The Neuroscience collaborative specialization provides an opportunity for MSc/MBS/PhD students engaged in research in the rapidly expanding field of neuroscience, to combine their departmental degree program with multidisciplinary exposure to the field of neuroscience. This unique combination of multidisciplinary studies provides students with the best possible foundation for academic careers in neuroscience and related areas. The collaborative specialization includes participation from core faculty in the following departments: Animal Biosciences, Biomedical Sciences, Clinical Studies, Human Health and Nutritional Sciences, Integrative Biology, Molecular and Cellular Biology, Pathobiology, Philosophy (PhD only), Population Medicine and Psychology. Students wishing to pursue a Master’s or PhD degree with the designation Neuroscience must enter the collaborative specialization in Neuroscience through a participating department.

### Administrative Staff

**Director** (until December 31, 2021)
Boyer Winters (3005 MacKinnon, Ext. 52163)
bwinters@uoguelph.ca

**Graduate Program Coordinator** (until December 31, 2021)
Mark Fenske (4003 MacKinnon Extension, Ext. 53518)
mfenske@uoguelph.ca

**Graduate Program Assistant**
TBD (4014 MacKinnon, Ext. 53508)
psycgpa@uoguelph.ca

**Director and Graduate Program Coordinator** (effective January 1, 2022)
Jasmin Lalonde (3460 Science Complex, Ext. 54706)
jalon07@uoguelph.ca (calendar.uoguelph.ca/graduate-calendar/collaborative-specializations/neuroscience/jalon07@uoguelph.ca)

**Graduate Program Assistant** (effective January 1, 2022)
Jillian Cockwell (4480 Science Complex, Ext. 56246)
cbsmcbgrad@uoguelph.ca (calendar.uoguelph.ca/graduate-calendar/collaborative-specializations/neuroscience/cbsmcbgrad@uoguelph.ca)

### College Representatives

Craig Bailey (OVC)

Jasmin Lalonde (CSAHS)

### Graduate Faculty

This list may include Regular Graduate Faculty, Associated Graduate Faculty and/or Graduate Faculty from other universities.

**Naseem Al-Aidroos**
B.Sc. Waterloo, MA, PhD Toronto - Associate Professor
Graduate Faculty

**Craig D. Bailey**
B.Sc., PhD Queen’s - Associate Professor
Graduate Faculty

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**Andrew J. Bendall**
B.Sc. Australian National, PhD Macquarie - Associate Professor
Graduate Faculty

**Leah Bent**
B.Sc., M.Sc. Guelph, PhD British Columbia - Associate Professor
Graduate Faculty

**Nicholas J. Bernier**
B.Sc. McGill, Diploma Aquaculture Malaspina College, M.Sc. British Columbia, PhD Ottawa - Professor
Graduate Faculty

**Elena Choleris**
B.Sc., PhD Parma (Italy) - Professor
Graduate Faculty

**Donald Dedrick**
BA, MA Carleton, PhD Toronto - Associate Professor
Graduate Faculty

**Mark J. Fenske**
B.Sc. Lethbridge, MA, PhD Waterloo - Professor
Graduate Faculty

**Christopher Fiacconi**
B.Sc. Western, PhD McMaster - Assistant Professor
Graduate Faculty

**Andreas Heyland**
B.Sc., M.Sc. Zurich, PhD Florida - Professor
Graduate Faculty

**Fiona James**
HB.Sc. Toronto, M.Sc. Western, DVM, D.V.Sc. Guelph, Dipl. ACVIM - Assistant Professor
Graduate Faculty

**Nina Jones**
B.Sc. Guelph, PhD Toronto - Associate Professor
Graduate Faculty

**Bettina E. Kalisch**
B.Sc., M.Sc., PhD Queen’s - Associate Professor
Graduate Faculty

**Frederic Laberge**
B.Sc., M.Sc. Laval, PhD Manitoba - Associate Professor
Graduate Faculty

**Jibran Khokhar**
B.Sc. Queen’s, PhD Toronto - Assistant Professor
Graduate Faculty

**Frederic Laberge**
B.Sc., M.Sc. Laval, PhD Manitoba - Associate Professor
Graduate Faculty

**Jasmin Lalonde**
B.A. Ottawa, MA, PhD McGill - Assistant Professor
Graduate Faculty

**Francesco Leri**
BA, MA, PhD McGill - Professor
Graduate Faculty

**Ray Lu**
MSc/MBS Collaborative Specialization

The MSc/MBS collaborative specialization in Neuroscience enables students engaged in neuroscience research to combine their departmental degree program with a multidisciplinary specialization in the field of neuroscience.

Admission Requirements
MSc/MBS students in the collaborative specialization in Neuroscience must meet the admission requirements of the participating department in which they are enrolled. The application process has two stages: first, application to the primary program of interest, identifying interest in the collaborative specialization as a secondary focus. If the student is admitted to the primary program, the second stage is then admission to the collaborative specialization.

Program Requirements
Students in the MSc/MBS collaborative specialization must complete NEUR*6000 Principles of Neuroscience and a major project/paper or thesis in the field of Neuroscience. Further, students must register for NEUR*6100 Seminar in Neuroscience each term that they are in the collaborative specialization. In NEUR*6100 Seminar in Neuroscience, students and faculty will meet once a month to discuss issues/hear talks/present research in neuroscience.

Requirements of this collaborative specialization may also serve as elective requirements in the student’s home program.

PhD Collaborative Specialization

The PhD collaborative specialization in Neuroscience enables students engaged in neuroscience dissertation research to combine their departmental degree program with a multidisciplinary specialization in the field of neuroscience.

Admission Requirements
PhD students in the collaborative specialization in Neuroscience must meet the PhD admission requirements for the participating department in which they are enrolled.

Program Requirements
If a student enters the PhD collaborative specialization in Neuroscience at the doctoral level, students must complete NEUR*6000 Principles of Neuroscience, or show evidence of course equivalence in prior training. Students must be engaged in neuroscience dissertation research. During each term of their program of studies, doctoral students must enroll in NEUR*6100 Seminar in Neuroscience. The seminar will meet monthly. Students must take their qualifying exams within five semesters of entering the program, as required by University graduate policies. One member on the qualifying exam committee must be a core member of the collaborative specialization in Neuroscience outside the student's home department or a faculty member from another university approved by graduate studies. As well one member of the student's advisory committee must be a core member of the neuroscience collaborative...
specialization outside the student’s home department or a faculty member from another university approved by graduate studies.

Requirements of this collaborative specialization may also serve as elective requirements in the student’s home program.

**Courses**

**NEUR*6000  Principles of Neuroscience  Unspecified  [0.50]**
This course is designed to ensure that graduate students with diverse neuroscience backgrounds registered in the collaborative specialization in Neuroscience are exposed to the fundamentals in all areas of neuroscience.

**Department(s):** Department of Biomedical Sciences  
**Location(s):** Guelph

**NEUR*6100  Seminar in Neuroscience  Unspecified  [0.00]**
This course will expose graduate students to some of the major theories, issues and methodologies driving research in neuroscience. Students will learn to critically evaluate presentations by researchers in this field as well as to communicate the results of their own research.

**Department(s):** Department of Psychology  
**Location(s):** Guelph