

# Undergraduate Program in Biology and Medicine

University of Rochester  
Hutchison Hall Room 402F  
Rochester, NY 14627

[UPBM Website](#)

[Contact Us](#)



## December '10

## e-Newsletter

### Inside

<a href="#">deKiewiet Fellowship 2011</a>	Pg 1-2
<a href="#">Degree with Distinction in Research</a>	Pg 2
<a href="#">Biology Department Diploma Ceremony 2011</a>	Pg 2
<a href="#">Networking Opportunities</a>	Pg 2-3
<a href="#">Amgen Scholars Program at Columbia U</a>	Pg 3
<a href="#">DHS Education Programs</a>	Pg 3
<a href="#">Research Program for Undergraduates (RPU) in Biotechnology at Columbia U</a>	Pg 3
<a href="#">Nemours/A.I. duPont Hospital UG Scholarship</a>	Pg 3-4
<a href="#">2011 Summer Cancer Research Fellowships</a>	Pg 4
<a href="#">IVY Journal of Ethics Submissions</a>	Pg 4
<a href="#">EPA Internships in Europe</a>	Pg 4
<a href="#">Upcoming Events</a>	Pg 4
<a href="#">Opportunities</a>	Pg 4-6

### **deKiewiet Fellowship 2011 For Juniors Going Into Senior Year Pre-Applications and PI Letter of Support Due Monday, 2/14/11, 4:30 p.m.**

The de Kiewiet Summer Research Fellowships are designed to give University of Rochester students in the B.S. and B.A. Tracks in the Program in Biology and Medicine an opportunity to obtain substantial research experience in the laboratories of Program Faculty. The Faculty in the Program includes all members of the following departments along with many faculty from other biomedical departments: Biology, Biochemistry and Biophysics, Microbiology and Immunology, Neurobiology and Anatomy, Neuroscience, Oral Biology, Pharmacology and Physiology.

UPBM Majors in their junior year are invited to submit competitive applications. UPBM majors include: BA Biology (BIO), BS Biochemistry (BBC), BS Cell and Developmental Biology (BCD), BS Ecology and Evolutionary Biology (BEB), BS Microbiology (BMB), BS Molecular Genetics (BMG), and BS Neuroscience (BNS).

de Kiewiet Fellows work for ten weeks during June, July, and August in the lab of their research mentor and present a poster in the UPBM Poster Session in October of their fellowship year. Fellows receive a \$4000 stipend for the fellowship period.

Students applying for the fellowship will need to submit a pre-application form and a letter of support from their PI by Monday, **2/14/11 by 4:30 p.m.**

Selected candidates will be invited to formally apply on Friday, 2/18/11. The formal application process requires candidates to submit: a [specially formatted six-page proposal](#), two letter of references, a summary of research and career goals, a note of authorship from the PI, and official transcripts. Selected applicants will be given further details when notified. The deadline for formal applications is Monday, 3/14/11. Final decision will be communicated 3/31/11.

Pre-application form available on-line at:  
<http://courses.ats.rochester.edu/surveys/dekiewietFellowship/>

See Photo Album from 2010 deKiewiet fellowship:  
<http://www.rochester.edu/college/BIO/UPBM/deKiewiet/2010/PhotoAlbum.p>

df.

Contact the [UPBM administrator](#) with any questions.

### **Degree with Distinction in Research - seniors**

#### **Applications for Candidacy due on Tuesday, March 1st**

A degree with distinction in research is an honor that recognizes a student for outstanding accomplishments in research. Students majoring in the Undergraduate Program in Biology and Medicine (UPBM) with research of exceptional quality and a minimum BIO GPA of 2.7 may apply for candidacy during their senior year. Candidates must have developed a novel body of work that includes publication quality data from which to generate a senior thesis. In addition, candidates must successfully present and defend their senior thesis before a faculty examination committee.

Planning of a senior thesis generally begins before or at the beginning of the senior year. Students should consult **both** their major/track coordinator and research advisor beforehand. Students may use research obtained through Independent Research (395) courses, fellowships, internships, and voluntary work to compose their senior thesis. Research performed at other institutions may be used as long as the thesis is written under the supervision of a U of R full-time faculty member.

