2022
Kavli Summer Institute in Cognitive Neuroscience

Week XX: Motivated Cognition:
Environmental, Neural, and Computational Bases

Course Directors

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Cognition is fundamentally motivated: active, goal-driven, and sensitive to context. People organize their thinking to enable survival, growth, and well-being in the world. While these statements might seem uncontroversial, investigating behavior from the perspective of motivated cognition has led to novel and surprising insights. In this week, expert speakers will discuss how environmental forces shape motivated cognition, how neural and computational systems support these processes, and how variations in these processes lead to differences in thinking and behavior across development and across individuals, including in psychiatric disorders. Challenges and essential next steps for this burgeoning field will be highlighted.

****Tentative Schedule/Speakers – to be updated as details are confirmed****

**Monday (x/xx): Environmental Influences on Motivated Cognition**

8:00-8:30    Breakfast
8:30-8:35    Welcome – Mangun, Giesbrecht and Miller
8:35-8:45    Introductory Remarks – Yuko Munakata and Randy O'Reilly
8:45-10:15   **Speaker 1: Dimo Amso** Brown University
             *Ecological Insights into the Development of Cognitive Control*
10:15-10:30  Break
10:30-11:45  **Speaker 2: Yuko Munakata**, University of California, Davis
             *When is it worth engaging cognitive control? The influence of social factors*
11:45-1:45   Lunch
1:45-5:00    **Lab Session**: – Neuroanatomy – **Skirmantas Janusonis (UCSB)**
             LOCATION: Physical Sciences Building North (PSBN), Rms. 2664 and 2666

**Tuesday (x/xx): Neural Mechanisms of Motivated Cognition**

8:00-8:45    Breakfast
8:45-10:15   **Speaker 3: TBA** Frontal Mechanisms of Goal-Directed Behavior
10:15-10:30  Break
10:30-11:45  **Speaker 4: Erie Boorman**, UC Davis
The Neural Architecture of Reinforcement Learning and Decision Making

Wednesday (x/xx): Computational Models of Motivated Cognition

8:00-8:45  Breakfast
8:45-10:15  **Speaker 5: Randy O'Reilly**, University of California, Davis  
*Computational models of the systems neuroscience of motivated cognition*
10:15-10:30  Break
10:30-11:45  **Speaker 6: Michael Frank**, Brown University  
*Insights from modeling frontostriatal mechanisms in motivated cognition*
11:45-1:45  Lunch
1:45-5:00  **Lab Session: TBA**

Thursday (x/xx): Individual Differences and Disorders of Motivated Cognition

8:00-8:45  Breakfast
8:45-10:15  **Speaker 7: TBA**
10:15-10:30  Break
10:30-11:45  **Speaker 8: Michael Treadway**, Emory University  
*Motivational factors in major mental disorders*
11:45-1:45  Lunch
1:45-5:00  Debate Preparation (no lab)
6:30-8:00  **DEBATES: Teams 1 and 2** (fellows will be organized into teams during week 1)

Friday (x/xx): Individual Differences and Development of Motivated Cognition

8:00-8:45  Breakfast
8:45-10:15  **Speaker 9: Kim Chiew**, University of Denver  
*The Influence of Motivation and Affect on Cognitive Control and Memory*
10:15-10:30  Break
10:30-11:45  **Speaker 10: Catherine Hartley**, NYU  
*Mechanisms of Motivated Actions & Choices: Variations across Individuals and Development*
11:45-1:45  Lunch
1:45-3:00  **Speaker 11: Adriana Galvan**, UCLA  
*Motivated behavior in adolescence*
3:00-3:30  Final discussion and sum-up.
3:30-5:30  Chill out
5:30  **BBQ at Goleta Beach** *(walking distance from campus – see map)*

Saturday and Sunday: Free, to self-assemble and enjoy the Santa Barbara area and each other’s company.
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