



**SCUOLA DI PSICOLOGIA**

**Dipartimento di Psicologia Generale (DPG)**

**Corsi di Laurea in Neuroscienze e Riabilitazione Neuropsicologica  
e**

**Psicologia Cognitiva Applicata**

**Conferenza  
Prof. Kristin Flegal  
Glasgow University**

**Mechanisms  
of successful cognitive training interventions.**

Progress in cognitive training research requires a mechanistic understanding of the factors that influence training success and promote transfer of training gains to other tasks. I will present on a line of research investigating cognitive and neural mechanisms involved in training-induced plasticity, for informing the development of successful cognitive training interventions. A study of encoding strategy training on older adults' memory performance revealed the most beneficial outcomes when environmental support was provided to encourage time and effort toward encoding but participants were allowed to generate their own strategies. A downside of strategy training approaches is limited transfer to untrained tasks, and in another study a process-based training approach was taken to examine potential mediators of transfer. Training the cognitive process of working memory updating with adaptively increasing task difficulty, in young adults, resulted in fMRI activation decreases in task-related brain areas and transfer to an untrained episodic memory task. Training interventions that incorporate external support to target latent function and adaptivity to sustain challenging demands have promise for improving cognitive performance.

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**11 Aprile 2018**

**dalle 12.30 alle 13.30**

**Aula 2D**

**Psico 2**