Interested students must submit an [application for candidacy](#) to the UPBM office (Hutchison 402F) with the endorsing signatures of **both** their research mentor and major/track coordinator by **Tuesday, March 1st, 2011**. Please note that students do not need to register an Independent Research (395) course to do a senior thesis unless necessary to complete experimentation.

The candidate's major/track coordinator will work with the research advisor to form an examination committee. An examination committee usually consists of three faculty members: the major/track coordinator or designated appointee, the research advisor, and a third faculty member within a relevant area of study. The UPBM Administrator will notify candidates with the names of faculty who will serve on their examination committee by **March 28th, 2011**.

It is the responsibility of the candidate to contact the examination committee members to schedule a date and time for the defense. Candidates should initiate this process as soon as the examination committee is formed, as it may be difficult to coordinate a mutual date, time and conference room by **Friday April 15th, 2011**. Final arrangements should also be communicated to the [UPBM office](#) by 4/15/11.

Senior thesis papers should be a minimum of 20 pages in length and written as a scientific paper using supporting text, diagrams, figures, and properly noted references. Candidates must provide copies of their thesis to each of their committee members and the [UPBM office](#) at least **one week in advance** of their thesis defense. Please note that failure to comply may result in the cancellation of the defense.

Students should prepare a 20-minute presentation and should be prepared to answer questions during an oral

examination. If the committee agrees, the seminar may be open to guests; however, the oral examination will be closed.

The thesis defense must be completed and the results communicated to the [UPBM office](#) in writing by the end of the first week in May, **Friday May 6th, 2011**. Upon successful completion **Distinction in Research** will be noted on transcripts and a certificate awarded at the student's diploma ceremony.

Please contact the [UPBM Administrator](#) with questions.

### **Biology Department Diploma Ceremony 2011**

#### **BIO, BCD, BEB & BMG majors Ceremony Location & Time Change / Pictures Needed**

It is hard to believe this year is half way over already! May will be here sooner than we know.

The location and time of the Biology Department diploma ceremony has changed. This year, the ceremony will be held on **Sunday May 15, 2011 in the Palestra at 1: 15 p.m. with a reception in the field house immediately following**. Further details about the ceremony will be forthcoming.

We would like to put together a senior slide show to be presented during the ceremony. However, the slide show is contingent on how many pictures are submitted. Seniors feel free to e-mail your tasteful & appropriate pictures that you would like to have included to the [UPBM administrator](#) before May 1, 2011.

### **Networking Opportunities for Undergrads**

#### **Message from Brie Spinetto '09 UR Office of Alumni Relations**

As students progress through their majors, they start to reach out for opportunities to be able to figure out what's next. "*What can I do with a Biology major?*" "*Where should I start?*" As an alumna who double majored in economics and anthropology, I definitely shared those same questions.

In early January, the Office of Alumni Relations is hosting three opportunities for students to interact with alumni and parents of the University of Rochester. These Student-Alumni Networking Nights will be hosted in DC, New York City, and Boston, and give students a chance to ask questions of people who have been in their same position, and have advice to share.

We encourage our majors to look into the following opportunities, held in Boston, DC, and New York City over winter break. *Student-Alumni Networking Nights*, held in these three cities in early January, will have University of Rochester alumni and parents in attendance who have all been in your shoes and are ready to give advice and suggestions to help you get on their same, successful track. The *Student-Alumni Networking Night* is designed to help University of Rochester students start the conversation behind answering some of the tough questions- what will I be? Who will hire someone with my major? What if I accept the "wrong" job? What does the "real world" really have in store for me? Meeting and talking with alumni and parents from a variety of career fields will help settle your anxiety and can provide strategies for taking your

ambitions to the next step. Register for the Night at <http://www.rochester.edu/alumni/events>.

Any further questions on how the nights can be utilized should be directed to Brie Spinetto '09 at [bspinetto@alumni.rochester.edu](mailto:bspinetto@alumni.rochester.edu).

### **Amgen Scholars Program at Columbia U**

Applications Deadline February 15, 2011

Columbia University and Barnard College are excited to host the Amgen Scholars Program. The Amgen Scholars Program provides hundreds of undergraduate students with the opportunity to engage in a hands-on summer research experience at some of the world's leading institutions. The program aims to increase learning and networking opportunities for undergraduate students committed to pursuing science or engineering careers. One unique component of the program is the opportunity to attend the U.S. symposium in Los Angeles, where students can meet their peers from across the nation, network with scientists and learn about science careers in industry and academia.

