
Barcelona.

*Speakers:*

**Spatial maps in piriform cortex during olfactory navigation.**  
Cindy Poo  
Champalimaud Foundation, Lisbon, Portugal.

**Social decision-making in rodents.**  
Cristina Márquez  
Instituto de Neurociencias de Alicante, Alicante, Spain.

**Mechanisms underlying simple perceptual choices.**  
Alfonso Renart Fernandez  
Champalimaud Neuroscience Program, Lisbon, Portugal.

**The dynamics of evidence accumulation in expectation-guided perceptual decisions.**  
Jaime de la Rocha  
Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS),  
Barcelona, Spain.



### Short Oral Poster Teaser Presentations

- **PS5-40 S05 - Take care of your babies! Mouse pups produce pheromones that induce maternal behaviour.** Rafael Gote-rris-Cerisuelo. *Universitat Jaume I, Castellón, Spain.*
- **PS5-47 S05 - Microglia Regulate Learning and Memory through NF- $\kappa$ B.** Aysha María Bhojwani Cabrera. *Consejo Superior de Investigaciones. Alicante, Spain.*
- **PS4-57 S05 - Bump attractor dynamics underlying stimulus integration in perceptual estimation tasks.** Jose M. Esnaola-Acebes. *Centre de Recerca Matemàtica (CRM), Barcelona, Spain.*

15:00-17:00  
Auditorium 2

### S06 - TRACING CELL LINEAGES IN THE BRAIN

Chairs:

Jorge García-Marqués  
Centro Nacional de Biotecnología, CSIC, Madrid, Spain.

Isabel Espinosa-Medina  
Janelia Research Campus, Howard Hughes Medical Institute,  
Maryland, USA.

Speakers:

**Neural stem cell lineage progression in developing cerebral cortex.**

Simon Hippenmeyer  
Institute of Science and Technology (IST) Austria, Austria.

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**Temporal encoding and manipulation of vertebrate cell histories with a new CRISPR/Cas9 system.**

Isabel Espinosa-Medina  
Janelia Research Campus, Howard Hughes Medical Institute,  
Maryland, USA.

**Delving into the generation of cortical astrocyte diversity and plasticity using multicolour lineage tracing tools.**

Karine Loulier  
Institut for Neurosciences of Montpellier (INM), University of  
Montpellier, INSERM, Montpellier, France.

**Cell lineages in the vertebrate brain: lessons from Drosophila.**

Jorge García Marqués  
Centro Nacional de Biotecnología, CSIC, Madrid, Spain.



### Short Oral Poster Teaser Presentations

- **PS3-07 S06 - Understanding the mechanisms involved in migration and circuit integration of thalamic interneurons.** Irene Huerga Gómez. *Instituto De Neurociencias De Alicante, Alicante, Spain.*
- **PS3-08 S06 - Differential expression levels of Sox9 in early neocortical radial glial cells regulate the decision between stem cell maintenance and differentiation.** Jaime Fabra-Beser. *BIO-TECMED Institute, Universidad de Valencia, Valencia, Spain.*
- **PS5-03 S06 - Postnatal refinement of interhemispheric callosal projections: GluN3A-mediated mechanisms.** Oliver Crawley. *Instituto de Neurociencias, San Juan de Alicante, Spain.*

15:00-18:30  
Exhibition hall

**POSTER SESSION 3**  
**PS3-01 to PS3-94**

17:00-17:30

Coffee break

18:30-19:30  
Auditorium 1

**HONORARY LECTURE "MARÍA TERESA MIRAS PORTUGAL"**

*Chair:* Gertrudis Perea  
Vicepresident of SENC.

*Speaker:* **Neural substrates of associative, elective, and cooperative learning tasks.**

*Sponsored by:*



FUNDACION  
RAMÓN ARECES

José María Delgado  
Universidad Pablo de Olavide, Sevilla, Spain.

*This event will be entirely in Spanish.*

19:30-20:30  
Parallel Room 1

**SATELLITE EVENT 4**  
**A neuroscientific dialog on lucid dreaming.**

*Speakers:* Natalia López-González del Rey  
PhD candidate at HM CINAC, natural lucid dreamer.

Guglielmo Foffani  
Senior investigator at HM CINAC, trained lucid dreamer.



## NOVEMBER 5<sup>TH</sup>, FRIDAY

09:00-11:00  
Auditorium 1

### S07 - MOTOR CIRCUITS AND MOTOR CONTROL FROM A BASIC AND CLINICAL VIEW

**Chairs:**

Claudia Ammann  
HM CINAC, Hospital Universitario HM Puerta del Sur, Móstoles, Spain.

María Teresa Jurado Parras  
*Instituto Cajal. CSIC, Madrid, Spain.*

**Speakers:**

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**Sensorimotor integration by dorsal striatal circuits.**

Ramón Reig  
Instituto de Neurociencias CSIC-UMH, Alicante, Spain.

**Motor control in the dorsal striatum.**

María Teresa Jurado Parras  
*Instituto Cajal. CSIC, Madrid, Spain.*

**Chx10 pedunculo-pontine neurons, a midbrain glutamatergic subpopulation that causes global motor immobilization.**

Roberto Leiras  
Faculty of Health and Medical Sciences, University of Copenhagen, Copenhagen, Denmark.

**Disinhibition of the motor cortex in Parkinson's disease.**

Claudia Ammann  
HM CINAC, Hospital Universitario HM Puerta del Sur, Móstoles, Spain.

#### Short Oral Poster Teaser Presentations

- **PS4-41 S07 - Interference-based forgetting in a goal-directed spatial navigation task for rodents.** Paula Peixoto Moledo. *Institut d'Investigacions Biomèdiques August Pi i Sunyer, Barcelona, Spain.*
- **PS4-42 S07 - Inhibition in a midbrain circuit controlling instinctive escape decisions.** Oriol Pavón Arocas. *Sainsbury Wellcome Centre, UCL, London, UK.*
- **PS4-43 S07 - Functional analysis of cholinergic neuromodulation of chandelier cells from single-cell to circuit.** Emilio Martínez-Márquez. *Instituto de Biomedicina de Sevilla (IBiS)/HUVR/CSIC/Universidad de Sevilla, Sevilla, Spain.*



09:00-11:00  
Auditorium 2

## S08 - ORIGIN AND EXPANSION OF THE NEOCORTEX

Chair:

Víctor Borrell  
Instituto de Neurociencias CSIC-UMH, Alicante, Spain.

Speakers:

**Evolution of the pallium: new insights from studies in amphibians.**

Nerea Moreno  
Universidad Complutense de Madrid, Madrid, Spain.

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**Mosaic evolutionary history of brain circuits through the lens of neurodevelopment.**

Fernando Garcia-Moreno  
Achucarro Basque Center For Neuroscience, Leioa, Bizkaia, Spain.

**Genetic evolution of cerebral cortex size determinants.**

Víctor Borrell  
Instituto de Neurociencias CSIC-UMH, Alicante, Spain.

**How does the human brain develop to the right size and shape? The role of the extracellular matrix.**

Katie Long  
Centre for Developmental Neurobiology and MRC Centre for Neurodevelopmental Developmental Disorders, King's College London, London, UK.

### Short Oral Poster Teaser Presentations

- **PS4-10 S08 - In vitro study of neurodevelopment in Huntington's disease.** Phil Sanders. *Faculty of Medicine and Health Sciences, University of Barcelona, Barcelona, Spain.*
- **PS4-11 S08 - Increased GABA levels in postnatal development alter cortical inter-hemispheric circuits.** Lorena Bragg-Gonzalo. *Centro Nacional De Biotecnología, Madrid, Spain.*
- **PS4-12 S08 - CB1 receptors deficiency in oligodendrocyte precursors disrupts postnatal oligodendrogenesis and causes hypomyelination in mice.** Aníbal Sánchez. *Instituto Ramón y Cajal de Investigación Sanitaria (IRYCIS), Madrid, Spain.*

09:00-12:30  
Exhibition hall

**POSTER SESSION 4**  
**PS4-01 to PS4-95**

**11:00-11:30** Coffee break**12:30-13:30** **PRESIDENTIAL LECTURE**

Auditorium 1

*Chair:* Joan Comella  
President of SENC.

*Speaker:* **Innate immunity in Neurodegenerative disease.**  
Michael T. Heneka

*Sponsored by:* University of Bonn, Bonn, Germany.

**13:30-14:30** **SATELLITE EVENT 5**

Auditorium 1

**From Alzheimer's disease to vascular dementia: different roads leading to cognitive decline**

*Chair:* María Ángeles Moro  
Professor, Neurovascular Pathophysiology, Centro Nacional de Investigaciones Cardiovasculares, CNIC, Spain.

*Speakers:* Marion Buckwalter  
Professor of Neurology and of Neurosurgery, Stanford University Medical Center, USA.

*Sponsored by:*



Marta Cortes-Canteli  
Miguel Servet Research Fellow, CNIC, Spain.

Ismael Santa-Maria  
Taub Institute for Research on Alzheimer's Disease and the Aging Brain, Columbia University, USA.

**13:30-14:30** **SATELLITE EVENT 6**

Auditorium 2

**Data-Driven Computational Neuroscience**

*Chair:* Elena Galea Rodríguez de Velasco  
Institut de Neurociències, Universitat Autònoma de Barcelona, Barcelona, Spain.

*Speakers:* Concha Bielza Lozoya  
Computational Intelligence Group, Universidad Politécnica de Madrid, Madrid, Spain.



15:00-17:00  
Auditorium 1

**S09 - UNDERSTANDING THE NEUROIMMUNE AXIS IN HEALTH AND DISEASE: MYELOID AND LYMPHOID CELLS IN THE CENTRAL NERVOUS SYSTEM**

*Chair:*

Amanda Sierra

Achucarro Basque Center for Neuroscience Ikerbasque Foundation, University of the Basque Country UPV/EHU, Bizkaia, Spain.

*Speakers:*

**Not just corpse removal: How microglial phagocytosis maintains tissue homeostasis.**

Amanda Sierra

Achucarro Basque Center for Neuroscience Ikerbasque Foundation, University of the Basque Country UPV/EHU, Bizkaia, Spain.

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**Understanding microglial dynamics from development to age-related neurological disorders.**

Diego Gómez Nicola

School of Biological Sciences, University of Southampton, UK.

**Dynamics of CNS invading myeloid cells and phenotype acquisition during neuroinflammation.**

Giuseppe Locatelli

Theodor Kocher Institute, University of Bern, Bern, Switzerland.

**Role of CD4 T cells in brain development.**

Emanuela Pasciuto

Katholieke Universiteit Leuven- VIB Center for Brain and Disease Research, University of Leuven, Belgium.

**Short Oral Poster Teaser Presentations**

- **PS5-81 S09 - Oleylethanolamide treatment modulates neuroinflammation and microgliosis in a mouse model of cerebellar neurodegeneration.** Eduardo Weruaga Prieto. *Universidad De Salamanca, Salamanca, Spain.*
- **PS5-82 S09 - Cortical and hippocampal rhythmopathies in experimental models of brain metastasis.** Alberto Sanchez-Aguilera Lopez. *Instituto Cajal - CSIC, Madrid, Spain.*
- **PS5-83 S09 - From engrams to memory pathology in Down syndrome.** Álvaro Fernández Blanco. *Centre For Genomic Regulation (CRG), The Barcelona Institute of Science and Technology (BIST), Barcelona, Spain.*

15:00-17:00  
Auditorium 2**S10 - RETHINKING THE EPIGENETIC LANDSCAPE IN THE INTELLECTUAL DISABILITY**

**Chairs:** Angel Barco  
Instituto de Neurociencias CSIC-UMH, Alicante, Spain.

Mara Dierssen  
Center for Genomic Regulation, Barcelona, Spain.

**Speakers:** **Specialization of brain cell types is encoded by specific 3D genome architectures.**

Ana Pombo  
The Max Delbrück Center for Molecular Medicine, Berlin, Germany.

**The RNA and histone-methylation landscape in cognitive diseases.**

Andre Fischer  
German Center for Neurodegenerative Diseases (DZNE), Göttingen, Germany.

**ID-linked KDMs prevent spurious transcription in neurons.**

Angel Barco  
Instituto de Neurociencias CSIC-UMH, Alicante, Spain.

**Emerging roles for long noncoding RNAs in Down syndrome hippocampus.**

Mara Dierssen  
Center for Genomic Regulation, Barcelona, Spain.

**Short Oral Poster Teaser Presentations**

- **PS5-84 S10 - Pathological and therapeutic implications of myelin alterations in the Acid Sphingomyelinase Deficiency.** Marta Guerrero-Valero. *Centro De Biología Molecular Severo Ochoa (CSIC-UAM), Madrid, Spain.*
- **PS5-85 S10 - Human amygdala involvement in Alzheimer's disease revealed by MALDI Imaging and SWATH analysis.** Melania González Rodríguez. *Ciudad Real Medical School/CRIB, University of Castilla-La-Mancha, Ciudad Real, Spain.*
- **PS5-86 S10 - ApTOLL: A novel remyelinating molecule in a model of multiple sclerosis.** Beatriz Fernandez Gomez. *Cajal Institute, Madrid, Spain.*



15:00-18:30  
Exhibition hall

**POSTER SESSION 5**  
**PS5-01 to PS5-96**

**17:00-17:30** Coffee break

**19:00-20:30** **SENC Assembly**  
Auditorium 2



## POSTER SESSIONS

### POSTER SESSION 1 - WEDNESDAY, 3<sup>RD</sup> NOV. 15:30 - 19:00

TOPICS	POSTER AREA	POSTERS
<b>01.</b> Developmental Neurobiology	Area 2	01 - 10
<b>02.</b> Neuronal excitability, Synapses and Glia: Cellular mechanisms	Area 2	11 - 28
<b>03.</b> Systems Neuroscience	Area 2	29 - 37
<b>04.</b> Cognitive and Behavioral Neuroscience	Area 1	38 - 50, 87
<b>05.</b> Theoretical and Computational Neuroscience	Area 1	51 - 53
<b>06.</b> Disorders and Nervous System repair	Area 1	54 - 76, 88
<b>07.</b> Homeostatic and Neuroendocrine systems	Area 1	77 - 79
<b>08.</b> New Methods and Technologies	Area 1	80 - 83
<b>09.</b> History, Teaching, Release and Ethics	Area 1	84
<b>10.</b> Others	Area 1	85 - 86

### POSTER SESSION 2 - THURSDAY, 4<sup>TH</sup> NOV. 09:00 - 12:30

TOPICS	POSTER AREA	POSTERS
<b>01.</b> Developmental Neurobiology	Area 1	01 - 08
<b>02.</b> Neuronal excitability, Synapses and Glia: Cellular mechanisms	Area 1	09 - 25
<b>03.</b> Systems Neuroscience	Area 1	26 - 36
<b>04.</b> Cognitive and Behavioral Neuroscience	Area 1	37 - 48
<b>05.</b> Theoretical and Computational Neuroscience	Area 2	49 - 52
<b>06.</b> Disorders and Nervous System repair	Area 2	53 - 79
<b>07.</b> Homeostatic and Neuroendocrine systems	Area 2	80 - 82
<b>08.</b> New Methods and Technologies	Area 2	83 - 86
<b>09.</b> History, Teaching, Release and Ethics	Area 2	87
<b>10.</b> Others	Area 2	88 - 89



## POSTER SESSION 3 - THURSDAY, 4<sup>TH</sup> NOV. 15:00 - 18:30

TOPICS	POSTER AREA	POSTERS
<b>01.</b> Developmental Neurobiology	Area 1	01 - 11
<b>02.</b> Neuronal excitability, Synapses and Glia: Cellular mechanisms	Area 1	12 - 28
<b>03.</b> Systems Neuroscience	Area 1	29 - 40
<b>04.</b> Cognitive and Behavioral Neuroscience	Area 1	41 - 52, 93 - 94
<b>05.</b> Theoretical and Computational Neuroscience	Area 2	53 - 56
<b>06.</b> Disorders and Nervous System repair	Area 2	57 - 83
<b>07.</b> Homeostatic and Neuroendocrine systems	Area 2	84 - 86
<b>08.</b> New Methods and Technologies	Area 2	87 - 90
<b>10.</b> Others	Area 2	91 - 92

## POSTER SESSION 4 - FRIDAY, 5<sup>TH</sup> NOV. 09:00 - 12:30

TOPICS	POSTER AREA	POSTERS
<b>01.</b> Developmental Neurobiology	Area 1	01 - 12
<b>02.</b> Neuronal excitability, Synapses and Glia: Cellular mechanisms	Area 1	13 - 30
<b>03.</b> Systems Neuroscience	Area 1	31 - 43
<b>04.</b> Cognitive and Behavioral Neuroscience	Area 1	44 - 55
<b>05.</b> Theoretical and Computational Neuroscience	Area 2	56 - 58
<b>06.</b> Disorders and Nervous System repair	Area 2	59 - 85
<b>07.</b> Homeostatic and Neuroendocrine systems	Area 2	86 - 87
<b>08.</b> New Methods and Technologies	Area 2	88 - 92
<b>10.</b> Others	Area 2	93 - 95



**POSTER SESSION 5 - FRIDAY, 5<sup>TH</sup> NOV. 15:00 - 18:30**

TOPICS	POSTER AREA	POSTERS
<b>01.</b> Developmental Neurobiology	Area 1	01 - 10
<b>02.</b> Neuronal excitability, Synapses and Glia: Cellular mechanisms	Area 1	11 - 28
<b>03.</b> Systems Neuroscience	Area 1	29 - 39
<b>04.</b> Cognitive and Behavioral Neuroscience	Area 1	40 - 51
<b>05.</b> Theoretical and Computational Neuroscience	Area 2	52 - 54
<b>06.</b> Disorders and Nervous System repair	Area 2	55 - 87
<b>07.</b> Homeostatic and Neuroendocrine systems	Area 2	88 - 89
<b>08.</b> New Methods and Technologies	Area 2	90 - 94
<b>10.</b> Others	Area 2	95 - 96



**POSTER SESSION 1 - WEDNESDAY, 3<sup>RD</sup> NOV. 15:30 - 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. Guillermina 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 Mn2+ 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. Guillermina 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. Maria 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. Maria 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 GABAA 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

**Arantazu Belloso-Iguerategui<sup>1</sup>**, Marta Zamarbide-Gonzalez<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>Clínica 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 Pais 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-Martin<sup>2</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>2</sup>, Dr. Javier Márquez-Ruiz<sup>2</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. Yunesky 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 Martín-Fernandez<sup>1,2</sup>, Ana Paula Mengolla<sup>1,2</sup>, Guillem Lopez-Fernandez<sup>1,2</sup>, Dr. Cyril Henry<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, Kharagpur, 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 Acadèmia 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 $\alpha$ -synuclein, and patterns of nitro- $\alpha$ -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 Acadèmia 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>BUB-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 Gaudio<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 Busto<sup>2</sup>, PhD. M<sup>a</sup> 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>Cipjf, Centro De Investigacion Principe Felipe, Valencia, Spain, <sup>2</sup>CSIC, Madrid, Spain, <sup>3</sup>Hospital Nacional de Paraplégicos, 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), Leida, 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-Anguaita<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-Gamero<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-Álvoro<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 Puigros**<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-Escolano**<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>, Katherina 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 CERIU 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. Martínez-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 Paraplégicos, 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 iPSC.

**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-Urefia<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 Ruíz<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



## POSTER SESSION 2 - THURSDAY, 4<sup>TH</sup> NOV. 09:00 - 12:30. Exhibition Hall

PS2-01

### ADAMTS2 and Poly (I:C): Genetic and enviromental mouse models of Schizophrenia disorder.

**Miss Celia Martín-Cuevas<sup>1,2</sup>**, Mr Víctor Darío Ramos-Herrero<sup>2</sup>, Dr. Susana García-Cerro<sup>1,2</sup>, Dr. Manuel Canal-Rivero<sup>1,2,3</sup>, Miss Nathalia Garrido-Torres<sup>1,2,3</sup>, Mr. Idalino Rocha-González<sup>1,2,3</sup>, Dr. Miguel Ruíz-Veguilla<sup>1,2,3,4</sup>, Dr. Benedicto Crespo-Facorro<sup>1,2,3,4</sup>, Dr. Ana Carmen Sánchez-Hidalgo<sup>1,2</sup>

<sup>1</sup>Spanish Network for Research in Mental Health (CIBERSAM), Madrid, Spain, <sup>2</sup>Seville Biomedical Research Centre (IBIS), Seville, Spain, <sup>3</sup>University Hospital Virgen del Rocío, Seville, Spain, <sup>4</sup>University of Seville, Seville, Spain

PS2-02

### CHROMATIN SIGNATURES OF NEURONAL SUBPOPULATIONS WITH DIVERGENT PROJECTION AT THE MIDLINE IDENTIFY NOVEL WIRING REGULATORS

**Dr. Marta Fernández-Nogales<sup>1</sup>**, María Teresa López-Cascales<sup>1</sup>, Dr. Rafael Muñoz-Viana<sup>1</sup>, Dr. Jordi Fernández-Albert<sup>1</sup>, Dr. Verónica Murcia-Belmonte<sup>1</sup>, Dr. Ángel Barco<sup>1</sup>, Dr. Eloisa Herrera<sup>1</sup>

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

PS2-03

### A ribo-tag based screen identifies a cohort of proteins locally translated at the axons during axonal navigation

**Dr. Veronica Murcia-Belmonte<sup>1</sup>**, M Teresa López-Cascales<sup>1</sup>, Dr Angel Barco<sup>1</sup>, Dr Eloisa Herrera<sup>1</sup>

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

PS2-04

### Developmental-based classification of neurons in the chicken central extended amygdala

**Ms. Alessandra Pross<sup>1,2</sup>**, Mr. Alek Hanafi Metwalli<sup>1,2</sup>, Dr. Ester Desfilis<sup>1,2</sup>, Prof. Loreta Medina<sup>1,2</sup>

<sup>1</sup>Lleida's Institute for Biomedical Research-Dr. Pifarre Foundation (IRBLleida), Lleida, Spain, <sup>2</sup>University of Lleida, Lleida, Spain

PS2-05

### Wnt1 effect on the Fasciculus retroflexus axonal navigation.

**Ms. Verónica Company<sup>1</sup>**, Ms. Ana Moreno-Cerdá<sup>1</sup>, Ms. Francisca Almagro-García<sup>1</sup>, Dr. Salvador Martínez<sup>1</sup>, Dr. Diego Echevarría<sup>1</sup>, Dr. Eduardo Puelles<sup>1</sup>

<sup>1</sup>Instituto De Neurociencias (UMH-CSIC), Sant Joan D'Alacant, Spain



PS2-06

**Wnt1 role in the specification and differentiation of the habenular complex.**

**Ms. Ana Moreno Cerdá<sup>1</sup>**, Ms Verónica Company<sup>1</sup>, Ms Raquel Murcia-Ramón<sup>1</sup>, Dr. Abraham Andreu-Cervera<sup>1</sup>, Ms Francisca Almagro-García<sup>1</sup>, Dr Salvador Martínez<sup>2</sup>, Dr Diego Echevarría<sup>1</sup>, Dr Eduardo Puelles<sup>1</sup>

<sup>1</sup>Instituto de Neurociencias (UMH-CSIC), Sant Joan D' Alacant, Spain

PS2-07

**Otp expression in cortical neurons throughout ontogenesis**

**Ms. Lorena Morales<sup>1,2</sup>**, Doctor Ester Desfilis<sup>1,2</sup>, Professor Loreta Medina<sup>1,2</sup>

<sup>1</sup>Lleida's Institute For Biomedical Research-Dr.Pifarré Foundation (IRBLleida), Lleida, Spain, <sup>2</sup>University of Lleida, Lleida, Spain

PS2-08

**Expression of gonadal hormones' receptors in Otp-related social behavior network**

**Ms. Alba Gonzalez-Alonso<sup>1,2</sup>**, Ms Lorena Morales<sup>1,2</sup>, Doctor Antonio Abellán<sup>1,2</sup>, Professor Loreta Medina<sup>1,2</sup>, Doctor Ester Desfilis<sup>1,2</sup>

<sup>1</sup>Lleida's Institute for Biomedical Research-Dr. Pifarré Foundation (IRBLleida), Lleida, Spain, <sup>2</sup>University Of Lleida, Lleida, Spain

PS2-09

**Astrocytes gate spike timing dependent plasticity in the Nucleus Accumbens**

**Mr. Samuel Alberquilla<sup>1</sup>**, Dra Carmen Nanclares<sup>2</sup>, Dra Rosario Moratalla<sup>1</sup>, Dr Alfonso Araque<sup>2</sup>, Dr Eduardo Daniel Martín<sup>1</sup>

<sup>1</sup>Instituto Cajal, Madrid, Spain, <sup>2</sup>University of Minnesota, Medical School, Minneapolis, USA

PS2-10

**Neuromuscular activity regulates PKA catalytic and regulatory subunits and its downstream signaling pathway for ACh release at the NMJ**

**Ms. Aleksandra Polishchuk<sup>1</sup>**, Mr. Victor Cilleros-Mañé<sup>1</sup>, Ms. Laia Just-Borràs<sup>1</sup>, Ms. Maria Durán-Vigara<sup>1</sup>, Mr. Genís Vandellós<sup>1</sup>, Ms. Marta Balanyà Segura<sup>1</sup>, Ms. Gemma Argilaga<sup>1</sup>, Dr. Marta Tomàs<sup>1</sup>, Dr. Neus Garcia<sup>1</sup>, Dr. Josep Tomàs<sup>1</sup>, Dr. Maria Angel Lanuza<sup>1</sup>

<sup>1</sup>Universitat Rovira I Virgili, Reus, Spain

PS2-11

**Basal autophagy inhibition in microglia diminishes phagocytosis of apoptotic cells and microglial survival**



Dr. Ainhoa Plaza-Zabala<sup>1,2</sup>, **Miss Virginia Sierra-Torre<sup>1,2</sup>**, Dr. Guillermo Mariño<sup>3,4</sup>, Dr. Travis Faust<sup>5</sup>, Dr. Dorothy Schafer<sup>5</sup>, Dr. Amanda Sierra<sup>1,2,6</sup>

<sup>1</sup>Achucarro Basque Center For Neuroscience, Leioa, Spain, <sup>2</sup>University of the Basque Country, Leioa, Spain, <sup>3</sup>University of Oviedo, Oviedo, Spain, <sup>4</sup>Instituto de Investigación Sanitaria del Principado de Asturias, Oviedo, Spain, <sup>5</sup>University of Massachusetts Medical School, Worcester MA 01605, USA, <sup>6</sup>Ikerbasque Foundation, Bilbao, Spain

PS2-12

### Modification of the extracellular matrix impairs microglial motility

**Dr. Federico Soria<sup>1,2,3</sup>**, Lic. Irene Tomé-Velasco<sup>1</sup>

<sup>1</sup>Achucarro Basque Center For Neuroscience, Leioa, Spain, <sup>2</sup>Departamento de Neurociencias, Universidad del País Vasco, Leioa, Spain, <sup>3</sup>Centro de Investigación Biomédica en Red Enfermedades Neurodegenerativas (CIBERNED), , Spain

PS2-13

### Brain estrogen synthesis regulates synaptic inhibition in female hippocampus

**Dr. Alicia Hernández-Vivanco<sup>1</sup>**, Dr. Íñigo Azcoitia<sup>2</sup>, Alba González-Alonso<sup>1</sup>, Dr. Pablo Méndez<sup>1</sup>

<sup>1</sup>Instituto Cajal, Madrid, Spain, <sup>2</sup>Universidad Complutense de Madrid, Madrid, Spain

PS2-14

### EFFECTS OF TRANSCRANIAL DIRECT-CURRENT STIMULATION (tDCS) ON THALAMOCORTICAL SENSORY PATHWAY IN AWAKE MICE

Mr. Guillermo Sánchez-Garrido Campos<sup>1</sup>, Ms. Marta Estévez-Rodríguez<sup>1</sup>, PhD Isabel Cordones<sup>1</sup>, **PhD Javier Márquez-Ruiz<sup>1</sup>**

<sup>1</sup>Pablo de Olavide University, Seville, Spain

PS2-15

### Characterization of synaptic transmission occurring in olfactory glomeruli of *X. tropicalis* tadpoles in vivo

**Ms. Marta Casas<sup>2</sup>**, Dr. Artur Llobet<sup>2</sup>

<sup>1</sup>DIBELL, Barcelona, Spain, <sup>2</sup>Institute of Neurosciences, Barcelona, Spain

PS2-16

### Towards pharmacological modulation of microglial phagocytosis

**Ms. Noelia Rodríguez-Iglesias<sup>1,2</sup>**, Mr. Iñaki Paris<sup>1,2</sup>, Dr. Jorge Valero<sup>3</sup>, Dr. Amanda Sierra<sup>1,2,4</sup>

<sup>1</sup>Achucarro Basque Center For Neuroscience, Leioa, Spain, <sup>2</sup>University of the Basque Country, Leioa, Spain, <sup>3</sup>Institute of Neurosciences of Castilla y León - INCyL - University of Salamanca, Salamanca, Spain, <sup>4</sup>Ikerbasque Foundation, Bilbao, Spain



PS2-17

**TRESK background potassium channel modulates thermal sensitivity in mice****Ms. Anna Pujol-Coma<sup>1</sup>**, Ms. Emily Eriksson<sup>1</sup>, Dr. Gerard Callejo<sup>1,2</sup>, Dr. Núria Comes<sup>1,2</sup>, Dr. 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

PS2-18

**Pre- and postsynaptic organization of C-type synapses on motor neurons are regulated by the different isoforms of Neuregulin 1****Dr. Anna Casanovas<sup>1</sup>**, Ms. Sara Salvany<sup>1</sup>, Ms. Lúcia Piedrafita<sup>1</sup>, Ms. Sílvia Gras<sup>1</sup>, Ms. Alaó Gatiús<sup>1</sup>, Ms. Alba Blasco<sup>1</sup>, Dr. Olga Tarabal<sup>1</sup>, Dr. Sara Hernández<sup>1</sup>, Prof. Jordi Calderó<sup>1</sup>, Dr. Markus H. Schwab<sup>2</sup>, Prof. Josep E. Esquerda<sup>1</sup><sup>1</sup>Universitat de Lleida / IRBLleida, Lleida, Spain, <sup>2</sup>Institute of Cellular Neurophysiology and Center for Systems Neuroscience (ZSN), University of Veterinary Medicine Hannover, Hannover, Germany

PS2-19

**Transcranial direct current stimulation effects across motor cortex layers on awake mice****Dr. Carlos Andres Sanchez Leon<sup>1</sup>**, Dr. Christoph van Thriel<sup>1</sup>, Dr. Michael Nitsche<sup>1</sup><sup>1</sup>Leibniz Research Centre for Working Environment and Human Factors, Dortmund, Germany

PS2-20

**The role of caspase 8 in the dopaminergic system****Ms. Isabel María Alonso-Bellido<sup>1,2</sup>**, Dr. Irene García-Domínguez<sup>1,2</sup>, Dr. Irene Suárez-Pereira<sup>3</sup>, Dr. Juan García-Revilla<sup>1,2</sup>, Prof. Dr. Martiniano Santiago<sup>1,2</sup>, Dr. Ana María Espinosa-Oliva<sup>1,2</sup>, Dr. Esther Berrocoso, Prof. Dr. José Luis Venero<sup>1,2</sup>, Dr. Rocío M. De Pablos<sup>1,2</sup>, Dr. Rocío Ruiz<sup>1,2</sup><sup>1</sup>Universidad De Sevilla, Sevilla, España, <sup>2</sup>Instituto Biomedicina Sevilla, Sevilla, España, <sup>3</sup>Universidad de Cádiz, , España

PS2-21

**ROLE OF PI3K CATALYTIC ISOFORMS IN NEURONAL METABOLISM****Ms. Alba Fernández-Rodrigo<sup>1</sup>**, Dr. Carla Sánchez-Castillo<sup>1</sup>, Dr. María Isabel Cuartero<sup>2</sup>, Mrs. Cristina Boers<sup>1</sup>, Dr. José Antonio Esteban<sup>1</sup><sup>1</sup>CBMSO-CSIC, Madrid, Spain, <sup>2</sup>CNIC, Madrid, Spain



PS2-22

### ROLE OF PI3-KINASE REGULATORY SUBUNIT (P85) IN THE STRUCTURAL PLASTICITY OF DENDRITIC SPINES

**Mr. Sergio López García<sup>1</sup>**, Mr. Pablo Zamorano González<sup>2</sup>, Prof. Jose Antonio Esteban García<sup>1</sup>

<sup>1</sup>Centro de Biología Molecular Severo Ochoa (CBMSO), Madrid, Spain, <sup>2</sup>Facultad de medicina- Universidad de Málaga, Málaga, Spain

PS2-23

### The microglial P2Y6 receptor mediates neuronal loss and memory deficits in neurodegeneration

**Dr. Mar Puigdellívol<sup>1,2</sup>**, Dr. Stefan Milde<sup>2</sup>, Dr. Anna Vilalta<sup>2</sup>, Dr. Tom Cockram<sup>2</sup>, Dr. David H. Allendorf<sup>2</sup>, Mr. Jeff Lee<sup>2</sup>, Dr. Miguel A. Burguillos<sup>2</sup>, Ms. Katryna Pampuščenko<sup>3</sup>, Dr. Vilmante Borutaite<sup>3</sup>, Dr. Hugh N. Nuthall<sup>4</sup>, Dr. Jack H. Brelstaff<sup>2</sup>, Prof. Maria Grazia Spillantini<sup>2</sup>, Prof. Guy C. Brown<sup>2</sup>

<sup>1</sup>Universitat De Barcelona, Barcelona, Spain, <sup>2</sup>University of Cambridge, Cambridge, United Kingdom, <sup>3</sup>Lithuanian University of Health Sciences, Kaunas, Lithuania, <sup>4</sup>Eli Lilly Research & Development, Erl Wood Manor, United Kingdom

PS2-24

### RAS SIGNALING DURING METABOTROPIC GLUTAMATE RECEPTOR DEPENDENT LONG TERM DEPRESSION (mGluR-LTD).

**Ms. Esperanza López-Merino<sup>1</sup>**, PhD. Víctor Briz<sup>1</sup>, Ms. Jessie Jiang<sup>1</sup>, PhD. Jose A. Esteban<sup>1</sup>

<sup>1</sup>Centro de Biología Molecular Severo Ochoa, Madrid, Spain

PS2-25

### On the G protein-coupled heteroreceptor complexes neuromodulation of the Claustrum

Mr. Ramon Fores-pons<sup>1,2</sup>, **Dr. Manuel Narvaez<sup>1</sup>**, Mr. Alexander Lopez-Salas<sup>2</sup>, Dr. Kjell Fuxe<sup>2</sup>, Dr. Dasiel Oscar Borroto-Escuela<sup>1,2</sup>

<sup>1</sup>Instituto De Investigación Biomédica De Málaga, Facultad De Medicina, Universidad De Málaga, Malaga, Spain, <sup>2</sup>Department of Neuroscience. Karolinska Institutet. , Stockholm, Sweden

PS2-26

### A comparative study of the somatosensory cortex and the hippocampus in adult mice. From the synaptome to the connectome.

