Undergraduate Program in Biology and Medicine

University of Rochester
Hutchison Hall Room 402F
Rochester, NY 14627
UPBM Website Contact Us

December ‘10

Inside

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

E-Newsletter

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
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 UBPM 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.
ambitions to the next step. Register for the Night at http://www.rochester.edu/alumnievents.

Any further questions on how the nights can be utilized should be directed to Brie Spinetto ’09 at 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

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

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/ru/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

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/

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.

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 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) 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?


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

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

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.fhcrc.org/science/education/facultyresidency/

Fred Hutchinson Cancer Research Center SURP Program
http://www.fhcrc.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

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 Academies 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/

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

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

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.ucnf.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.