

Undergraduate Program in Biology and Medicine

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Photo by Aaron Berkowitz '11
"Leaves changing by the dorm"

November 2009

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2010 NATIONAL CONFERENCE OF UNDERGRADUATE RESEARCH (NCUR) 2010

A message from the Office of Undergraduate Research

"The 2010 National Conference of Undergraduate Research (NCUR) will take place on the campus of the University of Montana, Missoula on April 15-17, 2010.

Typically, 15-25 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.

For more information on this year's conference visit: <http://www.umt.edu/ncur2010/>.

For an overview of the application process including forms and timelines visit: <http://www.rochester.edu/college/ugresearch/ncur/index.html>

Students may apply for financial assistance to attend the conference through the Office of Undergraduate Research: **submission deadline is November 4, 2009.**"

NATIONAL INSTITUTES OF HEALTH (NIH) SCHOLARS PROGRAM

A message from the Director for the NIH-Oxford Cambridge Scholars Program:

"I am writing to tell you about a groundbreaking biomedical research doctoral program—the National Institutes of Health-Oxford-Cambridge Scholars Program. This innovative program grew from the realization that the next generation of research scientists will increasingly need to adopt interdisciplinary approaches as they strive to produce high impact research outcomes whether basic or clinical.

This is an accelerated program, and students typically receive a doctoral degree in approximately four years. There is no standard curriculum or required coursework. Rather, each student pursues an individualized course of study in which thesis work is initiated at the beginning of the first year. The thesis project is carried out as collaboration between two labs, with half the research undertaken at NIH and half at one of the UK universities and each student being mentored by a senior scientist at each location. The program takes advantage of the superb resources and training environments at Oxford, Cambridge, and the NIH, the world's largest biomedical research facility, the main campus of which is located in Bethesda, Maryland where a diverse community of scientists conduct their research in over 1000 laboratories and the world's largest clinical research center conducts more than 1000 clinical research protocols.

From its first class that matriculated in 2001, NIH-Oxford-Cambridge Scholars have achieved at the highest levels of biomedical research, publishing first-author papers in journals such as *Nature*, *Nature Medicine*, *Nature Immunology*, *Proceedings of the National Academy of Sciences*, and *The Journal of Experimental Medicine*. Graduates have gone on to do post-doctoral training in top academic institutions and industry labs, and a few have gone directly to faculty positions.

All students are **fully funded** by the NIH for the duration of their doctoral work at both research sites and receive stipend, health insurance, and travel assistance. Through the NIH M.D./Ph.D Partnership Training Program, we also offer funding for combined M.D./Ph.D. training in collaboration with over twenty U.S. medical schools participating in the Medical Scientist Training Program (MSTP). For details about the M.D./Ph.D. options and training tracks please consult <http://gpp.nih.gov/Prospective/InstitutionalPartnerships/MSTPatNIH/>.

The **application deadline for Ph.D. and M.D./Ph.D. candidates is January 4th, 2010**. The free application is available online through the program website at <http://oxcam.gpp.nih.gov> via the "Apply Now" button. On our web site you will find additional program details, FAQs, student biographies, descriptions of some of the exciting research projects underway, and more. We would also like to invite you to participate in a teleconference call to learn more about our programs. Please email us at oxcam@mail.nih.gov or mdphd@mail.nih.gov if you would like more information or would like to participate in a conference call. We hope to hear from you soon!"

Belinda Redden, The Director of Fellowships / Asst. Director for the College Center for Academic Support said that she would be happy to work with any students who wish to apply for these fellowships.

PRE-GRAD SOCIETY - ANYONE INTERESTED? Message from Ben Sabari '10, BMG

"Dear pre-grad students of the UPBM,

I would like to create an informal group/club/forum/community or whatever you would like to call it for Biology students at the U of R who plan to attend graduate school.

It seems as though there is a sizable, yet for some reason silent, population of research-oriented and academia-oriented students here in the biology department. I think it would be a good idea to make this population more visible and interactive.