**Ms. Marta Turégano-López<sup>1,2</sup>**, Dr. Andrea Santuy<sup>1,3</sup>, Dr. José Rodrigo Rodríguez<sup>1,4</sup>, Dr. Ángel Merchán-Pérez<sup>1,5</sup>, Dr. Javier DeFelipe<sup>1,4</sup>

<sup>1</sup>Centro de Tecnología Biomédica. Universidad Politécnica de Madrid. , Madrid, Spain, <sup>2</sup>PhD Program in Neuroscience, Autonoma de Madrid University, Madrid 28029, Spain, <sup>3</sup>Hertie Institute for Clinical Brain Research Otfried-Müller-Str. 2772076 , Tübingen, Germany, <sup>4</sup>Cajal Institute. CSIC, Madrid, Spain, <sup>5</sup>Architecture and Informatics System Technology. Universidad Politécnica de Madrid, Madrid, Spain



PS2-27

**NMDAR BLOCKING BY MK801 PRODUCES SPECIFIC OSCILLATORY CHANGES IN THE HIPPOCAMPUS AND THE PREFRONTAL CORTEX IMPAIRING WORKING MEMORY AND PLACE CELL FIRING****Mr. Pablo Abad Pérez**<sup>1,2</sup>, Dr. Luis Martínez Otero<sup>2</sup>, Dr. Roger Redondo<sup>3</sup>, Dr. Victor Borrell<sup>2</sup>, Dr. Jorge Brotons Mas<sup>1,2</sup><sup>1</sup>Universidad Cardenal Herrera CEU, Elche, Spain, <sup>2</sup>Instituto de Neurociencias UMH-CSIC, Alicante, Spain, <sup>3</sup>Roche Pharma Research and Early Development, Neuroscience and Rare Diseases, Roche Innovation Center, Basel, Switzerland

PS2-28

**Age-dependent neural coding in the basal forebrain during a Pavlovian task****Dr. Sergio Martínez Bellver**<sup>1,2</sup>, Anna Velencei<sup>2</sup>, Dr. Nicola Solari<sup>2</sup>, Claire-Hélène de Belval<sup>3</sup>, Dr. Balázs Hangya<sup>2</sup><sup>1</sup>University Of Valencia, Valencia, Spain, <sup>2</sup>Institute of Experimental Medicine, Budapest, Hungary, <sup>3</sup>Ecole Normale Supérieure, Paris, France

PS2-29

**Dopaminergic blockades decrease physical exercise maintenance response.****Mr. Daniel Garrigos**<sup>1</sup>, Mr. Alberto Barreda<sup>1</sup>, Dr. Marta Martínez-Morga<sup>1</sup>, Dr. Angel Toval<sup>1</sup>, Mr. Yevheniy Kutsenko<sup>1</sup>, Dr. Kuei Y. Tseng<sup>2</sup>, Dr. José Luis Ferrán<sup>1</sup><sup>1</sup>University Of Murcia, Murcia, Spain, <sup>2</sup>University of Illinois at Chicago, Chicago, United States

PS2-30

**Increased excitability of parvalbumin-positive interneurons in premotor cortical area in a mouse model of obsessive-compulsive disorder****Mr. Santiago Reyes-León**<sup>1</sup>, Mr. Emilio Martínez-Márquez<sup>1</sup>, Mrs. Guadalupe Asensio-Gómez<sup>1</sup>, Dr. Pablo García-Junco-Clemente<sup>1</sup>, Dr. José Luis Nieto-González<sup>1</sup><sup>1</sup>Instituto de Biomedicina de Sevilla (IBIS) HUVR/CSIC/Universidad de Sevilla, Sevilla, Spain

PS2-31

**Area-specific patterns of convergent thalamic inputs to the mouse motor cortex****Ms. Carmen Alonso-Martínez**<sup>1</sup>, Dr. César Porrero<sup>1</sup>, Dr. Francisco Clascá<sup>1</sup><sup>1</sup>Sch. Of Medicine. Autonomous University Of Madrid, Madrid, Spain



PS2-32

### BBI: A Brain-Bacteria Interface to reveal and compute real-time changes in neuronal activity induced by bacterial presence

**Dr. Celia Herrera-Rincon<sup>1,2</sup>**, Prof. Michael Levin<sup>2</sup>, Dr. Antonio Murciano<sup>1</sup>, Dr. Francisco Conejero<sup>1</sup>, Mrs. Julia Murciano<sup>1</sup>, Ms. Martín Garcia-Montes<sup>1</sup>

<sup>1</sup>Universidad Complutense de Madrid, Madrid, Spain, <sup>2</sup>Tufts University, Boston, United States

PS2-33

### Electric fields modulation of epileptiform discharges in the cerebral cortex in vitro

**Ms. Joana Covelo<sup>1</sup>**, Dr. Almudena Barbero-Castillo<sup>1</sup>, Ms. Alessandra Camassa<sup>1</sup>, Prof. Dr. María Victoria Sánchez-Vives<sup>1,2</sup>

<sup>1</sup>Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Barcelona, Spain, <sup>2</sup>Catalan Institution for Research and Advanced Studies (ICREA), Barcelona, Spain

PS2-34

### Human $\alpha$ -synuclein overexpression in mouse serotonin neurons elicits a depressive phenotype: Focus on brain connectivity and synaptic density

Mrs. María Torres-López<sup>1,2</sup>, **Mr. Lluís Miguel-Río<sup>1,2,3</sup>**, Mrs. Verónica Paz<sup>1,2,3</sup>, Dr. Carme Casal<sup>1</sup>, Mrs. Enma Muñoz-Moreno<sup>4</sup>, Dr. Xavier López-Gil<sup>4</sup>, Dr. Analia Bortolozzi<sup>1,2,3</sup>

<sup>1</sup>Institut d'Investigacions Biomèdiques de Barcelona (IIBB), Spanish National Research Council (CSIC), Barcelona, Spain, <sup>2</sup>Institut d'Investigacions August Pi i Sunyer (IDIBAPS), Barcelona, Spain, <sup>3</sup>Centro de Investigación Biomédica en Red de Salud Mental (CIBERSAM), ISCIII, Madrid, Spain, <sup>4</sup>Magnetic Resonance Imaging Core Facility, Institut d'Investigacions August Pi i Sunyer (IDIBAPS), Barcelona, Spain

PS2-35

### A neuroanatomical pathway for the integration of pheromonal and spatial information.

**Mr. Manuel Esteban Vila-Martin<sup>1,2</sup>**, Ms. María. Villafranca-Faus<sup>2</sup>, Ms. Anna. Teruel-Sanchis<sup>1</sup>, Mr. Daniel. Esteve<sup>2</sup>, Mr. Esteban Merino<sup>2</sup>, Dr. Sergio Martínez-Bellver<sup>2</sup>, Dra. Joana. Martínez-Ricós<sup>2</sup>, Dra. Ana. Cervera-Ferri<sup>2</sup>, Dra. Ana. Lloret<sup>2</sup>, Dr. Vicent. Teruel-Martí<sup>2</sup>, Prof. Enrique Lanuza<sup>1</sup>

<sup>1</sup>University of Valencia, Burjassot., Spain., <sup>2</sup>University of Valencia, Valencia., Spain.

PS2-36

### Rotations of prefrontal working memory representations to protect from task interference in a dual-task paradigm

**Dr. Alexandre Mahrach<sup>1</sup>**, Xian Zhang<sup>2,3</sup>, Da Li<sup>2,3</sup>, Dr Chengyu Tony Li<sup>2,3</sup>, Dr Albert Compte<sup>1</sup>

<sup>1</sup>IDIBAPS, Barcelona, Spain, <sup>2</sup>Institute of Neuroscience, Shanghai, China, <sup>3</sup>University of Chinese Academy of Sciences, Beijing, China



PS2-37

### Understanding the Potential Role of Sirtuin 2 on Aging: Consequences of SIRT2.3 Overexpression in Senescence

**Ms. Noemí Sola-Sevilla<sup>1</sup>**, Dr. Ana Ricobaraza<sup>1</sup>, Dr. Rubén Hernandez-Alcoceba<sup>1</sup>, Dr. Maria S. Aymerich<sup>1</sup>, Dr. Rosa M. Tordera<sup>1</sup>, Dr. Elena Puerta<sup>1</sup>

<sup>1</sup>University Of Navarra, Pamplona, Spain

PS2-38

### THE SOCIAL COMPONENT OF ENVIRONMENTAL ENRICHMENT IS A PRO-NEUROGENIC STIMULUS IN ADULT C57BL6 FEMALE MICE

**Ms. Elena P. Moreno-Jiménez<sup>1,2,3</sup>**, Dr. Jesús Ávila<sup>1,3</sup>, Dr. María Llorens-Martín<sup>1,3</sup>

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

PS2-39

### Dealing with motherhood: Gene expression changes induced by pregnancy and lactation but not pup stimuli in the mouse medial amygdala

**Dr. María Abellán-Álvarez<sup>1</sup>**, Dr. Guillermo Ayala<sup>2</sup>, Dr. Manuela Barneo-Muñoz<sup>3</sup>, Dr. Fernando Martínez-García<sup>3</sup>, Dr Carmen Agustín-Pavón<sup>1</sup>, Dr Enrique Lanuza<sup>1</sup>

<sup>1</sup>Unitat mixta UV-UJI de Neuroanatomia Funcional Comparada, Departament de Biologia Cel·lular, Biologia Funcional i Antropologia Física, Facultat de Ciències Biològiques, Universitat de València., Burjassot, Spain, <sup>2</sup>Department d'Estadística i Investigació Operativa, Facultat de Matemàtiques; Universitat de València., Burjassot, Spain, <sup>3</sup>Unitat mixta UV-UJI de Neuroanatomia Funcional Comparada, Unitat Predepartamental de Medicina, Fac. Ciències de la Salut, Universitat Jaume I., Castelló de la Plana, Spain

PS2-41

### Galanin and neuropeptide Y interactions linked to neuronal precursor cells of the dentate gyrus in the hippocampus. Role in depression and cognitive impairment.

D. Ramon Fores-Pons<sup>1,2</sup>, Dr. Dasiel O. Borroto-Escuela<sup>2,3,4</sup>, D<sup>a</sup> Mariana Pita-Rodriguez<sup>1,2,5</sup>, Dr. Miguel A Barbancho<sup>1</sup>, Dr. Alexander López-Salas<sup>2</sup>, D<sup>a</sup> Paloma Rosas-Marqués<sup>1</sup>, D. Pablo Zamorano-González<sup>1</sup>, Dr. Kjell Fuxe<sup>2</sup>, Dra. Natalia García Casares<sup>1,2</sup>, **Dr. Manuel Narvaez<sup>1,2</sup>**

<sup>1</sup>Instituto De Investigación Biomédica De Málaga, Facultad de Medicina, Universidad de Málaga, Malaga, Spain, <sup>2</sup>Department of Neuroscience, Karolinska Institute, Stockholm, Sweden, <sup>3</sup>Department of Biomolecular Science, Section of Physiology, University of Urbino, Urbino, Italy, <sup>4</sup>Grupo Bohío-Estudio, Observatorio Cubano de Neurociencias, Yaguajay, Cuba, <sup>5</sup>Departamento de Neurogenética, Instituto de Neurología y Neurocirugía, La Habana, Cuba



PS2-42

### INDIVIDUAL VARIATION IN DROSOPHILA MELANOGASTER IMPACTS FEEDING BEHAVIOR

**Mr. Ruben Molla Albaladejo<sup>1</sup>**, Mrs. Sara Adelaida Del Rey Mateos<sup>1</sup>, Dr. Juan Antonio Sanchez Alcañiz<sup>1</sup>

<sup>1</sup>Instituto de Neurociencias de Alicante UMH-CSIC, San Juan de Alicante, España

PS2-43

### Relevance of metalloproteinase-9 in depression: a study in transgenic animal models

**Ms. Júlía Senserrich<sup>1,2,3</sup>**, Dra. Eva Florensa-Zanuy<sup>1,2</sup>, Dr. Álvaro Díaz<sup>1,2,3</sup>, Dr. Ángel Pazos<sup>1,2,3</sup>, Dra. Elena Castro<sup>1,2,3</sup>, Dra. Fuencisla Pilar-Cuellar<sup>1,2,3</sup>

<sup>1</sup>Centro de Investigación Biomédica en Red de Salud Mental (CIBERSAM), Instituto de Salud Carlos III, Madrid, Spain, <sup>2</sup>Instituto de Biomedicina y Biotecnología de Cantabria, IBBTEC (UC, CSIC, SODERCAN), Santander, Spain, <sup>3</sup>Facultad de Medicina, UC, Santander, Spain

PS2-44

### Effects of chronic CB1 receptor agonist ACEA in a mouse model of Alzheimer's Disease.

**Dr. Carla Ramon Duaso<sup>1</sup>**, Ms. Laura Vidal Palencia<sup>1</sup>, Mr. Jose Antonio González Parra<sup>1</sup>, Dr. Arnau Busquets García<sup>1</sup>

<sup>1</sup>IMIM-Hospital del Mar Medical Research Institute, Barcelona, Spain

PS2-45

### The associative striatum mediates flexible expectation-based choice biases

**Dr. Carlos Sindreu<sup>1</sup>**, Dr. Rafael Marín<sup>1</sup>, Ms Lorena Jimenez<sup>1</sup>, Dr. Yerko Fuentealba<sup>1</sup>, Dr. Daniel Duque<sup>1</sup>, Dr. Jaime de la Rocha<sup>1</sup>

<sup>1</sup>IDIBAPS, Barcelona, Spain

PS2-46

### Modulation of gut microbiota as a therapeutic approach to improve behavioural deficits in a mouse model of Down syndrome.

**Mr. Jose Antonio Gonzalez Parra<sup>1</sup>**, Dr. Elk Kossatz<sup>1</sup>, Ms. Emma Veza<sup>1</sup>, Dr. Patricia Robledo<sup>1,2</sup>, Dr. Arnau Busquets García<sup>1</sup>, Dr. Neus Pizarro<sup>1,3</sup>

<sup>1</sup>IMIM-Hospital del Mar Medical Research Institute, Barcelona, Spain, <sup>2</sup>Department of Experimental and Health Sciences, University Pompeu Fabra (UPF), Barcelona, Spain, <sup>3</sup>Autonomous University of Barcelona, Bellaterra, Barcelona, Spain



PS2-47

**Sub-chronic peripheral cannabinoid type-1 receptor blockade enhances cognitive performance in naïve mice and in a model of fragile X syndrome**Dr. Sara Martínez-Torres<sup>1,2,3</sup>, **Ms. Araceli Bergadà-Martínez<sup>1</sup>**, Ms. Lucía de los Reyes-Ramírez<sup>1</sup>, Ms. Irene Martínez-Gallego<sup>4</sup>, Prof. Antonio Rodríguez-Moreno<sup>4</sup>, Prof. Rafael Maldonado<sup>1,5</sup>, Prof. Andrés Ozaita<sup>1,5</sup><sup>1</sup>University Pompeu Fabra, Barcelona, Spain, <sup>2</sup>Institute for Bioengineering of Catalonia, Barcelona, Spain, <sup>3</sup>University of Barcelona, Barcelona, Spain, <sup>4</sup>University Pablo de Olavide, Seville, Spain, <sup>5</sup>IMIM (Hospital del Mar Medical Research Institute), Barcelona, Spain

PS2-48

**Neuraminidase-induced neuroinflammation causes anxiety and microgliosis in the amygdala****Ms. Ana León-Rodríguez<sup>1</sup>**, Ms. María del Mar Fernández-Arjona<sup>1,3</sup>, Ms. Carmen Pedraza<sup>2,3</sup>, Mr. Jesús M. M. Grondona<sup>1,3</sup>, Ms. María Dolores López-Ávalos<sup>1,3</sup><sup>1</sup>University of Málaga, Departamento de Biología Celular, Genética y Fisiología (Área de Fisiología Animal), Málaga, Spain, <sup>2</sup>University of Málaga, Departamento de Psicobiología y Metodología en las CC, Málaga, Spain, <sup>3</sup>Instituto de Investigación Biomédica de Málaga-IBIMA, Málaga, Spain

PS2-49

**Evoked neural population activity during static and dynamic visual stimuli recognition: a comparative study based on intracranial EEG****Mr. Manel Vila-Vidal<sup>1</sup>**, Dr. Mariam AlKhawaja<sup>2</sup>, Dr. Mar Carreño<sup>2,3</sup>, Dr. Pedro Roldán<sup>4</sup>, Dr. Jordi Rumià<sup>4</sup>, Dr Gustavo Deco<sup>1,5</sup>, Dr. Antonio Donaire<sup>2,3,6</sup>, Dr. Adrià Tauste Campo<sup>1,7</sup><sup>1</sup>Universitat Pompeu Fabra, Barcelona, Spain, <sup>2</sup>Epilepsy Program-Hospital Clínic, Barcelona, Spain, <sup>3</sup>Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Barcelona, Spain, <sup>4</sup>Epilepsy Program, Neurosurgery, Hospital Clínic, Barcelona, Spain, <sup>5</sup>Institució Catalana de Recerca i Estudis Avançats, Barcelona, Spain, <sup>6</sup>CIBERBBN, Networking Centre on Bioengineering, Biomaterials and Nanomedicine, Barcelona, Spain, <sup>7</sup>Universitat Politècnica de Catalunya, Barcelona, Spain

PS2-50

**Epileptogenic biomarkers based on combined power activation and connectivity of iEEG signals****Mr. Manel Vila-Vidal<sup>1</sup>**, Dr. Carmen Pérez-Enríquez<sup>3</sup>, Dr. Alessandro Principe<sup>1,2,3</sup>, Dr Rodrigo Rocamora<sup>1,2,3</sup>, Dr Gustavo Deco<sup>1,4</sup>, Dr. Adrià Tauste Campo<sup>1,5</sup><sup>1</sup>Universitat Pompeu Fabra, Barcelona, Spain, <sup>2</sup>Epilepsy Unit-Hospital del Mar, Barcelona, Spain, <sup>3</sup>Hospital del Mar Medical Research Institute (IMIM), Barcelona, Spain, <sup>4</sup>Institució Catalana de Recerca i Estudis Avançats, Barcelona, Spain, <sup>5</sup>Universitat Politècnica de Catalunya, Barcelona, Spain



PS2-51

## Finding Useful Biomechanics Markers as Functional Correlates of the Eyelid Movements

**Mr. Victor Castro-Andrés<sup>1</sup>**, Dr. Agnés Gruart<sup>1</sup>, Dr. Raudel Sánchez-Campusano<sup>1</sup>

<sup>1</sup>Division of Neuroscience, Universidad Pablo de Olavide, 41013-Seville, Spain

PS2-52

## Information transmission in delay-coupled neuronal circuits in the presence of a relay population

**Mr. Jaime Sánchez Claros<sup>1</sup>**, Dr. Aref Pariz<sup>2,3</sup>, Dr. Alireza Valizadeh<sup>3</sup>, Dr. Santiago Canals<sup>4</sup>, Dr. Claudio Mirasso<sup>1</sup>

<sup>1</sup>Instituto de Física Interdisciplinar y Sistemas Complejos (IFISC-UIB), Palma, Spain, <sup>2</sup>University of Ottawa, Ottawa, Canada, <sup>3</sup>Institute for Advanced Studies in Basic Sciences, Zanjan, Iran, <sup>4</sup>Instituto de Neurociencias (CSIC-UMH), Sant Joan d'Alacant, Spain

PS2-53

## Astrocytic calcium dynamics in multiple sclerosis: regulation by CB1 receptors

**Alvaro Moreno-García<sup>1,2,3,5,6</sup>**, Teresa Colomer<sup>1,2,3</sup>, Ana Bernal-Chico<sup>1,2,3</sup>, Asier Ruiz<sup>1,2,3</sup>, Carmen L Utrilla<sup>2</sup>, Urszula Skupio<sup>5,6</sup>, Roman Serrat<sup>5,6</sup>, Carlos Matute<sup>1,2,3</sup>, Giovanni Marsicano<sup>5,6</sup>, **Dr. Susana Mato<sup>1,2,3,4</sup>**

<sup>1</sup>University of the Basque Country UPV/EHU, Leioa, Spain, <sup>2</sup>Achucarro Basque Center for Neuroscience, Leioa, Spain, <sup>3</sup>Instituto de Salud Carlos III (CIBERNED), Madrid, Spain, <sup>4</sup>Biocruces Bizkaia, Barakaldo, Spain, <sup>5</sup>INSERM U1215, Neurocentre Magendie, Bordeaux, France, <sup>6</sup>Université de Bordeaux, France

PS2-54

## Amyloid propagation in a sporadic model of Alzheimer disease

**Juana Andreo-Lopez<sup>1</sup>**, Francisco Cantero-Molina<sup>1</sup>, Miriam Bettinetti-Luque<sup>1</sup>, Kelly Huynh<sup>2</sup>, Marie Nguyen<sup>2</sup>, Alwin Cheung<sup>2</sup>, Janine Tran<sup>2</sup>, Celia Da Cunha<sup>2</sup>, Laura Trujillo-Estrada<sup>1,2</sup>, Cristina Nuñez-Díaz<sup>1</sup>, Alessandra Cadete Martini<sup>2</sup>, Stefania Forner<sup>2</sup>, Antonia Gutierrez<sup>1</sup>, Frank LaFerla<sup>2</sup>, David Baglietto-Vargas<sup>1,2</sup>

<sup>1</sup>University of Malaga/CIBERNED/IBIMA, Málaga, Spain, <sup>2</sup>University of California, Irvine, USA

PS2-55

## Effect of the Src inhibitory peptide TAT-Cx43<sub>266-283</sub> on neural stem cells with EGFR overexpression or EGFRVIII mutation

**Ms. Andrea Álvarez-Vázquez<sup>1,2</sup>**, Dr. Berta Segura-Collar<sup>3</sup>, Dr. Pilar Sánchez-Gómez<sup>3</sup>, Prof. Arantxa Tabernero<sup>1,2</sup>

<sup>1</sup>Instituto de Neurociencias de Castilla y León (INCyL), University of Salamanca, Salamanca, Spain, <sup>2</sup>Instituto de Investigación Biomédica de Salamanca (IBSAL), Salamanca, Spain, <sup>3</sup>Neuro-oncology Unit, Instituto de Salud Carlos III-UFIEC, Madrid, Spain



PS2-56

## Microglia are key regulators of the innate anti-tumoural response in late adulthood

**Mr. Luis Cruz Hernández<sup>1,2</sup>**, Mrs Maite Sánchez Montero<sup>1,2</sup>, Mrs Marta García Cruzado<sup>2</sup>, Mrs Isabel María Alonso Bellido<sup>1,2</sup>, Dr Manuel Sarmiento Soto<sup>1,2</sup>, Dr José Luis Venero Recio<sup>1,2</sup>

<sup>1</sup>Instituto de Biomedicina Sevilla (IBiS), Sevilla, Spain, <sup>2</sup>Departamento de Bioquímica y Biología Molecular. Universidad de Sevilla, Sevilla, España

PS2-57

## ENDO-LYSOSOMAL DISRUPTION DRIVES MICROGLIAL PHAGOCYTOSIS DYSFUNCTION IN STROKE

**Ms. Virginia Sierra-Torre<sup>1,2</sup>**, Dr. Ainhoa Plaza-Zabala<sup>1,2</sup>, Ms. Sol Beccari<sup>1,2</sup>, Ms. Paloma R. Huguet-Rodriguez<sup>2</sup>, Dr. Estibaliz Capetillo-Zarate<sup>1,2,3</sup>, Dr. Alejandro Carretero<sup>1</sup>, Dr. Maria Domercq<sup>1,2,4</sup>, Dr. Jorge Valero<sup>1,3</sup>, Dr. Amanda Sierra<sup>1,2,3</sup>, Dr. Mikel García Zaballa<sup>2</sup>

<sup>1</sup>Achucarro Basque Center For Neuroscience, Leioa, Spain, <sup>2</sup>University of the Basque Country, Leioa, Spain, <sup>3</sup>Ikerbasque Foundation, Bilbao, Spain, <sup>4</sup>Instituto de Salud Carlos III, Centro de Investigación Biomédica en Red de Enfermedades Neurodegenerativas (CIBERNED), Leioa, Spain

PS2-58

## Generation of GRIN-related disorders Zebrafish models library for endophenotypic characterization and pharmacological screening

**Sílvia Locubiche Serra<sup>1,2</sup>**, Ana Santos Gómez<sup>2</sup>, Mireia Olivella<sup>3</sup>, Flavia De Santis<sup>1</sup>, Xavier Altafaj<sup>2</sup>, Davide Rubbini<sup>1</sup>, Javier Terriente<sup>1</sup>

<sup>1</sup>ZeClinics, Institut de Recerca Germans Trias I Pujol (IGTP), Badalona, Spain, <sup>2</sup>IDIBAPS, August Pi i Sunyer Biomedical Research Institute, Barcelona, Spain, <sup>3</sup>Universitat de Vic – Universitat Central de Catalunya, Vic, Spain

PS2-59

## High-fat feeding shifts the gut microbiome and accelerates retinal degeneration in retinitis pigmentosa mice

Dr. Oksana Kutsyr<sup>1</sup>, Dr. Agustina Noailles<sup>1</sup>, Dr. Natalia Martínez-Gil<sup>1</sup>, Ms. Lucía Maestre-Carballa<sup>1</sup>, Dr. Manuel Martínez-García<sup>1</sup>, Dr. Victoria Maneu<sup>1</sup>, Dr. Nicolás Cuenca<sup>1</sup>, **Dr. Pedro Lax<sup>1</sup>**

<sup>1</sup>University of Alicante, Alicante, Spain



PS2-60

### Activating epigenetic modifications are upregulated in the post-mortem brain of schizophrenia subjects: Effects of antipsychotic treatment

**Ms. Oihane Martínez-Peula<sup>1</sup>**, Dr Alfredo Ramos-Miguel<sup>1,2,3</sup>, Mr Benito Morentín<sup>4</sup>, Dr Callado L.F.<sup>1,2,5</sup>, Dr Meana J.J.<sup>1,2,5</sup>, Dr Guadalupe Rivero<sup>1,2,5</sup>

<sup>1</sup>University of the Basque Country (UPV/EHU), Leioa,, Spain, <sup>2</sup>Centro de Investigación Biomédica en Red de Salud Mental (CIBERSAM), , Spain, <sup>3</sup>University of British Columbia, Vancouver,, Canada, <sup>4</sup>Institute of Legal Medicine, Bilbao,, Spain, <sup>5</sup>Biocruces Bizkaia Health Research Institute, Barakaldo,, Spain

PS2-61

### Dysfunctional M2 Cortex-Superior Colliculus-Basal ganglia circuit in Huntington's disease

**Ms. Sara Conde-Berriozabal<sup>1,2,3</sup>**, Ms Lia Garcia-Gilbert<sup>1,2,3</sup>, Ms Laia Sitjà-Roqueta<sup>1,2,3</sup>, Ms Esther García-García<sup>1,2,3</sup>, Dra Emma Muñoz-Moreno<sup>2</sup>, Dr Javier López-Gil<sup>2</sup>, Dra Guadalupe Soria<sup>2</sup>, Dr Manuel J Rodríguez<sup>1,2,3</sup>, Dr Jordi Alberch<sup>1,2,3</sup>, Dr Mercè Masana<sup>1,2,3</sup>

<sup>1</sup>Dept. Biomedical Sciences, Institute of Neurosciences, School of Medicine and Health Sciences, Universitat de Barcelona, Barcelona, Espanya, <sup>2</sup>Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Barcelona, Espanya, <sup>3</sup>Centro de Investigación Biomédica en Red sobre Enfermedades Neurodegenerativas (CIBERNED), Madrid, Espanya

PS2-62

### Involvement of the neuropeptide cortistatin in neuroinflammation and blood-brain barrier dysfunction in ischemic stroke

**Ms. Julia Castillo-González<sup>1</sup>**, Ms Ana Ubago-Rodríguez<sup>1</sup>, Ms Marta Caro<sup>1</sup>, Ms Irene Forte-Lago<sup>1</sup>, Ms Lara Buscemi<sup>2,3</sup>, Mr Pedro Hernández-Cortés<sup>4</sup>, Mr Lorenz Hirt<sup>2,3</sup>, Ms Elena González-Rey<sup>1</sup>

<sup>1</sup>Institute of Parasitology and Biomedicine López-Neyra (Spanish Research Council), Armilla (Granada), Spain, <sup>2</sup>Department of Fundamental Neurosciences (University of Lausanne), Lausanne, Switzerland, <sup>3</sup>Lausanne University Hospital, Lausanne, Switzerland, <sup>4</sup>Medicine School (University of Granada), Granada, Spain

PS2-63

### Transcriptomic analysis in a fragile X syndrome mouse model after CB1 receptor targeting reveals treatment-associated changes in RNA splicing machinery.

**Ms. Lucía de los Reyes-Ramírez<sup>1</sup>**, Ms. Araceli Bergadà-Martínez<sup>1</sup>, Ms. Marina Reixachs-Solé<sup>2,3</sup>, Dr. Sara Martínez-Torres<sup>1,4,5</sup>, Dr. Alba Navarro-Romero<sup>1,6</sup>, Prof. Rafael Maldonado<sup>1,7</sup>, Prof. Eduardo Eyras<sup>2,3,7</sup>, Prof. Andrés Ozaita<sup>1</sup>

<sup>1</sup>University Pompeu Fabra, Barcelona, Spain, <sup>2</sup>EMBL Australia Partner Laboratory Network at the Australian National University, Canberra, Australia, <sup>3</sup>The John Curtin School of Medical Research, Canberra, Australia, <sup>4</sup>Institute for Bioengineering of Catalonia, Barcelona, Spain, <sup>5</sup>University of Barcelona, Barcelona, Spain, <sup>6</sup>Vall d'Hebron Research Institute-CIBERNED, Barcelona, Spain, <sup>7</sup>Hospital del Mar Medical Research Institute (IMIM), Barcelona, Spain



PS2-64

### Increased serotonin 5-HT<sub>2A</sub> receptor constitutive activity on Gα<sub>i</sub>-protein in post-mortem frontal cortex of subjects with schizophrenia

**Ms. Itziar Muneta-Arrate**<sup>1,2</sup>, Dr Rebeca Diez-Alarcia<sup>1,2,3</sup>, Dr Igor Horrillo<sup>1,2,3</sup>, Dr Meana J.J.<sup>1,2,3</sup>

<sup>1</sup>University of the Basque Country UPV/EHU, Leioa, Spain, <sup>2</sup>Centro de investigación Biomédica en Red de Salud Mental CIBERSAM, Spain, <sup>3</sup>Biocruces Bizkaia Health Research Institute, Barakaldo, Spain

PS2-65

### Functional selectivity of serotonin 5-HT<sub>2A</sub> receptor drugs on Gα<sub>i</sub>-proteins in postmortem human brain cortex

**Dr. Meana J.J.**<sup>1,2,3</sup>, Ms Itziar Muneta-Arrate<sup>1,2</sup>, Ms Patricia Miranda-Azpiazu<sup>1,4</sup>, Aintzane García-Bea<sup>1</sup>, Igor Horrillo<sup>1,2,3</sup>, Rebeca Diez-Alarcia<sup>1,2,3</sup>

<sup>1</sup> University of the Basque Country UPV/EHU, Leioa, Spain, <sup>2</sup>Centro de investigación Biomédica en Red de Salud Mental CIBERSAM, Spain, <sup>3</sup>Biocruces Bizkaia Health Research Institute, Barakaldo, Spain, <sup>4</sup>Achucarro Basque Center for Neuroscience, Leioa, Spain

PS2-66

### BCAS1 defines a heterogeneous population in oligodendroglioma and glioblastoma

**Msc. Raquel Morales-Gallel**<sup>1</sup>, Msc. María José Ulloa-Navas<sup>1</sup>, MD. Ricardo Prat-Acín<sup>2</sup>, MD. Gaspar Reynolds-Muntaner<sup>2</sup>, Dr. Vicente Herranz-Pérez<sup>1</sup>, Prof. José Manuel García-Verdugo<sup>1</sup>, MD. Jaime Ferrer-Lozano<sup>2</sup>

<sup>1</sup>University of Valencia-CIBERNED, Valencia, Spain, <sup>2</sup>Hospital Universitari i Politècnic La Fe, Valencia, Spain

PS2-67

### Antidepressant actions of ketamine engage cellular mechanisms of endoplasmic reticulum stress by the eIF2α pathway

**Mr. Lluís Miguel-Rio**<sup>1,2,3</sup>, Mr. Unai Sarriés-Serrano<sup>1,2,3</sup>, Mrs. Verónica Paz<sup>1,2,3</sup>, Mrs. Leticia Campa<sup>1,2,3</sup>, Dr. Analia Bortolozzi<sup>1,2,3</sup>

<sup>1</sup>Institut d'Investigacions Biomèdiques de Barcelona (IIBB), Spanish National Research Council (CSIC), Barcelona, Spain, <sup>2</sup>Institut d'Investigacions August Pi i Sunyer (IDIBAPS), Barcelona, Spain, <sup>3</sup>Centro de Investigación Biomédica en Red de Salud Mental (CIBERSAM), ISCIII, Madrid, Spain

PS2-68

### A closer look at Cux1 heterozygosis in the neocortex, when one copy is not enough

**Ms. Elia Marcos-Grañeda**<sup>1</sup>, Dr. Marta Nieto<sup>1</sup>

<sup>1</sup>CNB-CSIC, Madrid, Spain



PS2-69

### Immunodensity of dopamine D2, cannabinoid CB1, metabotropic glutamate mGlu2 and mGlu3 receptors in schizophrenia subjects

**PhD candidate DelaCuesta-Barrutia J.<sup>1</sup>**, Dr Peñagarikano O.<sup>1,2</sup>, Mr Morentin B.<sup>3,4</sup>, Dr Callado L.F.<sup>1,2,4</sup>, Dr Meana J.J.<sup>1,2,4</sup>, Dr Ramos-Miguel A.<sup>1,2,5</sup>, Dr Erdozain A.M.<sup>1,2</sup>

<sup>1</sup>University of the Basque Country, UPV/EHU, Leioa,, Spain, <sup>2</sup>Centro de Investigación Biomédica en Red de Salud Mental (CIBERSAM), , Spain, <sup>3</sup>Basque Institute of Legal Medicine, Bilbao,, Spain, <sup>4</sup>Biocruces Bizkaia Health Research Institute, Barakaldo, Spain, <sup>5</sup>University of British Columbia, Vancouver BC, Canada

PS2-70

### Generation and characterisation of new mouse models of TDP-43 proteinopathies including a new genomically humanised Knock-In strain

José Miguel Brito-Armas<sup>1</sup>, Francesca Di Giorgio<sup>2</sup>, Judith Noda Mayor<sup>1</sup>, Alessandro Marrero Gagliardi<sup>1</sup>, Laura Santana Cordón<sup>1</sup>, Noemi Socas Pérez<sup>1</sup>, Thomas J Cunningham<sup>3</sup>, Elizabeth MC Fisher<sup>2</sup>, Ángel Acebes Vindel<sup>4</sup>, **Abraham Acevedo Arozena<sup>1</sup>**

<sup>1</sup>Ciberned, Hospital Universitario De Canarias, ITB-ULL, San Cristóbal De La Laguna (tenerife), Spain, <sup>2</sup>UCL Institute of Neurology, Department of Neuromuscular Diseases, London , United Kingdom, <sup>3</sup>MRC Harwell Institute, Harwell Campus Oxfordshire, United Kingdom, <sup>4</sup>Dpto ciencias básicas Universidad de La Laguna (ULL), San Cristóbal De La Laguna (tenerife), Spain

PS2-71

### A new non-aggregative splicing isoform of human Tau is decreased in Alzheimer's disease.

**Mr. Daniel Ruiz-Gabarre<sup>1,2,3</sup>**, Dr. Vega García-Escudero<sup>1,2,3</sup>, Dr. Ricardo Gargini<sup>4</sup>, Dr Mar Pérez<sup>1,2</sup>, Ms Esther García<sup>1</sup>, Ms Raquel Cuadros<sup>1</sup>, Dr Ivó H. Hernández<sup>1</sup>, Dr. Jorge R. Cabrera<sup>5</sup>, Dr Ramón García-Escudero<sup>6,7,8</sup>, Dr. José J. Lucas<sup>1,9</sup>, Prof. Félix Hernández<sup>1,9</sup>, Prof Jesús Ávila<sup>1,9</sup>

<sup>1</sup>Centro De Biología Molecular Severo Ochoa, Madrid, Spain, <sup>2</sup>Universidad Autónoma de Madrid, Madrid, Spain, <sup>3</sup>Graduate Program in Neuroscience, Autónoma de Madrid University, Madrid, Spain, <sup>4</sup>Instituto de Salud Carlos III-UFIEC, Madrid, Spain, <sup>5</sup>Fundación Hospital de Jove, Gijón, Spain, <sup>6</sup>CIEMAT, Madrid, Spain, <sup>7</sup>Centro de Investigación Biomédica en Red de Cáncer (CIBERONC), Madrid, Spain, <sup>8</sup>Hospital 12 Octubre Research Institute/CIEMAT, Madrid, Spain, <sup>9</sup>Networking Research Center on Neurodegenerative Diseases (CIBERNED), Madrid, Spain

PS2-72

### Synergistic effects of applying Static Magnetic Fields and Diazepam to Control EEG Abnormalities in an Epileptic Rat Model

**Dr. Carmen de Labra<sup>1</sup>**, Dr. Javier Cudeiro<sup>1,2</sup>, Dr. Casto Rivadulla<sup>1</sup>

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



PS2-73

**Mitochondrial dysfunction and neurotoxicity induced by frataxin deficiency in astrocytes are attenuated with the Sonic Hedgehog agonist SAG****Mr. Andres Vicente-Acosta**<sup>1</sup>, Dr. Javier Díaz-Nido<sup>1</sup>, Dr. Frida Loria<sup>2</sup><sup>1</sup>Centro de Biología Molecular Severo Ochoa (CSIC-UAM) and Universidad Autónoma de Madrid (UAM), Madrid, Spain,<sup>2</sup>Laboratorio de Apoyo a la Investigación, Hospital Universitario Fundación Alcorcón, Madrid, Spain

PS2-74

**Sperm cytoskeleton ODFs genes as a potential mechanism of glioblastoma progression****Ms. Teresa De Los Reyes**<sup>1</sup>, Dr Sergio Casas-Tintó<sup>1</sup><sup>1</sup>Instituto Cajal CSIC, Madrid, Spain

PS2-75

**Auditory evoked oscillations are altered in UBE3A knock-out rat model of Angelman's syndrome****Ms. Irene Gonzalez-Burgos**<sup>1,2,3</sup>, Ms. Marie Bainier<sup>1</sup>, Dr. Philipp Schoenenberger<sup>1</sup>, Dr. Philipp Janz<sup>1</sup>, Dr. Miguel Valencia<sup>2,3</sup>, Dr. Roger Redondo<sup>1</sup><sup>1</sup>Roche Pharma Research and Early Development, Neuroscience and Rare Diseases, Roche Innovation Center Basel, F. Hoffmann-La Roche Ltd, Basel, Switzerland, <sup>2</sup>Center of Applied Medical Research, University of Navarra, Pamplona, Spain,<sup>3</sup>IdiSNA, Navarra Institute for Health Research, Pamplona, Spain