Applications are now available for all ten host universities, and I encourage you to visit the link <http://www.amgenscholars.com> if you are interested in learning more about the program details and eligibility requirements. The application deadline for all U.S. host universities is February 1, 2011 with the exception of the California Institute of Technology, for which the deadline is February 15, 2011. The Columbia University/Barnard College program takes place between May 31st and August 5th 2011. For further information about the Amgen Scholars program at Columbia University/ Barnard College please visit our website: <http://www.columbia.edu/cu/biology/ug/amgen>

### **DHS Education Programs 2011**

#### **Competition Cycles are Now Open**

Announcing the U.S. Department of Homeland Security (DHS) Education Programs  
<http://www.orau.gov/dhseducationprograms>.

The [DHS Scholarship Program](#) is intended for students interested in pursuing the basic science and technology innovations that can be applied to the DHS Mission. The program supports students at the undergraduate level. The award includes full tuition and fees and a monthly stipend plus a 10-week summer internship doing research in a DHS-related area.

The [DHS HS-STEM Summer Internship Program](#) provides a 10-week summer research experience for undergraduate students majoring in homeland security related science, technology, engineering and mathematics (HS-STEM) disciplines. Students will have the opportunity to conduct research in DHS mission-relevant areas at federal research facilities located across the country. Participants receive a stipend of \$500 each week plus transportation expenses to/from their internship location.

The [DHS Summer Research Team Program for Minority Serving Institutions](#) provides research opportunities to increase and enhance the scientific leadership at Minority Serving Institutions in research areas that support the mission and goals of DHS. The program supports research teams composed of a faculty member and up to two students (undergraduate or graduate level) for a 10-week summer internship doing research at a university-based DHS Center of Excellence. The award includes a stipend plus transportation expenses to/from the internship location.

Questions regarding the DHS Education Programs can be sent via e-mail to: [dhsed@orau.org](mailto:dhsed@orau.org)

### **Research Program for Undergraduates (RPU) in Biotechnology at Columbia University**

#### **Applications Deadline March 1, 2011**

The Columbia University IGERT on Optical Techniques for Actuation, Sensing, and Imaging of Biological Systems (BioIGERT), a National Science Foundation IGERT program, will support outstanding undergraduates as Summer Research Fellows for the period from May 29 through August 6, 2011. This program provides a \$4000 stipend for each successful candidate and free campus housing (worth \$2700) in which you are expected to reside. Those selected will have an opportunity to participate fully in the interdisciplinary research activities of the BioIGERT faculty across the Departments of Physics, Biology, Biomedical Engineering, Chemistry, Chemical Engineering, Mechanical Engineering, and Electrical Engineering, and includes collaborative research with industry including IBM Yorktown Heights.

This is the best summer job you'll ever have; apply now:  
<http://www.bioigert.columbia.edu/rpu/apply.html>

For details about BioIGERT, please visit:  
<http://www.bioigert.columbia.edu>

### **Nemours/A.I. duPont Hospital UG Scholarship Program**

#### **Application Deadline January 21, 2011**

The Nemours Summer Undergraduate Research Scholarship at Alfred I. duPont Hospital for Children is accepting applications for the 2011 program. Online applications will be accepted from December 6, 2010 through January 21, 2011. *The deadline for application is January 21, 2011.*

Applicants must be undergraduate students with a minimum GPA of 3.0 and interest in basic and applied sciences, healthcare, or related fields. During the 10 week paid scholarship program that begins June 6th, 2011 and ends August 12th, 2011, Nemours research faculty will guide students through the process of formulating and testing hypotheses, interpreting data, and communicating results. Training will be provided on human subjects protection and animal welfare. Students are exposed to enrichment activities during the summer including the opportunity to shadow clinicians, attend grand rounds and research seminars, and participate in discussions around medical and academic research careers. All students will present

their research project and findings to the Nemours community at a final day symposium and celebration.

