

**University of California, Irvine  
Statistics Seminar**

*The Value of Control*

**Mimi Liljeholm  
Associate Professor, Cognitive Sciences  
UC Irvine**

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6011 Donald Bren Hall**

The utility of a given experience, like interacting with a particular friend or tasting a particular food, fluctuates continually according to homeostatic and hedonic principles. Consequently, to maximize reward, an individual must be able to flexibly escape or attain outcomes as preferences change, by switching between actions. In this talk, I will present behavioral, computational, and neural evidence suggesting that *instrumental divergence* – the degree to which available options differ with respect to their outcome distributions – plays a critical role in the affordance of flexible control. Implications for the arbitration between deliberate and reflexive action selection, and for the representational discovery of actions, in human and artificial intelligence will be discussed.