



*Epigenetic Regulation of Acquired Behaviors in Health
and Disease*

International University of Andalucía

Sede Antonio Machado of Baeza (Jaén)

September 29th - October 1st, 2026

MEETING PROGRAM

Monday, September 28th

18.00-20.00: Registration

21.00: Dinner

Tuesday, September 29th

8.00-8.45: Breakfast

9.00-9.10: Opening remarks

9.10-9.30: Self presentations

Session I: Epigenetic regulation of activity-driven gene expression in neuronal cells.

Chair: Matthew Kocher

- **9.30-10.15: Hongjun Song**, University of Pennsylvania, USA.
Dynamic chromatin interaction induced by neuronal activity and behavior.
- **10.15-11.00: Angel Barco**, IN UMH-CSIC, Spain.
Activity-driven chromatin changes in hippocampal neurons.

11.00-11.30: Coffee break

Session II: Transcriptional and epigenetic control of memory formation

Chair: Clara Ortega de San Luis

- **11.30-12.15: Ana M. Oliveira**, Central Institute of Mental Health, Mannheim, Germany.
DNA methylation regulates the stability of memory engrams.
- **12.15-13.00: Taro Kitazawa**, Aarhus University, Denmark.
Whole-genome single-cell multimodal history tracing reveals neuronal plasticity.
- **13.00-13.20: Ernest Palomer**, CBMSO, Madrid, Spain.
EpiFlow: a high-dimensional spectral flow cytometry platform for single-cell epigenetic profiling in the brain

13.20-13.30: Open discussion**13.30-15:00: Lunch****15.00-16.30: Poster session****Session III: Epigenetic mechanisms in cognitive development****Chair: Beatriz del Blanco**

- **16.30-17.15: Nael Nadif Kasri**, Radboud University Medical Centre, The Netherlands.
Chromatin-based regulation of network plasticity in neurodevelopmental disorders.
- **17.15-18.00: Aleksandra Pękowska**, Nencki Institute for Experimental Biomedicine, Poland.
Shaping chromatin domain three-dimensional architecture in cell differentiation.

18.00-18.30: Coffee break

- **18.30-18.50: Nathalie Berube**, Western University, London, Canada
Glial ATRX functions converge on hippocampal memory
- **18.50-19.10: Clara Ortega de San Luis**, Universidad de Jaen, Spain
Role of clustered protocadherins in engram formation and memory function

20:00-21:00: Guided tour of Baeza**21.00: Dinner**

Wednesday, September 30th

8.00-8.45: Breakfast

Session IV: Epigenetic mechanisms in neurodegenerative disorders

Chair: Eloisa Herrera

- **9.00-9.45: Sara Marzi**, King's College London, UK.
Epigenetic regulation of glial cells in Alzheimer's disease.
- **9:45-10.30: Anne-Laurence Boutillier**, UDS/CNRS, Strasbourg, France.
Astrocyte epigenetic reprogramming by APOE4 increases hippocampal vulnerability in Lewy body dementia.
- **10.30-10:50 Asmae Benchohra**, IDISCAM, Univ. of Castilla-La Mancha, Spain.
Dysregulated miRNAs in Alzheimer's Disease: From Biomarker Discovery to Direct Detection

10.50-11.00: Open discussion

11.00-11.30: Coffee break

Session V: Epigenetic mechanisms in aging

Chair: Isabel Bustos-Martínez

- **11.30-12.15: Li Huei Tsai**, Picower Institute for Learning and Memory, USA.
Transcriptomic and epigenetic mechanisms underlying the neuroprotective effects of gamma sensory stimulation.
- **12.15-13.00: Shelley Berger**, University of Pennsylvania, USA.
Metabolic-epigenetic pathways in brain aging and neurodegeneration.
- **13.00-13.20: Rafael Alcala-Vida**, IN UMH-CSIC, Spain.
KAT3 protein targeted degradation strategies to modulate neural lineage cell identity maintenance.

13.20-13.30: Open discussion

13.30-15:00: Lunch

Session VI: Epigenetic mechanisms in psychiatric disorders

Chair: Nathalie Berube

- **15.00-15.45: José V. Sánchez-Mut**, Instituto de Neurociencias (CSIC-UMH), San Juan de Alicante, Alicante (Spain).
Neuronal coupling of CG and non-CG DNA methylation is an evolutionarily conserved mechanism linking aging, development, and synaptic function.
- **15.45-16.30: Tomohisa Toda**, Medizinische Institute für Physik Friedrich-Alexander Universität Erlangen-Nürnberg, Germany.
Long-lived molecules in neural plasticity and brain aging.
- **16.30-16.20: Jose I Gómez-Blanco**, Università degli Studi di Milano, Italy
RNF10 role in protein homeostasis in synaptic plasticity

16.20-16.30: Open discussion

16.30-18.00: Poster session

18.00-18.30: Coffee break

Thursday, October 1st

8.00-8.45: Breakfast

Session VII: Epigenetic mechanisms underlying environmental and hormonal effects

Chair: Ernest Palomer

- **9.00-9.45: Mario Fernández Fraga**. Centro de Investigación en Nanomateriales y Nanotecnología (CINN). CSIC. Spain.
Multiomic rewiring of the brain in enriched environments.
- **9.45-10.30: Marija Kundakovic**, Fordham University, NY, USA.
Epigenomic programming of brain plasticity and disease risk by ovarian hormones.
- **10.30-10:50 Federico Miozzo**, IN UMH-CSIC, Spain.
Dissecting AP-1 contribution to environmental enrichment-induced cognitive enhancement and activity-driven transcription.

10.50-11.00: Summing up and prospects

11.00h Coffee break & Farewell