

'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: Gregory G. Brown **Email:** Greg.brown@mcgill.ca
Phone: 514-398-6426 **Website:** _____
Supervisor's Department or Unit: Biology **Course Number:** ANAT396

SECTION B: PROJECT INFORMATION

Term: Fall 2006 **Project start & end dates:** September 15 – December 15, 2006

Project title: RNA maturases in Arabidopsis mitochondria

Project description: Group II introns are found in organelles and bacteria and are related to spliceosomal snRNAs. RNA maturases are multifunctional proteins required for the splicing of group II introns. The nuclear genome of the model plant *Arabidopsis thaliana* has four genes that encode RNA maturases, called n-Mats. The protein products of these genes are predicted to be targeted to mitochondria. In this project, the expression patterns of n-Mat transcripts in various *Arabidopsis* tissues will be examined. In addition, the morphology and mitochondrial RNA splicing will be examined in insertion mutants that disrupt the expression of the different n-Mats.

Prerequisites: 1 term completed at McGill + CGPA ≥ 3.0; or permission of instructor.

Grading scheme: Attendance 10%, Laboratory performance 40%, Final Report 50%

Other: _____

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:** _____
I have not applied for another 396 course in this term. **(circle one)** U0 / U1 / U2 / U3
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:** _____