Additional information and the online application are available at: [www.NemoursResearch.org/Scholarship](http://www.NemoursResearch.org/Scholarship)

## **2011 Summer Cancer Research Fellowships & Internships**

### **Application Deadline January 24, 2011**

The Summer Cancer Research Fellowship/Internship program provides a unique opportunity for eligible current sophomore, junior or senior undergraduate students to engage in innovative integrative biology approaches to cancer research through the National Cancer Institute's (NCI) Integrative Cancer Biology Program (ICBP). The ICBP, composed of twelve multi disciplinary Centers across the United States, focuses on the analysis of cancer using systems biology approaches. Researchers within each ICBP Center utilize the integration of experimental biology with mathematical and computational modeling to gain new insights into the biology and management of cancer.

Selected student participants are paired with a faculty-mentor from a participating ICBP Center based on the student's indicated research interests. Through mentored research projects, faculty lectures, seminars, discussions and other activities, the student gains both an understanding and appreciation of major questions currently under investigation and the novel research approaches being used within the ICBP Centers.

The program begins June 6, 2011 and ends August 5, 2011. Note: some ICBP Centers have modified start/end dates based on the individual Center institution's summer calendars.

For more information visit:  
[http://icbp.nci.nih.gov/summer\\_program/](http://icbp.nci.nih.gov/summer_program/)

The Ivy Journal of Ethics is an annual journal of applied bioethics published by the Bioethics Society of Cornell. Research and discussion based articles are published primarily from undergraduate students at schools throughout the US, Canada, and Europe. In the past, we have also published submissions from notable faculty members, such as Nobel Laureate Roald Hoffmann. It has been well received by noted Bioethicists such as Dr. Atul Gawande of Brigham and Women's Hospital/Harvard Medical School. For past editions of the Ivy Journal of Ethics, please visit our website: [www.rso.cornell.edu/bsc](http://www.rso.cornell.edu/bsc).

## **Ivy Journal of Ethics**

### **Call for Undergraduate Submissions Deadline February 1st, 2011**

We are currently accepting submissions for the Spring 2011 edition of the Journal. Past volumes have contained an array of issues, from xenotransplantation, stem cell research, abortion, and in vitro fertilization to matters concerning doping in athletics and bioterrorism. In our

most recent issues, we have focused on maternal and fetal rights, combating HIV/AIDS in developing nations, and corruption and deforestation. For the Spring 2011 edition, we are particularly interested in submissions centered on current issues in healthcare policy, but we would be delighted to receive submissions on any other topics related to bioethics for inclusion in our next journal.

Submissions should be emailed to [ethics@cornell.edu](mailto:ethics@cornell.edu) by **February 1, 2011**. Please do not submit manuscripts that have been or will be up for publication in any other journal.

Please feel free to e-mail ([wpi3@cornell.edu](mailto:wpi3@cornell.edu)) Mr. William Imperiale with any questions.

## **EPA Internships in Europe**

The University of Rochester, in cooperation with **Educational Programs Abroad (EPA)**, sponsors semester-long study programs in London, Berlin, Bonn, Cologne, Brussels, Edinburgh and Madrid that combine eight-credit internships with coursework throughout the semester, and provide a solid work experience. Students get a window on the world of work, a sample of life as a team player, and an unforgettable opportunity to explore what it's like to live and work in a foreign country.

For more information and for application materials, please visit:  
<http://www.rochester.edu/college/internships/>

## **Upcoming Events**

### **January 21 (Friday) 3:00 PM**

Hutchison 316  
David Loehlin, University of Rochester  
"TBA"

### **January 28 (Friday) 3:00 PM**

Hutchison 316  
Dr. Michael Clark, University of Rochester  
"TBA"

## **Opportunities**

Alaskan Observers North Pacific Ground Fish Observer  
Positions Available Year-Round:  
<http://www.alaskanobservers.com/observer.html>

Albert Einstein Summer UG 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>

Amgen Scholars Program At Columbia University  
<http://www.columbia.edu/cu/biology/ug/amgen/>

Berkeley Amgen Scholars Program  
<http://amgenscholars.berkeley.edu>

Case Western Reserve Summer Research Program  
[http://casemed.case.edu/admissions/research/summer\\_programs.cfm](http://casemed.case.edu/admissions/research/summer_programs.cfm)

