

# Modeling the brain

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PROPOSITIONS ACCOMPANYING THE DISSERTATION

**MODELING THE BRAIN**  
**Mechanisms underlying the interplay between the  
multiple facets of stress and cognition**

Stella Voulgaropoulou  
5<sup>th</sup> of December 2023

1. Stress exerts powerful effects on a number of cognitive and affective processes that are essential in everyday life, including motivation, learning, emotion regulation and memory. - This thesis
2. Stress may be a predisposing factor but also consequence of other mental health problems. - This thesis
3. Acute stress shifts the balance between maximizing reward and minimizing effort. - This thesis
4. Catecholamines are not only involved in the pathogenesis of many stress-related neuropsychiatric conditions but also in everyday decision-making and behavior.
5. Dopamine and noradrenaline may make important contributions to value and energization-related aspects of goal-directed behavior. - This thesis
6. Implementing transdiagnostic approaches into clinical practice is challenging and will take time but it could address the heterogeneity and comorbidity observed in real-world patients.
7. Everyone knows what stress is, but nobody really knows about stress (Hans Selye).
8. Improving transdiagnostic conceptualization of stress is very important, not only for both clinical and non-clinical populations but also for the general health care, economy, and job market worldwide. -This thesis
9. “Παν μέτρον ἄριστον” / “Pan metron ariston”, which means “Everything in moderation” (Kleovoulos o Lindios, 6th century BC).
10. The beautiful thing about learning is that nobody can take it away from you (B.B. King).