

UNDERGRADUATE RESEARCH OPPORTUNITIES (URO) IN LIFE SCIENCES
University of Toronto

What Students Should Expect

A student who participates in an undergraduate research opportunity (URO) in the Life Sciences, regardless of the nature of the opportunity (be it course-based or stipend-based), will have many opportunities to learn about or directly experience:

- 1) Good Laboratory Practice
 - a. Using established laboratory safety protocols and standard operating procedures (SOPs).
 - b. Proper documenting of laboratory protocols and results and maintaining proper laboratory records.
- 2) Experimental and Critical Evaluation Skills
 - a. Searching the scientific literature and critically evaluating scientific evidence.
 - b. Designing experiments and choosing the appropriate methods of analysis.
 - c. Using appropriate laboratory techniques.
 - d. Troubleshooting problems and actively formulating appropriate solutions.
 - e. Critically analyzing and interpreting data using logic and evidence-based reasoning.
- 3) Communication, Collaboration and Networking Skills
 - a. Communicating in a scholarly style, orally and/or in writing, in seminars, written reports, journal articles, and/or poster presentations, including a final presentation of research work.
 - b. Participating in seminar series, journal clubs and/or lab meetings.
 - c. Working as a team member in a collaborative research environment.
 - d. Building contacts with peers and professionals within the research environment.
- 4) Personal Development
 - a. Beneficially implementing the feedback received and mentoring provided by a research supervisor/principal investigator on a regular basis.
 - b. Thinking and working independently and confidently.