

NOVEL INSIGHTS INTO BRAIN ENERGY METABOLISM IN HEALTH AND DISEASE

XIII CAJAL CONFERENCE

Spanish Society of Neuroscience

15-17 April 2026, Cádiz

15/04

11.30: Bus Sevilla-Cádiz (if needed)

13.00-15.30: Meeting registration & Hotel check-in

13.30-14.45: Lunch at the Hotel Cádiz Bahía Restaurant

15.15: Welcome and Conference Opening

15.30: Plenary lecture by Dr. Carmen Sandi (EPFL): *Mitochondrial origins of anxiety*

16.20: Selected oral presentations:

- 16.20: Jordi Duran (IQS Barcelona - Universitat Ramon Llull): *Metabolic dysregulation of glycogen in inhibitory neurons as a driver of epilepsy*
- 16.40: Rita Valenzuela Limiñana (Universidad de Santiago de Compostela): *Targeting mitochondrial dopaminergic dysfunction with renin-angiotensin system modulation*
- 17.00: Anel Marie Martinez Felix (Hospital Del Mar Medical Research Institute): *Endocannabinoids signaling regulates sharp-wave ripples function across learning*
- 17.20: Vanja Tepavcevic Mandic (University of Valencia): *Monocarboxylate transporter 2 regulates white matter integrity*

17.40: Coffee break

18.10: Plenary lecture by Dr. Thomas Schwarz (Harvard Medical School): *Mitochondrial dynamics for neuronal health and survival*

19.00: Selected oral presentations:

- 19.00: Ali Jawaid (Lukasiewicz Research Network- PORT Polish Center for Technology Development): *TDP-43 dysfunction drives cell-type specific metabolic reprogramming in motor neurons and microglia: Implications for neurodegenerative disorders*
- 19.20: Esther García Benítez (University of Seville): *Alternative NADH oxidation in dopaminergic neurons prevents the Parkinsonian Phenotype*
- 19.40: Alejandro Collado Solé (CNIO): *Microglia Rank signaling regulates GnRH neuronal function and the Hypothalamic-Pituitary-Gonadal axis*
- 20:00 – 20:20 Adrian Marti Pastor (Technical University Munich): *Neuronal compartmentalization results in "impoverished" axonal mitochondria*

21.00: Dinner at the Hotel Cádiz Bahía Restaurant



16/04

07.30 – 09.00: Breakfast at the Hotel Cádiz Bahía Restaurant

09.00: Plenary Lecture by Dr. Juan Pedro Bolaños (University of Salamanca): *Brain metabolism and cognition: beyond mere energy*

09.50: Selected oral presentations:

- 09.50: Vassilios Beglopoulos (University of Lancashire): *Mitochondria in memory retrieval and implications for Alzheimer's disease*
- 10.10: Alfonso Gómez Romero (Universidad Autónoma de Madrid - Hospital Infantil Universitario Niño Jesús): *Sex differences in the acute effect of astrocyte-derived extracellular vesicles on the hypothalamic response to high fat diet intake*
- 10.30: Vicente Roca Agujetas (Instituto De Biomedicina De Sevilla): *Mitochondrial bioenergetic stress drives microglial transition toward ferroptotic and senescent phenotypes in Alzheimer's disease*

- **10.50:** Verónica Sobrino Cabello (IMIBIC): *Perineuronal Net Remodeling in the hypothalamus induced by Early-Onset Obesity Impairs KNDy Neuronal Function and Disrupts the Regulation of the Reproductive Axis*

11:10: Coffee Break

11.40: Plenary lecture by Dr. Stefanie Schirmeier (Technische Universität Dresden): *Metabolic flexibility: Insights from tiny brains*

2.30: Selected oral presentations:

- 12.30: Florencia Cabrera-Cabrera (Tallinn University of Technology): *Norepinephrine Couples Astrocytic Metabolism to mTOR-Driven Protein Synthesis*
- 12.50: Bella Mora Romero (IBiS-CSIC): *Microglial electron transport chain sustains brain development with different roles for each complex*
- 13.10: Maria V. Sanchez-Mico (Massachusetts General Hospital (MGH) / Harvard Medical School): *Astrocyte Oxidative Stress and Calcium Dyshomeostasis Induced by Amyloid- β Plaques and Soluble Amyloid- β Oligomers In Vivo*

13.30 – 15:00: Lunch

15.30: Plenary Lecture by Dr. Luc Pellerin (University of Poitiers): *Astrocyte Neuron Lactate Shuttle: Concept, Evidence and Role(s)*

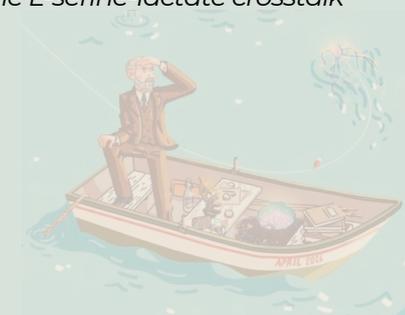
16.20: Selected oral presentations:

- 16-20: Irene Fernández González (Universitat Autònoma De Barcelona): *Deciphering the role of lactylation in a mouse model of Leigh Syndrome*
- 16.40: Léa Cohen (Université Paris-Saclay): *Decoding astrocytic metabolism: the L-serine-lactate crosstalk mediated by pyruvate kinase M2*

17.00 – 18.30: Coffee Break & Poster session

18.45 – 21.30: Recreational activity: Sunset Cruise from the Port of Cádiz

21.30: Dinner at “Calachica Restaurant”



17/04

07.30 – 09.00: Breakfast at the Hotel Cádiz Bahía Restaurant

10.30 – 13.00: Guided Walking Tour of Cádiz

13.30 – 15.00: Lunch at the Hotel Cádiz Bahía Restaurant

15.30: Plenary Lecture by Dr. Gary Yellen, Harvard Medical School, USA: *Glucose metabolism in neurons: its dynamics and regulation*

16.20: Selected oral presentations:

- 16.20: Anne-Karine Bouzier-Sore (CRMSB lab, Bordeaux): *Brain energy metabolism and neuroprotection: the emerging role of lactate in neonatal hypoxia-ischemia.*
- 16.40 – 17:00 Marina García Macía (University of Salamanca): *Metabolic and Homeostatic Orchestration of Oligodendrocytes During Zebrafish Visual System Regeneration*
- 17.00: Eneritz Lopez Muguruza (Euskal Herriko Unibertsitatea): *Metabolic Flexibility of CNS Cells under Glucose Deprivation*
- 17.20: Maite Solas (University of Navarra): *Beneficial effects of astrocytic metabolic modulation in Alzheimer's disease*

17:40 – 19:00: Coffee Break & Poster session

19.00: Plenary lecture by Dr. Gülçin Pekkurnaz (University of San Diego): *Metabolic and Mitochondrial Plasticity in Neurons*

19.50 – 20:15: Closing and awards (Best Student Poster Award & Best Oral Communication Award)

18/04 (Hotel Check-out: 12pm)

07.30 – 09.00: Breakfast at the Hotel Cádiz Bahía Restaurant

8.30: Bus Sevilla-Cadiz (if needed)