PS2-76

**Expression of microglial CX3CR1 in Alzheimer's disease and its regulation by noradrenaline****Ms. Irene Lopez Gutierrez**<sup>1</sup>, Dra. Marta Gonzalez Prieto<sup>1</sup>, Dr. Jose Luis Muñoz Madrigal<sup>1</sup>, Dr. Juan Carlos Leza<sup>1</sup><sup>1</sup>Universidad Complutense De Madrid, Madrid, Spain

PS2-77

**Assessment of the integrity of the endothelial junctions and blood-brain barrier disruption in MCT8 deficiency****M Guillén-Yunta**<sup>1</sup>, V Valcárcel-Hernández<sup>1</sup>, A Montero-Pedrazuela<sup>1</sup>, A Guadaño-Ferraz<sup>1</sup><sup>1</sup>Instituto De Investigaciones Biomédicas "Alberto-Sols", Consejo Superior de Investigaciones Científicas (CSIC), Universidad Autónoma de Madrid (UAM), Madrid, Spain



PS2-78

### The role of extracellular vesicles in Alzheimer's disease: mechanistic insight into intrinsic protection

**Dr. Andreu Matamoros-Anglés<sup>1</sup>**, Dr. Mohsin Shafiq<sup>1</sup>, Santra Brenna<sup>2</sup>, Dr Behnam Mohammadi<sup>1</sup>, Dr Hermann Clemens Altmepfen<sup>1</sup>, Dr Berta Puig<sup>2</sup>, Prof. Dr. Markus Glatzel<sup>1</sup>

<sup>1</sup>Institute of Neuropathology, University Medical Center Hamburg-Eppendorf., Hamburg, Germany, <sup>2</sup>Department of Neurology, Experimental Research in Stroke and Inflammation, University Medical Center Hamburg-Eppendorf., Hamburg, Germany

PS2-79

### Δ9-TETRAHYDROCANNABINOL PROMOTES FUNCTIONAL REMYELINATION IN THE MOUSE BRAIN

Tania Aguado<sup>1,2,3</sup>, Alba Huerga-Gómez<sup>1,2,3</sup>, Anibal Sánchez-de la Torre<sup>1,2,3</sup>, Eva Resel<sup>1,2,3</sup>, Juan Carlos Chara<sup>2,4,5</sup>, Carlos Matute<sup>2,4,5</sup>, Susana Mato<sup>2,4,5</sup>, Ismael Galve-Roperh<sup>1,2,3</sup>, Manuel Guzman<sup>1,2,3</sup>, **Javier Palazuelos<sup>1,2,3</sup>**

<sup>1</sup>Instituto Ramón y Cajal de Investigación Sanitaria (IRYCIS), Madrid, Spain, <sup>2</sup>Complutense University, Madrid, Spain, <sup>3</sup>Centro de Investigación Biomédica en Red sobre Enfermedades Neurodegenerativas (CIBERNED), Madrid, Spain, <sup>4</sup>University of the Basque Country UPV/EHU, Leioa, Spain, <sup>5</sup> Achucarro Basque Center for Neuroscience, Leioa, Spain

PS2-80

### Astrocytic GLUT1 ablation improves systemic glucose metabolism and promotes cognition

**Mr. Carlos G. Ardanaz<sup>1,3</sup>**, Prof. María J. Ramírez<sup>1,3</sup>, Dr. Cristian Smerdou<sup>2,3</sup>, Dr. Maite Solas<sup>1,3</sup>

<sup>1</sup>University of Navarra, Pamplona, Spain, <sup>2</sup>Center for Applied Medical Research (CIMA), Pamplona, Spain, <sup>3</sup>IdISNA (Navarra Institute for Health Research), Pamplona, Spain

PS2-81

### Hypothalamic anorexigenic and orexigenic gene expression after morning or evening forced wheel exercise in adolescent rats

**Mr. Yevheniy Kutsenko<sup>1,2</sup>**, Mr. Alberto Barreda<sup>2</sup>, Dr. Ángel Toval<sup>1,2</sup>, Mr. Daniel Garrigos<sup>1,2</sup>, Dr. Marta Martínez-Morga<sup>1,2</sup>, Prof. Bruno Ribeiro Do Couto<sup>3</sup>, Prof. José Luis Ferrán<sup>1,2</sup>

<sup>1</sup>Faculty of Medicine, University of Murcia, Murcia, Spain, <sup>2</sup>Institute of Biomedical Research of Murcia – IMIB, Virgen de la Arrixaca University Hospital, Murcia, Spain, <sup>3</sup>Faculty of Psychology, University of Murcia, Murcia, Spain

PS2-82

### IGF1 modulates inflammation and phagocytosis in reactive astrocytes through PI3K(p110α) in a sex-specific manner.

**Mr. Daniel Pinto-Benito<sup>1,2</sup>**, Ms. Carmen Paradela-Leal<sup>1</sup>, Dr. Angeles Arévalo<sup>1,2</sup>

<sup>1</sup>Instituto Cajal (CSIC), Madrid, Spain, <sup>2</sup>CIBERFES, Spain



PS2-83

**A novel modular toolbox for precise neuronal epigenome editing****Ms. Marta Alaiz-Noya<sup>1</sup>**, Dr. Beatriz Del Blanco<sup>1</sup>, Ms. Carina Vanesa Racovac<sup>1</sup>, Dr. Angel Barco<sup>1</sup><sup>1</sup>Instituto de Neurociencias, San Juan De Alicante, Spain

PS2-84

**USE OF BIORESORBABLE NANOPATTERNED POLYMER SCAFFOLDS AS A STRATEGY TO GUIDE THE MIGRATION OF NEURAL AND DENTAL STEM AND PROGENITOR CELLS.**Yurena Polo<sup>1,4</sup>, Jon Luzuriaga<sup>1</sup>, J Iturri<sup>3</sup>, Beatriz Pardo-Rodriguez<sup>1</sup>, J.L. Toca-Herrera<sup>3</sup>, Gaskon Ibarretxe<sup>1</sup>, Fernando Unda<sup>1</sup>, JR Sarasua<sup>1,4</sup>, Aitor Larrañaga<sup>1,4</sup>, **Jose R. 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>BOKU University of Natural Resources and Life Sciences, Vienna, Austria, <sup>4</sup>Polimerbio S.L., Donostia-San Sebastian, Spain

PS2-85

**Generation of an in vitro assay to evaluate antipsychotic drug effects on synaptogenesis****María Martín-Estebané<sup>1</sup>**, David Martín-Oliva<sup>2</sup>, Juan Francisco López-Giménez<sup>1</sup><sup>1</sup>Instituto de Parasitología y Biomedicina "López-Neyra", CSIC, Granada, Spain, <sup>2</sup>Universidad de Granada, Granada, Spain

PS2-86

**Virtual Water Maze For Human Memory Assessment Synchronized With Transcranial Magnetic Stimulation****Ms. Arantzazu San Agustín<sup>1,2</sup>**, Ms. Ana Rojo<sup>1,3</sup>, Mr. David Crevillén<sup>1</sup>, Mr. Rodrigo Martín<sup>1</sup>, Dr. Juan Camilo Moreno<sup>1</sup><sup>1</sup>Instituto Cajal - CSIC, Madrid, Spain, <sup>2</sup>Universidad Autónoma de Madrid (UAM), Madrid, Spain, <sup>3</sup>Universidad San Pablo CEU, Madrid, Spain

PS2-87

**The women neuroscientists disciples of Pío del Río-Hortega spread the Cajal School through Europe and America**Dr. Cristina Nombela<sup>1</sup>, Prof. Elena Giné<sup>2</sup>, Dr. Emilio Fernández-Egea<sup>3</sup>, Dr. Yulia Worbe<sup>4</sup>, **Dr. Fernando de Castro<sup>5</sup>**, Prof. Dr. Juan del Río-Hortega Bereciartu<sup>6</sup><sup>1</sup>Universidad Autónoma de Madrid, Madrid, Spain, <sup>2</sup>Universidad Complutense de Madrid, Madrid, Spain, <sup>3</sup>University of Cambridge, Cambridge, United Kingdom, <sup>4</sup>Sorbonne Université, Paris, France, <sup>5</sup>Instituto Cajal-CSIC, Madrid, Spain, <sup>6</sup>Universidad de Valladolid, Valladolid, Spain



PS2-88

### DOES RTP801/REDD1 PARTICIPATE IN tRNA METABOLISM?

**Mr. Genís Campoy-Campos<sup>1,2</sup>**, Dr. Adrián-Gabriel Torres<sup>3,4</sup>, Mrs Julia Solana-Balaguer<sup>1,2</sup>, Dr. Leticia Pérez-Sisqués<sup>1,2</sup>, Dr. Lluís Ribas de Pouplana<sup>3,4,5</sup>, MD Jordi Alberch<sup>1,2,6,7</sup>, Dr. Esther Pérez-Navarro<sup>1,2,6,7</sup>, Dr. Cristina Malagelada<sup>1,2,6</sup>

<sup>1</sup>Universitat de Barcelona, Barcelona, Spain, <sup>2</sup>Institut de Neurociències, Barcelona, Spain, <sup>3</sup>Institut de Recerca Biomèdica (IRB), Barcelona, Spain, <sup>4</sup>Barcelona Institute of Science and Technology (BIST), Barcelona, Spain, <sup>5</sup>Institució Catalana de Recerca i Estudis Avançats (ICREA), Barcelona, Spain, <sup>6</sup>Centro de Investigación Biomédica en Red sobre Enfermedades Neurodegenerativas (CIBERNED), Barcelona, Spain, <sup>7</sup>IDIBAPS-Institut d'Investigacions Biomèdiques August Pi i Sunyer, Barcelona, Barcelona, Spain

PS2-89

### Small RNA in plasma extracellular vesicles as early biomarkers in Huntington's disease

**Ms. Marina Herrero-Lorenzo<sup>1</sup>**, PhD Ana Gámez-Valero<sup>1</sup>, PhD Georgia Escaramís<sup>1,2</sup>, PhD Rocío Pérez-González<sup>3,4,5</sup>, MD Jesús Pérez<sup>3,4,5</sup>, MD Jaime Kulisevsky<sup>3,4,5</sup>, PhD Eulàlia Martí<sup>1,2</sup>

<sup>1</sup>Department of Biomedicine, Faculty of Medicine, Institute of Neurosciences, University of Barcelona, Barcelona, Spain, <sup>2</sup>Centro de Investigación Biomédica en Red de Epidemiología y Salud Pública (CIBERESP), Ministerio de Ciencia Innovación y Universidades, Madrid, Spain, <sup>3</sup>Movement Disorders Unit, Neurology Department, Hospital de la Santa Creu i Sant Pau, Barcelona, Spain, <sup>4</sup>Biomedical Research Institute (IIB-Sant Pau), Barcelona, Spain, <sup>5</sup>Centro de Investigación en Red-Enfermedades Neurodegenerativas (CIBERNED), Madrid, Spain

**POSTER SESSION 3 - THURSDAY, 4<sup>TH</sup> NOV. 15:00 - 18:30. Exhibition Hall**

PS3-01

**Calcium channels in synapse elimination during neuromuscular junction development**

**Ms. Marta Balanyà Segura**<sup>1</sup>, Dr. Neus Garcia<sup>1</sup>, Mr. Pablo Hernández<sup>1</sup>, Dr. Maria A. Lanuza<sup>1</sup>, Dr. Marta Tomàs<sup>1</sup>, Mr. Víctor Cilleros-Mañé<sup>1</sup>, Ms. Laia Just-Borràs<sup>1</sup>, Ms. Maria Duran-Vigara<sup>1</sup>, Ms. Aleksandra Polishchuk<sup>1</sup>, Dr. Josep Tomàs<sup>1</sup>

<sup>1</sup>Universitat Rovira I Virgili, Reus, Spain

PS3-02

**Effects of shortening the habituation protocol on exercise capacity during adolescence of rats**

**Dr. Marta Martínez**<sup>1</sup>, Angel Toval<sup>1</sup>, Yevheniy Kutsenko<sup>1</sup>, Dr. Antonia Alonso<sup>1</sup>, Daniel Garrigós<sup>1</sup>, Alberto Barreda<sup>1</sup>, Bruno Ribeiro Do Couto<sup>1</sup>, Ferrán Jose Luis<sup>1</sup>

<sup>1</sup>Murcia University, Murcia, Spain

PS3-03

**Development of Otp and Sim1 cells in the chicken extended amygdala**

**Mr. Alek Metwalli**<sup>1,2</sup>, Ms Alessandra Pross<sup>1,2</sup>, Dr Ester Desfilis<sup>1,2</sup>, Dr Antonio Abellán<sup>1,2</sup>, Professor Loreta Medina<sup>1,2</sup>

<sup>1</sup>Lleida's Institute For Biomedical Research-Dr.Pifarré Foundation (IRBLleida), Lleida, Spain, <sup>2</sup>University of Lleida, Spain

PS3-04

**Analysis of the activation dynamics of postnatal neural stem cells of the subventricular zone using in utero electroporation**

**Ms. Isabel Mateos-White**<sup>1</sup>, Mr. Jaime Fabra-Beser<sup>1</sup>, Mr. David de Agustín-Durán<sup>1</sup>, Dra. Isabel Fariñas<sup>1</sup>, Dra. Cristina Gil-Sanz<sup>1</sup>

<sup>1</sup>BIOTECMED Institute, Universidad de Valencia, Burjassot, España

PS3-05

**Conserved cell types in the early embryonic brain across vertebrates**

**Mr. Rodrigo Senovilla-Ganzo**<sup>1</sup>, Mrs. Eneritz Rueda-Alaña<sup>1</sup>, Dr. Fernando García-Moreno<sup>1,2</sup>

<sup>1</sup>Achucarro Basque Center for Neuroscience, Leioa, Spain, <sup>2</sup>IKERBASQUE Foundation, Bilbao, Spain

PS3-06

**Unravelling the Neural Cell Progeny of Single Subpallial Progenitor Cells**

**Ms. Rebeca Sánchez-González**<sup>1</sup>, Dr Laura López-Mascaraque<sup>1</sup>

<sup>1</sup>Cajal Insitute, Madrid, Spain



PS3-07

Understanding the mechanisms involved in migration and circuit integration of thalamic interneurons

**Ms. Irene Huerga-Gómez<sup>1</sup>**, Dr. Guillermina López-Bendito<sup>1</sup>

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

PS3-08

Differential expression levels of Sox9 in early neocortical radial glial cells regulate the decision between stem cell maintenance and differentiation.

**Mr. Jaime Fabra-Beser<sup>1</sup>**, Dr. Jessica Alves Medeiros de Araujo<sup>2,3</sup>, Dr. Diego Marques-Coelho<sup>3,4</sup>, Dr. Loyal A Goff<sup>2</sup>, Dr. Marcos R Costa<sup>3,5</sup>, Dr. Ulrich Müller<sup>2</sup>, Dr. Cristina Gil-Sanz<sup>1</sup>

<sup>1</sup>BIOTECMED Institute, Universidad de Valencia, Burjassot, Spain, <sup>2</sup>The Solomon H. Snyder Department of Neuroscience, Johns Hopkins University School of Medicine, Baltimore, USA, <sup>3</sup>Brain Institute, Federal University of Rio Grande do Norte, Natal, Brazil, <sup>4</sup>Bioinformatics Multidisciplinary Environment, IMD, Federal University of Rio Grande do Norte, Natal, Brazil, <sup>5</sup>Univ Lille, Inserm, CHU Lille, Institut Pasteur de Lille, Lille, France

PS3-09

Lineage Cell-Potential of Single Neural Progenitor Cells

**Ana Cristina Ojalvo-Sanz<sup>1,2</sup>**, Rebeca Sánchez-González<sup>1</sup>, Laura López-Mascaraque<sup>1</sup>

<sup>1</sup>Cajal Institute-CSIC, Madrid, Spain, <sup>2</sup>PhD Program in Neuroscience, Autonoma de Madrid University, Madrid, Spain

PS3-10

Microglia gradually acquire their mature phenotype in the developing hippocampus

**Ms. Marta Pereira-Iglesias<sup>1</sup>**, Ms. Alice Louail<sup>1</sup>, Ms. Sol Beccari<sup>1</sup>, Dr. Jorge Valero<sup>3</sup>, Dr. Amanda Sierra<sup>1,2,4</sup>

<sup>1</sup>Achucarro Basque Center For Neuroscience, Leioa, Spain, <sup>2</sup>University of the Basque Country UPV/EHU, Leioa, Spain, <sup>3</sup>Institute of Neuroscience of Castilla y León – INCyL, University of Salamanca, Salamanca, Spain, <sup>4</sup>Ikerbasque Foundation, Bilbao, Spain

PS3-11

The sound of sight: mapping crossmodal circuits of audio-visual connectivity in the mammalian brain.

**Ms. Irene Varela Martínez<sup>1</sup>**, Dr. Linnea Weiss<sup>1</sup>, Dr. Marta Nieto López<sup>1</sup>

<sup>1</sup>Centro Nacional De Biotecnología (CNB-CSIC), Madrid, Spain



PS3-12

**TREK channels and their physiological role in the intracardiac neurons: focusing on temperature and intracellular acidification****Ms. Ana Campos-Rios<sup>1</sup>**, Ms. Diana Rodrigues<sup>2,3</sup>, Dr Lola Rueda-Ruzafa<sup>1</sup>, Dr. Salvador Herrera-Pérez<sup>1</sup>, Dra Patricia Monteiro<sup>2,3</sup>, Dr J.A. Lamas<sup>1</sup><sup>1</sup>CINBIO, University of Vigo, Vigo, Spain, <sup>2</sup>Life and Health Sciences Research Institute (ICVS), School of Medicine, University of Minho, , Portugal, <sup>3</sup>ICVS/3B's-PT Government Associate Laboratory, Braga/Guimarães, Portugal

PS3-13

**Impaired striatal plasticity and dendritic spine remodeling in the premotor stage of an animal model of progressive parkinsonism**Dr. Leyre Merino-Galan<sup>1,2</sup>, **Dr. Marta Zamarbide<sup>1,3</sup>**, Arantzazu Beloso-Iguerategui<sup>1</sup>, Dr. Belén Gago<sup>4</sup>, Dr. Dani Dumitriu<sup>5</sup>, Dr. Ana Quiroga-Varela<sup>1,3,6</sup>, Dr. María Cruz Rodríguez-Oroz<sup>1,3,7</sup><sup>1</sup>CIMA-Universidad De Navarra, Pamplona, Spain, <sup>2</sup>University of the Basque Country (UPV/EHU), Leioa, Spain, <sup>3</sup>Navarra Institute for Health Research (IdiSNA), Pamplona, Spain, <sup>4</sup>Instituto de Investigación Biomédica de Málaga, Universidad de Málaga, Málaga, Spain, <sup>5</sup>New York State Psychiatric Institute, Columbia University, New York, USA, <sup>6</sup>Girona Biomedical Research Institute (IDIBGI), Salt, Spain, <sup>7</sup>Clínica Universidad de Navarra (CUN), Pamplona, Spain

PS3-14

**NMDA RECEPTOR CONTENT OF EXCITATORY SYNAPSES IN THE CA1 REGION OF THE HIPPOCAMPUS IS REDUCED IN P301S MICE****Ms. Rocío Alfaro Ruiz<sup>1</sup>**, Ms. Carolina Aguado<sup>1</sup>, Alejandro Martín-Belmonte<sup>1</sup>, Félix Hernández<sup>2</sup>, Ana Esther Moreno-Martínez<sup>1</sup>, Jesús Avila<sup>2</sup>, Yugo Fukazawa, Rafael Luján<sup>1</sup><sup>1</sup>Facultad de Medicina. Instituto de Investigación en Discapacidades Neurológicas, Universidad de Castilla-La Mancha, Albacete, Spain, <sup>2</sup>Centro de Biología Molecular Severo Ochoa (CSIC-UAM), Madrid, Spain, <sup>3</sup>Division of Brain Structure and Function, Faculty of Medical Science, University of Fukui, Fukui, Japan

PS3-15

**REDUCTION IN THE DENSITY OF GROUP I MGLU5 RECEPTORS ALONG THE NEURONAL SURFACE OF HIPPOCAMPAL CELLS IN A MOUSE MODEL OF ALZHEIMER'S DISEASE****Ms. Ana Esther Moreno Martínez<sup>1</sup>**, Alejandro Martín-Belmonte<sup>1</sup>, Carolina Aguado<sup>1</sup>, Rocío Alfaro-Ruiz<sup>1</sup>, Jose Luis Albasanz<sup>2</sup>, Mairena Martín<sup>2</sup>, Yugo Fukazawa<sup>3</sup>, Rafael Luján<sup>1</sup><sup>1</sup>Facultad de Medicina. Instituto de Discapacidades Neurológicas, Universidad de Castilla-La Mancha, Albacete, Spain, <sup>2</sup>Department of Inorganic, Organic and Biochemistry, Faculty of Chemical and Technological Sciences, Universidad de Castilla-La Mancha, School of Medicine of Ciudad Real, Regional Center of Biomedical Research (CRIB), Ciudad Real, Spain, <sup>3</sup>Division of Brain Structure and Function, Faculty of Medical Science, University of Fukui, Fukui, Japan



PS3-16

### Trans-synaptic effects after inducing long-term potentiation in the hippocampal circuit

**Ms. M. T. Romero-Barragan<sup>1</sup>**, Prof. J. M. Delgado-Garcia<sup>1</sup>, Prof. A. Gruart i Masso<sup>1</sup>

<sup>1</sup>Division of Neurosciences, Pablo de Olavide University, Sevilla, Spain

PS3-17

### Modulation of the presynaptic translome by astrocytic extracellular vesicles in Alzheimer's Disease

**Aida de la Cruz<sup>1,2</sup>**, María Gamarra<sup>1,2</sup>, Jimena Baleriola<sup>1,2,3</sup>

<sup>1</sup>Achucarro Basque Center for Neuroscience, Leioa, Spain, <sup>2</sup>University of the Basque Country (UPV/EHU), Leioa, Spain,

<sup>3</sup>IKERBASQUE Basque Foundation for Science, Bilbao, Spain

PS3-18

### Contribution of astrocyte extracellular vesicles to local translation in neurons

**María Gamarra<sup>1,2</sup>**, Esperanza González<sup>3</sup>, Mikel Azkargorta<sup>3</sup>, Juan Manuel Falcón<sup>3,4</sup>, Félix Elortza<sup>3</sup>, Jimena Baleriola<sup>1,2,4</sup>

<sup>1</sup>Achucarro Basque Center For Neuroscience, Leioa, Spain, <sup>2</sup>Universidad del País Vasco, UPV/EHU, Leioa, Spain,

<sup>3</sup>CIBioGUNE, Derio, Spain, <sup>4</sup>IKERBASQUE, Bilbao, Spain

PS3-19

### Comparative effect of Glutamatergic Receptors Agonists N-Methyl-D-Aspartate and Kainate on Mouse Inner Retinal Cells

**Mr. Mateo Pazo González<sup>1,2</sup>**, Ms Celia Ferrández Alamillos<sup>1</sup>, Mr Santiago Milla Navarro<sup>1</sup>, Dr. Isabel Ortuño Lizarán<sup>3</sup>, Dr. Nicolás Cuenca Navarro<sup>3</sup>, Dr. Pedro de la Villa Polo<sup>1</sup>

<sup>1</sup>University of Alcalá, Alcalá de Henares, Spain, <sup>2</sup>Centro de Investigaciones Biológicas Margarita Salas - CSIC, Madrid, Spain,

<sup>3</sup>University of Alicante, Alicante, Spain

PS3-20

### M1 and M2 muscarinic receptors coordinately regulate the exocytotic proteins through PKC and PKA at the adult neuromuscular junction.

**Mr. Victor Cilleros-Mañé<sup>1</sup>**, Ms. Laia Just-Borràs<sup>1</sup>, Ms. Aleksandra Polishchuk<sup>1</sup>, Ms. Maria Durán<sup>1</sup>, Ms. Marta Balanyà<sup>1</sup>, Dr. Marta Tomàs<sup>1</sup>, Dr. Neus Garcia<sup>1</sup>, Prof. Josep Tomàs<sup>1</sup>, Dr. Maria Angel Lanuza<sup>1</sup>

<sup>1</sup>Universitat Rovira i Virgili. Facultat de Medicina i Ciències de la Salut. Unitat d'Histologia i Neurobiologia (UHNEURO), Carrer Sant Llorenç 21. Reus (43201), Spain



PS3-21

**EFFECTS OF TRANSCRANIAL DIRECT-CURRENT STIMULATION (tDCS) ON THE FIELD POTENTIAL INDUCED BY PHOTOSTIMULATION OF GLUTAMATERGIC CELLS IN SOMATOSENSORY CORTEX**

**Ms. Marta Estévez-Rodríguez<sup>1</sup>**, Mr. Guillermo Sánchez-Garrido Campos<sup>1</sup>, PhD Isabel Cordones<sup>1</sup>, PhD Javier Márquez-Ruiz<sup>1</sup>

<sup>1</sup>Pablo De Olavide University, Sevilla, Spain

PS3-22

**Effect of Sei and Fin whale Müller glia in the survival and neurite growth of RGCs in vitro.**

**Dr. Xandra Pereiro<sup>1</sup>**, Dr. Noelia Ruzafa<sup>1</sup>, Msc. Sandra Beriain<sup>1</sup>, Prof. Elena Vecino<sup>1</sup>

<sup>1</sup>University of Basque Country, Leioa, Spain

PS3-23

**Chemogenetic stimulation of mature oligodendrocytes drives myelin-axon metabolic coupling and prevents axonal damage**

PhD Student Ana Palma<sup>1</sup>, Professor of Anatomy Alberto Pérez-Samartín<sup>1</sup>, Full professor of Anatomy Carlos Matute<sup>1</sup>, **Dr. Maria Domercq<sup>1</sup>**

<sup>1</sup>Achucarro Basque Center for Neurosciences, Cibernet and Departamento de Neurociencias, Universidad del País Vasco-UPV/EHU, E-48940 Leioa, Spain

PS3-24

**Dopamine receptors in oligodendroglia**

**Dr. Carlos Luis Palfo<sup>1</sup>**, Carolina Rincón<sup>1,2</sup>, Manuel Marfil<sup>1,3</sup>, Rocío Rojas<sup>1,3</sup>, Dr. Jorge Pascual-Guerra<sup>1</sup>

<sup>1</sup>Hospital Universitario Ramón Y Cajal - IRYCIS, Madrid, Spain, <sup>2</sup>Universidad Politécnica de Madrid, Madrid, Spain, <sup>3</sup>Universidad Complutense de Madrid, Madrid, Spain

PS3-25

**Astrocytic Network Heterogeneity in the Nucleus Accumbens**

**Ms. Irene Serra<sup>1</sup>**, Mr. Julio Esparza<sup>1</sup>, Ms. Cristina Martín-Monteagudo<sup>1</sup>, Dr. Marta Navarrete<sup>1</sup>

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

PS3-26

**MONITORING OF ABERRANT NEUROGENESIS IN HIPPOCAMPUS DURING IN VITRO EPILEPTOGENESIS**

**Ms. Ane Rodríguez<sup>1</sup>**, Dr. Juan Manuel Encinas<sup>1,2,3</sup>, Dr. Jan Tonnesen<sup>1,2</sup>



<sup>1</sup>Achucarro Basque Center For Neuroscience, Leioa, Spain, <sup>2</sup>Neuroscience department, University of the Basque Country (UPV-EHU), Leioa, Spain, <sup>3</sup>Ikerbasque - Basque Foundation for Science, Bilbao, Spain

PS3-27

### RNA localisation and local translation in microglial peripheral processes

**Maite Blanco**<sup>1,2</sup>, Josune Imaz<sup>1</sup>, Jimena Baleriola<sup>1,2,3</sup>

<sup>1</sup>Achucarro Basque Center For Neuroscience, Leioa, Spain, <sup>2</sup>University of Basque Country (UPV), Leioa, Spain, <sup>3</sup>IKERBASQUE, Basque Foundation for Science, Bilbao, Spain

PS3-28

### Role of GABAA and AMPA receptors in the generation and propagation of epileptiform activity in the cingulate cortex of a mouse model of lissencephaly.

**Dr. Abraham Andreu-Cervera**<sup>1</sup>, Ms. Paula Martín-Climent<sup>1</sup>, Ms. Raquel Murcia-Ramón<sup>1</sup>, Dr. Eduardo Domínguez-Sala<sup>1</sup>, Dr. Diego Echevarría<sup>1</sup>, Prof. Salvador Martínez<sup>1</sup>, Prof. Emilio Geijo-Barrientos<sup>1</sup>

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

PS3-29

### Expression of c-Fos in the vomeronasal amygdala and lateral entorhinal cortex of female mice induced by male pheromonal signals.

**Ms. Anna Teruel-Sanchis**<sup>1,2</sup>, Mr. Manuel Esteban Vila-Martin<sup>1,2</sup>, Mr. Esteban Merino<sup>1</sup>, Ms. María Villafranca-Faus<sup>1</sup>, Mr. Daniel Esteve<sup>1</sup>, Mr. Sergio Martínez-Bellver<sup>1</sup>, Ms. Ana Cervera-Ferri<sup>1</sup>, Ms. Joana Martínez-Ricós<sup>1</sup>, Ms. Ana Lloret<sup>1</sup>, Mr. Vicent Teruel-Martí<sup>1</sup>, Mr. Enrique Lanuza<sup>1,2</sup>

<sup>1</sup>Universitat De València, Valencia, Spain, <sup>2</sup>Universitat de València, Burjassot, Spain

PS3-30

### LACK OF AVERSIVE BEHAVIOR IN FEMALE MICE EXPOSED TO PREDATOR ODORS

Mr. Mario Orts Richart<sup>1</sup>, Dr. Adoración HERNÁNDEZ-MARTÍNEZ<sup>1</sup>, **Professor Enrique LANUZA**<sup>1</sup>, Ms. Camila SAVARELLI<sup>1</sup>

<sup>1</sup>Universidad De Valencia, Burjasot, Spain

PS3-31

### The amygdalo-hippocampal pathway: the first step to the who component of the episodic memory

**Ms. Maria Villafranca-Faus**<sup>1</sup>, Mr. Manuel Esteban Vila-Martin<sup>1</sup>, Ms. Anna Teruel-Sanchis<sup>1</sup>, Mr. Esteban Merino<sup>1</sup>, Mr. Daniel Esteve<sup>1,2</sup>, Ms. Alba Ramón-Lainez<sup>1</sup>, Dr. Sergio Martínez-Bellver<sup>1</sup>, Dra. Ana Cervera-Ferri<sup>1</sup>, Dra. Joana Martínez-Ricós<sup>1</sup>, Dra. Ana Lloret<sup>1,2</sup>, Dr. Vicent Teruel-Martí<sup>1</sup>, Dr. Enrique Lanuza<sup>1</sup>

<sup>1</sup>University of Valencia, Valencia, Spain, <sup>2</sup>Health Research Institute INCLIVA, Valencia, Spain



PS3-32

**Input-output relationships of the posterior intralaminar thalamic nuclei in the mouse****Mr. Enrique Gonzalo-Martín<sup>1</sup>**, Dr. María García-Amado<sup>1</sup>, Dr. Francisco Clascá<sup>1</sup>, Dr. Lucía Prensa<sup>1</sup><sup>1</sup>Autonomous University of Madrid, Madrid, Spain

PS3-33

**Prefrontal-hippocampal circuit alterations and rescue in a mouse model of schizophrenia****Ms. Cristina Delgado-Sallent<sup>1,3</sup>**, Dr Thomas Gener<sup>1</sup>, Mr Pau Nebot<sup>1</sup>, Ms Amanda Blair Fath<sup>2</sup>, Dr. Maria Victòria Puig<sup>1</sup><sup>1</sup>Institut Hospital del Mar d'Investigacions Mèdiques, Barcelona, Spain, <sup>2</sup>Massachusetts Institute of Technology, Cambridge, USA, <sup>3</sup>Universitat Pompeu Fabra, Barcelona, Spain

PS3-34

**Ultrastructural comparison of VPM thalamocortical synapses in primary and secondary somatosensory cortices****Pablo J Martín-Correa<sup>1</sup>**, Dr. Javier Rodríguez-Moreno<sup>1</sup>, Dr. Astrid Rollenhagen<sup>2</sup>, Dr. Joachim HR Lübke<sup>2</sup>, Dr. Francisco Clascá<sup>1</sup><sup>1</sup>Autonoma de Madrid University (UAM), Madrid, Spain, <sup>2</sup>Institute of Neuroscience and Medicine INM-10, Research Centre Jülich GmbH, Jülich, Germany

PS3-35

**SPATIAL PERIODIC FIRING IN THE SUBICULUM OF MICE**PhD Candidate Pablo Abad-Pérez<sup>1,2</sup>, Dr Luís Martínez-Otero<sup>2</sup>, Dr Victor Borrell<sup>2</sup>, **Dr. Jorge R Brotons-mas<sup>1,2</sup>**<sup>1</sup>Universidad Cardenal Herrera, Elche, Spain, <sup>2</sup>Instituto de Neurociencias, UMH-CISC, San Juan de Alicante, Spain

PS3-37

**Involvement of the prefrontal cortex-limbic pathway in the development of food addiction****Mr. Pablo Calvé<sup>1,2</sup>**, Mr. Thomas Gener<sup>2</sup>, Mr. Pau Nebot<sup>2</sup>, Mr. Sami Kummer<sup>1</sup>, Mrs. Elena Martín<sup>1,2</sup>, Mrs. M<sup>a</sup> Victoria Puig<sup>2</sup>, Mr. Rafael Maldonado<sup>1,2</sup><sup>1</sup>Laboratory of Neuropharmacology-Neurophar, Department of Experimental and Health Sciences, Universitat Pompeu Fabra (UPF), 08003 Barcelona, Spain, <sup>2</sup>Hospital del Mar Medical Research Institute, 08003 Barcelona, Spain



PS3-38

### Neural mechanisms of serial dependence across visual hemifields and bilateral prefrontal cortex

**Ms. Melanie Tschiersch**<sup>1</sup>, Dr. João Barbosa<sup>2</sup>, Mr. Akash Umakantha<sup>3</sup>, Prof. Matthew A. Smith<sup>3</sup>, Dr. Albert Compte<sup>1</sup>

<sup>1</sup>IDIBAPS, Barcelona, Spain, <sup>2</sup>Ecole Normale Supérieure, Paris, France, <sup>3</sup>Carnegie Mellon University, Pittsburgh, USA

PS3-39

### Neuronal activity reflecting sensory and behavioural variables in the mouse somatosensory and posterior parietal cortex

**Prof. Miguel Maravall**<sup>1</sup>, Dr. Malamati Bitzidou<sup>1,2</sup>, Dr. Michael Bale<sup>1,3</sup>, Dr. Elena Giusto<sup>1,4</sup>, Mr. Paul Kinghorn<sup>1</sup>

<sup>1</sup>University of Sussex, Brighton, United Kingdom, <sup>2</sup>Francis Crick Institute, London, United Kingdom, <sup>3</sup>Scientifica Ltd., Uckfield, United Kingdom, <sup>4</sup>Ospedale San Camillo IRCCS SRL, Venezia Lido, Italy

PS3-40

### Neural probes for multimodal interrogation of brain lamination

**Dr. María Teresa Jurado Parras**<sup>1</sup>, Dr. Elena Cid, Dr. Filippo Pisano<sup>2</sup>, Dr. Maria Samuela Andriani<sup>2</sup>, Dr. Antonio Balena<sup>2</sup>, Dr. Marco Pisanello<sup>2</sup>, Dr. Massimo De Vittorio<sup>2,3</sup>, Dr. Ferruccio Pisanello<sup>2</sup>, Dr. Liset M de la Prida<sup>1</sup>

<sup>1</sup>Instituto Cajal. CSIC, Madrid, Spain, <sup>2</sup>Istituto Italiano di Tecnologia – Center for Biomolecular Nanotechnologies, Arnesano(Le), Italy, <sup>3</sup>Università del Salento, Lecce, Italy

PS3-41

### Cognitive effects of physical exercise are inherited by the second generation

**Ms. Patricia Tezanos**<sup>1</sup>, Ms. Manuela de las Casas<sup>2</sup>, Dra. Kerry McGreevy<sup>1</sup>, Dra. Ángela Fontán-Lozano<sup>3</sup>, Dr. José Luis Trejo<sup>1</sup>

<sup>1</sup>Instituto Cajal - CSIC, Madrid, Spain, <sup>2</sup>Instituto de Neurociencias de Alicante, Alicante, Spain, <sup>3</sup>Universidad de Sevilla, Sevilla, Spain

PS3-42

### A scalable and physical approach to the study of spatial navigation and its components

**Mr. Pablo Muela**<sup>1</sup>, Ms. Patricia Tezanos<sup>1</sup>, Ms. Elisa Cintado<sup>1</sup>, Dr. José Luis Trejo<sup>1</sup>

