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.