



# UConn BIRC Speaker Series

Tuesday, December 15<sup>th</sup> from 12-1:30 pm ET via Zoom

## ***A reward-learning framework of autonomous knowledge acquisition: An integrated account of curiosity, interest, and intrinsic-extrinsic rewards***

Kou Murayama, PhD, University of Tübingen



**Abstract:** The recent growing body of neuroscientific studies have suggested that curiosity and interest are processed in the reward network in the brain (e.g., the striatum), which is commonly activated by extrinsic incentives. These findings have led neuroscience researchers to claim that interest is little different from the motivation driven by extrinsic incentives. On the other hand, there is a long-lasting tradition in psychology which denotes that curiosity is something special, and completely independent of, or even in competition with, motivation driven by extrinsic incentives. The objective of the talk is to provide a preliminary framework that accommodates both similarities and dissimilarities between curiosity and extrinsic incentives with some empirical evidence. The basic idea is that curiosity (or interest) can be described as a reward-learning model of knowledge acquisition, but that this knowledge acquisition process has some inherent unique properties (i.e., sustainability, volatility, and under-appreciation) that characterize interest as distinct from extrinsic incentives.

*Bio: Kou Murayama is a psychologist who focuses on a number of overlapping questions about how motivation works in human functioning. With his broad and interdisciplinary background both in basic and applied (especially educational) sciences, his research program features a “multimethod approach”, combining a number of different perspectives, and methodologies (e.g., longitudinal modeling, behavioral experiments, neuroimaging, educational intervention) to gain a comprehensive understanding of motivation. One of the central themes of his recent work is to understand how humans are autonomously motivated to seek and gain knowledge (motivational state often called “interest” or “intrinsic motivation”) and how we can apply this idea to educational settings.*

Remote access Registration: <https://bit.ly/3onsWlj>

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**\*Please note: You *must* register in advance via Zoom\***

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