

'396' Undergraduate Research Project Application Form

Version: 200603

Office for Undergraduate Research in Science
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Email: victor.chisholm@mcgill.ca Web: www.mcgill.ca/science/ours/

INSTRUCTIONS FOR STUDENTS

- **All fields are required, unless indicated otherwise.**
- Download and print this form. Complete Section C and sign.
- See "How students can apply" instructions in Section B.
- Your supervisor or department will tell you if you are selected for this project. If so, you will receive a code to register for a '396' course on MINERVA.

SECTION A: SUPERVISOR INFORMATION

Name: Ursula Stochaj **Email:** Ursula.stochaj@mcgill.ca
Phone: 514-398-2949 **Website:** _____
Supervisor's Department or Unit: Physiology **Course Number:** PHGY396

SECTION B: PROJECT INFORMATION

Term: Winter 2008 **Project start & end dates:** January - April 2008

Project title: The role of PI3 kinase in nucleocytoplasmic transport of heat shock proteins.
Project description: This project will analyze how signaling through PI3 kinase regulates the distribution and abundance of stress proteins and factors that control heat shock protein activity. Human culture cells will serve as the model system for these studies. Quantitative fluorescence microscopy and other imaging techniques will be employed to monitor the localization of candidate proteins under different physiological conditions. This will involve the use of specific pharmacological tools that inhibit PI3 kinase. The abundance of heat shock proteins and their interacting components will be determined by Western blotting. The ultimate goal of these studies is to define at the molecular level the link between PI3 signaling and stress protein function.

Prerequisites: 2 terms completed at McGill + CGPA ≥ 3.0
Grading scheme: Performance in lab: 50 %; final report 50%.

Other: Best way to reach me: email

Status: Mark with an x. This project is...
 Open to applicants
 Already taken; no more positions available this term
 Taken, but contact me for other possible projects this term

Ethics, safety, and training: Which of the following, if any, is involved? Mark with an x.
 Animal subjects
 Human subjects
 Biohazardous substances
 Radioactive materials
 Handling chemicals
 Using lasers

For undergraduate students, ethics and safety compliance is the supervisor's responsibility.

How students can apply: _____

SECTION C: STUDENT INFORMATION. (1) PRINT LEGIBLY AND SIGN. (2) SEE "HOW STUDENTS CAN APPLY" IN SECTION B.

Name: _____ **McGill ID:** _____
Email: _____@mail.mcgill.ca **Phone:** _____
Program: _____ (e.g., B.Sc. Maj. Chem. Minor Biology) **Level:** (circle one) U0 / U1 / U2 / U3
I have not applied for another 396 course in this term.
Student signature: _____ **Date:** _____

SECTION D: APPROVALS. (1) PRINT NAMES & SIGN. (2) NOTIFY OFFICE FOR UNDERGRADUATE RESEARCH IN SCIENCE. (3) GIVE STUDENT CODE TO REGISTER FOR COURSE ON MINERVA.

Supervisor: _____ **Date:** _____
Unit Chair, Director, or designate - I certify that this project conforms to departmental requirements for 396 courses. _____ **Date:** _____