



Western

Postdoctoral Research Fellow in Human Brain Neuroimaging and Spectroscopy

Post-Doctoral Researcher Positions are available to work on a newly funded Neuropsychiatry Team Research Program at the University of Western Ontario. Our program will be investigating the effects of adolescent exposure to nicotine on increased risk for developing mood and anxiety disorders in later life (see *Addiction Biology*, 26(2):e12891; *Cerebral Cortex*, 29:3140-3153; *Neuropsychopharmacology*, 39:2799-815, *Drug Alcohol Depend*, 215:108215). Experiments will comprise an integrative combination of 3.0 Tesla functional brain imaging with fMRI, connectomics using resting-state fMRI and diffusion tensor imaging, magnetic resonance spectroscopy measuring neurotransmitter levels in various neural targets of interest, including the prefrontal cortex and ventral striatum. Studies will also use genomic approaches to examine and identify genetic biomarkers for nicotine-related and mood/anxiety disorder risks. Research will be conducted in patient populations with histories of adolescent nicotine exposure and mood/anxiety disorders selected from local clinics. Selected applicants will have the opportunity to learn multiple neuroscience and neuropsychiatry-based research techniques while working in a team of leading experts in the fields of neuroimaging, neurodevelopment, behavioural neuroscience, genomics and mood/anxiety disorders. We encourage applications from candidates with expertise in neuropsychiatry research, preferably with backgrounds in neuroimaging physics/biophysics and with experience in human brain proton magnetic resonance spectroscopy. Interested applicants should send expressions of interest and a current C.V. to: AddictionResearchGroup@protonmail.com

Related Websites:

https://www.schulich.uwo.ca/about/news/2024/february/researchers_revolutionizing_understanding_of_nicotines_effect_on_adolescent_brain.html

<https://www.laviolettelab.com/>

<https://lawsonimaging.ca/scientists/jtheberge>

https://www.schulich.uwo.ca/research//research_excellence/daring_to_ask/ended_chairs/dr_elizabeth_osuch.html

<https://www.khokharlab.com/>

https://www.schulich.uwo.ca/research//research_excellence/daring_to_ask/ended_chairs/dr_robert_hegele.html