



# UNIVERSIDAD DE GRANADA

Centro de Investigación  
Mente, Cerebro y  
Comportamiento

## CIMCYC Talks: Competition Between Predictive Processes and Prefrontal Cortex Functions

Desde el Lun, 31/03/2025 - 14:00

### CIMCYC Talks

El Máster en Neurociencia Cognitiva y del Comportamiento invita a la CIMCYC Talks "Competition Between Predictive Processes and Prefrontal Cortex Functions", con el Dr. Dezső Németh, investigador del Lyon Neuroscience Research Center.

"Human learning and predictive processing rely on multiple cognitive systems associated with distinct brain structures. These systems do not always cooperate; they sometimes compete to optimize performance. Research suggests that reducing the engagement of prefrontal cortex-mediated explicit and attentional processes can enhance non-declarative learning.

In this talk, I will present findings from four studies—on non-invasive brain stimulation, functional brain connectivity, lifespan development, local sleep, and mind-wandering—exploring the competitive interaction between perceptual statistical learning and prefrontal executive functions. Our results highlight the competitive nature of cognitive systems and their implications for improving learning and predictive processing".