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

PS3-43

### A study of the pain pathways in the context of fear memories

**Ms. Patricia Tezanos**<sup>1</sup>, Ms. Elisa Cintado<sup>1</sup>, Mr Pablo Muela<sup>1</sup>, Dr. José Luis Trejo<sup>1</sup>

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



PS3-44

**Physiology of hormetic effects of exercise on cognitive enhancement: miRNA and microbiota involvement****Ms. Elisa Cintado<sup>1</sup>**, Ms. Patricia Tezanos<sup>1</sup>, Mr. Pablo Muela<sup>1</sup>, Ms. Marta Montero<sup>1</sup>, Dr. José Luis Trejo<sup>1</sup><sup>1</sup>Instituto Cajal (CSIC), Madrid, Spain

PS3-45

**Conditional deletion of the Cntnap2 gene in mice: a phenotypic study****Ms. Teresa Sierra-Arregui<sup>1</sup>**, Ander Txurruka-Bengoia<sup>1</sup>, Marta Fernández<sup>1</sup>, Javier Llorente<sup>1</sup>, Olga Peñagarikano<sup>1,2</sup><sup>1</sup>University Of Basque Country (upv/ehu), Leioa, Spain, <sup>2</sup>Centro de Investigación Biomedica en Red Salud Mental, Spain

PS3-46

**Cerebellar Interpositus Nucleus Activities Underlying Classical Eyeblink Conditioning in Rabbits****Dra. Gloria G Parras<sup>1</sup>**, Dr. Jose María Delgado-García<sup>1</sup>, Dra. Agnés Gruart<sup>1</sup>, Dra. Rocío Leal-Campanario<sup>1</sup><sup>1</sup>University Pablo De Olavide, Seville, Spain

PS3-47

**Characteristics of the spontaneous blinking depending on the attentional conditions and the sensory nerve activity from the ocular surface****Mr. Miguel Delicado Miralles<sup>1</sup>**, Mr. Enrique Velasco<sup>1,2</sup>, Dr. Ariadna Diaz Tahoces<sup>1,3</sup>, Dr. María del Carmen Acosta Boj<sup>1,2</sup>, Dr. Juana Gallar<sup>1,2,3</sup><sup>1</sup>Instituto De Neurociencias De Alicante (UMH-CSIC), San Juan de Alicante, España, <sup>2</sup>The European University of Brain and Technology-NeurotechEU, San Juan de Alicante, España, <sup>3</sup>Instituto de Investigación Sanitaria y Biomédica de Alicante, San Juan de Alicante, España

PS3-48

**Sensory independent history choice biases in auditory categorization tasks in rats****Dr. Daniel Duque<sup>1</sup>**, Dr. Jaime de la Rocha<sup>1</sup><sup>1</sup>Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Barcelona, Spain

PS3-49

**Coaching and Human Brain Creativity Mechanisms****Mr. Gorka Bartolomé Anguita<sup>1</sup>**, Dr. Cristina Torrelles Nadal<sup>1</sup>, Dr. Eduardo Blanco Calvo<sup>2</sup><sup>1</sup>Universitat de Lleida, Lleida, Spain, <sup>2</sup>Universidad de Málaga, Málaga, Spain



PS3-50

### MicroRNAs signatures for vulnerability to food addiction.

**Alejandra García-Blanco<sup>1</sup>**, Laura Domingo-Rodríguez<sup>1</sup>, Judit Cabana-Domínguez<sup>2,3,4,5</sup>, Noèlia Fernàndez-Castillo<sup>2,3,4,5</sup>, Laura Pineda-Cirera<sup>2,3,4,5</sup>, Bru Cormand<sup>2,3,4,5</sup>, Elena Martín-García<sup>1</sup>, Rafael Maldonado<sup>1,6</sup>

<sup>1</sup>Universitat Pompeu Fabra (UPF), Barcelona, Spain, <sup>2</sup>Universitat de Barcelona (UB), Barcelona, Spain, <sup>3</sup>Centro de Investigación Biomédica en Red de Enfermedades Raras (CIBERER), Barcelona, Spain, <sup>4</sup>Institut de Biomedicina de la Universitat de Barcelona (IBUB), Barcelona, Spain, <sup>5</sup>Institut de Recerca Sant Joan de Déu (IR-SJD), Barcelona, Spain, <sup>6</sup>Hospital del Mar Medical Research Institute (IMIM), Barcelona, Spain

PS3-51

### EXPLORING NETWORK CODING STRATEGIES THAT COULD BE ESSENTIAL FOR THE PROPER EXECUTION OF BEHAVIORAL SEQUENCES DURING AN OPERANT CONDITIONING TASK

**Dr. Raudel Sánchez-campusano<sup>1,2</sup>**, Dr. José María Delgado-García<sup>1</sup>, Dr. Iván Fernández-Lamo<sup>1</sup>, Dr. Steven L. Bressler<sup>2</sup>, Dr. Agnès Gruart<sup>1</sup>

<sup>1</sup>Division of Neurosciences, Universidad Pablo de Olavide, Seville-41013, Spain, <sup>2</sup>Center for Complex Systems and Brain Sciences, Florida Atlantic University, FL-33431, USA

PS3-52

### The steroid sulfatase inhibitor STX64 improves age-associated cognitive deficiencies

**Mr. Juan Antonio Fernández Cabrera<sup>1</sup>**, Dr. Ángel Manuel Carrión Rodríguez<sup>1</sup>

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

PS3-53

### One-shot learning in recurrent networks using behavioral time-scale plasticity

**Mr. Pan Ye<sup>1</sup>**, Mr. Alex Roxin<sup>1</sup>

<sup>1</sup>Centre De Recerca Matemàtica, Barcelona, Spain

PS3-54

### META-ANALYSIS ON NEURAL DATA: A COMPARISON BETWEEN DIFFERENT APPROACHES TO SPIKE-SORTING ON CLAUSTRUM MULTI-UNITARY ACTIVITY

**Mr. Enrique Pérez-Martínez<sup>1</sup>**, Dr. María del Mar Reus-García<sup>1</sup>, Professor José María Delgado-García<sup>1</sup>, Dr. Raudel Sánchez-Campusano<sup>1</sup>

<sup>1</sup>Division of Neurosciences, Universidad Pablo de Olavide, 41013-Seville, Spain



PS3-55

**Specialized prefrontal circuits explain population dynamics during working memory encoding and maintenance****Mr. Nicolás Pollán<sup>1</sup>**, Dr Bijan Pesaran<sup>3</sup>, Dr Albert Compte<sup>2</sup>, Dr Klaus Wimmer<sup>1</sup><sup>1</sup>Centre De Recerca Matemàtica, Barcelona, Spain, <sup>2</sup> Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Barcelona, Spain, <sup>3</sup>Center for Neural Science, New York Univ., New York, USA

PS3-56

**Synaptic extension of the bump attractor model predicts target-distractor onset asynchrony effects****Mr. David Bestue<sup>1</sup>**, Dr. Rita Almeida<sup>2</sup>, Dr. Torkel Klingberg<sup>3</sup>, Dr. Jacqueline Gottlieb<sup>4</sup>, Dr. Albert Compte<sup>1</sup><sup>1</sup>IDIBAPS, Barcelona, Spain, <sup>2</sup>Stockholm University, Stockholm, Sweden, <sup>3</sup>Karolinska Institutet, Stockholm, Sweden, <sup>4</sup>Columbia University, New York, USA

PS3-57

**STUDY OF BONE MARROW-DERIVED MICROGLIAL CELLS IN A MODEL OF SELECTIVE NEURODEGENERATION****Mr. David Pérez-Boyer<sup>1,2,3</sup>**, Laura Pérez-Reuelta<sup>1,2,3</sup>, Dra. Ana de la Mata Sampedro<sup>4,5</sup>, Dr. Jesús María García Briñón<sup>1,2,3</sup>, Dr. David Díaz López<sup>1,2,3</sup>, Dr. Eduardo Weruaga Prieto<sup>1,2,3</sup><sup>1</sup>University of Salamanca, Salamanca, Spain, <sup>2</sup>INCYL, Institute for Neuroscience of Castilla y León, Salamanca, Spain, <sup>3</sup>IBSAL, Institute of Biomedical Research of Salamanca, Salamanca, Spain, <sup>4</sup>University of Valladolid, Valladolid, Spain, <sup>5</sup>IOBA, Applied Ophthalmology Institute, Valladolid, Spain

PS3-58

**The loss of starburst amacrine cells and their synaptic contacts with dopaminergic amacrine cells may explain the visual motion perception disturbance in Parkinson's disease.****Mr. Xavier Sánchez Sáez<sup>1</sup>**, Dr. Isabel Ortuño-Lizarán<sup>1</sup>, Dr. Pedro Lax<sup>1</sup>, Dr. Nicolás Cuenca<sup>1</sup><sup>1</sup>University of Alicante, Alicante, Spain

PS3-59

**CONTRIBUTION OF THE PRIMARY SOMATOSENSORY CORTEX TO REFLEX BLINK IN NAÏVE AND TEAR-DEFICIENT RATS****Mr. Vicente Miralles Liborio<sup>1</sup>**, Mr. Sergio Botella Esteve<sup>1</sup>, Mr. Enrique Velasco Serna<sup>1,2</sup>, Mr. Miguel Delicado Miralles<sup>1</sup>, Dr. Maria del Carmen Acosta<sup>1,2</sup>, Dr. Juana Gallar<sup>1,2,3</sup>, Dr. Juan Aguilar<sup>4</sup><sup>1</sup>Instituto de Neurociencias, Universidad Miguel Hernández-CSIC, San Juan de Alicante, Spain, <sup>2</sup>The European University of Brain and Technology-Neurotech, San Juan de Alicante, Spain, <sup>3</sup>Instituto de Investigación Sanitaria y Biomedica de Alicante, San Juan de Alicante, Spain, <sup>4</sup>Grupo de Neurofisiología Experimental. Unidad de Investigación, Hospital Nacional de Paraplégicos (SESCAM), Toledo, Spain



PS3-60

### MATERNAL SEPARATION DECREASES THE EXPRESSION OF DOUBLECORTIN IN THE OLFACTORY SYSTEM OF BOTH MEPC2-HETEROZYGOUS FEMALE MICE AND THEIR HEALTHY CONTROLS

**Ms. Elena Martínez<sup>1</sup>**, Dr. Anabel Forte<sup>1</sup>, Dr. Enrique Lanuza<sup>1</sup>, Dr. Monica Santos<sup>2</sup>, Dr. Carmen Agustín<sup>1</sup>

<sup>1</sup>University Of Valencia, Valencia, Spain, <sup>2</sup>Center for Neuroscience and Cell Biology, University of Coimbra, Coimbra, Portugal

PS3-61

### Acute cocaine enhances dopamine D2R recognition and signalling and counteracts D2R internalization in Sigma1R-D2R heteroreceptor complexes

Dr. Dasiel Oscar Borroto-escuela<sup>1,2</sup>, **Dr. Manuel Narváez<sup>2</sup>**, Dr. Wilber Romero-Fernández<sup>3</sup>, Mr. Luca Pinton<sup>4</sup>, Dr. Sarah Beggiano<sup>4</sup>, Dr. Luca Ferraro<sup>4</sup>, Mr. Ramon Fores-Pons<sup>2</sup>, Mr. Mariana Pita-Rodríguez<sup>2</sup>, Mr. Alexander Lopez-Salas<sup>1</sup>, Dr. Malgorzata Filip<sup>5</sup>, Dr. Kjell Fuxe<sup>1</sup>

<sup>1</sup>Department of Neuroscience, Karolinska Institutet., Stockholm, Sweden, <sup>2</sup>Instituto de Investigación Biomédica de Málaga, Universidad de Malaga, Malaga, Spain, <sup>3</sup>Department of Cell and Molecular Biology, Uppsala University, Uppsala, Sweden, <sup>4</sup>Department of Life Sciences and Biotechnology (SVEB), University of Ferrara, Ferrara, Italy, <sup>5</sup>Institute of Pharmacology, Polish Academy of Sciences, Krakow, Poland

PS3-62

### Dysregulation of the autophagic-lysosomal pathway in Parkinson's disease associated to GBA

Dr Alba Navarro-Romero<sup>1</sup>, **Marta Montpeyo<sup>1</sup>**, Irene Fernandez-Gonzalez<sup>1</sup>, Jordi Riera<sup>1</sup>, Dr David Montpeyo<sup>2</sup>, Eddie Pradas<sup>1,2</sup>, Dr Fernando Novio<sup>3</sup>, Dr Julia Lorenzo<sup>2</sup>, Dr Marta Martinez-Vicente<sup>1</sup>

<sup>1</sup>Institut De Recerca De La Vall D'hebron (VHIR), Barcelona, Spain, <sup>2</sup>Institut de Biotecnologia i de Biomedicina (IBB), Autonomous University of Barcelona, Bellaterra, Spain, <sup>3</sup>Catalan Institute of Nanoscience and Nanotechnology (ICN2)-CSIC, Barcelona, Spain

PS3-63

### P53 DEPLETION PROMOTES NEOVASCULARIZATION AND BRAIN REPAIR AFTER INTRACEREBRAL HEMORRHAGE

**Dr. Cristina Rodríguez<sup>1,2</sup>**, Mónica Carabias-Carrasco<sup>1,2</sup>, Mónica Resch-Beusher<sup>1,2</sup>, Estefanía Prieto<sup>2</sup>, Dr. Angeles Almeida<sup>1,2</sup>

<sup>1</sup>Institute of Biomedical Research of Salamanca (IBSAL), University Hospital of Salamanca, University of Salamanca, CSIC, Salamanca, Spain, <sup>2</sup>Institute of Functional Biology and Genomics (IBFG), University of Salamanca-CSIC, Salamanca, Spain



PS3-64

### Morphometric Cluster Analyses of Sibling NG2-Cells in Response to Multiple Sclerosis Lesion Models

**Ms. Sonsoles Barriola<sup>1,2</sup>**, Ms. Lina María Delgado-García<sup>1,3</sup>, Dr. Nieves Salvador<sup>1</sup>, Ms. Eva López Martínez<sup>1</sup>, Ms. Ana Cristina Ojalvo-Sanz<sup>1</sup>, Ms. Rebeca Sánchez-González<sup>1</sup>, Dr. Laura López-Mascarque<sup>1</sup>

<sup>1</sup>Instituto Cajal, Madrid, Spain, <sup>2</sup>Autonoma de Madrid University, Madrid, Spain, <sup>3</sup>Universidade Federal de São Paulo, São Paulo, Brazil

PS3-65

### Impact of white adipose tissue in AD pathology

**Miriam Bettinetti-Lugue<sup>1</sup>**, Juana Andreo-Lopez<sup>1</sup>, Francisco Cantero-Molina<sup>1</sup>, Laura Trujillo-Estrada<sup>1</sup>, Carlos J. Rodriguez-Ortiz<sup>2</sup>, Frank M. LaFerla<sup>2</sup>, Antonia Gutierrez<sup>1</sup>, David Baglietto-Vargas<sup>1,2</sup>

<sup>1</sup>University of Malaga/CIBERNED/IBIMA, Malaga, Spain, <sup>2</sup>University of California, Irvine, USA

PS3-66

### The role of the striatopallidal indirect pathway in the generation of L-DOPA induced dyskinesias

**Dr. María Sáez<sup>1</sup>**, Dr. Ettel Keifman<sup>2</sup>, Dr. Gustavo Murer<sup>2</sup>, Dr. Rosario Moratalla<sup>3</sup>, Dr. Ramón Reig<sup>1</sup>

<sup>1</sup>Instituto De Neurociencias UMH-CSIC, San Juan de Alicante, Spain, <sup>2</sup>Universidad de Buenos Aires, CONICET, Instituto de Fisiología y Biofísica (IFIBIO) Bernardo Houssay, Buenos Aires, Argentina, <sup>3</sup>Instituto Cajal CSIC, Madrid, Spain

PS3-67

### Dopamine D4R restores morphine-induced impairment of adult neurogenesis in the subventricular zone

**Dr. Belén Gago Calderón<sup>1</sup>**, Dr. M. Ángeles Real Avilés<sup>1</sup>, Marina Ponce Velasco<sup>1</sup>, Dr. Alicia Rivera Ramírez<sup>1</sup>

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

PS3-68

### Role of dopamine D4 receptor in the development of morphine-induced analgesic tolerance

**Marina Ponce Velasco<sup>1</sup>**, Dr. Alicia Rivera Ramírez<sup>1</sup>, Dr. Belén Gago Calderón<sup>1</sup>, Dr. M. Ángeles Real Avilés<sup>1</sup>

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

PS3-69

### Oligodendrocyte maturation and myelination: Implications of deficient thyroid hormone transport to the brain.

**Mr. Víctor Valcárcel Hernández<sup>1</sup>**, Ms. Marina Guillén Yunta<sup>1</sup>, Ms. Inés López de Toledo Soler<sup>1</sup>, Dr. Soledad Báñez López<sup>1,2</sup>, Dr. Ana Guadaño Ferraz<sup>1</sup>



<sup>1</sup>Instituto de Investigaciones Biomédicas "Alberto Sols" CSIC-UAM, Madrid, Spain, <sup>2</sup>University of Bristol, Translational Health Sciences, Bristol, United Kingdom

PS3-70

## Faim knockout leads to gliosis and late-onset neurodegeneration of photoreceptors in the mouse retina

**Anna Sirés<sup>1,2,3</sup>**, Mireia Turch-Anguera<sup>1,3,4</sup>, Dr. Patricia Bogdanov<sup>1,4</sup>, Dr. Joel Sampedro<sup>1,4</sup>, Hugo Ramos<sup>1,4</sup>, Dr. Agustín Ruiz<sup>5</sup>, Dr. Jianxin Huo<sup>6</sup>, Dr. Shengli Xu<sup>6</sup>, Dr. Kong-Peng Lam<sup>6</sup>, Dr. Joaquín López-Soriano<sup>1,2,3</sup>, Dr. María José Pérez-García<sup>1,2</sup>, Dr. Cristina Hernández<sup>1,4</sup>, Dr. Rafael Simó<sup>1,4</sup>, Dr. Montse Solé<sup>1,2,3</sup>, Dr. Joan Xavier Comella<sup>1,2,3</sup>

<sup>1</sup>Vall d'Hebron Institute of Research (VHIR), Barcelona, Spain, <sup>2</sup>Centro de Investigación Biomédica en Red sobre Enfermedades Neurodegenerativas (CIBERNED), Madrid, Spain, <sup>3</sup>Universitat Autònoma de Barcelona (UAB), , Spain, <sup>4</sup>Centro de Investigación Biomédica en Red de Diabetes y Enfermedades Metabólicas Asociadas (CIBERDEM), , Spain, <sup>5</sup>Fundació ACE, Institut Català de Neurociències Aplicades, Universitat Internacional de Catalunya (UIC), , Spain, <sup>6</sup>Singapore Immunology Network (SiGN), A\*STAR (Agency for Science, Technology and Research), Singapore, Singapore

PS3-71

## Effect of macrophages on neurosphere formation and neuronal differentiation of neural stem cells

**Dr. Dulce María Arzate Vazquez<sup>1</sup>**, Dr. Sergio Gascón<sup>1,2</sup>

<sup>1</sup>Instituto Cajal-CSIC, Madrid, Spain, <sup>2</sup>Ludwig Maximilians University at the Biomedical Center, Planegg/Martinsried, Germany

PS3-72

## Bile acids reduce glycolysis in proinflammatory macrophages

**Dr. Lorenzo Romero Ramírez<sup>1</sup>**, Ms Concepción García Rama<sup>1</sup>, Ms Siyu Wu<sup>1,2</sup>, Prof. Jörg Mey<sup>1,2</sup>

<sup>1</sup>Hospital Nacional De Paraplégicos, Sescam, Toledo, Spain, <sup>2</sup>Maastricht University, Maastricht, Netherlands

PS3-73

## The effect of bone marrow derived- mesenchymal stem cells on a novel in vitro model of X-linked adrenoleukodystrophy

**Ms. Claudia Pérez-García<sup>1,2</sup>**, Dra María Luisa Molina-Gallego<sup>2</sup>, Dr Carlos Bueno-López<sup>2</sup>, Dr Emilio Geijo-Barrientos<sup>2</sup>, Dr Salvador Martínez-Pérez<sup>2</sup>

<sup>1</sup>Cátedra de Neurociencia Aplicada. Universidad Católica de Murcia (UCAM), Murcia, Spain, <sup>2</sup>Instituto de Neurociencias UMH-CSIC, Alicante, Spain

PS3-74

## GABAB-receptor activation partially restores network dysfunction associated with NMDA-receptor hypofunction



**PhD Miguel Valencia<sup>1,2</sup>**, PhD Philipp Janz<sup>3</sup>, PhD Maria Jesús Nicolás<sup>1,2</sup>, Mrs Adriana Honrubia<sup>1,2</sup>, PhD Roger Redondo<sup>3</sup>

<sup>1</sup>University of Navarra, CIMA, Pamplona, Spain, <sup>2</sup>IdiSNA, Navarra Institute for Health Research, Pamplona, Spain, <sup>3</sup>F. Hoffmann-La Roche Ltd, Basel, Switzerland

PS3-75

## Deciphering the molecular mechanism of Plk1 control of adult neural stem cell activation, self-renewal and differentiation

**Coral López-Fonseca<sup>1,2</sup>**, Ana Laura Barrios-Muñoz<sup>1,2</sup>, José Manuel Morante-Redolat<sup>3</sup>, Isabel Fariñas<sup>3</sup>, Marcos Malumbres<sup>4</sup>, Francisco Zafra<sup>1,2</sup>, Eva Porlan<sup>1,2</sup>

<sup>1</sup>Departamento de Neuropatología Molecular, Centro de Biología Molecular Severo Ochoa (CSIC-UAM), Madrid, Spain; Departamento de Biología Molecular, Facultad de Ciencias, Universidad Autónoma de Madrid, Madrid, Spain., , , <sup>2</sup>IdiPAZ, ISCIII, Madrid, Spain., , , <sup>3</sup>Departamento de Biología Celular, Biología Funcional y Antropología Física, Universidad de Valencia, Burjassot, Spain; Centro de Investigación Biomédica en Red de Enfermedades Neurodegenerativas (CIBERNED), ISCIII, Madrid, Spain; Estructura de Recerca Interdisciplinaria en Biotecnología i Biomedicina (ERI BIOTECMED), Universidad de Valencia, Burjassot, Spain., , , <sup>4</sup>Grupo de División Celular y Cáncer, Centro Nacional de Investigaciones Oncológicas, Madrid, Spain., ,

PS3-76

## New experimental models for the study of Friedreich's Ataxia

**Dr. Saúl Herranz-Martin<sup>1</sup>**, Mrs Marina López-Lorigados<sup>1</sup>, Mr Andrés Vicente-Acosta<sup>1</sup>, Dr Javier Díaz-Nido<sup>1</sup>

<sup>1</sup>Universidad Autónoma De Madrid / Centro De Biología Molecular Severo Ochoa, Madrid, Spain

PS3-77

## Tauroursodeoxycholic acid supports early functional recovery of rats with spinal cord injury but does not improve effects of transplanted bone marrow-derived stromal cells

Ms Siyu Wu<sup>1,2</sup>, Dr. Lorenzo Romero Ramírez<sup>1</sup>, Mr Johannes de Munther<sup>3</sup>, Mr Erik Ch. Wolters<sup>3</sup>, Prof. Boris W. Kramer<sup>3</sup>, **Prof. Jörg Mey<sup>1,2</sup>**

<sup>1</sup>Hospital Nacional De Paraplégicos, Sescam, Toledo, Spain, <sup>2</sup>Maastricht University, Maastricht, Netherlands, <sup>3</sup>Neuroplast BV, Geleen, Netherlands

PS3-78

## NEUROPROTECTIVE EFFECT OF REMOTE ISCHEMIC PERCONDITIONING AND POSTCONDITIONING IN A PRECLINICAL MOUSE MODEL OF ACUTE ISCHEMIC STROKE

**Ms. Coral Torres Querol<sup>1</sup>**, Dr Lidia Bardia<sup>2</sup>, Dr Sebastien Tosi<sup>2</sup>, Dr Julien Colombelli<sup>2</sup>, Dr Gloria Arqué<sup>1,3</sup>, Dr Francisco Purroy<sup>1,3,4</sup>

<sup>1</sup>Institut de Recerca Biomèdica de Lleida (IRB Lleida), Lleida, Spain, <sup>2</sup>Institut de Recerca Biomèdica de Barcelona (IRB Barcelona), Barcelona Institute for Science and Technology – BIST, Barcelona, Spain, <sup>3</sup>Universitat de Lleida, Lleida, Spain, <sup>4</sup>Hospital Universitari Arnau de Vilanova (HUAV), Barcelona, Spain



PS3-79

## ROLE OF THE IMPRINTED GENE CDKN1C IN THE DIFFERENTIATION PROCESS OF NEURAL STEM CELLS

**Ms. Laura Lázaro-Carot<sup>1</sup>**, Dra. Anna Lozano-Ureña<sup>1</sup>, Mr. Esteban Jiménez-Villalba<sup>1</sup>, Mr. Pere Duart<sup>1</sup>, Ms. Isabel Mateos-White<sup>1</sup>, Dra. Cristina Gil-Sanz<sup>1</sup>, Dra. Isabel Fariñas<sup>1</sup>, Dra. Martina Kirstein<sup>1</sup>, Dra. Sacri R. Ferrón<sup>1</sup>

<sup>1</sup>BIOTECMED Institute, Universidad De Valencia, Valencia, Spain

PS3-80

## An in vivo reprogramming model to study glioblastoma formation

**Mr. Esteban Jiménez-Villalba<sup>1</sup>**, Dr. Anna Lozano-Ureña<sup>1</sup>, Ms. Isabel Mateos-White<sup>1</sup>, Dr. Manuel Serrano<sup>2</sup>, Dr. Cristina Gil-Sanz<sup>1</sup>, Dr. Isabel Fariñas<sup>1</sup>, Dr. Sacri R Ferrón<sup>1</sup>

<sup>1</sup>BIOTECMED Institute, Universidad De Valencia, Burjassot, Spain, <sup>2</sup>Institute for Research in Biomedicine, Barcelona Institute of Science and Technology, Barcelona, Spain

PS3-81

## Comparing astroglial reactivity in two transgenic mouse models of tauopathy

Dr. Juan Jose Fernandez-Valenzuela<sup>1</sup>, Dr. Raquel Sanchez-Varo<sup>1,2</sup>, **Ms Elba Lopez-Oliva<sup>1</sup>**, Dr. Carmen Romero-Molina<sup>3</sup>, Ms Marina Mejias-Ortega<sup>1</sup>, Dr. Elisabeth Sanchez-Mejias<sup>1</sup>, Dr. Maria Luisa Vizuete<sup>3</sup>, Dr. Jose Carlos Davila<sup>1</sup>, Dr. Javier Vitorica<sup>3</sup>, Dr. Antonia Gutierrez<sup>1</sup>

<sup>1</sup>Faculty of Sciences, University of Malaga/IBIMA/CIBERNED, Malaga, Spain, <sup>2</sup>Faculty of Medicine, University of Malaga, Malaga, Spain, <sup>3</sup>Faculty of Pharmacy, University of Seville/IBIS/CIBERNED, Seville, Spain

PS3-82

## COMBINED CELL AND GENE THERAPIES STOP MITRAL CELL DEATH IN PCD MICE

**Dr. David Díaz López<sup>1,2,3</sup>**, David Pérez-Boyero<sup>1,2,3</sup>, Dr. Carmelo Antonio Ávila-Zarza<sup>1,3</sup>, Dr. José Ramón Alonso Peña<sup>1,2,3</sup>, Dr. Eduardo Weruaga Prieto<sup>1,2,3</sup>

<sup>1</sup>University of Salamanca, Salamanca, Spain, <sup>2</sup>INCyL, Institute for Neuroscience of Castilla y León, Salamanca, Spain, <sup>3</sup>IBSAL, Institute of Biomedical Research of Salamanca, Salamanca, Spain

PS3-83

## WHY THE LOBULE X OF THE CEREBELLUM RESISTS THE NEURODEGENERATION OF THE PCD MOUSE?

Carlos Hernández-Pérez<sup>1,2,3</sup>, Valeria Lorena Cabedo Navarro<sup>1,2,3</sup>, Dr. Jesús García Briñón<sup>1,2,3</sup>, Dr. Eduardo Weruaga Prieto<sup>1,2,3</sup>, **Dr. David Díaz López<sup>1,2,3</sup>**

<sup>1</sup>University of Salamanca, Salamanca, Spain, <sup>2</sup>INCyL, Institute for Neuroscience of Castilla y León, Salamanca, Spain, <sup>3</sup>IBSAL, Institute of Biomedical Research of Salamanca, Salamanca, Spain



PS3-84

### Natural IgMs that bind to the neo-epitopes present in corpora amylacea of the human brain recognize carbohydrate structures

**Ms. Marta Riba<sup>1,2,3</sup>**, Dr. Elisabet Augé<sup>1,2,3</sup>, Ms. Iraida Tena<sup>1</sup>, Dr. Jaume del Valle<sup>1,2,3</sup>, Dr. Laura Molina-Porcel<sup>4,5</sup>, Ms. Teresa Ximelis<sup>4,5</sup>, Dr. Jordi Vilaplana<sup>1,2,3</sup>, Dr. Carme Pelegrí<sup>1,2,3</sup>

<sup>1</sup>Facultat de Farmàcia i Ciències de l'Alimentació, Universitat de Barcelona, Barcelona, Spain, <sup>2</sup>Institut de Neurociències, Universitat de Barcelona, Barcelona, Spain, <sup>3</sup>Centros de Biomedicina en Red de Enfermedades Neurodegenerativas (CIBERNED), Madrid, Spain, <sup>4</sup>Alzheimer's disease and other cognitive disorders unit. Neurology Service, Hospital Clínic, Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Universitat de Barcelona, Barcelona, Spain, <sup>5</sup>Neurological Tissue Bank of the Biobanc-Hospital Clínic-Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Barcelona, Spain

PS3-85

### Neo-epitopes from corpora amylacea in the human brain do not have a peptidic nature

**Ms. Marta Riba<sup>1,2,3</sup>**, Dr. Elisabet Augé<sup>1,2,3</sup>, Ms. Iraida Tena<sup>1</sup>, Dr. Jaume del Valle<sup>1,2,3</sup>, Dr. Laura Molina-Porcel<sup>4,5</sup>, Ms. Teresa Ximelis<sup>4,5</sup>, Dr. Carme Pelegrí<sup>1,2,3</sup>, Dr. Jordi Vilaplana<sup>1,2,3</sup>

<sup>1</sup>Facultat de Farmàcia i Ciències de l'Alimentació, Universitat de Barcelona, Barcelona, Spain, <sup>2</sup>Institut de Neurociències, Universitat de Barcelona, Barcelona, Spain, <sup>3</sup>Centros de Biomedicina en Red de Enfermedades Neurodegenerativas (CIBERNED), Madrid, Spain, <sup>4</sup>Alzheimer's disease and other cognitive disorders unit. Neurology Service, Hospital Clínic, Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Universitat de Barcelona, Barcelona, Spain, <sup>5</sup>Neurological Tissue Bank of the Biobanc-Hospital Clínic-Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Barcelona, Spain

PS3-86

### INSULIN-LIKE GROWTH FACTOR I COUPLES METABOLISM WITH CIRCADIAN ACTIVITY THROUGH HYPOTHALAMIC OREXIN NEURONS

Dr. Jaime Pignatelli<sup>1</sup>, **M. Estrella Fernandez de Sevilla<sup>1</sup>**, Dra. Gema Medina Gomez<sup>2</sup>, Ignacio Torres Aleman<sup>3</sup>

<sup>1</sup>Cajal Institute-csic, Madrid, Spain, <sup>2</sup>URJC, Madrid, Spain, <sup>3</sup>Achucarro Basque Neuroscience Center, Leioa, Spain

PS3-87

### DESIGN AND IMPLEMENTATION OF A METHOD TO STUDY LARYNGEAL RESISTANCE DURING THE STIMULATION OF CUNEIFORM NUCLEUS (CnF) IN SPONTANEOUSLY BREATHING ANAESTHETIZED RATS

**Ms. Marta Gonzalez-Garcia<sup>1,2,3</sup>**, Mr. Manuel Victor Lopez-Gonzalez<sup>1,2,3</sup>, Ms. Laura Carrillo-Franco<sup>1</sup>, Ms. Amelia Diaz-Casares<sup>1,2,3</sup>, Dr. Marc Stefan Dawid-Milner<sup>1,2,3</sup>

<sup>1</sup>Facultad de Medicina. Universidad De Málaga, Málaga, Spain, <sup>2</sup>Unidad de Neurofisiología del Sistema Nervioso Autónomo (CIMES). Universidad de Málaga, Málaga, Spain, <sup>3</sup>Instituto de Investigación Biomédica de Málaga (IBIMA), Málaga, Spain



PS3-88

### Imaging of synapses in 3D with non-destructive synchrotron X-ray ptychography

**Carles Bosch<sup>1</sup>**, Ana Diaz<sup>2</sup>, Alexandra Pacureanu<sup>3</sup>, Mirko Höller<sup>2</sup>, Elisabeth Müller<sup>4</sup>, Andreas Schaefer<sup>1</sup>

<sup>1</sup>The Francis Crick Institute, London, United Kingdom, <sup>2</sup>cSAXS beamline, Paul Scherrer Institut, Villigen, Switzerland, <sup>3</sup>ID16A beamline, ESRF, Grenoble, France, <sup>4</sup>Electron Microscopy Facility, Paul Scherrer Institut, , Switzerland

PS3-89

### Obtention and characterization of exosomes for non-invasive epilepsy monitoring

**Laura Zeballos Fernández<sup>1,2</sup>**, Mario García Hernández<sup>1</sup>, Dr. David Sánchez Benito<sup>1,2</sup>, Jaime Gonçalves Sánchez<sup>2</sup>, Dra. María Dolores Calabria Gallego<sup>2</sup>, Dr. Ricardo Gómez Nieto<sup>1,2</sup>, Dra. M<sup>a</sup> Dolores E. López García<sup>1,2</sup>

<sup>1</sup>Institute of Neuroscience of Castilla y León (INCYL), Salamanca, España, <sup>2</sup>Institute for Biomedical Research of Salamanca (IBSAL), Salamanca, España

PS3-90

### GENE THERAPY WITH VMAT2 REDUCES AGE-DEPENDENT NEUROMELANIN ACCUMULATION AND PREVENTS PARKINSON'S DISEASE PHENOTYPE IN NEUROMELANIN-PRODUCING RATS

**Mr. Joan Compte Barrón<sup>1</sup>**, Dr. Marta González-Sepúlveda<sup>1</sup>, Mrs. Alba Nicolau Vera<sup>1</sup>, Dr. Thais Cuadros Arasa<sup>1</sup>, Mr. Jordi Giménez-Romero<sup>1</sup>, Mrs. Annabelle Parent<sup>1</sup>, Dr. Ariadna Laguna Tuset<sup>1</sup>, Dr. Miquel Vila Bover<sup>1,2,3</sup>

<sup>1</sup>Vall d'Hebron Research Institute (VHIR)-Center for Networked Biomedical Research on Neurodegenerative Diseases (CIBERNED), Barcelona, Spain, <sup>2</sup>Autonomous University of Barcelona, Cerdanyola del Vallès, Barcelona, Spain, Spain, <sup>3</sup>Catalan Institution for Research and Advanced Studies (ICREA), Barcelona, Spain

PS3-91

### Age-related changes in the neuromuscular junction and skeletal muscle of C57BL/6J mice

**Ms. Alba Blasco<sup>1</sup>**, Ms. Sílvia Gras<sup>1</sup>, Dr. Guillem Mòdol-Caballero<sup>2</sup>, Dr. Olga Tarabal<sup>1</sup>, Dr. Anna Casanovas<sup>1</sup>, Ms. Lidia Piedrafita<sup>1</sup>, Dr. Alejandro Barranco<sup>3</sup>, Dr. Tapas Das<sup>4</sup>, Dr. Sara Hernández<sup>1</sup>, Ms. Sara Salvany<sup>1</sup>, Ms. Alaó Gatiús<sup>1</sup>, Dr. Suzette L. Pereira<sup>4</sup>, Prof. Xavier Navarro<sup>2</sup>, Dr. Ricardo Rueda<sup>3</sup>, Prof. Josep Enric Esquerda<sup>1</sup>, Prof. Jordi Calderó<sup>1</sup>

<sup>1</sup>Universitat de Lleida / IRBLleida, Lleida, Spain, <sup>2</sup>Universitat Autònoma de Barcelona / CIBERNED, Bellaterra, Spain, <sup>3</sup>Abbott Nutrition / Strategic Research, Granada, Spain, <sup>4</sup>Abbott Nutrition / Strategic Research, Columbus, USA

PS3-92

### Developmental neurotoxicity effects of nanoplastics in zebrafish embryo and human neural stem cell models



Dr. Monica Torres-Ruiz<sup>1</sup>, Dr. Maria del Carmen González Caballero<sup>1</sup>, Dr. Isabel Liste<sup>2</sup>, Ms. Mercedes De Alba González<sup>1</sup>, Ms. María Gallego Rodríguez<sup>1</sup>, Ms. Carla García López<sup>1</sup>, Dr. Ana Isabel Cañas Portilla<sup>1</sup>

