UPBM E-NEWSLETTER
Undergraduate Program in Biology and Medicine

UPBM Poster Session 2014
Huge Success - Relive the Magic

Many thanks to the UPBM majors who presented their research in this year’s poster session as well as to those who came out to support their colleagues. The event was a huge success. Dr. Benyajati took several pictures which have been turned into a slide show so that you can “Relive the Magic.” Click on the following link to visit the slideshow on-line: UPBM Poster Session Slide Show

Links
- Biology Department Newsletter
- Momma Needs a SUBS T-shirt
- Senior Slide Show 2014
- UPBM Alumni - Where Are They Now?
- UPBM E-News Archive
- UPBM Home Page

Photo by Dr. Cheeptip Benyajati. Pictured from left to right Logan Schwartz '16, BMG and Heather Le Bleu '16, BCD. Pictured in the back is Mrs. Deborah Lawrence from the Biology Main Office
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My name is Tatsunari Tomiyama. I am a Biology major in my senior year and this is what I did last summer.

This summer I attended an Internship at The Cleveland Clinic Center for Reproductive Medicine in the Glickman Urological Institute.

The Cleveland Clinic is located in the state of Ohio. The campus is centrally located between uptown and downtown Cleveland.

At the epicenter of its campus is a luxury hotel, The Intercontinental. The hotel provides private access to high-profiled customers seeking treatment at the Clinic.

The Cleveland Clinic has a much larger campus in comparison to the U of R and is especially known for their Cardiology and Urology departments which has earned them #1 rankings in US News World Reports.

The selection process for this internship was fairly competitive as thirty students were chosen from an applicant pool of approximately 250 undergrads worldwide.

Some advice to international students who are thinking about applying is to start early and contact the Center for College Advising Services to obtain the faculty approval to update the paperwork needed to work in the country over the summer.

I pursued this internship as I have an interest in aerospace medicine and was able to draw a connection between the field and my interests to a certain degree.

The workload is fairly rigorous as interns are assigned written and benchwork projects in addition to attending 68 lectures. At the end of the seven weeks interns were required to give a seven-minute presentation.

Under the mentorship of Dr. Du Plessis I wrote a paper entitled, “The Impact of Ionizing Radiation on Male Fertility.”

My bench project was entitled “Spermatozoa Protein Examination in Testicular Cancer.” The procedure was simpler than what I expected. A team removed sperm obtained from a testicular cancer patient. After “de-freezing” the sperm and the proper procedure to ready protein analysis, we examined the proteins and compared with a healthy sample.

Although the internship was a lot of work there was also enjoyable activities planned with co-workers and faculty. A lot of time was spent with my colleagues and as a result close friendships were formed.

One of my observations was that most other interns had pre-med interests which is different from mine. As noted before, my interests are primarily in aerospace medicine and primary care for astronauts and pilots. Although the research was not directly related I was able to gain professional experience.

I really appreciate the summer internship support members, mentors, and interns for providing me with this opportunity and would like to extend special acknowledgements to: Mentors/Faculty: Dr. Agarwal, Dr. Sharma, Dr. Gupta, Dr. Du Plessis, Dr. Ayaz, Dr. Tvrd, Dr. Gunes, Dr. Damayanti, Tina Virk. Interns: Aaron Panicker, Alaa Alsaaffar, Amit Shetty, Arun Syriac, Aysenur Ersoy, Cansu Yazar, Carolina Bassi, Caroline Cirenza, Deepika Sathish, Elizabeth Pandithurai, Feras Jazaeri, Hanna Tadros, Jasmine Eliwa, Julia Tsinberg, Khalid Jabarti, Maha Al-Sadaan, Maysa Al-Badawi, Namariq Haroun, Nawal Alkuhaimi, Rashna Shetty, Sara Philby, Sneha Parikh, Vanessa Dantas, Vijay Venugopal, Vikram Rohra, Wedad Al-Najjar. Additionally, a special thanks to: Marianne Arcoraci & Megan McKay.
Checklist for a Semester Abroad

By Campus Times · Published on September 18, 2014

Alexa Ball ’15, BIO

Exploring the myriad study abroad programs and scholarships

Making an appointment with an advisor is the first step to help me put everything in order. People throughout the University were ready and willing to still have some flexibility in my four-year schedule. Many I began planning to go abroad while I was a sophomore and plan early:

Abroad aspirations attainable:

Here are some things to keep in mind to help make your study abroad programs and scholarships.

