**Research Experience**

If you have been attending university for any length of time, you have probably conducted research. In general, research is the prolonged study of any particular subject and results in a final product such as an article, paper, or presentation. Gaining supervised research experience can prove challenging, especially while engaging in your undergraduate studies. This information sheet is designed to provide you with tips for obtaining supervised research opportunities.

## THE VALUE OF RESEARCH EXPERIENCE

For those pursuing a career in academia, a background in research is vital. Most graduate schools are looking for innovative students to bolster their ranks, and there is no better way to prove your academic worth than solid research experience. Even for those bound for non-academic careers, research can be beneficial as it provides practical experience, which is valued by employers. Research can also be of personal importance, as it can expand your career and academic horizons in new and unexpected directions.

## GETTING YOUR FOOT IN THE DOOR

### Volunteering
Volunteering is a great way to gain valuable experience, which can prepare you for more challenging research roles. Volunteer opportunities are often not research intensive, but they can give you some preliminary immersion in a research environment.  Hospitals, charities and non-profit organizations are common places to engage in volunteer research work. Positions may be available in a number of fields, from life sciences to social work. These volunteer opportunities are competitive, which means that it is important to apply with a well developed résumé and cover letter.  If invited to an interview, it is recommended that you research the organization beforehand. The information you obtain will allow you to ask intelligent questions that demonstrate your knowledge of the organization and your enthusiasm for the opportunity. Attend the Get Experience Fair at UTM (usually held in mid September) to speak with representatives from some of these organizations.  Be sure to pick up your copy of the "Volunteering" tip sheet in the Career Centre, which lists several suggestions and resources.

### Research Assistantships
Working as a Research Assistant (RA) provides experience in research methodology and hones your expertise in a particular field. It also allows you to work with professors and / or graduate students, focusing on one or more existing research projects.  For those interested in an academic career, an RA position is also an excellent way to make strategic contacts and references.

During September and October and in May (for summer work study positions) across all three campuses, research positions are posted through the Work Study Program. Check the Work Study job postings on the Career Learning Network (CLN). The Career Centre also maintains a binder of these positions during the hiring period.

In addition to these listings, the best way to obtain an RA position is to get to know your professors and thereby build networks in your field of study. Inquire about their current research projects and whether they are in need of additional help.  Many professors prefer to hire students they know and many RA positions are not advertised.  Start networking with your professors early.

### Research Opportunity Program and UTM Course Internships
UTM students can also use the Research Opportunities program (ROP) which allows students in their 2nd, 3rd or 4th years to earn a full course credit by participating in a faculty member's research. Check at http://www.utm.utoronto.ca/rop/ for more details. Availability varies by faculty and year. Some programs also offer internships to allow students to gain experience; check this website for more details:  http://www.utm.utoronto.ca/experience/  or enquire with your faculty advisor.

### Independent Study Courses
Another excellent method of gaining research experience is through a supervised study course. Offered in the majority of programs, these courses allow students to conduct an extensive examination of literature on a selected topic or perform laboratory and/or field work in their area of study. In order to qualify for these courses students must obtain the permission of the department and locate a professor who will agree to supervise them. For further information, consult the course calendar or speak with your academic department.

### Developing your Research Network
Make the most of your network. Talk to your professors. They have extensive research networks and may be willing to share contacts. Ask friends, family, colleagues, etc., if they are aware of any professors or industry professionals currently involved in research. You might need to supplement your network with additional contacts. If this is the case, review the U of T Blue Book (http://www.library.utoronto.ca/bluebook) to locate professors in respective areas of study.

## FUNDING OPPORTUNITIES

### Studentships and Fellowships
Studentships and fellowships are awarded at both the undergraduate and graduate level. Although these terms are often used interchangeably, they do have some differences. Studentships tend to refer to undergraduate positions, while fellowships tend to refer to graduate/post-doctoral positions.

Studentships allow students to engage in their own research in an academic, laboratory, or clinical setting. Generally, student research projects are completed under the guidance of a supervisor who is already established in the field. These positions are essentially research internships and usually present with a stipend (income). The level of compensation varies between studentships.

The bulletin boards in your departmental office are often a common location for professors to post current research positions. Additionally, some departments compile a database of students looking for opportunities or studentships. Professors often review these databases when they are interested in obtaining assistance with personal research projects and/or if they are interested in supervising a student research project. A good example is the Faculty of Medicine's research site, which lists summer studentship opportunities http://medicine.utoronto.ca/research/summer-student-program-information .

For additional leads in a variety of fields, search this site: http://fundingopps.cos.com (database of funding programs in humanities, physical, social and life science) Note: Academic Departments may have information on possible funding opportunities. Speak with the Undergraduate Advisor of the department to find out.

### Government Funding at a Glance
Government research funding programs specialize in particular research fields. Three main government funding bodies are the National Sciences and Engineering Research Council of Canada (NSERC), the Social Sciences and Humanities Research Council (SSHRC) as well as the Canadian Institutes of Health Research (CIHR). Funding from these agencies is directed primarily towards faculty, graduate students, or institutions and community agencies. However, undergraduate students who are supervised by a faculty member holding a designated grant may also apply for funding. NSERC has a dedicated undergraduate research grant, http://www.nserc-crsng.gc.ca/Students-Etudiants/UG-PC/USRA-BRPC_eng.asp and CIHR has sporadic grants for undergrads on their site.

Although the specifics of the application process may vary, in general, all proposals are awarded through an independent, national, peer-review process. This process involves a selection committee (made up of scholars and experts) who assess the proposals based on academic excellence and other essential criteria. For more information, consult the following sites:
- **NSERC** at http://www.nserc-crsng.gc.ca
- **SSHRC** at http://www.sshrc-crsh.gc.ca
- **CIHR at** http://www.cihr-irsc.gc.ca

### Preparing a research proposal
Most organizations require candidates to submit a formal proposal in order to be considered for project funding. It is important that your research project is conceptually sound and a good fit for the organization. Funding organizations like to know how your project complements their philosophy so researching the organization to tailor your proposal is key.

### Writing a proposal
Important sections in a proposal include: the **Executive Summary** - a brief summary of your proposal; the **Statement of Need** which provides rationale for your project and how it will further the field; the **Project Description** which outlines your objective, methodology, administrative structure, strategies for evaluation and timelines; and, the **Budget** lists the type of expenses likely to be incurred and an outline of how funding will be directed. For more information on writing proposals, visit: http://guides.library.illinois.edu/research_proposal

### Research Opportunities Abroad
MITACS has an international research program for undergraduate students https://www.mitacs.ca/en/programs/globalink/globalink-research-internship

The web site GoinGlobal lists international internships in a variety of research areas. Search this site by country of interest via the CLN https://cln.utoronto.ca/home.htm under the resources tab.

Please note that this information is subject to change. It is best to refer to the original sources for the most up to date information. (Updated May 2017)