Monthly Neuro Seminar Series

Spring 2023



Regents Professor of Neuroscience Director, Center for Behavioral Neuroscience Neuroscience Institute Georgia State University



Sex Differences in the Social Brain

The structural and functional sex differences in brain and their translational relevance will be introduced. The importance of the interactions of sex and social factors with an emphasis on aggression, social status and social reward will be discussed. The sex-dependent roles of vasopressin and serotonin in the neural circuitry regulating aggression and social status will be contrasted. The relevance of these data for considering the effects of sex and social factors on the therapeutic effects of the commonly prescribed fluoxetine (Prozac) will be discussed. Next, sex differences in the rewarding properties of social interactions will be presented along with an overarching hypothesis that oxytocin plays a critical role in a sex-dependent inverted U relationship between the intensity of social interactions and their rewarding properties. Finally, the surprising consequences of eliminating functional vasopressin V1a receptors using CRISPR/Cas9 technology on hamster social behavior will be briefly described.

Tuesday, February 7 4:00 PM Coverdell S175