It is no surprise that a semester, year, or summer abroad takes an immense amount of planning and important decision-making. Where and when do I want to go? Does UR offer a program in that country? Will I get credit and financial aid? Can I make it all work? These are all questions I asked myself before selecting my specific study abroad program.

In any situation, planning an experience abroad is a difficult and lengthy process. In my case, I wanted to study something completely unrelated to my major (Biology) in a non-English speaking country. To add to the challenge of selecting the right program, my bank account had seen better days.

Choosing to study in Rome, however, ended up being a simple decision after I took a UR summer course in Italy and fell in love with “la dolce vita.” But this time around, I wanted to experience Italian culture on a deeper level. As an Italian minor, I wanted to be immersed in the language in hopes of becoming fluent. Yet, as a biology major, I thought it would be impossible to study abroad for a whole semester without having to overload in the future. I eventually learned, however, that with great determination, a lot of help from academic advisers, and a generous scholarship, going abroad can become a reality for any student.

Here are some things to keep in mind to help make your study abroad aspirations attainable:

Plan Early:

I began planning to go abroad while I was a sophomore and still had some flexibility in my four-year schedule. Many people throughout the University were ready and willing to help me put everything in order. making an appointment with an advisor is the first step to exploring the myriad study abroad programs and scholarships available to UR students. The Center for Study Abroad is an invaluable resource that should be used early and often. My advisor gave me information about programs to fit my needs and helped me navigate the application processes for my program, scholarships, and student visa. Advisors in specific academic departments also helped me schedule my degree requirements in a way that permitted studying abroad. I had to shuffle my schedule around to squeeze in all my degree requirements, but I made it work.

Think outside the box:

For me, that “box” was my major. Studying abroad in a non-English speaking country meant that finding a program that would allow me to study biology would be difficult. Instead of focusing on the requirements for my major, I began considering other ways that a semester abroad might contribute to my course plan. Studying in Italy allowed me to earn credit towards my Italian cluster (which eventually became my Italian minor). With the university’s cluster curriculum, I found I had a lot of freedom in designing my academic plan. Choosing a cluster in a foreign language allowed me to stay on track with my degree requirements even while taking a semester off from biology. Clusters are an excellent way to efficiently incorporate studying abroad into any course of study.

Explore Financial Aid Options:

It is a common misconception that studying abroad will break the bank. My UR financial aid package transferred to my program and I received need-based aid directly from IES. There are also plenty of outside scholarship opportunities to explore. I was awarded the Benjamin A. Gilman International Scholarship, sponsored by the U.S. Department of State. The competitive scholarship is designed to benefit students studying in non-traditional study abroad locations and who are underrepresented in education abroad programs. Awards of up to $5,000 can help with the cost of tuition, room and board, airfare, local transportation, and books.

The Gilman Scholarship made all the difference in making my semester in Rome affordable. In addition to supplementing my tuition, the scholarship allowed me to live comfortably in Rome and explore other parts of Italy.

Going abroad will undoubtedly change your life and significantly impact your academic, professional, and personal goals. No other experience will be as infinitely challenging and infinitely rewarding as leaving the comforts of home and spending time abroad. If you truly possess a passion travel, any academic or financial hurdle can be overcome. There are numerous resources to help you create your unique experience abroad – you just have to know where to look.

Related:

Campus Time’s - Link to Article
Campus Times News
Office of Study Abroad - see website for info Meetings
Research Initiative Award for Undergraduates
Message from the River Campus Friends of the Libraries - Application Deadline 11/21/14

Research—the process of finding, evaluating, and synthesizing information in order to answer a question or solve a problem—is a life-long practice that emerges from curiosity and critical thinking. This intellectual activity involves the ability to identify and refine research topics, craft authentic questions, develop sound search strategies, and acquire the skills associated with information literacy. These skills include but are not limited to critically evaluating and analyzing information, effectively using sources, and appropriately citing information.