<sup>1</sup>Área de Toxicología Ambiental, Centro Nacional de Sanidad Ambiental (CNSA), Instituto de Salud Carlos III, Majadahonda, Spain, <sup>2</sup>Unidad de Regeneración Neural, Unidad Funcional de Investigación de Enfermedades Crónicas (UFIEC), Instituto de Salud Carlos III, Majadahonda, Spain

PS3-93

### Brief assessment of social cognition in "ataxia da Costa da Morte"

Dr. Rocio Martínez-Regueiro<sup>1</sup>, Dr. Montse Fernández-Prieto<sup>2</sup>, Dr. M.J. Sobrido<sup>2</sup>, Dr Manuel Arias<sup>3</sup>

<sup>1</sup>Universidade de Santiago de Compostela (USC), Santiago de Compostela, Spain, <sup>2</sup>Instituto de Investigación Sanitaria de Santiago de Compostela (IDIS), Santiago de Compostela, Spain, <sup>3</sup>Servicio Galego de Saúde (SERGAS), Santiago de Compostela, Spain

PS3-94

### Aging effects on emotional regulation are supported by differential neural networks as predicted by machine learning paradigms

Dr. Elena Solesio-joFRE<sup>1</sup>, Prof. Ángela Fernández-Pascual<sup>2</sup>, Mrs. María Hernández-Lorca<sup>1</sup>, Dr. Elisabet Rodríguez-Alzuetas<sup>3</sup>, Prof. Luis Carretié<sup>1</sup>

<sup>1</sup>Facultad de Psicología. Universidad Autónoma De Madrid, Madrid, Spain, <sup>2</sup>Escuela Politécnica Superior. Universidad Autónoma de Madrid, Madrid, Spain, <sup>3</sup>Center for Health Sciences. SRI International, Menlo Park, United States of America

PS5-71

### Functional and morphological study of transient ischemia-reperfusion in adult pigmented mice

Mr. Alejandro Gallego Ortega<sup>1</sup>, Ms. María Norte Muñoz<sup>1</sup>, Mr. Juan Antonio Miralles de Imperial Ollero<sup>3</sup>, Dr. Francisco Javier Valiente Soriano<sup>1</sup>, Prof. Pedro De la Villa<sup>2</sup>, Prof. Manuel Vidal Sanz<sup>1</sup>

<sup>1</sup>Universidad De Murcia, Murcia, Spain, <sup>2</sup>Universidad de Alcalá, Alcalá de Henares, Spain



## POSTER SESSION 4 - FRIDAY, 5<sup>TH</sup> NOV. 09:00 - 12:30. Exhibition Hall

PS4-01

### Dispersion and fate of pallial progenitors within the adult forebrain

**Edwards Antonio Cabrera<sup>1</sup>**, Rebeca Sánchez-González<sup>1,2</sup>, Ana Cristina Ojalvo-Sanz<sup>1,2</sup>, Sonsolo Barriola<sup>1,2</sup>, Laura López Mascaraque<sup>1</sup>

<sup>1</sup>Instituto Cajal, Madrid, Spain, <sup>2</sup>PhD Program in Neuroscience, Autonoma de Madrid University, Madrid, Spain

PS4-02

### Perturbation of adherens junctions associated proteins in the neocortex affects neurodevelopmental pathways causing cognitive and social deficits in mice

**Mr. David de Agustín-Durán<sup>1</sup>**, Ms. Alba Marín-Garnes<sup>1</sup>, Ms. Ana Pérez-Villalba<sup>2</sup>, Ms. Isabel Mateos-White<sup>1</sup>, Mr. Jaime Fabra-Beser<sup>1</sup>, Dra. Cristina Gil-Sanz<sup>1</sup>

<sup>1</sup>BIOTECMED Institute, Universidad de Valencia, Burjassot, Spain, <sup>2</sup>Laboratory of Animal Behavioural Phenotyping, Facultad de Psicología, Universidad Católica de Valencia, Burjassot, Spain

PS4-03

### Transcriptomic correlation of the topographic afferent innervation distribution in the habenular complex.

**Ms. Iris Juárez-Leal<sup>1</sup>**, Ms. Estefanía Carretero-Rodríguez<sup>2</sup>, Ms. Francisca Almagro-García<sup>1</sup>, Prof. Salvador Martínez<sup>1</sup>, Dr. Diego Echevarría<sup>1</sup>, Dr. Eduardo Puelles<sup>1</sup>

<sup>1</sup>Instituto De Neurociencias (UMH-CSIC), Sant Joan d'Alacant, España, <sup>2</sup>Universidad Miguel Hernández de Elche, Sant Joan d'Alacant, España

PS4-04

### Developmental origin of adult neurogenesis: Analysis of the postnatal hippocampal neurogenic niche in Sox5 conditional mutants

**Cristina Medina Menéndez<sup>1</sup>**, Lingling Li<sup>1</sup>, María Valdés<sup>1</sup>, Rafael López-Sansegundo<sup>1</sup>, Inés Colmena<sup>1</sup>, Véronique Lefebvre<sup>2</sup>, Aixa V. Morales<sup>1</sup>

<sup>1</sup>Cajal Institute, Madrid, Spain, <sup>2</sup>Children's Hospital of Philadelphia, Philadelphia, USA

PS4-05

### Organization of GABAergic interneurons in the cingulate cortex of an animal model of lissencephaly: the Lis1/sLis1 mouse

**Ms. Paula Martín-Climent<sup>1</sup>**, Dr. Abraham Andreu-Cervera<sup>1</sup>, Ms. Raquel Murcia-Ramón<sup>1</sup>, Dr. Diego Echevarría<sup>1</sup>, Prof. Salvador Martínez<sup>1</sup>, Prof. Emilio Geijo-Barrientos<sup>1</sup>

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



PS4-06

**Effects of Lis1 gene loss in parvalbumin expressing cells on the mouse hippocampal cytoarchitectonics****Ms. Ana María Jiménez<sup>1</sup>**, Dr. Abraham Andreu-Cervera<sup>1</sup>, Ms. Francisca Almagro-García<sup>1</sup>, Dr. Eduardo Puellas<sup>1</sup>, Dr. Diego Echevarría<sup>1</sup>, Prof. Emilio Geijo-Barrientos<sup>1</sup>, Prof. Salvador Martínez<sup>1</sup><sup>1</sup>Instituto de Neurociencias de Alicante (UMH-CSIC), San Juan de Alicante, Spain

PS4-07

**Cerebellar abnormalities in a conditional mouse mutant of the Lis1 gene****Dr. Abraham Andreu-Cervera<sup>1</sup>**, Ms. Ana María Jiménez<sup>1</sup>, Ms. Mar Azorín<sup>1</sup>, Ms. Francisca Almagro-García<sup>1</sup>, Dr. Eduardo Puellas<sup>1</sup>, Dr. Diego Echevarría<sup>1</sup>, Prof. Emilio Geijo-Barrientos<sup>1</sup>, Prof. Salvador Martínez<sup>1</sup><sup>1</sup>Instituto de Neurociencias de Alicante (UMH-CSIC), San Juan de Alicante, Spain

PS4-08

**Cerebral cortex development is coordinated by mitochondrial reactive oxygen species****Ms. Regina Mengual<sup>1,2</sup>**, Dr. Cristina Rodríguez<sup>1,2</sup>, Dr. Verónica Bobo-Jiménez<sup>1,2</sup>, Dr. María Delgado-Esteban<sup>1,2</sup>, Prof. Juan Pedro Bolaños<sup>1,2,3</sup>, Dr. Angeles Almeida<sup>1,2</sup><sup>1</sup>Institute of Biomedical Research of Salamanca, University Hospital of Salamanca, Salamanca, Spain, <sup>2</sup>Institute of Functional Biology and Genomics, University of Salamanca, CSIC, Salamanca, Spain, <sup>3</sup>CIBERFES, Instituto de Salud Carlos III, ,

PS4-09

**The impact of NMDA receptor subunit GluN3A deletion on the brain activity of young and adult mice****Ms. Alicia Alonso-Andres<sup>1</sup>**, Dr. Oliver Crawley<sup>1</sup>, Ms. Ana Isabel Navarro<sup>1</sup>, Dr. John F. Wesseling<sup>1</sup>, Dr. Isabel Pérez-Otaño<sup>1</sup>, Dr. Ramon Reig<sup>1</sup><sup>1</sup>Instituto de Neurociencias CSIC-UMH, Alicante, Spain

PS4-10

**In vitro study of neurodevelopment in Huntington's disease****Dr. Phil Sanders<sup>1,2,3,4,5</sup>**, Dr. Waseem Abbas<sup>1,2</sup>, Dr. Anna Esteve-Codina<sup>6,7</sup>, Dr. Gustavo Rodriguez-Esteban<sup>1,2,6,7</sup>, Georgina Bombau<sup>1,2,3,4,5</sup>, Mireia Galofre<sup>1,2,3,4,5</sup>, Andrea Honrubia<sup>1,2,3,4,5</sup>, Dr. Holger Heyn<sup>6,7</sup>, Prof. Petia Radeva<sup>8,9</sup>, Dr. Josep M. Canals<sup>1,2,3,4,5</sup><sup>1</sup>Faculty of Medicine and Health Sciences, University of Barcelona, Barcelona, Spain, <sup>2</sup>Creatio-Production and Validation Center of Advanced Therapies, University of Barcelona, Barcelona, Spain, <sup>3</sup>Institute of Neurosciences, University of Barcelona, Barcelona, Spain, <sup>4</sup>August Pi i Sunyer Biomedical Research Institute (IDIBAPS), Barcelona, Spain, <sup>5</sup>Networked Biomedical Research Centre for Neurodegenerative Disorders (CIBERNED), , Spain, <sup>6</sup>Centro Nacional de Análisis Genómico (CNAG-CRG) - Centre for Genomic Regulation (CRG), Barcelona, Spain, <sup>7</sup>Universitat Pompeu Fabra, Barcelona, Spain, <sup>8</sup>Faculty of Mathematics and Computer Science, University of Barcelona, Barcelona, Spain, <sup>9</sup>Computer Vision Center, Universitat Autònoma de Barcelona, Cerdanyola del Vallès, Spain



PS4-11

### Increased GABA levels in postnatal development alter cortical inter-hemispheric circuits

**Ms. Lorena Bragg-Gonzalo<sup>1</sup>**, Dr. Marta Nieto<sup>1</sup>

<sup>1</sup>Centro Nacional De Biotecnología, Madrid, Spain

PS4-12

### CB1 RECEPTORS DEFICIENCY IN OLIGODENDROCYTE PRECURSORS DISRUPTS POSTNATAL OLIGODENDROGENESIS AND CAUSES HYPOMYELINATION IN MICE

**Anibal Sánchez-de la Torre<sup>1,2,3</sup>**, Tania Aguado<sup>1,2,3</sup>, Alba Huerga-Gómez<sup>1,2,3</sup>, Juan Carlos Chara<sup>4,5</sup>, Krisztina Monory<sup>6</sup>, Carlos Matute<sup>4,5</sup>, Beat Lutz<sup>6</sup>, Susana Mato<sup>4,5</sup>, Manuel Guzman<sup>1,2,3</sup>, Ismael Galve-Roperh<sup>1,2,3</sup>, Javier Palazuelos<sup>1,2,3</sup>

<sup>1</sup>Instituto Ramón y Cajal de Investigación Sanitaria (IRYCIS), Madrid, Spain, <sup>2</sup>Complutense University, Madrid, Spain, <sup>3</sup>Centro de Investigación Biomédica en Red sobre Enfermedades Neurodegenerativas (CIBERNED), Madrid, Spain, <sup>4</sup>University of the Basque Country UPV/EHU, Leioa, Spain, <sup>5</sup>Achucarro Basque Center for Neuroscience, Leioa, Spain, <sup>6</sup>University Medical Center Mainz, Mainz, Germany

PS4-13

### NMDA receptors containing GluN3A subunits influence myelination during development and after injury

**Ms. Alice Staffa<sup>1</sup>**, Dr. Juan Carlos Chara Ventura<sup>2</sup>, Dr. Carlos Matute<sup>2</sup>, Dr. Isabel Perez-Otaño<sup>1</sup>

<sup>1</sup>Instituto de Neurociencias de Alicante, UMH-CSIC, San Juan de Alicante, Spain, <sup>2</sup>Achúcarro Basque Center for Neuroscience, UPV, Leioa, Spain

PS4-14

### COGNITIVE FUNCTIONS THAT RELY ON DORSAL HIPPOCAMPAL SYNAPTIC PLASTICITY PROCESSES INVOLVE A G-PROTEIN DEPENDENT MECHANISM THROUGH ADENOSINE A1 RECEPTOR-ACTIVATED GIRK CHANNELS

**Dr. Souhail Diebari<sup>1</sup>**, Dr. Sara Temprano-Carazo<sup>1</sup>, Dr. Irene Sánchez-Rodríguez<sup>1</sup>, Mr. Guillermo Iborra-Lázaro<sup>1</sup>, Dr. Agnès Gruart<sup>2</sup>, Dr. José M. Delgado-García<sup>2</sup>, Dr. Lydia Jiménez-Díaz<sup>2</sup>, Dr. Juan D. Navarro-López<sup>1</sup>

<sup>1</sup>University of Castilla-La Mancha; NeuroPhysiology and Behavior Laboratory, Ciudad Real, Spain, <sup>2</sup>Pablo de Olavide University, Sevilla, Spain

PS4-15

### Morphological Characterization of the Whale Retina

**Dr. Noelia Ruzafa<sup>1</sup>**, Dr. Xandra Pereiro<sup>1</sup>, Prof. Elena Vecino<sup>1</sup>

<sup>1</sup>University of Basque Country UPV/EHU, Leioa, Spain



PS4-16

**Characterization of Primary and Immortalized Whale Müller Glial Cells**PhD Xandra Pereiro<sup>1</sup>, **Ms Sandra Beriain<sup>1</sup>**, Ms Lara Rodríguez<sup>1</sup>, PhD Noelia Ruzafa<sup>1</sup>, Mr David Roiz-Valle<sup>2</sup>, PhD Jose-MP Freije<sup>2</sup>, Prof. Elena Vecino<sup>1</sup><sup>1</sup>University of Basque Country UPV/EHU, Leioa, Spain, <sup>2</sup>University Institute of Oncology os Asturias IOUPA, Oviedo, Spain

PS4-17

**Impact of aging on the structure and NMDA receptor expression of somatostatin expressing hippocampal interneurons****Ms. Yaiza Gramuntell<sup>1</sup>**, Ms. Patrycja Klimczak<sup>1</sup>, Dr. Simona Coviello<sup>1</sup>, Mr. Marc Beltran<sup>1</sup>, Prof. Juan Nacher<sup>1,2,3</sup><sup>1</sup>Institute of Biotechnology and Biomedicine (BIOTECMED), Universitat de València, Valencia, Spain, <sup>2</sup>CIBERSAM: Spanish National Network for Research in Mental Health, , Spain, <sup>3</sup>Fundación Investigación Hospital Clínico de Valencia, INCLIVA, Valencia, Spain

PS4-18

**Competition of transcriptional programs for transcriptional co-activators upon neuronal activation****Mr. Sergio Niferola<sup>1</sup>**, Dra. Beatriz Del Blanco<sup>1</sup>, Dr. Michal Lipinski<sup>1</sup>, Dr. Jose Pascual Lopez-Atalaya<sup>1</sup>, Dr. Angel Barco<sup>1</sup><sup>1</sup>Instituto de Neurociencias (CSIC-UMH), San Juan de Alicante 03350, Spain

PS4-19

**Signaling mediated by the CREB-regulated transcription coactivator-1 (CRTC1) regulates NMDA-dependent synaptic plasticity****Ms. Anna del Ser-Badia<sup>1</sup>**, Dr. Arnaldo Parra-Damas<sup>1</sup>, Dr. Lilian Enríquez-Barreto<sup>1</sup>, Mr. José Prius-Mengual<sup>2</sup>, Dr. José Rodríguez-Alvarez<sup>1</sup>, Dr. Antonio Rodríguez-Moreno<sup>2</sup>, Dr. Carlos Alberto Saura<sup>1</sup><sup>1</sup>Institut de Neurociències, Centro de Investigación Biomédica en Red Enfermedades Neurodegenerativas (CIBERNED), Universitat Autònoma de Barcelona, Bellaterra, Spain, <sup>2</sup>Department of Physiology, Anatomy and Cell Biology, Universidad Pablo de Olavide, Sevilla, Spain

PS4-20

**Aging entails motoneuron deafferentation and neuroinflammation in the mouse spinal cord****Ms. Sílvia Gras<sup>1</sup>**, Ms. Alba Blasco<sup>1</sup>, Dr. Guillem Mòdol-Caballero<sup>2</sup>, Dr. Olga Tarabal<sup>1</sup>, Dr. Anna Casanovas<sup>1</sup>, Ms. Lúcia Piedrafita<sup>1</sup>, Dr. Alejandro Barranco<sup>3</sup>, Dr. Tapas Das<sup>4</sup>, Ms. Sara Salvany<sup>1</sup>, Ms. Alaó Gatiús<sup>1</sup>, Dr. Suzette L. Pereira<sup>4</sup>, Prof. Xavier Navarro<sup>2</sup>, Dr. Ricardo Rueda<sup>3</sup>, Prof. Josep Enric Esquerda<sup>1</sup>, Prof. Jordi Calderó<sup>1</sup><sup>1</sup>Universitat de Lleida/IRBLleida, Lleida, Spain, <sup>2</sup>Universitat Autònoma de Barcelona/CIBERNED, Bellaterra, Spain, <sup>3</sup>Abbott Nutrition/Strategic Research, Granada, Spain, <sup>4</sup>Abbott Nutrition/Strategic Research, Columbus, USA



PS4-21

The Y172 antibody against phospho-c-Jun (Ser63) selectively detects an unidentified protein present in motoneurons and Schwann cells, two sidekicks of the neuromuscular system

**Ms. Alaó Gatiús<sup>1</sup>**, Mr. Pol Garcia-Segura<sup>1</sup>, Dr. Olga Tarabal<sup>1</sup>, Ms. Paula Cayuela<sup>1</sup>, Dr. Ana Garcerá<sup>1</sup>, Dr. Anna Casanovas<sup>1</sup>, Ms. Sara Salvany<sup>1</sup>, Ms. Sílvia Gras<sup>1</sup>, Ms. Alba Blasco<sup>1</sup>, Ms. Lúcia Piedrafita<sup>1</sup>, Dr. Sara Hernández<sup>2</sup>, Dr. Rosa María Soler<sup>1</sup>, Prof. Josep Enric Esquerda<sup>1</sup>, Prof. Jordi Calderó<sup>1</sup>

<sup>1</sup>Universitat de Lleida/IRBLleida, Lleida, Spain

PS4-22

Effects of balanced vs. deficient omega-3 fatty acid diets on adult hippocampal neurogenesis and glia

Noelia Rodríguez-Iglesias<sup>1,2</sup>, Dr Agnès Nadjar<sup>3</sup>, Dr Amanda Sierra<sup>1,2,4</sup>, **Dr. Jorge Valero<sup>5,6,7</sup>**

<sup>1</sup>Achucarro Basque Center for Neuroscience, Leioa, Spain, <sup>2</sup>UPV/EHU, University of the Basque Country, Leioa, Spain,

<sup>3</sup>University of Bordeaux, Neurocentre Magendie, , France, <sup>4</sup>Ikerbasque, Basque Foundation for Science, Bilbao, Spain,

<sup>5</sup>INCYL, Institute for Neuroscience of Castilla y León, Salamanca, Spain, <sup>6</sup>IBSAL, Institute for Biomedical Research of Salamanca, , Spain, <sup>7</sup>University of Salamanca, Salamanca, Spain

PS4-23

Afferent synaptic terminals on spinal cord motor neurons are acutely disrupted after peripheral nerve transection: involvement of necroptotic pathway and microglial piecemeal phagocytosis

**Ms. Sara Salvany<sup>1</sup>**, Dr. Anna Casanovas<sup>1</sup>, Ms. Lúcia Piedrafita<sup>1</sup>, Ms. Sílvia Gras<sup>1</sup>, Ms. Alaó Gatiús<sup>1</sup>, Ms. Alba Blasco<sup>1</sup>, Dr. Olga Tarabal<sup>1</sup>, Dr. Sara Hernández<sup>2</sup>, Prof. Jordi Calderó<sup>1</sup>, Prof. Josep E. Esquerda<sup>1</sup>

<sup>1</sup>Universitat de Lleida / IRBLleida, Lleida, Spain

PS4-24

Relationship of FAIM-L and Ovarian Tumor (OTU) Deubiquitinases in synaptic remodeling

**Ms. Mireia Turch-Anguera<sup>1,2</sup>**, Dr. Koen M.O. Galenkamp<sup>1,2,3</sup>, Dr. Elena Coccia<sup>1,2,3</sup>, Dr. Montse Solé<sup>1,2,3</sup>, Dr. Cristina Hernández<sup>1,4</sup>, Dr. Rafael Simó<sup>1,4</sup>, Prof. Joan X. Comella<sup>1,2,3</sup>

<sup>1</sup>Vall d'Hebron Institut de Recerca, Barcelona, Spain, <sup>2</sup>Universitat Autònoma de Barcelona, Bellaterra, Spain, <sup>3</sup>CIBERNED-ISCIII, Madrid, Spain, <sup>4</sup>CIBERDEM-ISCIII, Madrid, Spain



PS4-25

Potential neuroprotective role of lysophosphatidic acid receptor 1 overexpression by hippocampal neurons in a model of temporal lobe epilepsy

**Teresa Muro-García**<sup>1,2</sup>, Leire Boveda-Altube<sup>1,2</sup>, Dr. Juan Manuel Encinas<sup>1,2,3</sup>

<sup>1</sup>Achucarro Basque Center For Neuroscience, Leioa, Bizkaia, Spain, <sup>2</sup>Departamento de Neurociencias UPV/EHU, Leioa, Bizkaia, Spain, <sup>3</sup>IKERBASQUE, the Basque Foundation for Science, Bilbao, Bizkaia, Spain

PS4-26

The primary cilium as an organelle for astrocyte-neuron communication.

**Ms. Laura De las Heras-García**<sup>1</sup>, Dr. Olatz Pampliega<sup>1,2</sup>

<sup>1</sup>University Of The Basque Country, Leioa, Spain, <sup>2</sup>Achucarro Basque Center for Neuroscience, Leioa, Spain

PS4-27

Transgenic expression of mutant versions of CSPalpha/DNAJC5 causes lipofuscinosis in mice

Dr. Santiago López-Begines<sup>1</sup>, Ms. Ángela Lavado-Roldán<sup>1</sup>, Dr. Fabiola Mavillard Saborido<sup>1</sup>, Ms. Fátima Rubio-Pastor<sup>1</sup>, Ms. Vera Wiersma<sup>2</sup>, Ms. Wiep Scheper<sup>2</sup>, **Prof. Rafael Fernández-Chacón**<sup>1</sup>

<sup>1</sup>Instituto de Biomedicina de Sevilla (IBIS/HUVR/CSIC/Universidad de Sevilla), Depto. de Fisiología Médica y Biofísica & CIBERNED, Seville, Spain, <sup>2</sup>Dept. of Human Genetics, Amsterdam University Medical Centers, Amsterdam, The Netherlands

PS4-28

A mouse genetic strategy to investigate the role of CSP alpha/DNAJC5 in glutamatergic synaptic function and maintenance

**Ms. Cristina Mesa-Cruz**<sup>1</sup>, Dr. José Luis Nieto-González<sup>1</sup>, Prof. Rafael Fernández-Chacón<sup>1</sup>

<sup>1</sup>Instituto de Biomedicina de Sevilla (IBIS, HUVR/CSIC/Universidad de Sevilla), Depto. de Fisiología Médica y Biofísica & CIBERNED, Seville, Spain

PS4-29

Acute genetic elimination of a synaptic co-chaperone in adulthood to study protein stability in neurodegeneration

**Ms. Fátima Rubio-Pastor**<sup>1</sup>, Dr. Santiago López-Begines<sup>1</sup>, Prof. Rafael Fernández-Chacón<sup>1</sup>

<sup>1</sup>Instituto de Biomedicina de Sevilla (IBIS, HUVR/CSIC/Universidad de Sevilla), Depto. de Fisiología Médica y Biofísica & CIBERNED, Seville, Spain

PS4-30

Nucleus Accumbens Astrocytes Control The Cognitive Impairment Derived From Chronic Exposure To THC



**Ms. Cristina Martín-Montegudo<sup>1</sup>**, Mr. Julio Esparza<sup>1</sup>, Ms. Irene Serra<sup>1</sup>, Dr Nagore Puentes<sup>2</sup>, Dr. Pedro Grandes<sup>2</sup>, Dr Marta Navarrete<sup>1</sup>

<sup>1</sup>Cajal Institute, Madrid, Spain, <sup>2</sup>Achucarro Center, Bilbao, Spain

PS4-31

**A critical period for the itch spinal cord neural circuit?**

**Dr. Augusto Escalante<sup>1</sup>**, Prof. Dr. Eloísa Herrera<sup>1</sup>

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

PS4-32

**AN ANALYSIS OF TIMING CORRELATION REVEALS THAT MOTOR CORTEX NEURONS ARE RELATED, BUT NOT THE ORIGIN, OF CLASSICALLY CONDITIONING EYELID AND VIBRISSAE RESPONSES IN MICE**

**Prof. Juan Carlos López-Ramos<sup>1</sup>**, Prof. José María Delgado-García<sup>1</sup>

<sup>1</sup>Universidad Pablo de Olavide, Sevilla, Spain

PS4-33

**LARYNGEAL EFFECTS OF STIMULATION OF THE CUNEIFORM NUCLEUS IN SPONTANEOUSLY BREATHING ANAESTHETIZED RATS**

**Ms. Laura Carrillo-Franco<sup>1</sup>**, Mr. Manuel Victor Lopez-Gonzalez<sup>1,2,3</sup>, Ms. Marta Gonzalez-Garcia<sup>1,2,3</sup>, Ms. Amelía Diaz-Casares<sup>1,2,3</sup>, Dr. Marc Stefan Dawid-Milner<sup>1,2,3</sup>

<sup>1</sup>Facultad De Medicina, Universidad De Malaga, Malaga, Spain, <sup>2</sup>Unidad de Neurofisiología del Sistema Nervioso Autónomo (CIMES), Universidad de Malaga, Malaga, Spain, <sup>3</sup>Instituto de Investigación Biomédica de Málaga (IBIMA), Malaga, Spain

PS4-34

**Noradrenaline innervation and Alpha adrenoceptors in the human and macaque higher-order thalamic nuclei.**

**Ms. Isabel Pérez-Santos<sup>1</sup>**, Dr. Nicola Palomero-Gallagher<sup>2,3,4</sup>, Dr. Karl Zilles<sup>2,4,5</sup>, Dr. Carmen Cavada<sup>1</sup>

<sup>1</sup>Facultad De Medicina, Universidad Autónoma De Madrid, Madrid, Spain, <sup>2</sup>Institute of Neuroscience and Medicine (INM-1), Research Centre Jülich, Jülich, Germany, <sup>3</sup>Medical Faculty, RWTH Aachen University, Aachen, Germany, <sup>4</sup>C. & O. Vogt Institute for Brain Research, Heinrich-Heine-University, Düsseldorf, Germany, <sup>5</sup>JARA-BRAIN, Jülich-Aachen Research Alliance, Jülich, Germany

PS4-35

**Surprisingly dense projections from the ventral nucleus of the trapezoid body to the dorsal cochlear nucleus**

**Mr. Mario Gómez-Martínez<sup>1,2,3</sup>**, Mr. Héctor Rincón<sup>2,3,4</sup>, Dr. Marcelo Gómez-Álvarez<sup>1,2,3</sup>, Dr. Ricardo Gómez-Nieto<sup>1,2,3</sup>, Prof. Enrique Saldaña<sup>1,2,3</sup>



<sup>1</sup>University Of Salamanca, Salamanca, Spain, <sup>2</sup>Neuroscience institute of Castilla y León (INCyL), Salamanca, Spain, <sup>3</sup>Institute of Biomedical Research of Salamanca (IBSAL), Salamanca, Spain, <sup>4</sup>School of Health Sciences, Universidad Pontificia of Salamanca, Salamanca, Spain

PS4-36

## The power spectrum determines subthalamic beta bursts dynamics in Parkinson's disease

**Jesús Pardo-Valencia**<sup>1,2</sup>, Carla Fernández-García<sup>3</sup>, Fernando Alonso-Frech<sup>3</sup>, Guglielmo Foffani<sup>1,4</sup>

<sup>1</sup>HM CINAC (Centro Integral de Neurociencias Abarca Campal), Hospital Universitario HM Puerta del Sur, HM Hospitales, Madrid, Spain, <sup>2</sup>Universidad Politécnica de Madrid, Madrid, Spain, <sup>3</sup>Hospital Clínico San Carlos, Madrid, Spain, <sup>4</sup>Hospital Nacional de Paraplégicos, ESCAM, Toledo, Spain

PS4-37

## SECRETAGOGIN EXPRESSION IN THE MOUSE BRAIN

**Pablo González Téllez De Meneses**<sup>1,2,3</sup>, Laura Pérez-Revuelta<sup>1,2,3</sup>, Valeria Lorena Cabedo Navarro<sup>1,2,3</sup>, Dr. David Díaz López<sup>1,2,3</sup>, Dr. Eduardo Weruaga Prieto<sup>1,2,3</sup>, Dr. Jorge Valero<sup>1,2,3</sup>, Dr. José Ramón Alonso Peña<sup>1,2,3</sup>

<sup>1</sup>University Of Salamanca, Salamanca, Spain, <sup>2</sup>INCyL, Institute for Neuroscience of Castilla y León, Salamanca, Spain, <sup>3</sup>IBSAL, Institute of Biomedical Research of Salamanca, Salamanca, Spain

PS4-38

## Identification of a fast hippocampal recognition system in humans using intracerebral evoked potentials

**Dr. Víctor J. López-madrona**<sup>1</sup>, Prof. Agnès Trébuchon<sup>2,3</sup>, Dr. Andrei Barborica<sup>4</sup>, Dr. Serge Vulliémot<sup>5</sup>, Prof. Fabrice Bartolomei<sup>1,2</sup>, Dr. F. Xavier Alario<sup>6</sup>, Dr. Christian G. Bénar<sup>1</sup>

<sup>1</sup>Aix Marseille Univ, INSERM, INS, Inst Neurosci Syst, Marseille, France, <sup>2</sup>APHM, Timone Hospital, Epileptology and cerebral rhythmology, Marseille, France, <sup>3</sup>APHM, Timone Hospital, Functional and stereotactic neurosurgery, Marseille, France, <sup>4</sup>Physics Department, University of Bucharest, Bucharest, Romania, <sup>5</sup>EEG and Epilepsy Unit, University Hospitals and Faculty of Medicine, Geneva, Switzerland, <sup>6</sup>Aix-Marseille Université, CNRS, LPC, Marseille, France

PS4-39

## Chronic sensory deprivation alters cortical rhythms in the somatosensory cortex

**Ms. Marta Zaforas**<sup>1</sup>, Ms. Elena Alonso-Calviño<sup>1</sup>, Ms. Elena Fernández-López<sup>1</sup>, Ms. Claudia Miguel-Quesada<sup>1</sup>, Dr. Antonio Oliviero<sup>1</sup>, Dra. Juliana M Rosa<sup>1</sup>, Dr. Juan Aguilar<sup>1</sup>

<sup>1</sup>Hospital Nacional De Paraplégicos, Toledo, Spain



PS4-40

### Investigating the role of auditory cortex on decisions about sound lateralization

**Ms. Ana Mafalda Valente<sup>1</sup>**, Mr. Juan Castiñeiras de Saa<sup>1</sup>, Dr. Alfonso Renart<sup>1</sup>

<sup>1</sup>Champalimaud Research, Lisbon, Portugal

PS4-41

### Interference-based forgetting in a goal-directed spatial navigation task for rodents.

**Ms. Paula Peixoto-Moledo<sup>1</sup>**, MD, PhD Josep Dalmau<sup>1,2,3,4</sup>, PhD Pablo Jercog<sup>1</sup>

<sup>1</sup>Institut d'Investigacions Biomèdiques August Pi i Sunyer, Barcelona, Spain, <sup>2</sup>Hospital Clínic, Department of Neurology, Universitat de Barcelona, Barcelona, Spain, <sup>3</sup>University of Pennsylvania, USA, <sup>4</sup>Institució Catalana de Recerca i Estudis Avançats (ICREA), Barcelona, Spain

PS4-42

### Inhibition in a midbrain circuit controlling instinctive escape decisions

**Oriol Pavón Arocas<sup>1</sup>**, Vanessa Stempel<sup>1</sup>, Sarah Olesen<sup>1</sup>, Tiago Branco<sup>1</sup>

<sup>1</sup>Sainsbury Wellcome Centre, UCL, London, United Kingdom

PS4-43

### Functional analysis of cholinergic neuromodulation of chandelier cells from single-cell to circuit

**Mr. Emilio Martínez-Márquez<sup>1</sup>**, Mr. Santiago Reyes-León<sup>1</sup>, Mrs. Guadalupe Asensio-Gómez<sup>1</sup>, Dr. José Luis Nieto-González<sup>1</sup>, Dr. Pablo García-Junco-Clemente<sup>1</sup>

<sup>1</sup>Instituto de Biomedicina de Sevilla (IBIS)/HUVR/CSIC/Universidad de Sevilla, Sevilla, Spain

PS4-44

### Perceptual decisions results from the accumulation of unpredicted sensory evidence

**Mr. Alexandre Hyafil<sup>1</sup>**, Pau Blanco-Arnau

<sup>1</sup>Centre De Recerca Matemàtica, Bellaterra, Spain

PS4-45

### PSICOICTUS: EVALUATION AND PROGNOSIS OF AFFECTIVE AND COGNITIVE DISORDERS AFTER MINOR STROKE

**Ms. Cristina Pereira<sup>1</sup>**, Ms. Coral Torres-Querol<sup>1</sup>, Dra. Glòria Arqué<sup>1,2</sup>, Dr. Francisco Purroy<sup>1,2,3</sup>

<sup>1</sup>Institut de Recerca Biomèdica de Lleida (IRB Lleida), Lleida, Spain, <sup>2</sup>Universitat de Lleida, Lleida, Spain, <sup>3</sup>Hospital Universitari Arnau de Vilanova de Lleida, Lleida, Spain



PS4-46

**Non-conventional GluN3A expression gates memory formation by limiting synaptic mTOR signaling in juvenile and adult mice****Mr. Óscar Elfa-Zudaire**<sup>1</sup>, Ms. María José Conde-Dusman<sup>1,2,3</sup>, Dr. Luis García-Rabareda<sup>1,4</sup>, Ms. Carmen García-Lira<sup>1</sup>, Prof. Isabel Perez-Otaño<sup>1</sup><sup>1</sup>Instituto de Neurociencias de Alicante, CSIC-UMH, San Juan de Alicante, Spain, <sup>2</sup>Centre for Developmental Neurobiology, Institute of Psychiatry, Psychology and Neuroscience, King's College London, London, United Kingdom, <sup>3</sup>MRC Centre for Neurodevelopmental Disorders, King's College London, London, United Kingdom, <sup>4</sup>Institute of Science and Technology, Klosterneuburg, Austria

PS4-47

**The Hot Brain Hypothesis and a new type of interaction. A research on stress****Mr. Valentin Ionescu**<sup>1</sup><sup>1</sup>Cantemir-vodă National College, Bucharest, Romania

PS4-48

**Stress research and implications for the neuropsychiatric classification of emotion related brain functioning****Mr. Valentin Ionescu**<sup>1</sup><sup>1</sup>Cantemir-vodă National College, Bucharest, Romania

PS4-49

**DREAM protein inhibition as potential treatment against metabolic syndrome and its associated neurologic signs****Mr. Jose Manuel Hernandez Curiel**<sup>1</sup>, Dr. Ángel Manuel Carrión Rodríguez<sup>1</sup><sup>1</sup>Universidad Pablo De Olavide, Seville, España

PS4-50

**Is your gaze your aim? Eye position in reward gambling and the role of orbitofrontal cortex in encoding the value of visually cued offers.****Dr. Demetrio Ferro**<sup>1,2</sup>, Anna Rifé Mata<sup>1,2</sup>, Tyler Cash-Padgett<sup>3</sup>, Maya Z. Wang<sup>3</sup>, Prof. Benjamin Hayden<sup>3</sup>, Prof. Rubén Moreno Bote<sup>1,2</sup><sup>1</sup>Center for Brain and Cognition (CBC), Universitat Pompeu Fabra, 08002 Barcelona, Spain, <sup>2</sup>Engineering Department of Information and Communication Technologies (ETIC), Universitat Pompeu Fabra, 08002 Barcelona, Spain, <sup>3</sup>Department of Neuroscience, Center for Magnetic Resonance Research, Center for Neuroengineering, University of Minnesota, Minneapolis MN 55455, USA



