DEPARTMENT OF PHARMACOLOGY AND TOXICOLOGY

### **Undergraduate Research Opportunity Program (UROP)**

2024 APPLICATION GUIDELINES

The Department of Pharmacology and Toxicology invites summer studentship applications from undergraduate students. The Undergraduate Research Opportunity Program (UROP), administered by the Office of the Vice Dean, Research and Health Science Education (RHSE) in the Temerty Faculty of Medicine, provides UofT and non-UofT undergraduate students with an opportunity to gain valuable research experience during the summer session.

Students accepted into the program will work on a specific research project under the supervision of a faculty member and may meet on a weekly basis for group seminars and discussion at the discretion of their supervisor.

All students are required to:

* Submit a written final report with a length of at least three double-spaced pages (not including references)
* Give a 10–15-minute presentation of their research the end of July (date to be determined).
* Both the report and presentation should address the nature of research conducted by the student including: the scientific background relevant for the research topic, objectives/hypotheses, methodology, results, discussion, and conclusions.
* The supervisor should provide the student with feedback on the report and presentation, and a copy of the final report must be submitted to the Program Coordinator by August 31, 2024.
* The student’s final report will be part of a required activity report to be submitted by the Program Coordinator to the Office of the Vice Dean.

**Students are responsible for contacting the professors of their choice to inquire about research projects** and laboratory space. A list of potential supervisors and their research interests is available by accessing the faculty list (www.pharmtox.utoronto.ca/faculty). Interested students should contact potential supervisors directly to arrange an appointment to meet. Most professors will ask the student to bring their academic record and a resume or curriculum vitae to the initial interview.

**Award Duration:**

* Students are expected to engage in full-time research for at least 12 weeks as agreed upon with the supervisor from May to August to be able to qualify for the full stipend of **$5,000** ($2,500 from the UROP + $2,500 minimum paid by the sponsoring professor).

**Eligibility:**

* Students must have a minimum B+ average in the two terms of undergraduate studies immediately preceding award acceptance and must complete a full-time study term directly prior to the award period.
* Students who have completed their undergraduate program are not eligible to apply unless they have been accepted into or are currently enrolled in an undergraduate professional program (medical undergraduate).
* Students who have completed an undergraduate degree and have been accepted into a graduate program but have not yet begun are eligible to apply.
* University of Toronto and non-University of Toronto students may be considered, including international students (with valid student visa for the full summer work term).
* Students must be supervised by a faculty member of the Department of Pharmacology and Toxicology.
* Students may only submit one application to this program and each professor may only sponsor two students. Failure to comply with this rule may result in the application being denied.
* Students cannot accept multiple summer research awards at the same time.
* Preference will be given to students who have an interest in a research career in pharmacology or toxicology and who have taken at least an introductory course in pharmacology or toxicology.
* Research must be in health research in any area, cardiovascular/heart, cancer and cancer related diseases, kidney and kidney related diseases or respiratory diseases.

Students participating in this program cannot receive a course credit (e.g., PCL472Y or PCL474Y) for this work. However, students on a co-op work term or ASIP placement are eligible if all other criteria are met.

**Interested students should:**

1. Seek a position with a faculty member of the Department of Pharmacology and Toxicology who is willing to supervise you and to complete the sponsorship agreement form providing a minimum of $2,500 for the duration of the studentship program (i.e., minimum 12 weeks).
2. Submit a complete application by **February 27, 2024** including the application form, resume or curriculum vitae (CV), list of 2-3 references, copy of official academic transcript(s), and the sponsorship agreement letter. Only complete applications received by the deadline date from students meeting the eligibility criteria will be reviewed.

**DEPARTMENT OF PHARMACOLOGY AND TOXICOLOGY**

### **Undergraduate Research Opportunity Program (UROP)**

### APPLICATION FORM

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| **STUDENT INFORMATION** |
| **First Name:**      | **Last Name:**      | **Student #:**       |
| **Address:**      | **Unit #:**      |
| **City:**      | **Province/State:**      | **Postal/Zip Code:**       | **Country:**       |
| **Telephone #:**      | **Email:**      |

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| **ACADEMIC BACKGROUND** |
| **Program of Study:**      | **University:**      | **Year of Study:**       |
| **Pharmacology/Toxicology courses that you have taken** (Course Name / Course Code / Course Mark):      |
| **Statement of research interest and future goals**:      |
| **Previous research and/or other relevant experience** (attach another page if necessary):      |
| **SUPERVISOR INFORMATION***(Must be a Department of Pharmacology and Toxicology Faculty Member)* |
| **First Name:**      | **Last Name:**      |
| **Telephone #:**      | **Email:**      |
| **Name of Laboratory Business/Grants Officer:**       | **Email of Laboratory Business/Grants Officer:**       |

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| **PROPOSED RESEARCH PROJECT** |
| **Area of Research:**[ ]  Health Research in Any Area (GM) [ ]  Cancer and Cancer Related Diseases [ ]  Dr. John P. Mitchell Award Cancer Fund [ ]  Cardiovascular/Heart[ ]  Kidney and Kidney Related Diseases [ ]  Respiratory Diseases |
| **Research Topic**:      |
| **It is the responsibility of the supervisor to ensure that the student has the appropriate safety / ethics training. List all relevant protocol numbers under which the student will be working**:      |
| **FUNDING SOURCES** | UROP: | $2,500 |
| SUPERVISOR (minimum $2,500): | $      |
| TOTAL FUNDING FOR STUDENT: | $      |
| **Student Signature:** |  | **Supervisor Signature:**  |  |  |
| **Date:**  |       | **Date:**  |       |  |
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| **APPLICATION SUBMISSION** |
| **Please attach:** [ ]  Current résumé or curriculum vitae (CV)[ ]  List of 2-3 references with their contact information (professors or employers)[ ]  Up-to-date copy of official academic transcript[ ]  Completed supervisor agreement letter | **Submit applications to:**undergrad.pharmtox@utoronto.ca  |
| **Application Deadline:** February 27, 2024 |

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date

Undergraduate Program

Department of Pharmacology and Toxicology

Medical Sciences Building

1 King’s College Circle, Room 4207

Toronto, ON M5S 1A8

Dear Awards Committee:

**RE:**  **Undergraduate Research Opportunity Program (UROP) Summer 2024**

 **Supervisor Agreement Letter**

I agree to sponsor \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ for an Undergraduate Research Opportunity Program Studentship in my laboratory during the summer of 2024. I understand that I am only allowed to sponsor two students for this program.

I agree to assign a suitable research project, to supervise this student throughout the summer program, and to ensure that the student has the appropriate safety / ethics training. I understand that the student is expected to work for an agreed upon duration of at least 12 weeks during the summer.

I also agree to provide a stipend of at least $2,500 for this student, if the student has been granted an Undergraduate Research Opportunity Program (UROP) Award. The UROP funds administered by the Office of the Vice Dean, Research and Health Science Education (RHSE) in the Temerty Faculty of Medicine will be used to provide the student with an additional $2,500 for a total stipend of at least $5,000.

Sincerely,

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature of Supervisor