This could benefit the pre-grad population and the UPBM as a whole in several ways:

- 1.) It can help raise awareness among underclassmen that research science and people conducting research science are awesome and fun
- 2.) It can serve as a forum for students applying to graduate school and for people thinking about applying
- 3.) Most importantly, it would help establish some sort of community within the Biology department of like-minded individuals with similar career goals, affording its members camaraderie and bonhomie.

So, does this sound like something you want to be a part of?

Freshman and sophomores: is graduate school something you have thought about but don't really understand?

If YES, then email me (bsabari@u.rochester.edu) and we can get started.

Sincerely,
Ben Sabari"

RESEARCH INTERNSHIPS IN SCIENCE AND ENGINEERING (RISE): Study and Research in Germany

"RISE is a summer internship program for undergraduate students from the United States, Canada and the UK in the fields of biology, chemistry, physics, earth sciences and engineering. It offers unique opportunities for undergraduate students to work with research groups at universities and top research institutions across Germany for a period of 1.5 to 3 months during the summer. RISE interns are matched with doctoral students whom they assist and who serve as their mentors. The working language will be English. All scholarship holders receive stipends from the DAAD to help cover living expenses, while partner universities and research institutes provide housing assistance.

RISE internships were first offered in 2005 to applicants from the US and Canada. Following the first intake of

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around 100 students in 2005, the number of participants has increased steadily. In 2009, as many as 364 candidates (out of 1,149 applicants) were awarded an internship. Due to its great success, the program has now been extended to the UK. RISE hopes to accept as many students as possible for a summer internship in Germany. However this is a scholarship program and there are only limited funds available. Each year we have to turn away many students that apply to this program. In 2010 we hope to have 300 interns.

Interested students should apply for a RISE internship through the DAAD. (Please see below for further information on how to apply.) The application period for undergraduate students from the US, Canada, and the UK, who wish to take part in an internship during summer 2010, is: December 7, 2009 to January 31, 2010."

For more information about Unique Opportunities in Gaining Research Experience in Germany visit: <http://www.daad.de/rise/en/index.html>.

CARESTREAM HEALTH COMPANY: SEED HIRE PROGRAM

Amber Graham, the Senior Assistant Director at the University of Rochester Career Center recently forwarded some information regarding Carestream Health entry-level SEED program. In particular Carestream is interested in reaching Biology majors. According to Amber, "It's a great program with an emerging local employer! "For more information on the program visit: www.carestreamhealth.com. The job is also posted at [UR Career Services](#).

BIOLOGY MONTHLY SEMINARS

Seminars are held in Hutchison Hall, on the River Campus. ([Campus map](#)) Contact the Biology Department at 273-1139 at least 3 days in advance to request any special accommodations or if you would like to meet with an outside speaker. Refreshments provided.

November 2 (Monday) 12:00 PM
Hutchison 473
Dr. Jason Brickner, Northwestern University
"DNA zip codes control gene localization and transcriptional memory"

November 6 (Friday) 3:00 PM
Joint Seminar with Earth & Environmental Science
Hutchison 316
Dr. Camille Holmgren, Buffalo State University
"Packrats and Paleoclimate: Reconstructing the Glacial-Interglacial History of Vegetation in Arid Environments"

November 9 (Monday) 12:00 PM

Hutchison 473
Dr. Jennifer Surtees, SUNY Buffalo
"Finding a needle in a haystack: how mismatch repair proteins find and bind DNA lesions"

November 12 (Thursday) 9:45 AM
Ph.D. Thesis Defense
Lattimore 201
Leah Pogorzala, University of Rochester
"Maintenance of the Saccharomyces cerevisiae mitochondrial genome through BER and associated proteins"

November 13 (Friday) 3:00 PM
Hutchison 316
Dr. Sohini Ramachandran, Harvard University
"Continental Axes of Orientation Influence Patterns of Human Gene Flow"

November 16 (Monday) 12:00 PM
Hutchison 473
Dr. Alan Tartakoff, Case Western Reserve University
"Zygotogenesis in Yeast"

November 20 (Friday) 3:00 PM
Hutchison 316
Dr. Christopher Desjardins, University of Rochester
"Genetics of Host Preference in Nasonia"

November 23 (Monday) 12:00 PM
Hutchison 473
Dr. Mitch McVey, Tufts University
"Alternative end-joining repair of DNA double-strand breaks in Drosophila"