PS4-51

### Behavioral mechanisms underlying visually-guided control of steering

**Mr. Jorge Ramírez-Ruiz<sup>1</sup>**, PhD Akiyuki Anzai<sup>2</sup>, PhD Jan Drugowitsch<sup>3</sup>, PhD Gregory DeAngelis<sup>2</sup>, PhD Rubén Moreno-Bote<sup>1,4,5</sup>

<sup>1</sup>Center for Brain and Cognition, Department of Information and Communication Technologies, Universitat Pompeu Fabra, Barcelona, Spain, <sup>2</sup>Department of Brain and Cognitive Sciences, Center for Visual Science, University of Rochester, Rochester, United States of America, <sup>3</sup>Department of Neurobiology, Harvard Medical School, Boston, United States of America, <sup>4</sup>Serra Hünter Fellow Programme, Universitat Pompeu Fabra, Barcelona, Spain, <sup>5</sup>Catalan Institution for Research and Advanced Studies–Academia, Barcelona, Spain

PS4-52

### A novel visuospatial working memory task in mice

**Ms. Balma Serrano-Porcar<sup>1</sup>**, Ms. Eva Carrillo<sup>1</sup>, Mr. Rafael Marín<sup>1</sup>, Ms Anna Graell<sup>1</sup>, Ms Tiffany Ona-Jodar<sup>1</sup>, Mr Josep Dalmau<sup>1,2,3</sup>, Mr Albert Compte<sup>1</sup>, Mr Jaime de la Rocha<sup>1</sup>

<sup>1</sup>Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Barcelona, Spain, <sup>2</sup>Hospital Clínic, Barcelona, Spain, <sup>3</sup>ICREA, Barcelona, Spain

PS4-53

### Mechanisms of post-stroke cognitive impairment: hippocampal involvement

Ms. Cristina Torres-López<sup>1,2,3</sup>, Dr Juan De la Parra<sup>5</sup>, **Dr Maria Isabel Cuartero<sup>1,2,3</sup>**, Dr Alicia García-Culebras<sup>1,2,3</sup>, Ms Tania Jareño-Flores<sup>1,2</sup>, Dr Marina Benito<sup>6</sup>, Dr David Castejón<sup>2,4</sup>, Dr Encarnación Fernández-Valle<sup>2,4</sup>, Dr Juan Manuel García-Segura<sup>2,4</sup>, Dr Ignacio Lizasoain<sup>2,3,7</sup>, Dr María Ángeles Moro<sup>1,2,3,7</sup>

<sup>1</sup>Centro Nacional de Investigaciones Cardiovasculares Carlos III (CNIC), Madrid, Spain, <sup>2</sup>Universidad Complutense de Madrid (UCM), Madrid, Spain, <sup>3</sup>Instituto Universitario de Investigación en Neuroquímica (IUIN), Universidad Complutense de Madrid (UCM), Madrid, Spain, <sup>4</sup>Facultad de Ciencias Químicas, Universidad Complutense de Madrid (UCM), Madrid, Spain, <sup>5</sup>GW Pharmaceuticals, Madrid, Spain, <sup>6</sup>Hospital Nacional de Paraplégicos de Toledo, Toledo, Spain, <sup>7</sup>Instituto de Investigación Hospital 12 de Octubre (i+12), Madrid, Spain

PS4-54

### A role of 14-3-3ζ in transformation of labile short-term object recognition memory into stable long-term memory

Dr. Irene Navarro-Lobato<sup>1</sup>, Dr. Mariam Masmudi-Martín<sup>1</sup>, Ms. Maria del Rosario Gonzalez-Bermudez<sup>1</sup>, Ms. Marta Carretero-Rey<sup>1</sup>, **Dr. Zafar U. Khan<sup>1</sup>**

<sup>1</sup>University of Malaga, Malaga, Spain

PS4-55

### Role of the galanin N- terminal fragment (1-15) in the mesolimbic dopaminergic system



**Ms. Noelia Cantero García<sup>1</sup>**, Dr Antonio Flores Burgess<sup>1</sup>, Franciso Allén<sup>2</sup>, Laura Orio<sup>2</sup>, Antonia Serrano<sup>3</sup>, Ms Laura García Durán<sup>1</sup>, Kjell Fuxe<sup>4</sup>, José Ángel Narváez<sup>1</sup>, Luis Santín<sup>5</sup>, Zaida Díaz Cabiale<sup>1</sup>, Carmelo Millón<sup>1</sup>

<sup>1</sup>Facultad de Medicina, Universidad de Málaga, Málaga, Spain, <sup>2</sup>Universidad Complutense de Madrid, Madrid, Spain, <sup>3</sup>Unidad de Gestión Clínica de Salud Mental e Instituto de Investigación Biomédica de Málaga, Málaga, Spain, <sup>4</sup>Karolinska Institute, Stockholm, Sweden, <sup>5</sup>Facultad de Psicología, Universidad de Málaga, Málaga, España

PS4-56

### EPILEPTIC SEIZURE PREDICTION WITH A LSTM NETWORK

**Mr. Ángel Canal-Alonso<sup>1,2</sup>**, Dr. Roberto Casado-Vara<sup>1</sup>, Dr. Javier Prieto<sup>1,2</sup>, Prof. Juan Manuel Corchado<sup>1,3,4,5</sup>

<sup>1</sup>BISITE Research Group, University of Salamanca, Salamanca, Spain, <sup>2</sup>Institute for Biomedical Research of Salamanca, Salamanca, Spain, <sup>3</sup>Air Institute, IoT Digital Innovation Hub, Carbajosa de la Sagrada, Spain, <sup>4</sup>Department of electronics, Information and Communication, Faculty of Engineering, Osaka Institute of Technology, Osaka, Japan, <sup>5</sup>Pust Komputeran dan Informatik Universiti Malaysia Kelantan, Kelantan, Malaysia

PS4-57

### Bump attractor dynamics underlying stimulus integration in perceptual estimation tasks

**Dr. Jose M. Esnaola-Acebes<sup>1,2</sup>**, Dr. Alex Roxin<sup>1,2</sup>, Dr. Klaus Wimmer<sup>1,2</sup>

<sup>1</sup>Centre de Recerca Matemàtica (CRM), Bellaterra (Barcelona), Spain, <sup>2</sup>Barcelona Graduate School of Mathematics (BGSMath), Bellaterra (Barcelona), Spain

PS4-58

### The inverse problem in intracerebral field potentials: a reappraisal of volume-conducted and local field potentials.

**Ms. Sara Hernández-Recio<sup>1</sup>**, Dr. Daniel Torres<sup>1</sup>, Dr. Julia Makarova<sup>1</sup>, Dr. Oscar Herreras<sup>1</sup>

<sup>1</sup>Cajal Institute, Madrid, Spain

PS4-59

### STRIATUM-ENRICHED TRANSCRIPTION FACTOR FOXP2 AMELIORATES EARLY PSYCHIATRIC-LIKE DISTURBANCES AND MOLECULAR ALTERATIONS IN HUNTINGTON'S DISEASE

**Ms. Ened Rodríguez Urgellés<sup>1,2,3</sup>**, Mr. Ignacio del Castillo<sup>1,2,3</sup>, Dr Albert Giralte<sup>1,2,3</sup>, Dr Jordi Alberch<sup>1,2,3</sup>

<sup>1</sup>University Of Barcelona, Barcelona, Spain, <sup>2</sup>Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Barcelona, Spain, <sup>3</sup>Centro de Investigación Biomédica en Red sobre Enfermedades Neurodegenerativas (CIBERNED), Spain

PS4-60

### Parvalbumin interneurons and perineuronal nets in the hippocampus and retrosplenial cortex of a murine double hit model for schizophrenia

**Ms. Patrycja Klimczak<sup>1</sup>**, Ms. Yaiza Gramuntell<sup>1</sup>, Ms. Arianna Rizzo<sup>1</sup>, Mr. Marc Beltran<sup>1</sup>, Ms. Aitana Vazquez<sup>1</sup>, Prof. Juan Nacher<sup>1,2,3</sup>



<sup>1</sup>Institute of Biotechnology and Biomedicine (BIOTECMED), Universitat de València, Valencia, Spain, <sup>2</sup>CIBERSAM: Spanish National Network for Research in Mental Health, , Spain, <sup>3</sup>Fundación Investigación Hospital Clínico de Valencia, INCLIVA, Valencia, Spain

PS4-61

### Thalamus reticular nucleus alterations in response to peripubertal stress in female and male mice

**Ms. Júlía Alcaide<sup>1</sup>**, Dr. Clara Bueno-Fernandez<sup>1</sup>, Dr. Marta Perez-Rando<sup>1</sup>, Dr. Esther Castillo-Gómez<sup>2,3</sup>, Ms. Yaiza Gramuntell<sup>1</sup>, Mr. Marc Beltran<sup>1</sup>, Prof. Juan Nacher<sup>1,3,4</sup>

<sup>1</sup>Institute of Biotechnology and Biomedicine (BIOTECMED), Universitat de València, València, Spain, <sup>2</sup>School of Medical Sciences, Universitat Jaume I, València, Spain, <sup>3</sup>CIBERSAM: Spanish National Network for Research in Mental Health, València, Spain, <sup>4</sup>Fundación Investigación Hospital Clínico de Valencia, INCLIVA, ,

PS4-62

### THE EFFECT OF NEUROTROPHIC FACTORS ON THE CEREBELLAR DESTRUCTURATION ASSOCIATED WITH AUTISM SPECTRUM DISORDERS

**Laura Pérez-Revuelta<sup>1,2,3</sup>**, Ester Pérez-Martín<sup>1,2,3</sup>, Pablo González Téllez de Meneses<sup>1,2,3</sup>, Dr. Eduardo Weruaga Prieto<sup>1,2,3</sup>, Dr. José Ramón Alonso Peña<sup>1,2,3</sup>, Dr. David Díaz López<sup>1,2,3</sup>

<sup>1</sup>University of Salamanca, Salamanca, Spain, <sup>2</sup>INCYL, Institute for Neuroscience of Castilla y León, Salamanca, Spain, <sup>3</sup>IBSAL, Institute of Biomedical Research of Salamanca, Salamanca, Spain

PS4-63

### DETECTION OF BACTERIAL LIPOPOLYSACCHARIDE AND TRANSPORT MECHANISMS IN THE PREFRONTAL CORTEX OF ALCOHOL BINGE DRINKING-EXPOSED RATS

**Ms. Leticia López-Valencia<sup>1</sup>**, Ms. Berta Escudero<sup>1</sup>, Ms. Marta Moya<sup>1</sup>, Prof. Laura Orio<sup>1</sup>

<sup>1</sup>Facultad de Psicología, Universidad Complutense Madrid, Madrid, Spain

PS4-64

### UPREGULATION OF TLR4 SIGNALLING PATHWAY AND BEHAVIORAL DISINHIBITION IN WERNICKE-KORSAKOFF SYNDROME: EVIDENCE FROM AN ANIMAL MODEL AND HUMAN POST-MORTEM TISSUE

**Ms. Marta Moya<sup>1</sup>**, Ms. Berta Escudero<sup>1</sup>, Ms. Leticia López-Valencia<sup>1</sup>, Dr. Carmen Guerrero<sup>4</sup>, Ms. Elena Gómez Blázquez<sup>4</sup>, Prof. Meritxell López-Gallardo<sup>2</sup>, Prof. Borja García-Bueno<sup>2</sup>, Prof. Eva María Marco<sup>3</sup>, Prof. Laura Orio<sup>1</sup>

<sup>1</sup>Facultad de Psicología, Universidad Complutense Madrid, Madrid, Spain, <sup>2</sup>Facultad de Medicina, Universidad Complutense Madrid, Madrid, Spain, <sup>3</sup>Facultad de Biología, Universidad Complutense Madrid, Madrid, Spain, <sup>4</sup>Biobanco del Hospital Universitario Fundación Alcorcón , Madrid, Spain



PS4-65

**Non-motor symptoms and neuronal alterations in a comorbidity mice model of depression and Parkinson's disease****Mr. Adrian Sanz-Magro**<sup>1,2</sup>, Dr. Noelia Granado<sup>1,2</sup>, Mr. Manuel Márquez-Rivera<sup>1</sup>, Prof. Rosario Moratalla<sup>1,2</sup><sup>1</sup>Instituto Cajal, Consejo Superior de Investigaciones Científicas (CSIC), Madrid, Spain, <sup>2</sup>CIBERNED, Instituto de Salud Carlos III, Madrid, Spain

PS4-66

**A Synthetic Analogue of Pituitary Adenylate Cyclase-Activating Polypeptide (PACAP) Improves Motor and Cognitive Deficits in R6/1 Mouse Model of Huntington's Disease****Ms. Irene Solés-Tarres**<sup>1</sup>, PhD Jérôme Leprince<sup>5</sup>, Ms. Anna Sancho-Balsells<sup>2,3,4</sup>, PhD Albert Giralte<sup>2,3,4</sup>, PhD Jordi Alberch<sup>2,3,4</sup>, PhD David Vaudry<sup>5</sup>, PhD Xavier Xifró<sup>1</sup><sup>1</sup>Universitat de Girona, Girona, Spain, <sup>2</sup>Universitat de Barcelona, Barcelona, Spain, <sup>3</sup>Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Barcelona, Spain, <sup>4</sup>Centro de Investigación Biomédica en Red sobre Enfermedades Neurodegenerativas (CIBERNED), Madrid, Spain, <sup>5</sup>Université de Rouen, Normandie, France

PS4-67

**STEREOLOGICAL ANALYSIS OF NEURONS AND GLIA IN THE SUBICULAR COMPLEX IN ALZHEIMER'S DISEASE****Ms. Veronica Astillero-lopez**<sup>1</sup>, Ms. Sandra Villar-Conde<sup>1</sup>, Ms. Melania Gonzalez-Rodriguez<sup>1</sup>, Dr. Alicia Flores-Cuadrado<sup>1</sup>, Dr. Isabel Ubeda-Banon<sup>1</sup>, Prof. Alino Martinez-Marcos<sup>1</sup>, Dr. Daniel Saiz-Sanchez<sup>1</sup><sup>1</sup>Ciudad Real Medical School/CRIB, University of Castilla-La Mancha, Ciudad Real, Spain

PS4-68

**ROS-INDUCED SP1 REGULATES WRAP53 LEVELS AND NUCLEAR ACCUMULATION LEADING TO NEUROPROTECTION AFTER ISCHEMIA****Ms. Sandra Martínez-peralta**<sup>1,2</sup>, Irene Sánchez-Morán<sup>2</sup>, Cristina Rodríguez<sup>1,2</sup>, Ángeles Almeida<sup>1,2</sup><sup>1</sup>Institute of Biomedical Research of Salamanca (IBSAL), University Hospital of Salamanca, University of Salamanca, CSIC, Salamanca, Spain, <sup>2</sup>Institute of Functional Biology and Genomics (IBFG), CSIC, University of Salamanca, Salamanca, Spain

PS4-69

**THE VPA MURINE MODEL OF AUTISM: DIFFICULTIES AND ACHIEVEMENTS RELATED TO ITS OBTAINMENT AND ANALYSIS****Valeria Lorena Cabedo Navarro**<sup>1,2,3</sup>, Carlos Hernández-Pérez<sup>1,2,3</sup>, Pablo González Téllez de Meneses<sup>1,2,3</sup>, Dr. Eduardo Weruaga Prieto<sup>1,2,3</sup>, Dr. David Díaz López<sup>1,2,3</sup>, Dr. José Ramón Alonso Peña<sup>1,2,3</sup><sup>1</sup>University of Salamanca, Salamanca, Spain, <sup>2</sup>INCyL, Institute for Neuroscience of Castilla y León, Salamanca, Spain, <sup>3</sup>IBSAL, Institute of Biomedical Research of Salamanca, Salamanca, Spain



PS4-70

## Immature oligodendrocytes with R-Ras1 and R-Ras2 deficiency produce axonal degeneration

**PhD student Berta Alcover-Sanchez<sup>1</sup>**, Master student Gonzalo Garcia-Martin<sup>1</sup>, Master student Juan Escudero-Ramirez<sup>1</sup>, PhD Carolina Gonzalez-Riano<sup>2</sup>, Paz Lorenzo<sup>2</sup>, Dr. Alfredo Gimenez-Cassina<sup>1</sup>, Dr. Laura Formentini<sup>1</sup>, Dr. Pedro de la Villa-Polo<sup>3,4</sup>, Dr. Marta Pereira<sup>1</sup>, Dr. Francisco Wandosell<sup>1</sup>, **Dr. Beatriz Cubelos<sup>1</sup>**

<sup>1</sup>Universidad Autónoma de Madrid -CBMSO-CSIC, Madrid, Spain, <sup>2</sup>CEMBIO-CEU, Madrid, Spain, <sup>3</sup>Universidad de Alcalá, Madrid, Spain, <sup>4</sup>IRYCIS, Madrid, Spain

PS4-71

## Inflammation And Autophagy In Glycogen-Induced Neurodegeneration

**Dr. Jordi Duran<sup>1,2,3,7</sup>**, Dr. Pasquale Pellegrini<sup>1</sup>, Dr. Arnau Hervera<sup>3,4,5,6</sup>, Dr. Olga Varea<sup>1</sup>, Dr. Iliana López-Soldado<sup>1</sup>, Prof. Jose Antonio del Río<sup>3,4,5,6</sup>, Prof. Joan J. Guinovart<sup>1,2,5</sup>

<sup>1</sup>Institute for Research in Biomedicine (IRB Barcelona), The Barcelona Institute of Science and Technology, Barcelona, Spain, <sup>2</sup>Centro de Investigación Biomédica en Red de Diabetes y Enfermedades Metabólicas Asociadas (CIBERDEM), Madrid, Spain, <sup>3</sup>Institute for Bioengineering of Catalonia (IBEC), The Barcelona Institute of Science and Technology, Barcelona, Spain, <sup>4</sup>Centro de Investigación Biomédica en Red sobre Enfermedades Neurodegenerativas (CIBERNED), Madrid, Spain, <sup>5</sup>Universitat de Barcelona, Barcelona, Spain, <sup>6</sup>Institute of Neurosciences, University of Barcelona, Barcelona, Spain, <sup>7</sup>Universitat Ramon Llull, Institut Químic de Sarrià (IQS), Barcelona, Spain

PS4-72

## Age-dependent multisystem parkinsonian features in a novel neuromelanin-producing transgenic mouse model

**Ms. Nuria Peñuelas<sup>1</sup>**, Dr Ariadna Laguna<sup>1</sup>, Dr Marta Gonzalez-Sepulveda<sup>1</sup>, Mr Lluís Miquel-Rio<sup>2</sup>, Dr Helena Xicoy<sup>1</sup>, Mr Joan Compte<sup>1</sup>, Ms Alba Nicolau<sup>1</sup>, Ms Marina Lorente-Picón<sup>1</sup>, Mr Jordi Romero-Giménez<sup>1</sup>, Ms Annabelle Parent<sup>1</sup>, Dr Thais Cuadros<sup>1</sup>, Dr Analía Bortolozzi<sup>2</sup>, Dr Iria Carballo-Carbajal, Dr Miquel Vila<sup>1,3,4</sup>

<sup>1</sup>Vall d'Hebron Research Institute (VHIR)–Center for Networked Biomedical Research on Neurodegenerative Diseases (CIBERNED), Barcelona, Spain, <sup>2</sup>IIBB–CSIC, August Pi i Sunyer Biomedical Research Institute (IDIBAPS)–Center for Networked Biomedical Research on Mental Health (CIBERSAM), Barcelona, Spain, <sup>3</sup>Autonomous University of Barcelona (UAB), Barcelona, Spain, <sup>4</sup>Catalan Institution for Research and Advanced Studies (ICREA), Barcelona, Spain

PS4-73

## DIAZEPAM ADMINISTRATION IN THE INTRAHIPPOCAMPAL KAINIC ACID ANIMAL MODEL OF EPILEPSY RESCUE BRAIN FDG-PET HYPOMETABOLISM IMAGING

**Ms. Nira Hernández<sup>1</sup>**, Ms. María Gómez<sup>1</sup>, Mr. Guillermo Santamaría<sup>2</sup>, Mr. Rubén Fernández<sup>1</sup>, Dr. Luis García<sup>1,3</sup>, Dr. Mercedes Delgado<sup>1</sup>, Dr. Francisca Gómez<sup>1</sup>, Dr. Eduardo Martín<sup>4</sup>, Prof. Miguel Ángel Pozo<sup>1,3</sup>

<sup>1</sup>Instituto Pluridisciplinar, Universidad Complutense De Madrid, Madrid, Spain, <sup>2</sup>Instituto de Investigación Sanitaria, Fundación Jiménez Díaz, Madrid, Spain, <sup>3</sup>Instituto de Investigación Sanitaria San Carlos (IdISCC), Madrid, Spain, <sup>4</sup>Instituto Cajal, , Spain



PS4-74

**Activation of SGK1.1 up-regulates the M-current in presence of epilepsy mutations****Ms Elva Martin-Batista**<sup>1,2</sup>, Mr Rian Manville<sup>3</sup>, Mr David Bartolome-Martin<sup>1,2</sup>, Ms Belinda Rivero<sup>1,2</sup>, Mr Geoffrey Abbott<sup>3</sup>, Mr Diego Alvarez de la Rosa<sup>1,2</sup>, Ms Teresa Giraldez<sup>1,2</sup><sup>1</sup>University of La Laguna, San Cristóbal de la Laguna, Spain, <sup>2</sup>Institute of Biomedical Technologies, San Cristóbal de la Laguna, Spain, <sup>3</sup>University of California, Irvine, Irvine, United States

PS4-76

**Role of the NMDAR-NR2B subunits in the function of supramolecular NMDAR-BK complexes.****Ms. Rebeca Martínez-Lazaro**<sup>1,2</sup>, Dr. David Bartolome-Martin<sup>1,2</sup>, Dr. Ricardo Gomez<sup>1,2</sup>, Dr. Teresa Giraldez<sup>1,2</sup><sup>1</sup>University of La Laguna, San Cristóbal de la Laguna, España, <sup>2</sup>Institute of Biomedical Technologies, San Cristóbal de la Laguna, España

PS4-77

**FAIM-L as a modulator of Tau-pathology in Alzheimer's disease and other tauopathies****Raquel Badillos-Rodríguez**<sup>1,2,4</sup>, Carlos Soto<sup>2,4</sup>, Dr. Carles A. Saura<sup>2,4</sup>, Dr. Albert Giralte<sup>3,4</sup>, Dr. Jordi Alberch<sup>3,4</sup>, Dr. Montse Solé<sup>1,2,4</sup>, Dr. Joan X. Comella<sup>1,2,4</sup><sup>1</sup>Vall d'Hebron Institute of Research (VHIR), Barcelona, Spain, <sup>2</sup>Facultat de Medicina, Universitat Autònoma de Barcelona (UAB), Bellaterra, Spain, <sup>3</sup>Facultat de Medicina, Universitat de Barcelona (UB), Barcelona, Spain, <sup>4</sup>Centro de Investigación Biomédica en Red de Enfermedades Neurodegenerativas (CIBERNED), ISCIII, Madrid, Spain

PS4-78

**The overexpression of NRG1-type III does not ameliorate ALS clinical outcome in hSOD1G93A mouse model.****Dr. Sara Hernandez**<sup>1</sup>, Dr. Anna Casanovas<sup>1</sup>, Ms. Sara Salvany<sup>1</sup>, Dr. Olga Tarabal<sup>1</sup>, Ms. Alba Blasco<sup>1</sup>, Ms. Alaó Gatiús<sup>1</sup>, Ms. Silvia Gras<sup>1</sup>, Ms. Lidia Piedrafita<sup>1</sup>, Dr. Markus Schwab<sup>2</sup>, Dr. Jordi Calderó<sup>1</sup>, Dr. Josep Esquerda<sup>1</sup><sup>1</sup>Universitat De Lleida, Lleida, Spain, <sup>2</sup>Hannover Medical School, Hannover, Germany

PS4-79

**Generation and characterization of human pluripotent stem cell (hPSC)-derived astrocytes to model Alzheimer's disease.****Ms. María Alfonso Triguero**<sup>1,2</sup>, **Mr. Joan Cruz Sesé**<sup>1,2</sup>, Ms Nuria Galbis Gramage<sup>1</sup>, Ms Isabel Jiménez Ridruejo<sup>1</sup>, Dr. Elena Alberdi Alfonso<sup>1,2,3</sup>, Dr. Amaia Arranz Mendiguren<sup>1,4</sup><sup>1</sup>Achucarro Basque Center For Neuroscience, Leioa, Spain, <sup>2</sup>Universidad del País Vasco (UPV/EHU), Leioa, Spain, <sup>3</sup>Centro de Investigación Biomédica en Red de Enfermedades Neurodegenerativas (CIBERNED), Leioa, Spain, <sup>4</sup>Ikerbasque Basque Foundation for Science, Bilbao, Spain



PS4-80

### Three-dimensional synaptic organization of hippocampal CA1 stratum lacunosum-moleculare in Alzheimer's disease

**Dr. Marta Montero Crespo<sup>1,2</sup>**, Prof. Javier De Felipe Oroquieta<sup>1,2,3</sup>, Dr. Lidia Blázquez Llorca<sup>1,2,4</sup>

<sup>1</sup>Centro De Investigación Biomédica en Red (CIBERNED), Madrid, Spain, <sup>2</sup>Centro de Tecnología Biomédica (CTB), Universidad Politécnica de Madrid (UPM), Madrid, Spain, <sup>3</sup>Instituto Cajal, Spanish National Research Council (CSIC), Spain, <sup>4</sup>Facultad de Veterinaria, Universidad Complutense de Madrid (UCM), Spain

PS4-81

### The Gut-Brain Axis in a novel humanized transgenic mouse model for Parkinson's disease and brain aging

**Ms. Marina Lorente Picón<sup>1</sup>**, Dr. Miquel Vila<sup>1,2,3</sup>, Dra. Ariadna Laguna<sup>1</sup>

<sup>1</sup>Vall d'Hebron Research Institute (VHIR)–Center for Networked Biomedical Research on Neurodegenerative Diseases (CIBERNED), Barcelona, Spain, <sup>2</sup>Autonomous University of Barcelona, Barcelona, Spain, <sup>3</sup>Catalan Institution for Research and Advanced Studies (ICREA), Barcelona, Spain

PS4-82

### Purification and characterization of hPSC-derived striatal progenitor subpopulations for transplantation in Huntington's Disease

**Mr. Francisco J Molina Ruiz<sup>1,2,3,4,5</sup>**, Dr. Phil Sanders<sup>1,2,3,4,5</sup>, Ms. Cinta Gomis López<sup>1,2,3,4,5</sup>, Ms. Georgina Bombau Martínez<sup>1,2,3,4,5</sup>, Ms. Mireia Galofré Centelles<sup>1,2,3,4,5</sup>, Ms. Sílvia Artigas Fernández<sup>1,2,3,4,5</sup>, Ms. Clelia Introna<sup>1,2,3,4,5</sup>, Ms. Verónica Monforte Pizarro<sup>1,2,3,4,5</sup>, Dr. Josep M Canals Coll<sup>1,2,3,4,5</sup>

<sup>1</sup>Laboratory of Stem Cells and Regenerative Medicine, Department of Biomedical Sciences, Barcelona, Spain, <sup>2</sup>Creation-Production and Validation Center of Advanced Therapies, Faculty of Medicine and Health Sciences, Barcelona, Spain, <sup>3</sup>Institute of Neurosciences, University of Barcelona, Barcelona, Spain, <sup>4</sup>IDIBAPS, Barcelona, Spain, <sup>5</sup>CIBERNED, Barcelona, Spain

PS4-83

### Unravelling the distribution and function of the lipid transfer protein VPS13A in the brain to understand chorea acanthocytosis pathology

**Ms. Esther García-García<sup>1,2,3</sup>**, Ms. Nerea Chaparro-Cabanillas<sup>1,2,3</sup>, Mr. Albert Coll-Manzano<sup>1,2,3</sup>, Ms. Maria Carreras-Caballé<sup>1,2,3</sup>, Dr. Albert Giral<sup>1,2,3</sup>, Dr. Daniel del Toro<sup>1,2,3</sup>, Dr. Mercè Masana<sup>1,2,3</sup>, Dr. Jordi Alberch<sup>1,2,3</sup>, Dr. Manuel José Rodríguez<sup>1,2,3</sup>

<sup>1</sup>Institute of Neurosciences, School of Medicine and Health Sciences, Universitat de Barcelona, Barcelona, Spain, <sup>2</sup>Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Barcelona, Spain, <sup>3</sup>Centro de Investigación Biomédica en Red de Enfermedades Neurodegenerativas (CIBERNED), Madrid, Spain

PS4-85

### CHRONICALLY INCREASING CORTICOSTRIATAL ACTIVITY PRODUCES STRIATAL ASTROCYTOSIS IN MICE



**PhD Desire Humanes<sup>1</sup>**, PhD student Jesús Pardo-Valencia<sup>1,2</sup>, PhD student Miryam Moreno-Gómez<sup>1</sup>, Noelia Mercado-García<sup>1</sup>, Beatriz Pro-Sánchez<sup>1</sup>, Ana Revuelto-González<sup>1,3</sup>, PhD Tiziano Balzano<sup>1</sup>, PhD Javier Blesa<sup>1,4</sup>, Dr. José A. Obeso<sup>1,4,5</sup>, PhD Guglielmo Foffani<sup>1,4,6</sup>

<sup>1</sup>HM CINAC (Centro Integral de Neurociencias Abarca Campal), Hospital Universitario HM Puerta del Sur, HM Hospitales, Madrid, Spain, <sup>2</sup>Universidad Politécnica de Madrid, Madrid, Spain, <sup>3</sup>Universidad Complutense de Madrid, Madrid, Spain, <sup>4</sup>CIBERNED, Instituto Carlos III, Madrid, Spain, <sup>5</sup>Universidad CEU-San Pablo, Madrid, Spain, <sup>6</sup>Hospital Nacional de Parapléjicos, SESCAM, Toledo, Spain

PS4-86

### IGF-I MITIGATES POST-TRAUMATIC STRESS THROUGH OREXIN NEURONS

**Ms. M. E. Fernández de Sevilla<sup>1,2</sup>**, Dr Jaime Pignatelli<sup>1,2</sup>, Mr J. A. Zegarra-Valdivia<sup>1,2,3</sup>, Dr Pablo Mendez<sup>1</sup>, Dr Ángel Nuñez<sup>4</sup>, Dr Ignacio Torres-Aleman<sup>1,2,3</sup>

<sup>1</sup>Cajal Institute, Madrid, Spain, <sup>2</sup>Ciberred, Spain, <sup>3</sup>Achucarro Basque Neuroscience Center, Leioa, <sup>4</sup>University Autonomo of Madrid, Madrid, Spain

PS4-87

### Estradiol Regulates PSA-NCAM Expression and Connectivity of O-LM Interneurons in The Hippocampus of Adult Female Mice

**Dr. Marta Perez-Rando<sup>1</sup>**, Dr. Ramon Guirado<sup>1</sup>, Dr. Hector Carceller<sup>1</sup>, Dr. Juan Nacher<sup>1</sup>

<sup>1</sup>Neurobiology Unit, University Of Valencia, Valencia, Spain

PS4-88

### DISENTANGLING MICROGLIA AND ASTROCYTES ACTIVATION AND NEURODEGENERATION NON-INVASIVELY USING DIFFUSION MRI

Mr. Antonio Cerdán-Cerdá<sup>1</sup>, **Ms. Raquel Garcia-Hernandez<sup>1</sup>**, Mr. Alejandro Trouve-Carpena<sup>1</sup>, Mr. Santiago Canals<sup>1</sup>, Ms. Silvia De Santis<sup>1,2</sup>

<sup>1</sup>Instituto de Neurociencias de Alicante, CSIC/UMH, Alicante, Spain, <sup>2</sup>CUBRIC, School of Psychology, Cardiff University, Cardiff, UK

PS4-89

### Transcranial static magnetic stimulation over visual cortex of healthy subjects

**Ms. Marta Zaforas<sup>1</sup>**, Dr Vanesa Soto-León<sup>1</sup>, Dr Antonio Oliviero<sup>1</sup>

<sup>1</sup>Hospital Nacional De Parapléjicos, SESCAM, Toledo, Spain

PS4-90

### Immunoselective nanopheresis of A $\beta$ in cerebrospinal fluid as a treatment for Alzheimer's disease

**Ms. María Almudena Coto Vilcapoma<sup>1</sup>**, Mr. Juan Castilla Silgado<sup>1</sup>, Dr Ana Silvia González García<sup>1</sup>, Dr. Víctor Vega Martínez<sup>1</sup>, Dr Cristina Tomás Zapico<sup>1,3</sup>, Dr Víctor Manuel de la Prida Pidal<sup>1</sup>, Dr Manuel Menéndez González<sup>2,3</sup>



<sup>1</sup>Universidad de Oviedo, Oviedo, Spain, <sup>2</sup>Hospital Universitario Central de Asturias, Oviedo, Spain, <sup>3</sup>Instituto para la Investigación Sanitaria del Principado de Asturias, Oviedo, España

PS4-91

## Adjusting and validating a procedure for parenteral anaesthesia in neonatal mice

**Sandra Sanahuja-Irene<sup>1</sup>**, Rafael Gotteris-Cerisuelo<sup>1</sup>, Maria Jose Sanchez-Catalan<sup>1</sup>, Fernando Martinez-Garcia<sup>1</sup>  
<sup>1</sup>Universitat Jaume I, Castelló De La Plana, Spain

PS4-92

## IMPROVING THE EFFICIENCY OF HUMAN BRAIN ORGANOID GENERATION FROM PLURIPOTENT STEM CELLS

**Ms. Rosa González<sup>1</sup>**, Ms. Raquel Coronel<sup>2</sup>, Dr. Adela Bernabeu-Zornoza<sup>2</sup>, Ms. Andreea Rosca<sup>2</sup>, Ms. Patricia Mateos<sup>2</sup>, Dr. Victoria López<sup>1</sup>, Dr. Isabel Liste<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), Instituto De Salud Carlos III, Madrid, Spain

PS4-93

## In vivo and in vitro studies reveal a sex-dependent role for the insulin degrading enzyme (IDE) in memory tasks and in microglial cells

**Miriam Corraliza-Gomez<sup>1</sup>**, Teresa Bermejo<sup>1</sup>, Noelia Rodriguez-Iglesias<sup>2,3</sup>, Jorge Valero<sup>4,5</sup>, Diego Sanchez<sup>1</sup>, Eduardo Arranz<sup>1</sup>, Irene Cozar-Castellano<sup>1</sup>, Maria Dolores Ganfornina<sup>1</sup>

<sup>1</sup>Instituto de Biología y Genética Molecular, Universidad de Valladolid-CSIC, Valladolid, Spain, <sup>2</sup>Achucarro Basque Center for Neuroscience, Science Park of the UPV/EHU, Leioa, Spain, <sup>3</sup>Department of Neurosciences, University of the Basque Country, Leioa, Spain, <sup>4</sup>Institute of Neuroscience of Castilla y León – INCyL, University of Salamanca, Salamanca, Spain, <sup>5</sup>Institute for Biomedical Research of Salamanca, Salamanca, Salamanca, Spain

PS4-94

## Apolipoprotein D function in microglial responses to oxidative stress and amyloid beta-triggered damage

Miriam Corraliza-Gomez<sup>1</sup>, Beatriz Bendito-Guilarte<sup>1</sup>, **David Sardonis-Camarero<sup>1</sup>**, Diego Sanchez<sup>1</sup>, Maria Dolores Ganfornina<sup>1</sup>

<sup>1</sup>Instituto de Biología y Genética Molecular, Universidad de Valladolid-CSIC, Valladolid, Spain



PS4-95

**THE NEUROPROTECTIVE LIPOCALIN APOLIPOPROTEIN D INTERACTS WITH  
SPECIFIC SUBTYPES OF DETERGENT-RESISTANT MEMBRANE DOMAINS IN A  
BASIGIN-INDEPENDENT MANNER**

Miriam Corraliza-Gomez<sup>1</sup>, Dr. Manuela del Caño-Espinel<sup>1</sup>, Dr. Diego Sanchez<sup>1</sup>, Dr. Maria D. Ganfornina<sup>1</sup>

<sup>1</sup>*Instituto de Biología y Genética Molecular, University of Valladolid, Valladolid, Spain*



## POSTER SESSION 5 - FRIDAY, 5<sup>TH</sup> NOV. 15:00 - 18:30. Exhibition Hall

PS5-01

Identification of conserved neuron subtypes expressing Otp and Foxg1 in the extended amygdala of a lizard

**Ms. Júlia Freixes<sup>1,2</sup>**, Dr Loreta Medina<sup>1,2</sup>, Dr Ester Desfilis<sup>1,2</sup>

<sup>1</sup>Universitat de Lleida, Lleida, Spain, <sup>2</sup>Lleida's Institute for Biomedical Research-Dr. Pifarré Foundation (IRBLleida), Lleida, Spain

PS5-02

ROLE OF BASAL AUTOPHAGY IN THE REGULATION OF HIPPOCAMPAL NEURAL STEM CELL

**Ms. Isabel Calatayud-Baseiga<sup>1</sup>**, Mr. Jose María Guijarro<sup>1</sup>, Dr. Lucía Casares-Crespo<sup>1</sup>, Dr. Helena Mira<sup>1</sup>

