

**Research Associate (Limited Term)**  
**Job Number 1601775**

**Faculty / Division:** Faculty of Medicine  
**Department:** Department of Immunology  
**Campus:** St. George (downtown Toronto)

**Description**

The Department of Immunology in the Faculty of Medicine, University of Toronto, invites applications for the position of Research Associate (Limited Term) for a neuroimmunologist with experience in immune and neurodegenerative aspects of multiple sclerosis (MS) pathology. In particular, experience relevant to cortical demyelination and cognitive impairment driven by complement activation in the central nervous system (CNS). The successful candidate will be responsible for conducting molecular and neuropathological analysis of post-mortem human MS brains; analyzing complement activation/deposition in the CNS; executing prophylactic and therapeutic pre-clinical trials; and looking at functional studies in animal models of MS-like disease such as experimental autoimmune encephalomyelitis (EAE).

**Qualifications**  
**(MINIMUM)**

Ph.D. in a relevant scientific field with a minimum five (5) years of postdoctoral experience; and a strong publication record, including senior (last) authorships. Experience analyzing post-mortem human brain tissue, specifically brains from MS donors, is required. Due to the focus on cognitive impairment in MS, expertise with the immunopathology and neuropathology of the MS hippocampus is imperative; and advanced knowledge of complement biology and relevant complement immunoassays. Experience in the induction and clinical monitoring of the EAE model is required. Brain banking experience is an advantage. Mastery of experimental models of nerve\brain trauma, which share key aspects of neuronal damage with MS pathology, is an asset. Surgical skills (e.g. implantation of osmotic pumps, perfusion), preparing brain tissue for histology; experience with immunopathology and neuropathology of the nervous system; mastery of immunohistochemical techniques; microscopy; and experience with staining analysis software is required.

Evidence in ability to develop an independent research program with translational value and to direct projects. The successful candidate will be expected to contribute to the guidance of technicians and trainees, and to participate in the teaching mission of the lab; therefore, previous supervisory and teaching experience is required. Experience preparing manuscripts for submission to peer-review publications/journals and presenting findings at local, national and international conferences is required.

**Responsibilities:**

- Conducts molecular (western blot, qPCR) and pathological analysis (immunohistochemistry, immunofluorescence, advanced imaging techniques) of post-mortem MS brains, with focus on cortical demyelination and neurodegeneration;
- Tests novel therapeutics in EAE;
- Monitors clinical disability in EAE;
- Performs immunopathological and neuropathological analysis of mouse brain

tissue, including collecting and preparing samples, histology/immunohistochemistry (frozen tissue, formalin-fixed paraffin-embedded tissue, resin-embedded tissue), microscopy (light, fluorescence, confocal), and data analysis;

- Designs, plans and executes research projects;
- Supervises research staff;
- Works with multi-disciplinary, multi-institutional teams;
- Presents research findings to PI's and other members of the research team;
- Conducts data analysis and reporting;
- Ensures project goals are met within the context of the larger program;
- Liaises with collaborators and assists in compiling, analyzing and reporting research findings to researchers within and outside of the program.

The successful candidate is expected to participate in preparing grant applications; provide support to the overall research and teaching missions of the lab; perform research with a high degree of independence; and design, direct, execute, analyze and present in written and oral forms novel investigative studies that build on and/or take advantage of the resources and expertise within the lab as well as the incumbent's academic expertise.

**Travel:** Limited

**Notes:** The University of Toronto is strongly committed to diversity with its community and especially welcomes applications from visible minority group members, women, Aboriginal persons, persons with disabilities, members of sexual minority groups, and others who may contribute to further diversification of ideas.

All qualified incumbents are encouraged to apply; however, Canadians and permanent residents will be given priority.

**To Apply:** Please visit the University of Toronto careers website and apply for job number: 1601775

<https://utoronto.taleo.net/careersection/10000/jobdetail.ftl?job=1601775>

**Employee Group:** Research Associate, Limited Term

**Appointment Type:** Grant – Term (Two year)

**Schedule:** Full-time

**Pay Scale Group and Hiring Rate:** R01 -- Research Associates (Limited Term):  
\$42,264 - \$79,245

**Percentage of FTE:** 100

**Job Field:** Research Associate

**Job Posting:** November 7, 2016

**Job Closing:** December 12, 2016