

*The University of Pennsylvania*  
**Biology Undergraduate Newsletter**

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**Announcements**

**Nassau Award Winners**

The Biology Department congratulates the following Biology majors who were among the 16 recipients of Nassau Funds this year:

**Catherine Hulshof** – “The effect of neighboring edges on plant species composition in Santa Rosa National Park, Costa Rica.”

**Nisha Mukherjee** – “The roles of Wilms Tumor 1, NADPH oxidase 1 and phorbalin-1 proteins in the etiology of gastrointestinal cancer.”

**Jonathan Shoag** – “The role of Fyn kinase and SIP-26 in mast cell signaling.”

The Nassau award provides funds for supplies and travel to support independent research projects. This year, 70 applications were submitted from Penn’s undergraduate schools. For more information on the Nassau fund and other research funding opportunities, visit the Center for Undergraduate Research and Fellowships office (<http://www.upenn.edu/curf/>).

**Spring Events**

**Info Night for Undergraduates  
Interested in the Biology Major**  
will be held

**Thursday, February 16<sup>th</sup> at 5:30 pm  
in Leidy Lab room 109**

Thinking about majoring in Biology? The Undergraduate Chair, **Dr. Brenda Casper** and Biology professor, **Dr. Greg Guild** will provide information on the requirements for the major and answer your questions about the general major as well as concentrations within the major.

**Updates on Spring 2006 Courses**

**BIOL 484: Cell Motility and Cytoskeleton**

Taught by Dr. Svitkina on Mondays and Wednesdays 3:30-5 pm. This course uses primary literature to explore cell locomotion and microscopy. Dr. Svitkina is an expert in cell motility and will present slides and movies of cells to enhance the reading material. Students will present research papers as part of their grade for the course.

**More Updates on Spring 2006 Courses**

**BIOL 465: Ecological Techniques in Conservation**

Taught by Dr. William McShea.

Need to pick up a class? Biology 465 offers students a rare opportunity to gain hands-on experience in techniques commonly used in conservation biology. Students will learn practical methods used to study and manage real populations of wildlife. Emphasis is placed on populations of small mammals, forest birds, white-tailed deer, and their respective habitats. The class is taught primarily over a nine-day period in March (Spring Break) at the Smithsonian’s Conservation Research Center and the Shenandoah National Park. Come to the **information session Friday, January 13, 2-3 pm** in Goddard 102. For more information, contact the course TA Rich Lucas at [rlucus@sas.upenn.edu](mailto:rlucus@sas.upenn.edu).

**BIOL 535: Mathematical Ecology** has been cancelled.

**Research Opportunities**

**NSF Research Experience for Undergraduates**

REU sponsored by NSF offers students the opportunity to work with faculty and other researchers at a variety of locations. Research topics span all disciplines of biology including environmental biology, computational biology, biochemistry, and tropical research. Students receive a stipend and some include housing and transportation. Visit the NSF website at <http://www.nsf.gov/home/crssprgm/reu/start.htm> to search the list of projects. Application deadlines vary depending on the project. Some specific programs are listed below.

**Integrated Ecology at Bradley**

The Biology department at Bradley University in Peoria IL is offering a 10-week NSF REU program addressing environmental problems along the Illinois River Corridor. The program runs from May 30 – August 4 and includes a \$3500 stipend with housing provided on campus. For information on applying, contact Dr. Kelly McConnaughay at [kdm@bradley.edu](mailto:kdm@bradley.edu).

**Mountain Lake Biological Station**

The University of Virginia offers a summer REU at the Mountain Lake Biological Station. Students are encouraged to design their own projects in association with a station researcher. The program runs from May 30 – August 4 and includes a stipend of \$3640. Visit the MLBS website at <http://mlbs.org/REU.html> for information on available research programs and an application. Application deadline is **March 1<sup>st</sup>**.

### The Lankenau Institute for Medical Research

The Lankenau Institute, located in Wynnewood PA, is sponsoring a Summer Intern Program for college students who have completed their freshman, sophomore, or junior year. This year's program will run from June 5, 2006, to July 28, 2006. Students considering a career in medical research or medicine are invited to apply. For information about the scientific programs at the Institute and details about the application process, please go to their web site at [http://www.limr.org/html/intern\\_summer.htm](http://www.limr.org/html/intern_summer.htm).