<sup>1</sup>Instituto De Biomedicina De Valencia, Valencia, España

PS5-03

Postnatal refinement of interhemispheric callosal projections: GluN3A-mediated mechanisms

**Dr. Oliver Crawley<sup>1</sup>**, Ana Navarro<sup>1</sup>, Prof. Isabel Pérez-Otaño<sup>1</sup>

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

PS5-04

EFFECTS OF CHLORPYRIFOS ON CELL DEATH AND CELLULAR PHENOTYPIC SPECIFICATION OF HUMAN STEM CELLS

**Ms. Andreea Rosca<sup>1,2</sup>**, Ms. Raquel Coronel<sup>1</sup>, Ms. Rosa González<sup>1,3</sup>, Ms. Patricia Mateos<sup>1</sup>, Dra. López Victoria<sup>3</sup>, Dra. María del Carmen González<sup>4</sup>, Dra. Isabel Liste<sup>1</sup>

<sup>1</sup>Unidad de Regeneración Neural, Unidad Funcional de Investigación de Enfermedades Crónicas (UFIEC), Instituto de Salud Carlos III (ISCIII), Majadahonda, Spain, <sup>2</sup>Universidad de Alcalá, Alcalá de Henares, Spain, <sup>3</sup>Unidad de Biología Computacional, Unidad Funcional de Investigación de Enfermedades Crónicas (UFIEC), Instituto de Salud Carlos III (ISCIII), Majadahonda, Spain, <sup>4</sup>Centro Nacional de Sanidad Ambiental, Instituto de Salud Carlos III (ISCIII), Majadahonda, Spain

PS5-05

APC/C-Cdh1 inhibition promotes hypomyelination during postnatal development

**Ms. Silvia Gomila<sup>1,2</sup>**, Dr. Verónica Bobo-Jiménez<sup>1,2</sup>, Dr. Rebeca Lapresa<sup>1,2</sup>, Dr. Jesús Agulla<sup>1,2</sup>, Dr. Angeles Almeida<sup>1,2</sup>

<sup>1</sup>Instituto de Investigación Biomédica de Salamanca (IBSAL), Hospital Universitario de Salamanca, Salamanca, Spain, <sup>2</sup>Instituto de Biología Funcional y Genómica (IBFG), Universidad de Salamanca, CSIC, Salamanca, Spain



PS5-06

### Amyloid Precursor Protein (APP) regulates cell fate specification in human Neural Stem Cells

**Ms. Raquel Coronel<sup>1,2</sup>**, Ms Andreea Rosca<sup>1</sup>, Ms Rosa González<sup>1,3</sup>, Ms Patricia Mateos<sup>1</sup>, Dra. Victoria López<sup>3</sup>, Dr. Eduardo Arilla-Ferreiro<sup>2</sup>, Dra. Isabel Liste<sup>1</sup>

<sup>1</sup>Unidad de Regeneración Neural, Unidad Funcional de Investigación de Enfermedades Crónicas (UFIEC), Instituto de Salud Carlos III (ISCIII), Majadahonda / Madrid, Spain, <sup>2</sup>Unidad de Neurobioquímica, Departamento Biología de Sistemas, Facultad de Medicina, Universidad de Alcalá, Alcalá de Henares / Madrid, Spain, <sup>3</sup>Unidad de Biología Computacional, Unidad Funcional de Investigación de Enfermedades Crónicas (UFIEC), Instituto de Salud Carlos III (ISCIII), Majadahonda / Madrid, Spain

PS5-07

### EMBRYONIC CANNABINOID CB1 RECEPTOR KNOCKDOWN CONSEQUENCES IN GENE EXPRESSION AND FUNCTIONAL MATURATION OF PYRAMIDAL NEURONS

**Mr. Samuel Simón Sánchez<sup>1,2</sup>**, Ms. Georgia Skrepmpou<sup>3</sup>, PhD Femke den Boon<sup>3</sup>, PhD Daniel García Rincón<sup>1,2</sup>, PhD Juan Paraiso Luna<sup>1,2</sup>, PhD Taco Werkman<sup>3</sup>, Manuel Guzmán<sup>1,2</sup>, Pascal Chameau<sup>3</sup>, Ismael Galve Roperh<sup>1,2</sup>

<sup>1</sup>Universidad Complutense De Madrid, Madrid, Spain, <sup>2</sup>Centro de Investigación Biomédica en Red sobre Enfermedades Neurodegenerativas (CIBERNED), Instituto Ramón y Cajal de Investigación Sanitaria (IRYCIS) e Instituto Universitario de Investigación en Neuroquímica (IUIIN), Madrid, Spain, <sup>3</sup>Swammerdam Institute for Life Sciences, Center for Neuroscience, University of Amsterdam, Amsterdam, The Netherlands

PS5-08

### Proliferative rate and neurogenesis in human Neural Stem Cells are increased by A $\beta$ 40 peptide

Dra. Adela Bernabeu-Zornoza<sup>1</sup>, **Ms Raquel Coronel<sup>1,2</sup>**, Dra. Charlotte Palmer<sup>1</sup>, Ms Rosa González<sup>1,3</sup>, Ms Andreea Rosca<sup>1</sup>, Ms Patricia Mateos<sup>1</sup>, Dra. Victoria López<sup>3</sup>, Dra. Isabel Liste<sup>1</sup>

<sup>1</sup>Unidad de Regeneración Neural, Unidad Funcional de Investigación de Enfermedades Crónicas (UFIEC), Instituto de Salud Carlos III (ISCIII), Majadahonda / Madrid, Spain, <sup>2</sup>Unidad de Neurobioquímica, Departamento Biología de Sistemas, Facultad de Medicina, Universidad de Alcalá, Alcalá de Henares / Madrid, Spain, <sup>3</sup>Unidad de Biología Computacional, Unidad Funcional de Investigación de Enfermedades Crónicas (UFIEC), Instituto de Salud Carlos III (ISCIII), , Spain

PS5-09

### The cellular effect of Shh signaling in oligodendrocyte precursor cells (OPCs) depends on the microenvironment

Dra Sonia Nocera<sup>1</sup>, **Dr. Miguel Marchena<sup>1,2</sup>**, Beatriz Fernández-Gómez<sup>1</sup>, Yolanda Lao<sup>1</sup>, Lidia Sobrino<sup>1,3</sup>, Dr Rafael Lujan<sup>4</sup>, Dr Fernando de Castro<sup>1</sup>

<sup>1</sup>Instituto Cajal, Madrid, Spain, <sup>2</sup>Universidad Europea de Madrid, Villaviciosa de Odón (Madrid), Spain, <sup>3</sup>Universidad Rey Juan Carlos, Madrid, Spain, <sup>4</sup>Universidad de Castilla la Mancha, Albacete, Spain



PS5-10

### Ambra1 regulates cyclin D stability to guard S-phase entry and genomic integrity during neurodevelopment

**Dr. Giacomo Milletti<sup>1</sup>**, Dr. Emiliano Maiani<sup>2</sup>, Dr. Francesca Nazio<sup>1</sup>, Prof. Jiri Bartek<sup>3</sup>, Prof. Francesco Cecconi<sup>1</sup>

<sup>1</sup>Bambino Gesù Children's Hospital, Rome, Holy See [Vatican City State], <sup>2</sup>Cell Stress and Survival Unit, Danish Cancer Research Center, Copenhagen, Denmark, <sup>3</sup>Genome Integrity Unit, Danish Cancer Research Center, Copenhagen, Denmark

PS5-11

### In vivo astrocyte activation modulates spontaneous inhibitory activity during slow wave oscillations in the somatosensory cortex

**Dr. Salvador Herrera-Pérez<sup>1</sup>**, Ms. Claudia Miguel-Quesada<sup>1</sup>, Ms. Marta Zaforas<sup>1</sup>, Ms. Elena Alonso-Calviño<sup>1</sup>, Ms. Elena Fernández-López<sup>1</sup>, Dr. Juan Aguilar<sup>1</sup>, Dra. Juliana M Rosa<sup>1</sup>

<sup>1</sup>Hospital Nacional de Paraplégicos. SESSCAM, Toledo, Spain

PS5-12

### Adaptative myelin plasticity linked to increased neuronal excitability in the somatosensory cortex

**Ms. Claudia Miguel Quesada<sup>1</sup>**, Ms. Alba Fernández-González<sup>1</sup>, Dra. Elvira Brocca<sup>1</sup>, Dr. Alonso Higuero<sup>1</sup>, Ms. Marta Zaforas<sup>1</sup>, Ms. Elena Alonso-Calviño<sup>1</sup>, Ms. Elena Fernández-López<sup>1</sup>, Doctor José Abad<sup>1</sup>, Doctor Juan Aguilar<sup>1</sup>, Dra. Juliana M Rosa<sup>1</sup>

<sup>1</sup>Hospital Nacional De Paraplégicos, Sescam, Toledo, Spain

PS5-13

### Cortical astrocytes exhibit functional heterogeneity to discriminate sensory modalities

**Ms. Claudia Miguel Quesada<sup>1</sup>**, Ms. Marta Zaforas<sup>1</sup>, Doctor Salvador Herrera<sup>1</sup>, Ms. Elena Fernández-López<sup>1</sup>, Ms. Elena Alonso-Calviño<sup>1</sup>, Doctor Juan Aguilar<sup>1</sup>, Dra. Juliana M Rosa<sup>1</sup>

<sup>1</sup>Hospital Nacional De Paraplégicos, Sescam, Toledo, Spain

PS5-14

### Neuron-derived extracellular vesicles enhance synaptic plasticity through RTP801

**Ms. Julia Solana Balaguer<sup>1,2,3</sup>**, Mr. Albert Coll Manzano<sup>1,2,3,4</sup>, Mr. Genís Campoy Campoy<sup>1,2,3</sup>, Dr. Leticia Pérez Sisqués<sup>1,2,3</sup>, Dr. Núria Martín Flores<sup>1,2,3,5</sup>, Dr. Jordi Alberch<sup>1,2,3,4</sup>, Dr. Jordi Soriano<sup>1,6</sup>, Dr. Mercè Masana<sup>1,2,3,4</sup>, Dr. Cristina Malagelada<sup>1,2,3</sup>

<sup>1</sup>Universitat De Barcelona, Barcelona, Spain, <sup>2</sup>Institut de Neurociències, School of Medicine and Health Sciences of the University of Barcelona, Barcelona, Spain, <sup>3</sup>Centro de Investigación Biomédica en Red sobre Enfermedades Neurodegenerativas (CIBERNED), Barcelona, Spain, <sup>4</sup>IDIBAPS-Instituto de Investigaciones Biomédicas August Pi i Sunyer, School of Medicine and Health Sciences of the University of Barcelona, Barcelona, Spain, <sup>5</sup>University College London, London, United Kingdom, <sup>6</sup>Institute of Complex Systems (UBICS), Barcelona, Spain



PS5-15

**Microglial local translation in A $\beta$ -induced pathology****Ms. Josune Imaz<sup>1</sup>**, Maite Blanco<sup>1,2</sup>, Jimena Baleriola<sup>1,2,3</sup><sup>1</sup>Achucarro Basque Center For Neuroscience, Leioa, Spain, <sup>2</sup>University of the Basque Country, Leioa, Spain, <sup>3</sup>IKERBASQUE, Basque Foundation for Science, Bilbao, Spain

PS5-16

**Organization of a Sox2-positive glial cell population in the optic nerve associated with growing fibers in the fish visual system****Dr. Laura DeOliveira-Mello<sup>1</sup>**, Dr. Andreas F. Mack<sup>2</sup>, Dr. Juan Lara<sup>1</sup>, Dr. Rosario Arevalo<sup>1</sup>, Dr. Almudena Velasco<sup>1</sup><sup>1</sup>University of Salamanca, Salamanca, España, <sup>2</sup>University of Tübingen, Tübingen, Germany

PS5-17

**Reactive neural stem cells and aberrant neurogenesis in a neuron-specific model of Dravet Syndrome****Dr. Lorena Ruiz-Clavijo<sup>1,2</sup>**, **Dr. C Alonso<sup>3,4,5</sup>**, Dr Onintza Sagredo<sup>3,4,5</sup>, Dr Juan Manuel Encinas<sup>1,2,6</sup><sup>1</sup>Achucarro Basque Center for Neuroscience, Leioa, Spain, <sup>2</sup>University of the Basque Country (UPV/EHU), Leioa, Spain,<sup>3</sup>Instituto Universitario de Investigación en Neuroquímica, Departamento de Bioquímica y Biología Molecular, Facultad de Medicina, Universidad Complutense, Madrid, Spain, <sup>4</sup>Centro de Investigación Biomédica en Red de Enfermedades Neurodegenerativas (CIBERNED), Madrid, Spain, <sup>5</sup>Instituto Ramón y Cajal de Investigación Sanitaria (IRYCIS), , , ,<sup>6</sup>IKERBASQUE, The Basque Science Foundation, Bilbao, Spain

PS5-18

**Intact induction and presynaptic occlusion of short and long-term potentiation in synaptophysin family knockouts****Mr. Sergio Del Olmo-Cabrera<sup>1</sup>**, **Dr. John Wesseling<sup>1</sup>**<sup>1</sup>Instituto De Neurociencias CSIC-UMH, San Juan de Alicante, Alicante, Spain

PS5-19

**Parallel processing of quickly and slowly mobilized reserve vesicles in hippocampal synapses****Mr. Juan Jose Rodriguez Gotor<sup>1</sup>**, Dr. Kashif Mahfooz<sup>2</sup>, Dr. Mathan K. Raja<sup>3</sup>, Dr. John F. Wesseling<sup>1</sup><sup>1</sup>Instituto de Neurociencias CSIC-UMH, San Juan De Alicante, Alicante, Spain, <sup>2</sup>Dept. of Pharmacology, University of Oxford, , UK, <sup>3</sup>Dept. Neurociencias (CIMA), Universidad de Navarra, Pamplona, Spain



PS5-20

### Galectin-3 impairs gamma oscillations at hippocampal CA3 area ex vivo: A suitable target to counteract the progression of Alzheimer's disease

**Dr. Yuniesky Andrade-Talavera<sup>1,2</sup>**, Dr. Luis Enrique Arroyo-García<sup>2</sup>, Dr. Sara Bachiller<sup>3</sup>, Dr. Antonio Boza-Serrano<sup>3</sup>, Prof. Antonio Rodríguez-Moreno<sup>1</sup>, Prof. Tomas Deierborg<sup>3</sup>, Dr. André Fisahn<sup>2</sup>

<sup>1</sup>Universidad Pablo de Olavide, 41013-Seville, Spain, <sup>2</sup>Karolinska Institutet, Stockholm, Sweden, <sup>3</sup>Lund University, Lund, Sweden

PS5-21

### Differential effects of Paraquat in human and mouse astrocyte's membranes.

**Ms. Laura Sánchez-Sánchez<sup>1,2</sup>**, Dr. Egoitz Astigarraga<sup>1</sup>, Dr. Diego Sánchez Romero<sup>1</sup>, Dra María Dolores Ganfornina<sup>1</sup>, Dr. Gabriel Barreda-Gómez<sup>2</sup>

<sup>1</sup>IBGM Universidad De Valladolid-CSIC, Valladolid, Spain, <sup>2</sup>IMG Pharma Biotech S.L, Derio, Spain

PS5-22

### Role of lysophosphatidic acid receptor LPA1 in use-dependent short-term depression and recovery at excitatory synapses in rat hypoglossal motoneurons

**Ms. Angela Gento-Caro<sup>1</sup>**, Ms Esther Vilches-Herrando<sup>1</sup>, Dr David González-Forero<sup>1</sup>, Dr Bernardo Moreno-López<sup>1</sup>

<sup>1</sup>Área de Fisiología, Facultad de Medicina, Universidad de Cádiz, Cádiz, Spain

PS5-23

### p11 (S100A10) knockdown impacts synaptic strength and use-dependent short-term plasticity at excitatory synapses in rat hypoglossal motoneurons

**Ms. Esther Vilches Herrando<sup>1</sup>**, Ms Isis Gastaldo Jordán<sup>1</sup>, Ms Ángela Gento Caro<sup>1</sup>, Mr Federico Portillo<sup>1</sup>, Mr David González-Forero<sup>1</sup>, Mr Bernardo Moreno López<sup>1</sup>

<sup>1</sup>Área de Fisiología, Facultad de Medicina, Universidad de Cádiz, Cádiz, Spain

PS5-24

### Molecular mechanisms underlying NMDA receptor-BK channel coupling in specific brain regions

**Ms. Andrea Reyes-Carrión<sup>1,2</sup>**, Dr. David Bartolomé-Martín<sup>1,2</sup>, Mr. Alberto J. Gonzalez-Hernandez<sup>1,2</sup>, Dr. Belinda Rivero-Perez<sup>1,2</sup>, Dr. Teresa Giraldez<sup>1,2</sup>

<sup>1</sup>University of La Laguna, San Cristóbal de La Laguna, Spain, <sup>2</sup>Biomedical Technologies Institute, San Cristóbal de La Laguna, Spain



PS5-25

**Dissociation of functional and structural plasticity of dendritic spines during NMDAR and mGluR-dependent long-term synaptic depression in wild-type and fragile X model mice**

**Dr. Miquel Bosch<sup>1,2</sup>**, Dr. Aurore Thomazeau<sup>2,3</sup>, Ms Sofia Essayan-Perez<sup>2</sup>, Dr. Stephanie A. Barnes<sup>2</sup>, Dr. Hector De Jesus-Cortes<sup>2</sup>, Prof. Mark Bear<sup>2</sup>

<sup>1</sup>Universitat Internacional de Catalunya, Sant Cugat del Vallès, Spain, <sup>2</sup>Massachusetts Institute of Technology, Cambridge, USA, <sup>3</sup>The Research Institute of the McGill University Health Centre, Montreal, Canada

PS5-26

**Astrocyte-mediated switch in spike timing dependent plasticity during hippocampal development**

**Mr. Rafael Falcón-Moya<sup>1</sup>**, Mikel Pérez-Rodríguez<sup>1</sup>, Dr. José Prius-Mengual<sup>1</sup>, Dr. Antonio Rodríguez-Moreno<sup>1</sup>

<sup>1</sup>Pablo Olavide University, Seville, Spain

PS5-27

**Adenosine Receptor-Mediated Developmental Loss of Spike Timing-Dependent Depression in Layer 4 to Layer 2/3 synapses of Somatosensory Cortex**

**Mikel Pérez-Rodríguez<sup>1</sup>**, Antonio Rodríguez-Moreno<sup>1</sup>

<sup>1</sup>Laboratorio de Neurociencia Celular y Plasticidad, Departamento de Fisiología, Anatomía y Biología Celular, Universidad Pablo de Olavide, Sevilla, Spain

PS5-28

**Astro-Light: a new tool for modulation of specific astrocytic networks**

Ms. Irene Serra<sup>1</sup>, Ms. Cristina Martín-Monteaudo<sup>1</sup>, **Ms. Laura Delgado<sup>1</sup>**, Dr. Marta Navarrete<sup>1</sup>

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

PS5-29

**The olfactory peduncle in human and nonhuman primates**

**Mr. Raspeño García<sup>1</sup>**, Ms. Aguilar Gomez<sup>1</sup>, Dr. Sancho Bielsa<sup>1</sup>, Ms. Cozar Cuesta<sup>1</sup>, Ms. González Granero<sup>2</sup>, Dr. Artacho Pérula<sup>1</sup>, Dr. Insausti Serrano<sup>1</sup>, Dr. Garcia Verdugo<sup>2</sup>, Dr. De la Rosa Prieto<sup>1</sup>

<sup>1</sup>Castilla La Mancha University, Albacete, Spain, <sup>2</sup>Comparative Neurobiology Laboratory, Cavanilles Institute, Valencia, Spain



PS5-30

### STUDY OF THE DISTRIBUTION OF $\beta$ -TTP AND CALCIUM BINDING PROTEINS IN THE HIPPOCAMPUS OF A MURINE MODEL OF DELAYED AGEING, THE POL $\mu$ MOUSE.

**Mr. Jorge Selva Clemente**<sup>1,3,4</sup>, Dr. Noemí Villaseca González<sup>1,3,4</sup>, Dr. Joaquin González Fuentes<sup>1,3,4</sup>, Dr. Pilar Marcos Rabal<sup>2,3,4</sup>, Dr. Maria del Mar Arroyo Jiménez<sup>1,3,4</sup>

<sup>1</sup>School of Pharmacy, Universidad de Castilla-La Mancha, Albacete, Spain, <sup>2</sup>School of Medicine, Universidad de Castilla-La Mancha, Albacete, Spain, <sup>3</sup>Regional Center for Biomedical Research. University of Castilla-La Mancha, Albacete, Spain, <sup>4</sup>Research Group: Cellular Neuroanatomy and Molecular Chemistry of the Central Nervous System, Albacete, Spain

PS5-31

### Exercise-associated miRNA profile in miR-29a/b1 deficient mouse brain

**Ms. Paola Pinto Hernández**<sup>1</sup>, Ms. Noelia Blanco Agudín<sup>1</sup>, Mr. Manuel Fernández Sanjurjo<sup>1,2</sup>, Mr. Benjamín Fernández García<sup>1,2</sup>, Ms. Cristina Tomás Zapico<sup>1,2</sup>, Mr. Eduardo Iglesias Gutiérrez<sup>1,2</sup>

<sup>1</sup>Department of Functional Biology (Physiology), University of Oviedo, Oviedo, Spain, <sup>2</sup>Health Research Institute of the Principality of Asturias (ISPA), Oviedo, Spain

PS5-32

### PROJECTIONS OF THE RAT MEDIAL SUPERIOR OLIVE

**Mr. Héctor Rincón**<sup>1,2,4</sup>, Mr. Mario Gómez-Martínez<sup>1,3,4</sup>, Dr. Marcelo Gómez<sup>1,3,4</sup>, Prof. Enrique Saldaña<sup>1,3,4</sup>

<sup>1</sup>Instituto De Neurociencias De Castilla Y León, Salamanca, Spain, <sup>2</sup>Universidad Pontificia de Salamanca, Salamanca, Spain, <sup>3</sup>Universidad de Salamanca, Salamanca, España, <sup>4</sup>Institute of Biomedical Research of Salamanca, Salamanca, España

PS5-33

### MORPHOLOGICALLY DISTINCT AFFERENCES TO THE LATERAL SUPERIOR OLIVE

**Mr. Juan Luis Láinez-Meja**<sup>1,3</sup>, Mrs. Débora Díez-Sandoval<sup>1,3</sup>, Dr. Marcelo Gómez-Álvarez<sup>1,2,3</sup>, Prof. Enrique Saldaña<sup>1,2,3</sup>

<sup>1</sup>Neuroscience Institute of Castilla y León (INCYL), Salamanca, Spain, <sup>2</sup>University of Salamanca, Salamanca, Spain, <sup>3</sup>Institute of Biomedical Research of Salamanca (IBSAL), Salamanca, Spain

PS5-34

### Chronic full band recordings with graphene microtransistor neural interfaces for the discrimination of brain states

**Prof. Maria V. Sanchez-Vives**<sup>1,2</sup>, Alessandra Camassa<sup>2</sup>, Eduard Masvidal-Codina<sup>3</sup>, Dr Miquel Bosch<sup>2</sup>, Dr Xavier Illa<sup>3</sup>, Dr Rosa Villa<sup>3</sup>, Prof Jose Garrido<sup>1,4</sup>, Dr. Antón Guimerà-Brunet<sup>3</sup>, Dr. Almudena Barbero-Castillo<sup>2</sup>

<sup>1</sup>ICREA, Barcelona, Spain, <sup>2</sup>IDIBAPS, Barcelona, Spain, <sup>3</sup>CNM-CIBER, Barcelona, Spain, <sup>4</sup>ICN2, Barcelona, Spain



PS5-35

**Distinct hemispherical responsiveness to transcranial static magnetic field stimulation?****Cristina Pagge**<sup>1</sup>, Dr. Guglielmo Foffani<sup>1,2,3</sup>, Dr. Antonio Oliviero<sup>2</sup>, Dr. Claudia Ammann<sup>1</sup><sup>1</sup>HM CINAC, Hospital Universitario HM Puerta del Sur, HM Hospitales, Madrid, Spain, <sup>2</sup>Hospital Nacional de Paraplégicos, Toledo, Spain, <sup>3</sup>CIBERNED, Instituto de Salud Carlos III, Madrid, Spain

PS5-36

**Temporal binding of multisensory steady-state evoked responses**BSc Sara Cacciato<sup>1</sup>, MSc José Ángel Ochoa<sup>1</sup>, PhD Maria Jesús Nicolás<sup>1</sup>, MSc Guillermo Besné<sup>1</sup>, Ferran Capell<sup>1,2</sup>, **PhD Miguel Valencia**<sup>1,3</sup><sup>1</sup>University of Navarra, CIMA, Pamplona, Spain, <sup>2</sup>University of Navarra, School of Medicine, Pamplona, Spain, <sup>3</sup>IdiSNA, Navarra Institute for Health Research, Pamplona, Spain

PS5-37

**M1- muscarinic control of slow oscillations and epileptiform discharges by light****Mr. José Manuel Sánchez Sánchez**<sup>1</sup>, Dr. Fabio Riefole<sup>2</sup>, Dr. Almudena Barbero Castillo<sup>1</sup>, Dr Pau Gorostiza<sup>2,3</sup>, Dr Maria V Sanchez Vives<sup>1,3</sup><sup>1</sup>Instituto De Investigaciones Biomédicas August Pi I Sunyer (idibaps), Barcelona, Spain, <sup>2</sup>Instituto de Bioingeniería de Cataluña (IBEC), Barcelona, Spain, <sup>3</sup>Institución Catalana de Investigación y Estudios Avanzados (ICREA), Barcelona, Spain

PS5-38

**Phenotype Characterization of a Mice Model of Visual Blindness****Mr. SANTIAGO MILLA-NAVARRO**<sup>1</sup>, DR. ROMAN BLANCO<sup>1</sup>, Dr. PEDRO DE LA VILLA<sup>1</sup><sup>1</sup>University of Alcalá, Alcalá de Henares, España

PS5-39

**THE PROJECTION FROM THE INFERIOR COLLICULUS TO THE POSTERIOR INTRALAMINAR NUCLEUS OF THE THALAMUS STUDIED WITH ANTEROGRADE TRACERS**Débora Díez Sandoval<sup>1,2</sup>, Juan Luis Láinez Mejía<sup>1,2</sup>, Dr. Emmanuel Márquez Logorreta<sup>4</sup>, **Prof. Enrique Saldaña**<sup>1,2,3</sup><sup>1</sup>Neuroscience Institute of Castilla y León (INCYL), University of Salamanca, Salamanca, Spain, <sup>2</sup>Institute of Biomedical Research of Salamanca (IBSAL), Salamanca, Salamanca, Spain, <sup>3</sup>Department of Cell Biology and Pathology, University of Salamanca, Salamanca, Spain, <sup>4</sup>Janelia Research Campus, Howard Hughes Medical Institute, Ashburn, USA



PS5-40

**Take care of your babies! Mouse pups produce pheromones that induce maternal behaviour.**

**Rafael Goterris-cerisuelo<sup>1</sup>**, Sandra Sanahuja-Irene<sup>1</sup>, Fernando Martinez-Garcia<sup>1</sup>, Maria José Sánchez-Catalán<sup>1</sup>, Manuela Barneo-Muñoz<sup>1</sup>, Cinta Navarro-Moreno<sup>1</sup>, Leticia Lacalle-Bergeron<sup>1</sup>, Tania Portolés<sup>1</sup>, Joaquín Beltrán<sup>1</sup>, Juan Vicente Sancho<sup>1</sup>

<sup>1</sup>Universitat Jaume I, Castellón, Spain

PS5-41

**Human Brain oscillations and region distribution in two different fatiguing tasks**

**Dr. Vanesa Soto León<sup>1</sup>**, Miss Mabel Torres Llacsa<sup>1</sup>, Mr. Carlos Alonso Bonilla<sup>1</sup>, Dr. Laura Mordillo Mateos<sup>2</sup>, Miss Ana María Onate Figueraz<sup>1</sup>, Miss Marta Záforas Rodríguez<sup>1</sup>, Dr Antonio Oliviero<sup>1</sup>

<sup>1</sup>Hospital Nacional De Paraplégicos, Toledo, Spain, <sup>2</sup>Universidad De Castilla la Mancha, Toledo, Spain

PS5-42

**NAVIGATION TO A VIRTUAL PLATFORM TO EVALUATE ENCODING AND RETRIEVAL OF “EVERYDAY MEMORIES”**

**Mr. Andrés Pérez-Segura<sup>1</sup>**, Mr. Antonio Cerdán-Cerdá<sup>1</sup>, Dr. Santiago Canals<sup>1</sup>

<sup>1</sup>Instituto De Neurociencias Csic-umh, Sant Joan d'Alacant, Spain

PS5-43

**Intraneuronal  $\beta$ -amyloid but not Tau Accumulation Enhances Fear and Anxiety in Alzheimer’s Disease Transgenic Mice**

**Ms. Lola Capilla-López<sup>1</sup>**, Mr Ángel Deprada-Fernández<sup>1</sup>, Dr Arnaldo Parra-Damas<sup>1</sup>, Dr Carlos Alberto Saura<sup>1</sup>

<sup>1</sup>Institut de Neurociències, Centro de Investigación Biomédica en Red Enfermedades Neurodegenerativas (CIBERNED), Universitat Autònoma de Barcelona, Bellaterra, Barcelona, Spain

PS5-44

**Immune receptor TLR4 mediates cognitive deficit induced by high sodium diet**

**Mr. Enrique Fraga<sup>1,2,3,5</sup>**, Dra. Violeta Medina<sup>1,2</sup>, Mr. Diego García-López<sup>1</sup>, Dra. Macarena Hernández-Jiménez<sup>4</sup>, Ms. Sandra Sacristán<sup>1,2</sup>, Mr. Jorge Hernández-Matarazzo<sup>1,2</sup>, Dr. Ignacio Lizasoain<sup>2,3,5</sup>, Dra. María Ángele Moro<sup>1,2,3,5</sup>

<sup>1</sup>Centro Nacional de Investigaciones Cardiovasculares, Madrid, Spain, <sup>2</sup>Facultad de Medicina, Universidad Complutense de Madrid (UCM), Madrid, Spain, <sup>3</sup>Instituto Universitario de Investigación en Neuroquímica (IUIN), Universidad Complutense de Madrid (UCM), Madrid, Spain, <sup>4</sup>Aptatargets SL, Avda. Cardenal Herrera Oría 298, Madrid, Spain, <sup>5</sup>Instituto de Investigación Hospital 12 de Octubre (I+12), Madrid, Spain



PS5-45

## Global hypoperfusion model of bilateral common carotid artery stenosis induces hippocampus-dependent memory deficits

**Mr. Enrique Fraga<sup>1,2,3,4</sup>**, Dra. Violeta Medina<sup>1,2</sup>, Ms Sandra Sacristán<sup>1,2</sup>, Mr. Jorge Hernández-Matarazzo<sup>1,2</sup>, Mr Diego García-López<sup>1</sup>, Dr. Ignacio Lizasoain<sup>2,3,4</sup>, Dra. María Ángeles Moro<sup>1,2,3,4</sup>

<sup>1</sup>Centro Nacional de Investigaciones Cardiovasculares, Madrid, Spain, <sup>2</sup>Facultad de Medicina, Universidad Complutense de Madrid, Madrid, Spain, <sup>3</sup>Instituto Universitario de Investigación en Neuroquímica (IUIN), Universidad Complutense de Madrid, Madrid, Spain, <sup>4</sup>Instituto de Investigación Hospital 12 de Octubre (i+12), Madrid, Spain

PS5-47

## Microglia Regulate Learning and Memory through NF-κB

**Aysha M. Bhojwani-Cabrera<sup>1</sup>**, Carmen M. Navarrón-Izquierdo<sup>1</sup>, María Royo<sup>1</sup>, Sergio Niñerola<sup>1</sup>, Ángel Márquez-Galera<sup>1</sup>, Verónica Murcia-Belmonte<sup>1</sup>, Juan Medrano-Relinque<sup>1</sup>, Eloísa Herrera<sup>1</sup>, Agnès Gruart<sup>2</sup>, Ángel Barco<sup>1</sup>, Sandra Jurado<sup>1</sup>, José M. Delgado-García<sup>2</sup>, José P. López-Atalaya<sup>1</sup>

<sup>1</sup>Instituto de Neurociencias, Universidad Miguel Hernández-Consejo Superior de Investigaciones, Alicante, Spain, <sup>2</sup>División de Neurociencias, Universidad Pablo de Olavide, Sevilla, Spain

PS5-48

## LEARNING CONDITIONS INFLUENCE HIPPOCAMPAL-DEPENDENT MEMORY AND CONTEXT DISCRIMINATION

**Nuria Cano-Adamuz<sup>1</sup>**, César Redondo-Alañón<sup>1</sup>, Pablo Méndez<sup>1</sup>

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

PS5-49

## White matter hyperintensities and cognitive reserve affect working memory status and trajectory: A task-based functional Magnetic Resonance Imaging study

**Mr. Sergio Navarrete-Arroyo<sup>1</sup>**, PhD Lidia Vaqué-Alcázar<sup>1,2</sup>, PhD Roser Sala-Llloch<sup>3</sup>, PhD Kilian Abellaneda-Pérez<sup>1,2</sup>, Nina Coll-Padrós<sup>2,4</sup>, Cinta Valls-Pedret<sup>2,5,6</sup>, Núria Bargalló<sup>2,7</sup>, Emilio Ros<sup>5,6</sup>, PhD David Bartrés-Faz<sup>1,2</sup>

<sup>1</sup>Faculty of Medicine and Health Sciences, Institute of Neurosciences, University of Barcelona, 08036, Barcelona, Spain,

<sup>2</sup>Institute of Biomedical Research August Pi i Sunyer (IDIBAPS), 08036, Barcelona, Spain, <sup>3</sup>Institute of Neurosciences,

University of Barcelona, 08036, Barcelona, Spain, <sup>4</sup>Alzheimer Disease and Other Cognitive Disorders Unit, Neurology

Service, Hospital Clínic, 08036, Barcelona, Spain, <sup>5</sup>Endocrinology and Nutrition Service, Lipid Clinic, Hospital Clínic, 08036,

Barcelona, Spain, <sup>6</sup>Centro de Investigación Biomédica en Red Fisiopatología de La Obesidad Y Nutrición (CIBEROBN),

Instituto de Salud Carlos III (ISCIII), 28029, Madrid, Spain, <sup>7</sup>Centre de Diagnòstic Per La Imatge, Hospital Clínic, 08036,

Barcelona, Spain

PS5-50

## Behavioural characterization of motor and cognitive everyday life habits in Parkinson's disease

**Ms. Pasqualina Guida<sup>1</sup>**, Ms Mariana Monje, Mr Jose Angel Obeso, Mr. Ignacio Obeso



<sup>1</sup>HM CINAC. Centro Integral de Neurociencias AC. HM Hospitales. Fundación de Investigación HM Hospitales. HM Hospitales, Madrid, Spain, <sup>2</sup>PhD Program in Neuroscience, Autonoma de Madrid University, Madrid, Spain, <sup>3</sup>CIBERNED, Madrid, Spain

PS5-51

### Subjective cognitive complaints are related to cognitive dispersion and resting-state networks segregation in a middle-aged healthy population

**Ms. Lúdia Mulet-Pons<sup>1,2</sup>**, PhD Lúdia Vaqué-Alcàzar<sup>1,2</sup>, PhD Cristina Solé-Padullès<sup>1,2</sup>, PhD Kilian Abellana-Pérez<sup>1,2</sup>, PhD Gabriele Cattaneo<sup>3</sup>, PhD Javier Solana Sánchez<sup>3</sup>, Ms. Vanessa Alviarez-Schulze<sup>3,4</sup>, PhD Dídac Macià<sup>4</sup>, Ms. María del Rocío Cabello Toscano<sup>1,2</sup>, PhD Josep Maria Tormos<sup>3</sup>, PhD Álvaro Pascual-Leone<sup>3,5</sup>, PhD David Bartrés-Faz<sup>1,2,3</sup>

<sup>1</sup>Departament de Medicina, Facultat de Medicina i Ciències de la Salut, Institut de Neurociències, Universitat de Barcelona, Barcelona, Spain, <sup>2</sup>Institut de Recerca Biomèdica August Pi i Sunyer, Barcelona, Spain, <sup>3</sup>Institut Guttmann, Institut Universitari de Neurorehabilitació de la UAB, Badalona, Spain, <sup>4</sup>Departament de Biomedicina, Facultat de Medicina i Ciències de la Salut, Universitat de Barcelona, Barcelona, Spain, <sup>5</sup>Hinda and Arthur Marcus Institute for Aging Research, Hebrew SeniorLife, Harvard Medical School, Boston, USA

PS5-52

### Long-term turnover dynamics in area CA1 of hippocampus are consistent with plasticity of non-spatial inputs

**Dr. Federico Devalle<sup>1</sup>**, Dr. Alon Rubin<sup>2</sup>, Dr. Yaniv Ziv<sup>2</sup>, Dr. Alex Roxin<sup>1,3</sup>

<sup>1</sup>Centre De Recerca Matemàtica, Bellaterra (Barcelona), Spain, <sup>2</sup>Weizmann Institute of Science, Rehovot, Israel, <sup>3</sup>Barcelona Graduate School of Mathematics, Barcelona, Spain

PS5-53

### Neural network dynamics underlying the adjustment of temporal evidence weighting in perceptual decisions

**Citlalli Vivar<sup>1</sup>**, Dr. Gabriela Mochol<sup>1</sup>, Dr. Aaron J Levi<sup>2</sup>, Dr. Alexander C Huk<sup>2</sup>, Dr. Klaus Wimmer<sup>1</sup>

<sup>1</sup>Centre De Recerca Matemàtica (CRM), Spain, <sup>2</sup>University of Texas at Austin, Austin, U.S.A.

