'396' Undergraduate Research Project Application Form

Office for Undergraduate Research in Science
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Dawson Hall, Room 211
tel 514-398-5964, fax 514-398-8102
Form version 200603

Instructions for students

- *All fields are required, unless indicated otherwise.*
- Download and print this form. Complete Section 3 and sign.
- See "How students can apply" instructions in Section 2.10.
- 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.

1 Supervisor Information

Name:	Prof. Ted Perkins
Email:	theodore.perkins@mcgill.ca
Phone:	514-398-5018
Website:	http://www.mcb.mcgill.ca/∼perkins
Department or Unit:	School of Computer Science
Course number:	COMP396

2 Project Information

2.1 Term:

Summer 2008

2.2 Project start & end dates:

June 1 - August 31, 2008

2.3 Project title:

Regulation of rab genes in Drosophila

2.4 Project description:

Rab genes are key controllers of intracellular transport and are differrentially expressed in different tissues and at different times. In Drosophila, in particular, there are 31 rab genes, and these are homologous genes in humans and many other species. What causes these genes to be differentially expressed is not well understood. In this project, the student will perform various types of DNA sequence analysis to identify likely transcriptional regulatory elements, and possibly transcription factors, that modulate rab gene expression. Analyses will be based on the recently-completed collection of 12 Drosophila genomes and will employ a variety of auxiliary databases, as well as existing and custome-made analysis programs.

2.5 Prerequisites:

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

2.6 Grading scheme:

50% final report, 40% weekly progress & meetings, 10% final oral presentation

2.7 Other:

2.8 Status:

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

2.9 Ethics, safety, & training:

Which of the following, if any, is involved?
( ) Animal subjects
( ) Human subjects
( ) Biohazardous substances
( ) Radioactive materials
( ) Handling chemicals
( ) Using lasers
For undergraduate students, ethics and safety compliance is the supervisor's responsibility.

2.10 How students can apply:

This project is already taken.

3 Student Information. (1) Print legibly and sign. (2) See 'How students can apply' in Section 2.10.

Name:	
McGill ID:	
Email (first.last@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 this term. **Student signature:**	
Date:	

4 Approvals. (1) Print names and sign. (2) Notify Office for Undergraduate Research in Science. (3) Give student code to register for course on MINERVA.

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