

Research Work

Research in our laboratory (wet lab) focuses on the relationship between genetic, biochemical, and molecular mechanisms and neuropsychiatric illnesses such as schizophrenia and Parkinson's disease. Our research efforts are particularly directed towards the role of dopamine receptors in CNS disorders, understanding of the role of presynaptic phosphoprotein synapsis, drug development and novel drug formulations for CNS active drug delivery to the brain via intranasal administration. Most of these studies are performed in collaboration with other scientists within the Department of Psychiatry and Behavioural Neurosciences (Dr. Benicio Frey) as well as faculty members in the other departments (Dr. Todd Hoare (chemical and biomedical engineering), Dr. B Gupta (Department of Biology)). Hopefully, the discoveries from our lab will reach the marketplace to help patients with mental and neurological illnesses.

Engagement Opportunities

Introductory Level

 Assist with data analysis and entry in pre-clinical animal models of schizophrenia and Parkinson's disease

Intermediate Level

 Write section(s) of the paper

Advanced Level

 Statistical analysis of data, conduct limited experiments, write parts of the manuscripts