This new award recognizes excellence in undergraduate research leading towards a senior thesis, capstone project, or an independent research project. Students in their late junior year or early senior/Take Five year are especially encouraged to apply.

The award recognizes student engagement in a process of research spurred by their curiosity and interest. Specifically, the Award Committee is interested in a student’s ability to:

- Identify and refine a research topic of interest
- Gather materials for the early phases of a research project
- Establish methods for selecting and evaluating sources
- Work with faculty and librarians to develop a research strategy and to assess scope and direction of an independent research project

**Award Amount:** $500

The award is sponsored by The Friends of the University of Rochester Libraries (FURL).

**Application Deadline:** 11/21/2014

Award criteria and application procedures can be found at this link: [http://www.library.rochester.edu/friends/research-initiative](http://www.library.rochester.edu/friends/research-initiative).

If you have any questions about this award, please contact Margaret Engel at mengel@library.rochester.edu.

Related:
River Campus Friends of the Libraries

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First SUBS Volley Ball Game 11/7/14
Biology vs. Students - Society for Undergrad Biology Students (SUBS)

Harris Weber, president of the Student for Undergraduate Biology Students (SUBS) has announced the first volley ball game of the year. The game between the Biology Department and Students will be on Friday 11/7/14, from 4pm - 6pm in the Goergen Athletic Center, Court B.

The BIO department is back and are willing to take on ANYONE!!!!

Come out and play or stop by to cheer on your colleagues. At the very least check it out. See you on the 7th!

SUBS Mission: “Our purpose is to promote faculty-student interaction, to serve as a guiding force for Biology majors/interests, provide networking opportunities through events, and to cater to the needs of the membership through member input.”

SUBS plans many events throughout the year so stay tuned for more information on club events and dates.

Students can join by visiting the SUBS Website or by contacting the Club President, Harris Weber at: hweber4@u.rochester.edu

T-Shirts are available for $10 each. To order visit the [On-line SUBS T-shirt Order Form](http://www.library.rochester.edu/friends/research-initiative).

Related:
UPBM Calendar for AY 2014-15
Society for Undergraduate Biology Students Website
On-line SUBS T-shirt Order Form
My4Org Piece on Ex-Subs President Chelsea Hans ‘14, BCD
The 29th National Conference on Undergraduate Research (NCUR) will take place on the campus of Eastern Washington University, April 16 - 18, 2015. Typically, 20-30 students from the University of Rochester attend this conference annually and give presentations on their research. This is a wonderful opportunity for some of our strongest students to show off their work and meet other students doing research around the country. This venue is of particular value for students who do not have the opportunity to make a presentation at a professional meeting in their area of research.

If you know of a student —in any discipline—who might be interested in attending NCUR, please send them to the College webpage at www.rochester.edu/college/ugresearch/ncur/index.html where they will find an overview, application information and a timeline of the application process.

Although students can submit abstracts to attend the conference on their own, the Office of Undergraduate Research will organize a trip to NCUR for a group of University of Rochester students and cover the travel expenses for as many of these students as budget constraints allow. Therefore, I will be asking the advisers and/or departments of each applicant to consider making a voluntary contribution. These students are going forth to represent the University. Adviser and departmental contributions allow us to expand the program participation well beyond what is allowed solely through the budget of the Office of Undergraduate Research. This broad participation enriches the experience for all the students. We will do our best to take as many students with as broad representation across the College as possible.

Please note that the deadline for interested students to submit applications to the Office of Undergraduate Research to be part of this group is November 5, 2014.

Thanks for your help in encouraging students who might benefit from this experience to consider attending. If you have questions, please contact me or Ann Robinson in the Office of Undergraduate Research in 4-209B Dewey Hall (ann.robinson@rochester.edu or 585-276-5308).