### Ecology in Context Program

The Institute of Ecosystem Studies (IES), Millbrook NY, offers undergraduate research opportunities (REU) for research in ecology, environmental and conservation biology. This is a 12-week program beginning May 30 and ending August 21. Housing is provided and students receive a stipend of \$4650 (tentative). For information on available projects and an application, visit [www.ecostudies.org/reu.html](http://www.ecostudies.org/reu.html). Applications must be postmarked by **February 15, 2006**.

### UT Southwestern Graduate School of Biomedical Sciences

offers Summer Undergraduate Research Fellowships in many disciplines of molecular and cellular biology. Students develop an individual research project with a faculty member of UT Southwestern Graduate School. Students receive a stipend of \$3500 for the 10 week program that begins June 5<sup>th</sup>. Applications are due by **February 6, 2006**. For more information, visit their website at <http://www.utsouthwestern.edu/SURF> or contact the Office of the Dean at [SURF@utsouthwestern.edu](mailto:SURF@utsouthwestern.edu).

### Stowers Institute Scholars Program (Kansas City, MO)

Stowers offers an 8 week training program for students completing their junior year. Students work on a specific project under the direction of a research scientist. Applicants must have a minimum GPA of 3.5. For more information and an application, go to <http://www.stowers-institute.org>. All application materials must be received by **February 10, 2006**.

**American Museum of Natural History Southwestern Research Station** in the Chiricahua Mountains of Arizona is offering 30-40 volunteer positions from March 1 – Nov. 1 with most positions available for 6-8 weeks between May and August. Volunteers work 24 hours/week on routine chores in exchange for room and board. The remaining time each week can be spent assisting station researchers with field research. Applications are on <http://research.amnh.org/swrs/> or contact Dr. Dawn S. Wilson, Director, P.O. Box 16553, Portal AZ 85632 520-558-2396 [dwilson@amnh.org](mailto:dwilson@amnh.org).

## Fellowship Opportunities

### Rose Award

The Rose Undergraduate Research Award recognizes outstanding achievement in research. All research projects are eligible but a member of the faculty must nominate the research for the award. The student application and faculty letter are due **April 1, 2006** to the Center for Undergraduate Research and Fellowships.

### College Alumni Society and Class of 1971 Robert J. Holtz Endowed Fund for Undergraduate Research

The alumni of Penn have created a variety of grants to support independent research by providing funds for supplies or travel associated with undergraduate projects. Many of these grants have a **March 1** deadline for applications. For information on these opportunities please visit the Center for Undergraduate Research and Fellowships website at <http://www.upenn.edu/curf/research/research2.html> or contact Cheryl Shipman, [shipman@pobox.upenn.edu](mailto:shipman@pobox.upenn.edu).

## Job Opportunities

### NSF/Access Science Teaching Fellow Positions

If you are interested in helping to improve science education in grades K-12 in West Philadelphia schools, we invite you to apply for a position as a National Science Foundation (NSF) Teaching Fellow in Penn's Access Science Program. Each Teaching Fellow will work with teachers in the West Philadelphia schools to help plan and implement hands-on, inquiry-based science and math activities. Fellows will be involved in selecting their own placements. Undergraduate Fellows will be paid \$10/hr. We are seeking undergraduates who will be available to work in the range of 7-15 hours per week during the academic year. If you are interested, please provide a brief statement of your interest and any experience in teaching, and, if available, a resume. Please send inquiries to Leigh Seeleman; [leighsee@sas.upenn.edu](mailto:leighsee@sas.upenn.edu), Program Coordinator.

## Career Services

### Pre-Graduate

Panel on Graduate Fellowships and Study  
Tuesday, January 31 4:30-6:00 pm  
Grad/Undergrad Mentoring Program for the Life Sciences  
Tuesday, January 31 12:00-1:00 pm

### Pre-Health Applicant HPAB Workshop (for those seeking Fall 2007 admission)

Tuesday, January 24 12:00-1:30 pm  
Wednesday, February 8 4:00-5:30 pm  
Friday, February 24 3:00-4:30 pm  
Wednesday, March 2 10:00-11:00 am

### Pre-Dental Applicant Workshop

Tuesday, February 28 4:00-5:30 pm

### Pre-Vet Applicant Workshop

Thursday, February 16 4:00-5:30pm

### Physician Panel

Thursday, February 23 6:30 pm

To sign up for the workshops, please go to the pre-graduate/pre-professional desk in Career Services (McNeil Building). For further information and locations for these workshops, see Career Services website: [http://www.vpul.upenn.edu/careerservices/gradprof/gradprof\\_programs.html](http://www.vpul.upenn.edu/careerservices/gradprof/gradprof_programs.html)