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 BiolGERT Fellows Program:  
<http://www.bioigert.columbia.edu>

Columbia University / Master's Program in Climate and Society: <http://www.columbia.edu/cu/climatesociety/>

Columbia University MPA in Environmental Science and Policy Information:  
<http://www.columbia.edu/cu/mpaenvironment/pages/program.html>

Columbia University / MS in Nutrition:  
<http://cumc.columbia.edu/dept/ihn/student/PerspectiveStudents.html>

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

Fulbright Scholarship Program  
<http://us.fulbrightonline.org/home.html>

Fred Hutchinson Cancer Research Center UG Faculty Research Residency Program  
<http://www.fhrc.org/science/education/facultyresidency/>

Fred Hutchinson Cancer Research Center SURP Program  
<http://www.fhrc.org/science/education/undergraduates/>

Harvard School of Public Health Summer Program in Biological Sciences in Public Health  
<http://www.hsph.harvard.edu/academics/biological-sciences/undergraduate-summer-internship-program/>

Institute for Health Metrics and Evaluation Post-Bachelor Fellowship  
<http://www.healthmetricsandevaluation.org>

LUMCON 2010 Summer Field Program  
[www.lumcon.edu/education/university/summer](http://www.lumcon.edu/education/university/summer)

Kupcinet-Getz International Summer Science School 2011  
<http://www.fgs.org.il/en/>

Marine Mammal Research Internships  
<http://www.whalecenter.org>

MIT BE REU Program <http://web.mit.edu/be/education/reu.htm>

NASA Space Radiation Summer School  
<http://www.dsls.usra.edu/spacerad/2011>

National Academics Research Associate Program:  
<http://www7.nationalacademies.org/rap/>

National Academies Fellowships Program  
<http://www.national-academies.org>

The National Cancer Institute's Integrative Cancer Biology Program  
[http://icbp.nci.nih.gov/summer\\_program/](http://icbp.nci.nih.gov/summer_program/)

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/>

National Science Foundation's Graduate Research Fellowship Program (GRFP)  
<http://www.nsfgrfp.org/>

The Nemours Summer Undergraduate Research Scholarship at Alfred I. duPont Hospital for Children

New York State Dept. of Environmental Conservation Summer Job Opportunities  
<http://www.dec.ny.gov/education/1869.html>

Northeastern University Three Seas Program  
<http://www.threeseas@neu.edu>

Pasteur Foundation Internship in Paris  
<http://www.pasteurfoundation.org/documents/PasteurInternshipApp2011.pdf>.

RISE (Research Internships in Science and Engineering)  
<http://www.daad.de/rise/en/>

Rochester Academic of Science Student Research Grants  
<http://www.rasny.org/>

Roswell Park Summer Research Participation Program  
[http://www.roswellpark.org/Education/Summer\\_Programs](http://www.roswellpark.org/Education/Summer_Programs)

Sloan-Kettering Summer Undergraduate Research Program /  
<http://www.sloankettering.edu/gerstner/html/54513.cfm>

South Western Medical Center Summer UG Research (SURF)  
<http://www8.utsouthwestern.edu/utsw/home/education/surf/index.html>

Southern Teachers Agency / Biology Teaching Jobs  
<http://www.southernteachers.com/>

St. John Fisher Wegmans School of Pharmacy  
<http://www.sjfc.edu/pharmacy/admissions>

Stowers Scholar Program  
<http://www.stowers-institute.org/ScientistsSought/training/scholarsprogram.asp>

Teach for America  
<http://www.teachforamerica.org>

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

University of Kansas EEB Graduate Program  
<http://www.ku.edu/~eeb>

U of R Undergraduate Research Job Service:  
<http://www.rochester.edu/College/ugresearch/jobs/>

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

Wadsworth Center Summer Research Program 2011 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](#)

### **Contact Us**

We want to hear from you!  
Send submissions and feedback to [UPBM Administrator](#).

UPBM e-news is produced by the Department Of Biology, Undergraduate Program in Biology & Medicine during the academic year. You are receiving this message as a member of the UPBM community. Please do not forward this newsletter to other distribution lists. If you are receiving multiple copies or believe this message was sent to you in error, please contact the [UPBM Administrator](#).