PS5-54

### Control limitations shape perceptual decision making

**Mr. Juan R. Castifeiras De Saa<sup>1</sup>**, Dr. Alfonso Renart<sup>1</sup>

<sup>1</sup>Champalimaud Research, Lisbon, Portugal

PS5-55

### AhR Deletion Reduces Amyloid Plaque Accumulation and Axonal Dystrophy in the APP KI NL-F Alzheimer's Mouse Model



**Dr. Maribel Cuartero<sup>1</sup>**, Ms. Carmen Nieto Vaquero<sup>1</sup>, Ms. Sandra Vázquez Reyes<sup>1</sup>, Dr. Isabel Bravo Ferrer<sup>2</sup>, Dr. Alicia García Culebras<sup>1</sup>, Mr Javier Castro Millán<sup>1</sup>, Mr Daniel De los Reyes Hélices<sup>1</sup>, Dr. Olivia Hurtado<sup>1</sup>, Dr. María ángeles Moro<sup>1</sup>

<sup>1</sup>Centro Nacional de Investigaciones Cardiovasculares (CNIC), Madrid, Spain, <sup>2</sup>UK Dementia Research Institute, London, UK

PS5-56

### Impact of tauopathies on the functional organization of neuronal cultures

**Ms. Clara Fernández López<sup>1,2</sup>**, Ms. Júlia Sala Jarque<sup>1,3,4,5</sup>, Dra. Vanessa Gil Fernández<sup>1,3,4,5</sup>, Dr. Jose Antonio Del Río Fernández<sup>1,3,4,5</sup>, Dr. Isidre Ferrer Abizanda<sup>6</sup>, Dr. Ernest Giraldo Lledó<sup>1,7</sup>, Dr. Jordi Soriano Fradera<sup>1,2</sup>

<sup>1</sup>Universitat De Barcelona, Barcelona, Spain, <sup>2</sup>Universitat de Barcelona Institute of Complex Systems (UBICS), Barcelona, Spain, <sup>3</sup>Institute for Bioengineering of Catalonia (IBEC), The Barcelona Institute of Science and Technology, Barcelona, Spain, <sup>4</sup>Centro de Investigación Biomédica en Red sobre Enfermedades Neurodegenerativas (CIBERNED), Madrid, Spain, <sup>5</sup>Institute of Neuroscience, University of Barcelona, Barcelona, Spain, <sup>6</sup>Hospital Universitari de Bellvitge, Barcelona, Barcelona, <sup>7</sup>Institute for Research in Biomedicine (IRB), Barcelona, Barcelona

PS5-57

### Neural migration is impaired in the APP/PS1 Alzheimer's mice model due to increase senescence in migrating precursors cells

Mr. Daniel Esteve<sup>1</sup>, **Ms. Artemis Ftara<sup>1</sup>**, Dr. Paloma Monllor<sup>1</sup>, Ms Mariana Nepomuceno<sup>1</sup>, Dr Jose Viña<sup>1</sup>, Dr Ana Lloret<sup>1</sup>

<sup>1</sup>University Of Valencia, Valencia, Spain

PS5-58

### Oxidative damage in middle-aged apolipoprotein E4 carriers

Ms. Mariana Nepomuceno<sup>1</sup>, Dr. Paloma Monllor<sup>1</sup>, **Ms. Artemis Ftara<sup>1</sup>**, Mr Daniel Esteve<sup>1</sup>, Dr Jose Viña<sup>1</sup>, Dr Ana Lloret<sup>1</sup>

<sup>1</sup>University Of Valencia, Valencia, Spain

PS5-59

### Use of fluorophore-conjugated peptides to asses putative targeting to glia of peptide-drug hybrid molecules as a new therapeutic approach for Multiple Sclerosis.

**Dr. Fernando Josa-Prado<sup>1</sup>**, Yara Lackousha<sup>1</sup>, Carlota Tosat-Bitrián<sup>2</sup>, Ignacio Prieto-Mauricio<sup>1</sup>, Óscar Gutiérrez-Jiménez<sup>2</sup>, Dr. Martínez Ana<sup>2</sup>, Dr. Valle Palomo<sup>2</sup>, Dr. Fernando de Castro<sup>1</sup>

<sup>1</sup>Instituto Cajal - CSIC, Madrid, Spain, <sup>2</sup>Centro de Investigaciones Biológicas Margarita Salas - CSIC, Madrid, Madrid



PS5-60

### Male sex bias in Parkinson's disease is linked to an accelerated age-dependent neuromelanin accumulation

**Camille Guillard Sirieix<sup>1</sup>**, Jordi Romero-Giménez<sup>2</sup>, Thais Cuadros<sup>1</sup>, Annabelle Parent<sup>1</sup>, Ariadna Laguna<sup>1</sup>, Miquel Vila<sup>1,2,3</sup>

<sup>1</sup>Vall d'Hebron Research Institute (VHIR)-Center for Networked Biomedical Research on Neurodegenerative Diseases (CIBERNED), Barcelona, Spain, <sup>2</sup>Autonomous University of Barcelona, Cerdanyola del Vallès, Barcelona, Spain, <sup>3</sup>Catalan Institution for Research and Advanced Studies (ICREA), , Spain

PS5-61

### MALDI Imaging in mice brains reveals novel peptides signatures associated to the progression of Alzheimer's disease that can be reversed by ubiquinol

**Mr. Emilio Llanos-González<sup>1</sup>**, Dr. Francisco J. Sancho Bielsa<sup>1</sup>, Dr. Eduardo Chicano<sup>2</sup>, Dr. Gabriel F. Calvo<sup>3</sup>, Mr. David G. Aragonés<sup>3</sup>, Dr. Yoana Rabanal-Ruiz<sup>1</sup>, Dr. Cristina Pedrero-Prieto<sup>1</sup>, Dr. Sonia García-Carpintero<sup>1</sup>, Dr. Javier Frontiñán-Rubio<sup>1</sup>, Dr. Lydia Giménez-Llort<sup>4</sup>, Dr. Juan Ramón Peinado<sup>1</sup>, Dr. Francisco Javier Alcaín<sup>1</sup>, Dr. Mario Durán-Prado<sup>1</sup>

<sup>1</sup>GEON, Faculty of Medicine of Ciudad Real/CRIB, Ciudad Real, Spain, <sup>2</sup>IMIBIC, Proteomic Unit, Maimonides Biomedical Research Institute of Cordoba, Cordoba , Spain, <sup>3</sup>MOLAB, University of Castilla-La Mancha, Ciudad Real, Spain, <sup>4</sup>Institut of Neurosciences, Faculty of Medicine, UAB, Barcelona , Spain

PS5-62

### Alpha-synuclein interacts with neuromelanin to enhance Lewy body formation and neurodegeneration in neuromelanin-producing parkinsonian rodents.

**Ms. Alba Nicolau-Vera<sup>1</sup>**, Ms. Thais Cuadros<sup>1</sup>, Mr. Jordi Romero-Giménez<sup>1</sup>, Ms. Annabelle Parent<sup>1</sup>, Ms. Ariadna Laguna<sup>1</sup>, Mr. Miquel Vila<sup>1,2,3</sup>

<sup>1</sup>Vall d'Hebron Research Institute (VHIR)-Center for Networked Biomedical Research on Neurodegenerative Diseases (CIBERNED), Barcelona, Spain, <sup>2</sup>Autonomous University of Barcelona (UAB), Cerdanyola del Vallès, Spain, <sup>3</sup>Catalan Institution for Research and Advanced Studies (ICREA), Barcelona, Spain

PS5-63

### TRAUMATIC BRAIN INJURY INDUCES A BIPHASIC LONG-TERM EFFECT ON ADULT HIPPOCAMPAL NEUROGENESIS

**Ms. Irene Durá<sup>1,2</sup>**, Dr. Joanna Danielewicz<sup>1</sup>, Mr. Pierre Mortessagne<sup>4</sup>, Ms Tatiana Gallego-Flores<sup>1</sup>, Dr Soraya Martín-Suárez<sup>1</sup>, Dr Fanny Farrugia<sup>4</sup>, Dr Djoher Nora Abrous<sup>4</sup>, Dr Emilie Pacary<sup>4</sup>, Dr Juan Manuel Encinas<sup>1,2,3</sup>

<sup>1</sup>ACHUCARRO Basque Center For Neuroscience, Leioa, España, <sup>2</sup>University of the Basque Country, Leioa, Spain, <sup>3</sup>IKERBASQUE, The Basque Center Foundation, Bilbao, Spain, <sup>4</sup>Neurocentre Magendie, Bordeaux, France



PS5-64

### Sex differences in the kynurenine pathway in a mouse model of neuropathic pain and depression comorbidity

**Ms. Patricia Mariscal<sup>1,2</sup>**, Dr. José Pérez-Revuelta<sup>2,3</sup>, Ms Sergio Arrieta-Riquet<sup>2,7</sup>, Dr Cristina Romero-López-Alberca<sup>2,4,5</sup>, Dr Francisco González-Saiz<sup>1,2,3,5</sup>, Ms Gema Gómez-Benítez<sup>6</sup>, Mr Borja Sanz-Peña<sup>6</sup>, Dr Federico Hervías-Ortega<sup>2,4</sup>, Dr Juan Antonio Mico<sup>1,2,5</sup>, Dr Esther Berrocoso<sup>2,4,5</sup>, Dr Lidia Bravo<sup>1,2,5</sup>

<sup>1</sup>University of Cádiz (Neuroscience), Cádiz, Spain, <sup>2</sup>Instituto de Investigación e Innovación Biomédica de Cádiz, INIBICA, Hospital Universitario Puerta del Mar, Cádiz, Spain, <sup>3</sup>Hospital Universitario de Jerez (UGC Mental Health), Servicio Andaluz de Salud, Spain, <sup>4</sup>University of Cádiz (Psychology), Cádiz, Spain, <sup>5</sup>Centro de Investigación Biomédica en Red de Salud Mental (CIBERSAM), Instituto de Salud Carlos III, Madrid, Spain, <sup>6</sup>Hospital Universitario Puerta del Mar (UGC Neurosurgery), Servicio Andaluz de Salud, Cádiz, Spain, <sup>7</sup>Hospital Universitario de Jerez (UGC Critical Care), Servicio Andaluz de Salud, Spain

PS5-65

### KINETIC AND DISTRIBUTION OF NANOEMULSIFIED ALPHA-TOCOPHEROL IN AGEING MOUSE MODELS

**Dr. Noemi Villaseca González<sup>1,3,4</sup>**, Dr. Joaquín González Fuentes<sup>1,3,4</sup>, Ms. María Plaza-Oliver<sup>1,3,4</sup>, Dr. Virginia Rodríguez Robledo<sup>1,3,4</sup>, Dr. María Victoria Lozano<sup>1,3,4</sup>, Mr. Jorge Selva Clemente<sup>1,3,4</sup>, Dr. Lucía Castro Vázquez<sup>1,3,4</sup>, Dr. Pilar Marcos Rabal<sup>2,3,4</sup>, Dr. Manuel J Santander Ortega<sup>1,3,4</sup>, Dr. María del Mar Arroyo Jiménez<sup>1,3,4</sup>

<sup>1</sup>School of Pharmacy, University Of Castilla-la Mancha, Albacete, Spain, <sup>2</sup>Faculty of Medicine, University of Castilla-La Mancha, Albacete, Spain, <sup>3</sup>Regional Center for Biomedical Research. University of Castilla-La Mancha, Albacete, Spain, <sup>4</sup>Research Group: Cellular Neuroanatomy and Molecular Chemistry of the Central Nervous System, Albacete, Spain

PS5-66

### Studying the relevance of human APOE polymorphism in Alzheimer's disease through the application of iPSCs

**Rebeca Vecino<sup>1,2</sup>**, Eva Díaz-Guerra<sup>1,2</sup>, Esther Arribas-González<sup>1,2</sup>, Elena Moreno-Jiménez<sup>1,2</sup>, Leire Boveda<sup>1</sup>, Irene Serra-Hueto<sup>1</sup>, Adela Orellana<sup>2,3</sup>, Marta Navarrete<sup>1</sup>, Rosario Moratalla<sup>1,2</sup>, Agustín Ruiz<sup>2,3</sup>, Carlos Vicario<sup>1,2</sup>

<sup>1</sup>Instituto Cajal-CSIC, Madrid, Spain, <sup>2</sup>CIBERNED-ISCIII, Madrid, Spain, <sup>3</sup>Fundació ACE-Barcelona Alzheimer Treatment and Research Center, Barcelona, Spain

PS5-67

### Intermediate alleles in HTT gene may play a role in sporadic tauopathies

**Dr. Juan Castilla Silgado<sup>1</sup>**, Dra. Antía Reguera Acuña<sup>2</sup>, Dra. Carmen Martínez Rodríguez<sup>3</sup>, Dr. Sergio Pérez Oliveira<sup>2</sup>, Dra. María Daniela Corte Torres<sup>4</sup>, Dr. Manuel Menéndez González<sup>1,2,4</sup>, Dra. Victoria Álvarez Martínez<sup>2,4</sup>, Dra. Cristina Tomás Zapico<sup>1,4</sup>

<sup>1</sup>Universidad De Oviedo, Oviedo, Spain, <sup>2</sup>Hospital Universitario Central de Asturias, Oviedo, Spain, <sup>3</sup>Hospital Universitario de Cabueñes, Gijón, España, <sup>4</sup>Instituto de Investigación Sanitaria del Principado de Asturias (ISPA), Oviedo, España

PS5-68

### Gene-Regulatory Dynamics of Microglia States during Neuroinflammation



Carmen M. Navarron-Izquierdo<sup>1</sup>, Aysha M. Bhojwani-Cabrera<sup>1</sup>, Angel Marquez-Galera<sup>1</sup>, Sergio Niñerola<sup>1</sup>, Lorena Magno<sup>2</sup>, Manso Y<sup>3,4</sup>, Alba del Valle Vílchez<sup>3,4</sup>, José V. Sánchez-Mut<sup>1</sup>, Tammayn Lashley<sup>5,6</sup>, Ángel Barco<sup>1</sup>, **Eduardo Soriano<sup>3,4</sup>**, Paul J. Whiting<sup>2,7</sup>, José P. López Atalaya<sup>1</sup>

<sup>1</sup>Instituto de Neurociencias, Universidad Miguel Hernández-Consejo Superior de Investigaciones, Alicante, Spain, <sup>2</sup>Alzheimer's Research UK (ARUK) UCL Drug Discovery Institute (DDI), University College, London, UK, <sup>3</sup>Department of Cell Biology, Physiology and Immunology, University of Barcelona, Barcelona, Spain, <sup>4</sup>Centro de Investigación Biomédica en Red de Enfermedades Neurodegenerativas (CIBERNED), Madrid, Spain, <sup>5</sup>Queen Square Brain Bank for Neurological Disorders, Department of Clinical and Movement, London, UK, <sup>6</sup>Department of Neurodegenerative Disease, Queen Square Institute of Neurology, University, London, United Kingdom, <sup>7</sup>UK Dementia Research Institute at University College London, London, United Kingdom

PS5-69

### MiR-138 as a restorative therapy for spinal cord injury

**Dr. M. Asunción Barreda-Manso<sup>1</sup>**, Dr. David Regigada<sup>1</sup>, Dr. Manuel Nieto-Díaz<sup>1</sup>, Dr. Teresa Muñoz-Galdeano<sup>1</sup>, Altea Soto<sup>1</sup>, Dr. Rodrigo M. Maza<sup>1</sup>

<sup>1</sup>Hospital Nacional De Paraplégicos (SESCAM), Toledo, Spain

PS5-70

### Inhibition of Receptor Protein Tyrosine Phosphatase $\beta/\zeta$ prevents decreases on hippocampal neurogenesis induced by acute ethanol in male and female adolescent mice but only decreases ethanol intake in male mice

**Milagros Galán-Llario<sup>1</sup>**, María Rodríguez-Zapata<sup>1</sup>, Teresa Fontán<sup>1</sup>, Esther Gramage<sup>1</sup>, Marta Vicente-Rodríguez<sup>1</sup>, Carmen Pérez-García<sup>1</sup>, José María Zapico<sup>1</sup>, Ana Ramos<sup>1</sup>, Beatriz de Pascual-Teresa<sup>1</sup>, Prof. Gonzalo Herradón<sup>1</sup>

<sup>1</sup>Facultad de Farmacia. Universidad San Pablo CEU, Madrid, Spain

PS5-72

### Targeting mTOR/4E-BP1 axis by the antidepressant Sertraline ameliorates motor deficits in the R6/1 mouse model of Huntington's disease

**Ms. Carla Castany-Pladevall<sup>1,2,3</sup>**, Dr. Arantxa Golbano<sup>1,2,3</sup>, Dr. Marta Garcia-Forn<sup>1,2,3</sup>, Dr. Jordi Creus-Muncunill<sup>1,2,3</sup>, Lluís Salvador<sup>1,2,3</sup>, Dr. Esther Pérez-Navarro<sup>1,2,3</sup>

<sup>1</sup>Facultat de Medicina i Ciències de la Salut, Institut de Neurociències, Universitat de Barcelona, Barcelona, Spain, <sup>2</sup>Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Barcelona, Spain, <sup>3</sup>Centro de Investigación Biomédica en Red sobre Enfermedades Neurodegenerativas (CIBERNED), Madrid, Spain

PS5-74

### Chronic pain induces plasticity into Locus coeruleus over time: role of the Locus Coeruleus - Dorsal Reticular Nucleus Pathway.



**Ms. Carmen Camarena-Delgado**<sup>1,2</sup>, Ms. Meritxell Llorca-Torralba<sup>1,2,4</sup>, Ms. Irene Suárez-Pereira<sup>2,3,4</sup>, Ms Lidia Bravo<sup>2,3,4</sup>, Ms Carolina López-Martín<sup>1,2</sup>, Mr. José Antonio García-Partida<sup>2,3,4</sup>, Mr Juan Antonio Mico<sup>2,3,4</sup>, Ms Esther Berrocoso<sup>1,2,4</sup>

<sup>1</sup>University of Cádiz (Psychology), Cádiz, Spain, <sup>2</sup>Instituto de Investigación e Innovación Biomédica de Cádiz, Hospital Universitario Puerta del Mar, Cádiz, Spain, <sup>3</sup>University of Cádiz (Neuroscience), Cádiz, Spain, <sup>4</sup>Centro de Investigación Biomédica en Red de Salud Mental (CIBERSAM), Instituto de Salud Carlos III, Madrid, Spain

PS5-75

**MiR-182-5p and miR-138-5p regulate Nogo-A/Nogo receptor expression, promoting neurite outgrowth in neural cells**

**Ms. Altea Soto**<sup>1</sup>, Dr. Manuel Nieto-Díaz<sup>1</sup>, Dr. M. Asunción Barreda-Manso<sup>1</sup>, Dr. Teresa Muñoz-Galdeano<sup>1</sup>, Dr. David Reigada<sup>1</sup>, Dr. Rodrigo M. Maza<sup>1</sup>

<sup>1</sup>Hospital Nacional de Paraplégicos (SESCAM), Toledo, Spain

PS5-76

**NeuroCLUEDO: which, when and where neurons die after spinal cord injury?**

**Dr. Manuel Nieto-Díaz**<sup>1</sup>, Nadia Ibañez Barranco<sup>1</sup>, Dr. David Reigada<sup>1</sup>, Dr. M. Asunción Barreda-Manso<sup>1</sup>, Ms. Altea Soto<sup>1</sup>, Dr. Teresa Muñoz-Galdeano<sup>1</sup>, Dr. Rodrigo M. Maza<sup>1</sup>

<sup>1</sup>Hospital Nacional de Paraplégicos (SESCAM), Toledo, Spain

PS5-77

**CALCIUM TRANSPORT AT ER-MITOCHONDRIA CONTACT SITES IS MODULATED BY PYK2**

**Laura López-Molina**<sup>1,2,3</sup>, Carmen Díaz-Cifuentes<sup>4,5,6</sup>, Silvia Ginés<sup>1,2,3</sup>, Albert Giral<sup>1,2,3</sup>

<sup>1</sup>Universitat De Barcelona, Barcelona, Spain, <sup>2</sup>IDIBAPS, Barcelona, Spain, <sup>3</sup>CIBERNED, Madrid, Spain, <sup>4</sup>Inserm, Paris, France, <sup>5</sup>Université Pierre & Marie Curie, Paris, France, <sup>6</sup>Institut du Fer a Moulin, Paris, France

PS5-78

**Modeling Parkinson's Disease With the Alpha-Synuclein Protein**

**Ms. Mónica Gómez-Benito**<sup>1,2</sup>, Dr. Noelia Granado<sup>1,2</sup>, Dr. Patricia García-Sanz<sup>1,2</sup>, Dr. Irene Ruiz-de Diego<sup>1,2</sup>, Dr. Rubén García-Montes<sup>1,2</sup>, Dr. Mireille Dumoulin<sup>3</sup>, Dr. Rosario Moratalla<sup>1,2</sup>

<sup>1</sup>Instituto Cajal (CSIC), Madrid, Spain, <sup>2</sup>CIBERNED, Instituto de Salud Carlos III, Madrid, Spain, <sup>3</sup>Centre of Protein Engineering, InBios, University of Liege, Liège, Belgium

PS5-79

**Acute effects of intermittent theta-burst stimulation in the remediation of impulsivity in hypersexual Parkinson's Disease.**



**Mr. David Mata-Marín<sup>1</sup>**

<sup>1</sup>HM CINAC. Centro Integral de Neurociencias AC. HM Hospitales, Móstoles, Spain, <sup>2</sup>Network Center for Biomedical Research on Neurodegenerative Diseases (CIBERNED), Instituto Carlos III, Madrid, Spain, <sup>3</sup>PhD Program in Neuroscience, Autónoma de Madrid University, Madrid, Spain

PS5-80

**Small RNAs derived from differentially affected brain regions of Huntington's disease patients recapitulate diverse neuropathological outcomes in wild-type mice**

**Ms Anna Guisado-Corcoll<sup>1,2,3</sup>**, Mr Jordi Creus-Muncunill<sup>1,2,3,9</sup>, Ms Veronica Venturi<sup>4</sup>, Ms Lorena Pantano<sup>5</sup>, Ms Georgia Escaramís<sup>1,6</sup>, Ms Marta García de Herreros<sup>1,2,3</sup>, Ms Maria Solaguren-Beascoa<sup>1</sup>, Ms Ana Gámez-Valero<sup>1</sup>, Ms Cristina Navarrete<sup>4</sup>, Ms Mercè Masana<sup>1,2,3</sup>, Mr Franc Llorens<sup>3,7,8</sup>, Ms Daniela Diaz-Lucena<sup>3,7</sup>, Ms Esther Pérez-Navarro<sup>1,2,3</sup>, Ms Eulàlia Martí<sup>1,4,6</sup>

<sup>1</sup>Departament de Biomedicina, Facultat de Medicina i Ciències de la Salut, Institut de Neurociències, Universitat de Barcelona, Barcelona, Spain, <sup>2</sup>Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Barcelona, Spain, <sup>3</sup>Centro de Investigación Biomédica en Red sobre Enfermedades Neurodegenerativas (CIBERNED), Barcelona, Spain, <sup>4</sup>Department of Neurology, Icahn School of Medicine at Mount Sinai, New York, USA, <sup>5</sup>Centre for Genomic Regulation (CRG), The Barcelona Institute for Science and Technology, Barcelona, Spain, <sup>6</sup>Department of Biostatistics, Harvard T.H. Chan School of Public Health, Boston, USA, <sup>7</sup>Centro de Investigación Biomédica en Red sobre Epidemiología y Salud Pública (CIBERESP), Barcelona, Spain, <sup>8</sup>Bellvitge Biomedical Research Institute (IDIBELL), L'Hospitalet de Llobregat, Spain, <sup>9</sup>Department of Neurology, National Reference Center for CJD Surveillance, University Medical Center Göttingen, Göttingen, Germany

PS5-82

**Cortical and hippocampal rhythmopathies in experimental models of brain metastasis**

**Dr. Alberto Sanchez-Aguilera<sup>1</sup>**, Dr. Mariam Masmudi-Martín<sup>2</sup>, Dr. Andrea Navas-Olivé<sup>1</sup>, Dr. Manuel Valiente<sup>2</sup>, Dr. Liset Menéndez de la Prida<sup>1</sup>

<sup>1</sup>Instituto Cajal - CSIC, Madrid, Spain, <sup>2</sup>Centro Nacional de Investigaciones Oncológicas, Madrid, Spain

PS5-83

**From engrams to memory pathology in Down syndrome**

**Mr. Álvaro Fernández-Blanco<sup>1</sup>**, Dr. Alfonso Zamora-Moratalla<sup>1</sup>, Dr. Mara Dierssen<sup>1</sup>

<sup>1</sup>Centre For Genomic Regulation (CRG), The Barcelona Institute of Science and Technology (BIST), Barcelona, Spain

PS5-84

**Pathological and therapeutic implications of myelin alterations in the Acid Sphingomyelinase Deficiency**

**Dr. Marta Guerrero-Valero<sup>1</sup>**, Jaime Mulero Franco<sup>1</sup>, Dr. Fernando de Castro<sup>2</sup>, M.D. Ledesma<sup>1</sup>

<sup>1</sup>Centro De Biología Molecular Severo Ochoa (CSIC-UAM), Madrid, Spain, <sup>2</sup>Instituto Cajal (CSIC), Madrid, Spain



PS5-85

### Human amygdala involvement in Alzheimer's disease revealed by MALDI Imaging and SWATH analysis.

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

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

PS5-86

### ApTOLL: A NOVEL REMYELINATING MOLECULE IN A MODEL OF MULTIPLE SCLEROSIS

**Beatriz Fernández-Gómez<sup>1,2</sup>**, Paula Gómez-Martín<sup>1</sup>, David Piñeiro<sup>2</sup>, Macarena Hernández-Jiménez<sup>2</sup>, Fernando de Castro<sup>1</sup>

<sup>1</sup>Cajal Institute, Madrid, Spain, <sup>2</sup>Aptatargets. S.L, Madrid, Spain

PS5-87

### Local protein synthesis in health and disease

**Dr. Jimena Baleriola<sup>1,2,3</sup>**, Ms. María Gamarra<sup>1,3</sup>, Ms. Maite Blanco<sup>1,3</sup>, Ms. Aida de la Cruz<sup>1,3</sup>, Ms. Josune Imaz<sup>1</sup>

<sup>1</sup>Achucarro Basque Center for Neuroscience, Leioa, Spain, <sup>2</sup>kerbasque, Bilbao, Spain, <sup>3</sup>University of the Basque Country, Leioa, Spain

PS5-88

### Enhanced neuronal glycolysis causes cognitive impairment and metabolic syndrome in mouse

**Dr. Daniel Jimenez-Blasco<sup>1,2,3</sup>**, Dr. Marina Garcia-Macia<sup>1,2,3</sup>, Dr. Carlos Vicente-Gutierrez<sup>1,2,3</sup>, Dr. Ruben Quintana-Cabrera<sup>1,2,3</sup>, Dr. Rebeca Lapresa<sup>1,2</sup>, Dr. Jesus Agulla<sup>1,2</sup>, Dr. Veronica Bobo-Jimenez<sup>1,2</sup>, Dr. Emilio Fernandez<sup>1,2,3</sup>, Prof. Peter Carmeliet<sup>4</sup>, Dr. Angeles Almeida<sup>1,2</sup>, Prof. Juan P Bolaños<sup>1,2,3</sup>

<sup>1</sup>Institute of Functional Biology and Genomics, University of Salamanca, CSIC, Salamanca, Spain, <sup>2</sup>Institute of Biomedical Research of Salamanca, University Hospital of Salamanca, Salamanca, Spain, <sup>3</sup>CIBERFES, Instituto de Salud Carlos III, Madrid, Spain, <sup>4</sup>Vesalius Research Center, Leuven, Belgium

PS5-89

### Simultaneous reciprocal chemogenetic regulation of AgRP and POMC neurons reveals non-overlapping functions in control of metabolism.



**Dr. Alain De Solis<sup>1</sup>**, Dr. Jan Radermacher<sup>2</sup>, Almudena Del Rio-Martin<sup>1</sup>, Dr. Paul Klemm<sup>1</sup>, Dr. Anna-Lena Cremer<sup>1</sup>, Dr. Heiko Backes<sup>1</sup>, Dr. Peter Kloppenburg<sup>2</sup>, Prof. Jens C. Bruning<sup>1</sup>

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

PS5-90

## Non-viral vehicles and modified oligonucleotides for RNAi-based therapies for CNS damage

**Altea Soto<sup>1</sup>**, Dr. Manuel Nieto-Díaz<sup>1</sup>, Dr. David Reigada<sup>1</sup>, Dr. M<sup>a</sup> Asunción Barreda-Manso<sup>1</sup>, Dr. Teresa Muñoz-Galdeano<sup>1</sup>, Dr. Ramón Eritja<sup>2</sup>, Dr. Ana Aviñó<sup>2</sup>, Dr. Helmut Reinecke<sup>3</sup>, Dr. Carlos Elvira<sup>3</sup>, Dr. Enrique Martínez<sup>3</sup>, Dr. Alberto Gallardo<sup>3</sup>, Dr. Juan Rodríguez<sup>3</sup>, Dr. Paula Bosch<sup>3</sup>, Dr. Rodrigo M. Maza<sup>1</sup>

<sup>1</sup>Hospital Nacional De Paraplégicos (SESCAM), Toledo, Spain, <sup>2</sup>Instituto de Química Avanzada de Cataluña (CSIC), Barcelona, Spain, <sup>3</sup>Instituto de Ciencia y Tecnología de Polímeros (CSIC), Madrid, Spain

PS5-91

## Hippocampal-targeted, cell type-specific manipulation of NFκB activity to treat brain injuries and diseases

**Mr. Gorka Kortabarria<sup>1,2</sup>**, Dr. Alejandro Carretero-Guillén<sup>1,2</sup>, Prof. Juan Manuel Encinas<sup>1,2,3</sup>, Prof. Mazahir T. Hasan<sup>1,2,3</sup>

<sup>1</sup>Achucarro Basque Center for Neuroscience, Leioa, Spain, <sup>2</sup>University of the Basque Country (UPV/EHU), Leioa, Spain, <sup>3</sup>IKERBASQUE, The Basque Science Foundation, Bilbao, Spain

PS5-92

## Modulating neuronal activity using phytochromes

**Laja Sitjà-Roqueta<sup>1,2,3</sup>**, Albert Coll-Manzano<sup>1,2,3</sup>, Esther García-García<sup>1,2,3</sup>, Sara Fernández-García<sup>1,2,3</sup>, Sara Conde-Berriozaba<sup>1,2,3</sup>, Manuel J Rodríguez<sup>1,2,3</sup>, Jordi Soriano<sup>4</sup>, Deniz Dalkara<sup>5</sup>, Andreas Möglich<sup>6</sup>, Jordi Alberch<sup>1,2,3</sup>, Mercè Masana<sup>1,2,3</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>Centro de Investigación Biomédica en Red de Enfermedades Neurodegenerativas (CIBERNED), Madrid, Spain, <sup>4</sup>Universitat de Barcelona, Barcelona, Spain, <sup>5</sup>Sorbonne Université, INSERM, CNRS, Institut de la Vision, Paris, France, <sup>6</sup>Universität Bayreuth, Bayreuth, Germany

PS5-93

## Longitudinal calcium imaging of neural activity in epileptic networks: in vitro an in-vivo approach

**Dr. Soraya Martín-Suárez<sup>1</sup>**, Dr Paolo Bonifazi<sup>1</sup>

<sup>1</sup>Biocruces Bizkaia Health Research Institute, Barakaldo, Spain



PS5-94

### Experimental and modeling study of near infrared-laser stimulation in single and electrically coupled neurons

**Ms. Alicia Garrido-Peña<sup>1</sup>**, Dr. Rafael Levi<sup>1</sup>, Dr. Javier Castilla<sup>2</sup>, Dr. Jesús Tornero<sup>2</sup>, Dr. Pablo Varona<sup>1</sup>

<sup>1</sup>Universidad Autónoma De Madrid, Madrid, Spain, <sup>2</sup>Unidad Avanzada de Neurorehabilitación. Hospital Los Madroños, Brunete, Spain

PS5-95

### Gene variants involved in the glutamate and calcium pathway in the epileptic model hamster GASH/Sal.

Ms. Sandra M. Diaz- Rodriguez<sup>1,3</sup>, PhD Jose M. Matias-Pereda<sup>2</sup>, Phd Ricardo J. Gómez-Nieto<sup>1,2</sup>, Phd Javier M. Herrero -Turrión<sup>1,4</sup>, **Phd María Dolores López - García<sup>1,3</sup>**

<sup>1</sup>Research center in neurosciences of Castilla y León, Salamanca, España, <sup>2</sup>Institute of Molecular and Cellular Biology of Cancer (IBMCC), Salamanca, España, <sup>3</sup>Institute of Biomedical Research of Salamanca, Spain., Salamanca, España, <sup>4</sup>INCYL Neurological Tissue Bank (BTN-INCYL), Salamanca, España

PS5-96

### Sex differences of acute and chronic administration of cannabidiol in the genetically audiogenic seizure-prone hamster GASH/Sal

Ms. Giselda Eunice Cabral-Pereira<sup>1,2</sup>, Dra. María Consuelo Sancho Sánchez<sup>1,2</sup>, Dr. Luis J. Muñoz<sup>3</sup>, Dr. Ricardo Gómez-Nieto<sup>1,2</sup>, Dra. M<sup>a</sup>. Dolores E. López García<sup>1,2</sup>, **Dr. David Sánchez Benito<sup>1,2</sup>**

<sup>1</sup>Institute of Neuroscience of Castilla y León (INCYL), Salamanca, Spain, <sup>2</sup>Institute of Biomedical Research of Salamanca (IBSAL), Salamanca, Spain, <sup>3</sup>Animal Research Service, Salamanca, Spain



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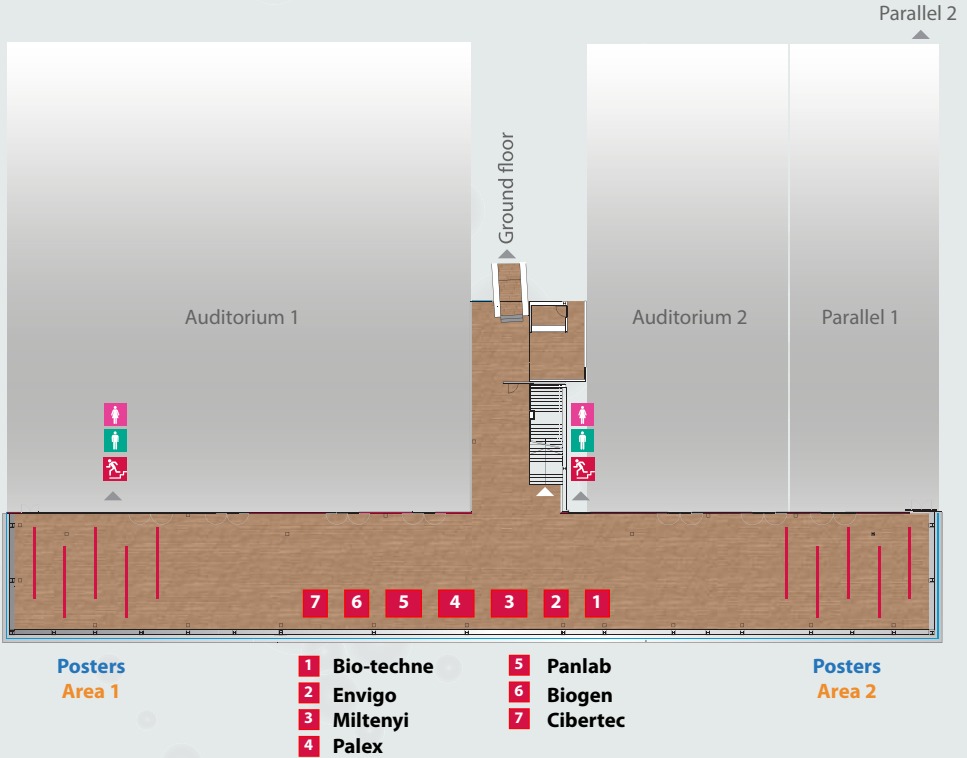


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T. +34 955 102 928  
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