
21 April 2021

POSTDOCTORAL FELLOW POSITION, ANDREAZZA LAB

The University of Toronto, Department of Pharmacology & Toxicology

RESEARCH PROGRAM OVERVIEW

The postdoctoral fellow will be working in a vibrant and collaborative laboratory which focuses on the understanding of the role of mitochondrial function in mental illness, especially in mood disorders. As neurons depend on mitochondrial function, dysfunctional mitochondria during neurodevelopment is expected to impact neurotransmission with potentially crucial implications for mood disorders. Currently, the laboratory of Dr. Andrezza is evaluating the impact of mitochondrial dysfunction on neurotransmission using 2D models and 3D brain organoids generated from induced pluripotent stem cells from patients with bipolar disorder and/or mitochondrial disease.

To accelerate the discovery of effective therapeutic approaches to treat mitochondrial dysfunction/disease, Dr. Andrezza founded mitoNET.ca, which after successful fundraising and support from the University of Toronto became [MITO2i](#). The objective is to unite researchers from different medical fields with a common interest in unveiling the role of mitochondrial function and genetics in human diseases and transform mitochondrial health. The postdoctoral fellow will work closely with MITO2i researchers.

QUALIFICATIONS

PhD required. Background in stem cell work, mitochondrial biology and genetics are an asset.

Seeking one creative individual who can integrate stem cell and mitochondrial biology on projects focusing on the development of 2D models and 3D brain organoids models to study mitochondrial health (function, genetics and morphology) and development of by-genomic interaction models leading to test of target therapeutics. Ideal candidates must have experience in some or all of the below:

Mammalian cell and molecular biology;
PCR;
Image analysis;
Transfection;
Designing and generating DNA constructs;
Lineage-directed differentiation;
Mitochondrial biology;
Genome editing and manipulation for disease modelling;
Experience with CRISPR/Cas9 would be an asset.

Individuals must also:

Work well in a goal-oriented team environment;
Be comfortable with mentoring and work along and collaborative with all team members;
Have a proven track record of research (i.e. publication record);
Possess excellent communication skills – both verbal and written;
Have the ability to work independently and organize own workload;
Have the ability to design and analyze experiments, keep meticulous records of experiments and data, report on research progress and outcomes openly, and review methodologies in response to feedback; &
Have demonstrated the ability to write scientific reports and manuscripts.

OTHER CONSIDERATIONS

The Andreazza laboratory is situated at the Medical Science Building at the University of Toronto, Department of Pharmacology & Toxicology.

The position is **available from August 1st, 2021** and will be based on a one-year renewable contract, up to a maximum of 3 years duration. Salary will be commensurate with qualifications and experience, with a minimum pay of \$40,000. Candidates are also encouraged to apply for competitive fellowship awards.

Employment as a Postdoctoral Fellow at the University of Toronto is covered by the terms of the CUPE 3902 Unit 5 Collective Agreement.

The normal hours of work are 40 hours per week for a full-time postdoctoral fellow (pro-rated for those holding a partial appointment) recognizing that the needs of the employee's research and training and the needs of the supervisor's research program may require flexibility in the performance of the employee's duties and hours of work.

A letter of application, accompanied by a detailed curriculum vitae including a list of publications, and contact details for 3 references, should be sent by email to:

Ana Andreazza
ana.andreazza@utoronto.ca

Applications process is open from April 21, 2021 until May 20, 2021. Review of applications will begin immediately and continue until the positions are filled.

Equity and diversity are essential to academic excellence. An open and diverse community fosters the inclusion of voices that have been underrepresented or discouraged. We encourage applications from members of groups that have been marginalized. All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority.