November 30 (Monday) 12:00 PM
Hutchison 473
Dr. Sheila Patek, University of Massachusetts Amherst
"Airborne ants and smashing shrimp at the intersection of physics and macroevolution"

UPCOMING EVENTS

November 4 (Monday) 12:00 PM
Advising and Cluster Fair, Wilson Commons May Room

November 9 (Monday)
*Online registration begins for spring 2010 semester:
11/9 Seniors
11/10 Juniors
11/11 Sophomores
11/12 Freshman

November 18 (Wednesday)
S/F Deadline (except first semester students)

November 18 (Wednesday)
Last date students can withdraw from courses

November 25 – November 29 (Wednesday – Thursday)
Thanksgiving Break (begins at noon)

November 30 Monday - Classes resume

OPPORTUNITIES

Alaskan Observers, Inc. North Pacific Ground Fish Observer

Positions Available Year-Round:

<http://www.alaskanobservers.com/observer.html>

Albert Einstein Summer Undergraduate Research Program:

<http://www.aecom.yu.edu/phd/index.asp?surp>

American Association for Cancer Research Minority Scholar in Cancer Research Awards:

<http://www.aacr.org/home/scientists/meetings--workshops/travel-grants/minority-scholar-awards.aspx>

Case Western University Summer UG Research in Pharmacology

<http://pharmacology.case.edu/education/surp.aspx>

The Chicago Center for Systems Biology Summer REU Program

<http://www.igsb.org>

Cold Spring Harbor Laboratory Watson School of Biological Sciences Undergraduate Research Program <http://www.cshl.edu/URP/>

Columbia University/Barnard College Amgen Scholars Summer Research Program

<http://www.columbia.edu/cu/biology/ug/amgen/>

Columbia University BioGERT Fellows Program:

<http://www.bioigert.columbia.edu>

Educational Programs Abroad (EPA): <http://www.epa-internships.org>

Fulbright Scholarship Program

<http://us.fulbrightonline.org/home.html>.

Institute for Health Metrics and Evaluation Post-Bachelor Fellowship

<http://www.healthmetricsandevaluation.org>

LUMCON 2010 Summer Field Program

www.lumcon.edu/education/university/summer

Marine Mammal Research Internships

<http://www.whalecenter.org>

MIT BE REU Program

<http://web.mit.edu/be/education/reu.htm>

National Academies Research Associate Program:

<http://www7.nationalacademies.org/rap/>

National Academies Fellowships Program

<http://www.national-academies.org>

National Institute of Allergy and Infectious Diseases (NIAID), Intramural NIAID Research Opportunities (INRO); for more information visit:

<http://www3.niaid.nih.gov/labs/training/inro/>

Rice University 2010 IBB Summer UG Internship HHMI Program in Bionanotechnology:

http://cohesion.rice.edu/naturalsciences/hhmi/index.cfm?doc_id=10945

REU in Cellular Engineering:

http://cohesion.rice.edu/naturalsciences/nsfreu/index.cfm?doc_id=11338

Roswell Park Summer Research Participation Program http://www.roswellpark.org/Education/Summer_Programs

South Western Medical Center Summer UG Research (SURF)

<http://www8.utsouthwestern.edu/utsw/home/education/surf/index.html>

Teach for America

<http://www.teachforamerica.org>

The UNCF Merck Science Initiative Science Scholarships and Fellowships: <http://www.uncf.org>

U of R National Fellowships and Scholarships Website: <http://www.rochester.edu/College/CCAS/fellowships>

Undergraduates Program at the Synchrotron Radiation Center

http://www.src.wisc.edu/outreach/SRC-REU/2009/SRC-REU_Summer_Internship.pdf

Wadsworth Center Summer Research Program 2009 in Molecular and Cellular Biosciences

<mailto:http://www.wadsworth.org/educate/molcel.htm>

HELPFUL LINKS

Athletics

Biology Department

Dining

Directory

Employee Discounts

Facilities

Libraries

Undergraduate Program in Biology & Medicine

University Information Technology

University Counseling Center

Parking

CONTACT US

We want to hear from you!

Send submissions and feedback to [UPBM Administrator](#).

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