

## ***Studying 'real-life' consciousness and volition: promise, challenges and perils***

In the last decades, questions about free will and consciousness - once considered outside the scope of empirical science - have become part and parcel of cognitive neuroscience. To meet the challenge of scientifically operationalizing these questions, different experimental manipulations have been developed. In this talk, I will first argue that these operational definitions play a critical role in shaping the questions we ask and the conclusions we reach. I will further question the external validity of some of the findings, and examine the relations between the operational definitions and the theoretical constructs being studied. Then, I will present new, more ecological ways to study consciousness and volition. These will focus on changing the operational definitions, changing the stimuli, and changing the experimental methods, using also virtual and augmented reality. Though sometimes less controlled, I will argue that such experiments pave the way for a fuller, more complete, understanding of consciousness and volition.