

PSYC 964 – Social and Motivational Processes

This graduate-level course explores the neurobiology of various psychopathologies, with a specific focus on the oxytocin system and its interactions with the brain's stress and reward systems. As a conceptual framework we will consider the hypothesis that social support may moderate the relationship between stress and psychopathology via social buffering-induced oxytocinergic activity. The course combines lectures, discussions, and student-led presentations. The initial 3-4 weeks features lectures on the use of animals in research, signaling molecules, epigenetics, and molecular techniques used in behavioral neuroscience. These sessions are designed to familiarize students from varying backgrounds with advanced technologies and methodologies. Subsequent background lectures will cover the potential long-term impacts of early life adversity on the oxytocin system, and the importance of that system for the anti-stress properties of social buffering. After this foundational section, students will lead presentations/discussions of selected empirical reports implicating oxytocin in affective disorders, aggression, developmental disorders and substance abuse disorder. In addition, students will complete two writing assignments. The first is a 2-page media-style lay language press release based on their presentation paper. The final assignment is a 5-page critical analysis of a recent empirical report related to the themes of the course.