



Máster Universitario en
Neurociencia Cognitiva
y del Comportamiento

Charla Dr. Dezső Németh "Competition Between Predictive Processes and Prefrontal Cortex Functions"

~~Fecha~~ el Lun, 31/03/2025 - 16:00

**Dr. Dezső Németh, Centre de
Recherche en Neurosciences
de Lyon, France.**

**Day, Place, and Time: 31st March at 16:00h,
in Sala de Conferencias 1. CIMCYC.**



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.