



Epigenetic Regulation of Acquired Behaviors in Health and Disease

International University of Andalucía

Sede Antonio Machado of Baeza (Jaén)

DATE: September 29th - October 1st, 2026

Organizers:

Angel Barco, CSIC Research Professor, Instituto de Neurociencias CSIC-UMH, Sant Joan d'Alacant, Alicante, Spain.

Li Huei Tsai, Director of the Picower Institute for Learning and Memory and MIT Picower Professor, Cambridge, MA. USA.

MEETING PROGRAM

Monday, September 28th

18.00-20.00: Registration

20.30: Dinner

Tuesday, September 29th

8.00-8.45: Breakfast

9.00-9.10: Opening remarks

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

9.10-9.45: Hongjun Song, University of Pennsylvania, USA.

Dynamic chromatin interaction induced by neuronal activity and behavior.

9.45-10.20: Angel Barco, IN UMH-CSIC, Spain.

Activity-driven chromatin changes in hippocampal neurons.

10.20-10.35: Short talk selected from abstract.

10.35-10.50: Short talk selected from abstract.

10.50-11.20: Coffee break

Session II: Transcriptional and epigenetic control of memory formation

11.20-11.55: Mario Fernández Fraga. *Centro de Investigación en Nanomateriales y Nanotecnología (CINN). CSIC. Spain. "Multiomic rewiring of the brain in enriched environments"*

11.55-12.30: Ana M. Oliveira, Central Institute of Mental Health, Mannheim, Germany. *DNA methylation regulates the stability of memory engrams.*

12.30-13.05: Taro Kitazawa, Aarhus University, Denmark. *Whole-genome single-cell multimodal history tracing reveals neuronal plasticity.*

13.15: Lunch

16.00-18.00: Poster session

Session III: Epigenetic mechanisms in cognitive development

18.00-18.35: Nael Nadif Kasri, Radboud University Medical Centre, The Netherlands. *Chromatin-Based Regulation of Network Plasticity in Neurodevelopmental Disorders.*

18.35-19.10: Aleksandra Pękowska, Nencki Institute for Experimental Biomedicine, Poland. *Shaping chromatin domain three-dimensional architecture in cell differentiation.*

19.10-19.25: Short talk selected from abstracts

19.25-19.40: Short talk selected from abstracts

20:00h Guided tour to Baeza

21:00h Dinner

Wednesday, September 30th

8.00-8.45: Breakfast

Session IV: Epigenetic mechanisms in neurodegenerative disorders

9.00-9.35: Li Huei Tsai, Picower Institute for Learning and Memory, USA. *The Many Paths to Memory Loss: How Age, Sex, and Genetics interact with Alzheimer's Disease.*

9.35-10.10: Sara Marzi, King's College London, UK. *Epigenetic regulation of glial cells in Alzheimer's disease.*

10.10-11.45: Anne-Laurence Boutillier, UDS/CNRS, Strasbourg, France. *Astrocyte epigenetic reprogramming by APOE4 increases hippocampal vulnerability in Lewy body dementia.*

10.45-11.00: Short talk selected from abstracts

11.00-11.30: Coffee break

Session V: Epigenetic mechanisms in aging

11.30-12.05: Marija Kundakovic, Fordham University, NY, USA. *Molecular and cellular characterization of the human brain across menopausal transition.*

12.05-12.40: Shelley Berger, University of Pennsylvania, USA. *Metabolic-epigenetic pathways in brain aging and neurodegeneration.*

12.40-13.15: 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.*

13.15: Lunch

15.00-18.00: Poster session

20.00: Dinner

Thursday, October 1st

8.00-8.45: Breakfast

Session VI: Epigenetic mechanisms in psychiatric disorders

9.00-9.15: Short talk selected from abstracts

9.15-9.30: Short talk selected from abstracts

9.30-10.05: Tomohisa Toda, Medizinische Institute für Physik Friedrich-Alexander Universität Erlangen-Nürnberg, Germany. *Long-lived molecules in neural plasticity and brain aging.*

10.05-10.40: ?????

10.40-11.30: Roundtable for general discussion, summing up and prospects.