

'396' Undergraduate Research Project Application Form

Version: 200603

Office for Undergraduate Research in Science
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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: Norman White **Email:** Norman.white@mcgill.ca
Phone: 514-398-6082 **Website:** <http://www.psych.mcgill.ca/faculty/white.html>
Supervisor's Department or Unit: Psychology **Course Number:** PSYC 396

SECTION B: PROJECT INFORMATION

Term: Summer 2008 **Project start & end dates:** Jun 1, 2008-Aug 31, 2008
Project title: Effects of amygdala and hippocampal inactivation on conditioned cue preference learning
Project description: Conditioned cue preference learning is a model of combined cognitive and emotional learning in humans. The hippocampus is a central structure for cognitive learning, the amygdala for emotional learning. The project will involve injecting a neural transmission (GABAa) blocker (muscimol) into each of these structures to produce a temporary inactivation at specific times in the training and testing procedures. The rats will be prepared with cannulas for making the injections by a graduate student. The student will then collect the behavioral data, analyze it and write a research report on the effects of blocking cognitive or emotional learning on conditioned cue preference performance. While running the project the student will read some of the background literature on the experiment and will participate in an ongoing research seminar in the lab dealing with issues relevant to the project. The grade will be based primarily on the research report.
Prerequisites: 1 term completed at McGill + CGPA ≥ 3.0; or permission of instructor.
Grading scheme: The grade will be based on the research report (80%) and on the student's performance in the lab (20%).
Other: _____
Status: Mark with an x. This project is...
[] Open to applicants
[x] 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.
[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: _____ **Phone:** _____
Program: _____ **Level:** _____
(circle one)
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:** _____