You can find more information on this year’s conference on the NCUR website at www.cur.org/ncur_2015/.

Sincerely,

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Related: Office of Undergraduate Research
National Conference of Undergrad Research - NCUR 2015
Davis Projects for Peace
Kathryn W. Davis Summer Fellowship
Deutscher Akademischer Austausch Dienst (DAAD)
Research Internships in Science and Engineering (RISE)
Duke University / Robert Noyce
Teacher Fellowship Program
EPA Internships
Medical Research and Health Science Internships Available in Europe!
Fred Hutchinson Cancer Research Center
Summer Undergraduate Research Program
Fred Hutchinson Cancer Research Center
Internships in Scientific Research or Medicine
Fulbright Scholarship
US Student Program
Gerstner Sloan-Kettering
Summer Undergraduate Research Program
Harvard Medical School
Summer Undergraduate Research Internship Program
Harvard School of Public Health
Summer Program in Biological Sciences Public Health
Homeland Security DHS Education Programs
HS-STEM Summer Internship Program
Institute for Health Metrics and Evaluation (IHME)
Post-Bachelor Fellowship
Louisiana University Marine Consortium
Summer Field Course Information
MATCH Education
Teacher Residency
Mayo Clinic
Summer Undergraduate Research Fellowship
MedLife
Volunteers
Michigan State Veterinary
Enrichment Summer Program
NASA Space Radiation Summer School
Summer 2015 Program
National Collegiate Research Conference (NCRC)
NCRC 2015 Applications Plenary Apps Due 9/6/14, General Apps Due 11/4/14
Nemours/Alfred I. duPont Hospital for Children and Nemours Office of Health Equity and Inclusion
Summer Undergrad Research Scholarship
New York State Dept. of Environmental Conservation
Summer Employment Opportunities
One Hear Source
Volunteer Opportunities in Africa
One Start
Your chance to win US$150k to realize your biotech business idea
PIRG - Job Openings for Graduating Seniors
http://jobs.studentpirgs.org/
Projects for Peace
Kathryn W. Davis Summer Fellowship
Research Internships in Science and Engineering RISE
Deutscher Akademischer Austausch Dienst (DAAD)
Roswell Park Cancer Institute
Summer Research Programs
SUNY Oswego Global Laboratory
Summer Science Research Abroad
Teach for America
Opportunities
Texas Tech University Health Sciences Center
Summer Accelerated Biomedical Research Internship
Tulane University
Graduate Program in Biomedical Sciences
The Chicago Center for Systems Biology Summer REU
Summer REU Program in Systems Biology
The UNCF Merck Science Initiative
Science Scholarships and Fellowships
University of Chicago
REU Program in Computational Neuropsychiatric Genomics
University of Iowa
Summer Undergraduate MSTP Research Program
University of California Berkeley
Amgen Scholars UG Summer Research Program
University of Missouri
Summer Internship Programs
University of Notre Dame Environmental Research Ctr.
Summer Programs
Contributors / Feedback of UPBM E-News Welcome
Really, Throw me a Bone
Please feel free to send submissions and / or feedback to help improve this newsletter to the UPBM Administrator.

What type of things are you looking for? Anything students feel their colleagues may: benefit from, find interesting, helpful, and/or funny that is generally pertaining to the college experience. Pictures (tasteful) are good as well.

Sharing means caring.

Helpful Links
This -N- That

- Athletics
- Biology Department
- Center for Study Abroad & Interdepartmental Programs
- Center for Excellence Teaching and Learning
- Counseling Center
- Dining
- Directory
- Employee Discounts
- Gwen Green Career and Internship Center
- Health Professions Advising Office
- Facilities
- Information Technology
- Journal Of Undergraduate Research (JUR)
- Kapalan Test Prep and Admissions
- Libraries
- My4Org - Your campus cheat sheet
- Research Connections Newsletter
- Rochester Academy of Science
- Student Fellowships Office
- Undergraduate Program in Biology & Medicine
- Undergraduate Research Office
- University Health Services
- Writing Speaking and Argument Program