The Psychology Department in the College of Science presents a colloquium by

Dr. Lique Coolen
The University of Mississippi Medical Center

"Experience with Social Reward Influences Vulnerability for Substance Abuse in Rats"

Vulnerability to develop drug addiction is influenced by multiple factors, including the social support network of the individual and the social environment in which drug taking occurs. Dr. Coolen will use rat models to demonstrate that a loss of social reward experience increases vulnerability for addiction. In addition, she will show that drug taking within a social context increases vulnerability for addiction. Finally, she will discuss the neurobiological mechanisms by which social experiences influence drug behaviors. Drugs of abuse act on the mesolimbic system which mediates naturally rewarding behaviors, and is critical for the learning and memory of stimulus-reward associations and the prediction of reward. The Coolen lab has demonstrated that experience with social behavior and drugs of abuse causes neural alterations in nucleus accumbens, ventral tegmental area, and medial prefrontal cortex neurons. In turn, such alterations contribute to changes in drug-related behaviors and addiction. Together, these findings suggest that drugs may activate mechanisms of plasticity shared with natural rewards, and allowing for the unique interplay between natural and drug rewards.

Thursday, November 30, 2017 at 4pm
Refreshments served at 3:45
220 Shillman Hall