

## NMDAR hypofunction at the crossroads of psychosis and cognition: insights from schizophrenia and anti-NMDAR encephalitis



Esteve Auditorium, Centre Esther Koplowitz, IDIBAPS









## **Abstract**

This workshop brings together experts from molecular psychiatry, immunology, and cognitive neuroscience to explore the role of NMDARs in both pathophysiology and cognition through the lens of Schizophrenia and anti-NMDAR encephalitis. The first part of the workshop will focus on the molecular and cellular mechanisms that implicate NMDAR hypofunction in schizophrenia, including evidence from genetic, pharmacological, and post-mortem studies. The discussion will then pivot to anti-NMDAR encephalitis, highlighting its clinical features, immunological basis, and the insights it offers into receptor-level disruptions.

Despite vastly different etiologies, both disorders manifest overlapping symptoms, such as psychosis and severe cognitive impairments, raising compelling questions about shared circuit-level vulnerabilities. Building on this comparison, the final segment of the workshop will examine the role of NMDARs in working memory—a fundamental cognitive function that is similarly disrupted in both conditions.

## Agenda

	DAY1 Tue	sday December 9th
	9:00 - 9:20	Registration and poster setup
	9:·20- 9:40	Welcome
	SESSION 1	
	Molecular me	chanisms of neuropsychiatric disorders
	→ Chair: Gisela Sugranyes (IDIBAPS, Barcelona)	
	9:40 - 10:20	· Josep Dalmau (IDIBAPS/Caixa Research Institute, Barcelona)
	10:20 - 11:00	· Ines Khadimallah (Lausanne University Hospital)
	11:00 - 11:30	Coffee break
	11:30 - 12:10	· Gemma Modinos (Kings College, London)
	12:10 - 12:50	· Guillermo Horga (Columbia University, New York)
	13:00 - 14:30	Lunch with Posters (CEK)
	SESSION 2	
	Preclinical res	search of NMDA-related neuropathologies: comparing animal models across the NMDA-disease spectrum
	→ Chair: Eduard Parellada (Clínic Borcelono/Universitat de Borcelono/IDIBAPS)	
	14:30 - 15 50	· Christian Geis (Jena University Hospital)
	14:30 - 15:10	· Patricia Gassó (Universitat de Barcelona/IDIBAPS)
	16:30 - 17:10	· Katharina Schmack (Crick Institute, London)
	15:50-16:20	Coffee break
	17:10 - 17:50	· Ji Hu (ShanghaiTech University, Shanghai)
	17:40 - 18:20	· Estíbaliz Maudes (University Medical Center Göttingen)
	18:20-19:30	Posters with wine and cheese (CEK)

## DAY 2 Wednesday December 10th

**SESSION 3** 

The role of NMDAR in working memory: a comparison across models and diseases

→ Chair: Carles Sindreu (CIBERER/IDIBAPS, Barcelona)

9:30-10:10 · Albert Compte (IDIBAPS, Barcelona)

10:10-10:50 · T.B.C.

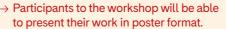
0:50 - 11:20 Coffee break (posters)

11:20 - 12:00 • Min Wang (Yale School of Medicine, New Haven)

12:00 - 12:40 John Murray (Dartmouth College, Hanover)

12:40 - 13:30 • Final discussion. Moderator: Jaime de la Rocha (IDIBAPS, Barcelona)





→ A limited number of posters will be accepted on a first come first serve basis.





Early registration fee
20€ from Nov. 1st to 20th.

Late registration fee
50€ from Nov. 20th to Dec 5th.