



# Aging: Cognitive Reserve & Neural Compensation

March, 25<sup>th</sup> 2021
16:00 – 18:00 Italy time (ET 10-12 am)

16:00 – 16:10 Prof. **Erika Borella** (University of Padua) Welcome and opening remarks

16:10 – 17:00 Prof. **Yaakov Stern** (Columbia University New York) Studying cognitive reserve

17:00 – 17:50 Prof. **Roberto Cabeza** (Duke University, Humboldt University-Berlin) Age-Related Compensation in Memory Networks and Representations

17:50 – 18:00 Prof. **Matthias Kliegel** (University of Geneva) Closing remarks

### **ZOOM LINK:**

https://unipd.zoom.us/j/86054178535?pwd=TlpOM3EyWmVlQ1VVc1ZGNjlxN2U5QT09

# SHORT ABSTRACTS

# Stern's talk

I will discuss research approaches to understanding the neural basis of cognitive reserve, sharing some new data from studies exploring the epidemiology, cognitive underpinnings and neural implementation of cognitive reserve. I will discuss the progress of a program designed to come to consensus on operational definitions for terms related to reserve and resilience among human and animal researchers.

# Cabeza's talk

Compensation refers to the cognition-enhancing recruitment of additional neurocognitive resources when task demands exceed available neurocognitive resources. In fMRI studies of aging, greater (univariate) activity in older adults than younger adults is often attributed to compensation. Extending these findings, the talk describes evidence of age-related compensation at the level of memory networks and representations, as well as the manipulation of compensatory mechanisms using TMS.

### Organizers:

Erika Borella, Patrizia Bisiacchi, Giorgia Cona – Department of General Psychology, University of Padova, Italy.





