



DEPARTMENT OF  
PSYCHOLOGY  
*Illinois State University*

## The Department of Psychology & CBS Colloquium Series

# Imbalances in brain maturation and their role in adolescent- typical behavior and the consequences of amphetamine abuse

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Compared to adults, adolescents who use drugs are more likely to develop substance use disorders. The reason for this is multifaceted, but the characteristic features of motivated behavior in adolescents - including heightened risk taking and reduced impulse control - likely contribute to their heightened vulnerability. Work on both humans and laboratory animals has established that neuronal signaling in the prefrontal cortex (PFC) and nucleus accumbens is critical for self-regulatory behaviors, and imbalances in the functional maturation of the PFC relative to the accumbens may play a critical role in adolescent-typical behavior as well as in the consequences of drug use during this time of life. In this talk, I will discuss our studies that have used a rat model of adolescence to explore this hypothesis in measures of brain function and behavior.



**Friday, Apr. 7, 2017**  
**2:00 to 3:00 p.m.**  
**48 DeGarmo Hall**

*Sponsored by the  
Department of Psychology.*

If you need a special accommodation to participate in this program, please contact the Psychology Department at (309) 438-8651. Please allow sufficient time to arrange the accommodation.