



Flavio Kapczinski, MSc, PhD, MD



HEALTH SCIENCES
Psychiatry & Behavioural
Neurosciences

Research Work

I have been at the forefront of research in biomarkers in bipolar disorder. My research contributed to the development of the concept of neuroprogression. Neuroprogression is the underlying biology of chronicity, functional impairment and higher propensity for dementia among patients with mood disorders. My overarching research focus is to understand the biological components of neuroprogression in bipolar disorder, and translate such scientific knowledge into improvements in clinical interventions. Moreover, in recent years I have been moving toward the realm of big data, studying sleep patterns and proteins in the body, and using neuroimaging to collect information on brain and behavioural patterns to learn when and how to intervene more successfully. While the status quo in psychiatry is the reduction of symptoms and remediation of dysfunction, my team and I believe that the use of machine learning and big data will help pave the way toward personalized medicine in psychiatry. Overall, I believe the main task for psychiatry is to now translate findings from the field of neuroscience into better clinical solutions for patients, their families and the community.

Engagement Opportunities

Introductory Level

- Serve as a second reviewer on systematic review (20 hrs)
- Full-text screening of research articles (20 hrs)

Intermediate Level

- Assist with meta-analysis (60 hrs)
- Write a section of a paper (10 hrs)

Advanced Level

- Perform secondary data analysis and write manuscript (100 hrs)
- Complete a meta-analysis/systematic review and write-up (100 hrs)

If you are interested in learning more, please leave your contact information with the Research Office and/or contact Flavio Kapczinski (kapczinf@mcmaster.ca).