Sex Differential Expression of Tyrosine Hydroxylase in the Mouse Pre-frontal Cortex

Laith Sawaged

The norepinephrine system is involved in a range of physiological processes like mood, sleep, appetite, and memory. This functional, and sex-dependent, diversity of the NE(norepinephrine) system contributes to its significant role in neurological diseases. Immunohistochemistry was performed in this study to determine the differences in the expression of the TH(tyrosine-hydroxylase) gene in the pre-frontal cortex, a region implicated in schizophrenia, of mice. Results show that female mice brains have higher expression of TH in the PFC, which may be linked to the different prevalence of schizophrenia across the two sexes.