HOW TO GET INVOLVED IN RESEARCH

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Why Do Research?

- **Educational Benefits Include:**
  - Working closely with a faculty mentor
  - Learning about issues, methods, and leaders in your chosen field
  - Applying concepts learned in coursework to "real life" situations
  - Sharpening problem-solving skills
  - Learn to read primary literature

- **Professional Benefits Include:**
  - Exploring and preparing for future careers
  - Developing marketable skills
  - Enhancing professional communication skills
  - Collaborating with others and working effectively as part of a team

- **Personal Benefits Include:**
  - Growing as a critical, analytical, and independent thinker
  - Meeting challenges and demonstrating the ability to complete a project
  - Discovering personal interests
  - Developing internal standards of excellence
How Do You Find a Research Position?

- Here are some strategies to help you find a research opportunity
- Centrally-coordinated programs and resources are listed below
- You will also benefit greatly by talking to professors, advisors, and administrative staff in your area of interest; they may know of opportunities specific to your field.
Talk to professors

- To find them, start at http://undergrad-catalog.buffalo.edu/academicprograms/index.shtml, choose the department(s) that interest you, and then browse the faculty listings from each department’s home page.

- Approach faculty with respect and do your homework:
  - Read about their research on their websites. You might scan the abstracts from their recent publications (you can ask a librarian for help finding these).
  - When you introduce yourself, discuss your interests, qualifications, and expectations. Have your résumé and transcripts ready.
  - You may want to interview other students who have worked with the professor.
  - Contact professors during their office hours or via email (but do not send a general email to a whole list of professors).
Talk with other people in departments

- Ask which professors take students and what it is like to work in their labs.
- You can talk with any or all of the following:
  - Teaching assistants;
  - Lab instructors;
  - Departmental staff, academic or non-academic: advisors, secretaries, program directors, etc.;
  - Professors (if professors don't have room in their labs, you can ask if they can suggest any colleagues to you);
  - Peers - students you know who have already participated in undergraduate research;
  - Peers - undergraduate student societies, whether departmental or faculty-wide.
  - Read bulletin boards. Departments post opportunities they receive from outside groups or institutions.
  - Read email and list serv announcements. Sift through all of them, you never know where or when an opportunity might come to you electronically.
Explore the (CURCA) website

- “The Center for Undergraduate Research & Creative Activities (CURCA) is here to assist you as you build great relationships with faculty mentors in your field of interest, add impressive experiences to your resume and learn lessons that will last you a lifetime.”
  - The Research Opportunities website lists UB professors with specific opportunities for undergraduates.
  - Attend workshops on finding and funding undergraduate research offered every semester
Celebration of Academic Excellence

- The Celebration of Academic Excellence is held in April of each year.
- Come look at what other UB students have done, and discover what you can do.
- Use the Celebration’s program as a resource to see both the kind of research being done on campus and to uncover the names of faculty supporting that research.
Apply for summer research:

- UB Summer Research Examples include:
  - Chemistry REU
  - Center for Children and Families
  - Collegiate Science and Technology Entry Program (CSTEP)
  - Hauptman-Woodward Medical Research Institute Summer Program
  - LSAMP (Louis Stokes Alliance for Minority Participation)
  - Roswell Park Cancer Institute Summer Program

- Look here for other REU opportunities

- You may also want to contact Elizabeth Colucci (colucci3@buffalo.edu) in the Honors College for additional resources.
Get funding through the Work-Study program

- The Work Study program subsidizes the cost of hiring students, including for research positions.
- Applicants must demonstrate financial need for the given academic year and apply to Work Study.
- Some professors do not know about this opportunity. If you are eligible, tell the professor when you are talking with her/him.
Register for a research-oriented course

- '498' research project courses
  - '498' courses are undergraduate research courses offered by various departments
  - These are multiple credit electives which you can take within or outside your department.

- ‘497’ Departmental Honors
  - ‘497 courses are undergraduate courses offered by various departments
  - Usually taken late in your academic career and available in most departments
  - Inquire at your department for more details.
Field studies and study abroad opportunities

- Short courses or semester-long programs with a research focus or component.
- These are UB courses, but delivered off-site:
- More detailed information is available through the Study Abroad Office.
Take part in an internship

- Test your career goals and gain confidence and experience!
- Return to your studies more focused, with a sense of where your academic careers might lead
- Internships are often available through departmental list servs, bulletin boards and Career Services, particularly BullsEye.
Get acquainted with your Library!

- The UB Library provides essential services, programs and resources to support the research of UB students and faculty. The Library offers:
  - workshops and classes to help develop and build vital research skills,
  - online subject guides to most disciplinary areas,
  - thousands of e-journals, e-books, and print resources on all topics,
  - databases and search engines to access information,
  - Subject Librarians
  - software to use in citing references and avoiding plagiarism, including EndNote Software with training in its use,
  - Help in the form of blogs, FAQs and “Ask a Librarian”.
Check out Career Services for useful skills

- Learn skills that are transferable from the traditional job market to the academic and research sector, such as interviewing skills, networking, and improving your CV/résumé.

- Visit Career Services.
  - Be sure to check out Bulls Eye for internships and job opportunities.
Go to departmental talks

- Attend talks, seminars, colloquia organized by UB departments and faculties.
- At specialist talks, it's okay if you don't understand that much of the technical stuff (you won't be the only one!).
- You'll get a sense of what scientists do, what the questions are, and what research is about - plus it's an opportunity to meet people in your department.
- On a less technical level, there are also many accessible outreach events which are intended for you and the wider public.
Think outside the box

- Your UB degree offers you excellent preparation for work in your field of study...
- ...but there are often opportunities outside your own department. Don't overlook possibilities for cross-disciplinary work where your skills overlap with another unit on campus.
Funding

- Find out where the money is:
  - Honors College – Research and Creative Activities Fund
  - CURCA – Undergraduate Research Awards
The End

- Good luck in your endeavour to find a research opportunity!!!!

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