

Lay summary: Aberrant neuroimmune interactions during development contribute to oxytocin system hypofunction in mice lacking an autism-risk gene

Katrina Choe (PI): McMaster University

Masha Prager-Khoutorsky (co-PI): McGill University

The brain neurohormone known as oxytocin is critical for supporting normal social behaviours, and has been implicated in autism spectrum disorders (ASD). Using mice, we will study how mutations in *Cntnap2*, a gene strongly associated with ASD, interfere with the interaction between the immune system and the developing brain, leading to lowered brain oxytocin and a reduced interest in social interactions. Results from our study will help understand the relationship between ASD-linked gene mutations, brain-immune system interactions, brain oxytocin and social behaviour.