

# '396' Undergraduate Research Project Application Form

Version: 200603

Office for Undergraduate Research in Science  
Tel.: 514-398-5964 / Fax: 514-398-8102 / Dawson Hall, Room 211  
Email: [victor.chisholm@mcgill.ca](mailto:victor.chisholm@mcgill.ca) Web: [www.mcgill.ca/science/ours/](http://www.mcgill.ca/science/ours/)

## INSTRUCTIONS FOR SUPERVISORS

- **All fields are required, unless indicated otherwise.**
- Form available in Word and LaTeX formats.
- Complete Sections A & B electronically.
- Email to [victor.chisholm@mcgill.ca](mailto:victor.chisholm@mcgill.ca) who will post as PDF on [www.mcgill.ca/science/ours/396/](http://www.mcgill.ca/science/ours/396/).

## 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:** Terence Coderre  
(Co-advisor: Catherine Bushnell) **Email:** [terence.coderre@mcgill.ca](mailto:terence.coderre@mcgill.ca)  
[catherine.bushnell@mcgill.ca](mailto:catherine.bushnell@mcgill.ca)

**Phone:** 514-398-5773 **Website:** \_\_\_\_\_

**Supervisor's Department or Unit:** Psychology **Course Number:** PSYC396

## SECTION B: PROJECT INFORMATION

**Term:** Winter 2007 **Project start & end dates:** January 3-April 30, 2007

**Project title:** Natural basis of attentional and emotional modulation of pain

**Project description:** This project involves the analysis of functional and anatomical magnetic resonance imaging (MRI) data that were collected in a cohort of healthy volunteers. Experimental heat pain was presented while the subjects attended to or were distracted from the painful stimuli, as well as when the subjects were in a positive or negative emotional state. The student will examine differences in pain-evoked neural activation during these different psychological conditions. If time allows, she will also examine structural differences in the brains of subjects whose pain was highly influenced by each psychological manipulation and those who had little effect of psychological state on pain perception.

**Prerequisites:** 1 term completed at McGill + CGPA  $\geq$  3.0; or permission of instructor.

**Grading scheme:** The final report will be worth 50% of the final grade. The other 50% will be based on the student's performance in the lab. After analyzing the data, the student will write a report about the findings; the report will include a literature review of psychological modulation of pain (5-10 double spaced pages) and will include at least 10 references.

**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.  
[ ] Animal subjects  
[ x ] Human subjects (Student will only analyze data and will not be working directly with 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:** Bring this application form and your advising transcript to me during office hours.

## 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:** \_\_\_\_\_