In This Issue . . .

Academy of Natural Sciences  2
Research Experiences for Undergraduates

American Orchid Society  3
Research Grants

Field Museum of Natural History  3
Visiting Scholarships

Floriculture Industry Research and Scholarship Trust  4
Scholarship - Research

Gloeckner (Fred C.) Foundation  7
Foundation Grants

Mycological Society of America  8
Mentor Student Travel Awards

National Geographic Society (NGS)  9
Grants for Research and Exploration

National Science Foundation  10-15
Various Opportunities

Smithsonian Institution  15-17
Fellowship & Internship Programs

Do You Know About NEON: National Ecological Observatory Network

The National Ecological Observatory Network (NEON) is a continental scale research instrument consisting of geographically distributed infrastructure, networked via state-of-the-art communications. Cutting-edge lab and field instrumentation, site-based experimental infrastructure, natural history archive facilities and/or computational, analytical and modeling capabilities, linked via a computational network will comprise NEON.

NEON will transform ecological research by enabling studies on major environmental challenges at regional to continental scales. Scientists and engineers will use NEON to conduct real-time ecological studies spanning all levels of biological organization and temporal and geographical scales. NSF disciplinary and multi-disciplinary programs will support NEON research projects and educational activities. Data from standard measurements made using NEON will be publicly available.

NEON will be a platform for experiential learning and biosphere literacy. NEON will create innovative learning environments and pathways for K-20 students and foster integration of research and education through institutional and multi-institutional networking, partnerships, alliances, and collaborations. NEON’s research and communication infrastructure will enable public dialog, education of policy and management decision makers, and the development of workforce skills and life-long career opportunities. NEON will forge new disciplinary alliances and push interdisciplinary scientific, information, and technological frontiers, and thus will create education and training opportunities leading to new career paths.

For more information about NEON go to NSF’s website at http://www.neoninc.org/
Academy of Natural Sciences  
Research Experiences for Undergraduates Fellowships

REU Coordinator  
The Academy of Natural Sciences  
1900 Benjamin Franklin Parkway  
Philadelphia, PA  19103  
E-mail: reucoordinator@acnatsci.org  
Web Site: http://www.acnatsci.org/  
E-Forms: http://www.acnatsci.org/research/opportunities/reu.php  

DEADLINE ANNOUNCED:  03/02/2007

Since its founding in 1812, The Academy of Natural Sciences has had a mission to create the basis for a healthy and sustainable planet through exploration, research, and education. The Academy of Natural Sciences of Philadelphia offers 10-week summer internships for undergraduates, through the National Science Foundation's (NSF) Research Programs for Undergraduates (REU). The Academy's REU program is dedicated to training students in research based on the Academy's world-renowned collections in Botany, Ichthyology, Ornithology, Entomology, Malacology, and Paleontology as well as our Library and Archives. Research staff at the Academy work in systematics, natural history, evolutionary biology, and ecology. This program offers a diverse array of research experiences, which include field trips, workshops, and seminars. Each student works on a project with an academy scientist mentor. Example research areas include: revisionary systematics or taxonomy of a group of organisms, evolutionary and systematic studies using morphological or molecular techniques, biogeography, bioinformatics, aquatic ecology, and the history of natural science. A list of research projects is included below. Students planning graduate study and careers in systematic and evolutionary biology will find the REU program especially valuable.

Support Provided: The Academy will pay for travel to and from Philadelphia, housing and expenses for supplies, field trips, and research. All students will live in dormitories or apartments adjacent to the Academy of Natural Sciences in the heart of the Museum district of Philadelphia. Each student will receive a stipend of $350 per week.

Applicant Information: Applicants must be U.S. citizens or permanent residents and enrolled in a college or university (i.e., entering your sophomore, junior, or senior year after completing our summer program). Participants must commit to full participation in the 10-week program, which runs from the first full week of June until mid-August.

Application Information: Applicants will be required to provide: (1) one-page statement of intent stating career goals and how this experience will help meet these goals; (2) transcript (we will accept unofficial transcripts; official transcripts will be requested from all accepted applicants); (3) two letters of recommendation (email letters will be accepted from official workplace email addresses). There is no actual application form. Send application materials to: REU Coordinator, above. Applications for Summer 2007 will be accepted January 15 to March 2, 2007. If applicants have questions, please contact: reucoordinator@acnatsci.org.
American Orchid Society

Research Grants

Conservation and Research Committees
16700 AOS Lane
Delray Beach, FL 33446-4351
Phone: (561)404-2000  Fax: (561)404-2045
E-mail: theaos@aos.org
Web Site: http://www.aos.org/
E-Forms: http://www.aos.org/aos/research/page04.aspx

DEADLINE ANNOUNCED: 07/01/2007

The American Orchid Society periodically awards research grants for non-commercial conservation projects, as well as experimental projects and fundamental and applied research on orchids. More than $1 million has been awarded since this program was established in the 1950s. The AOS's goals in this regard are to advance the conservation and preservation of orchids in every aspect, and/or advance the scientific study of orchids in every respect, including classification, evolution, propagation, culture, care and development.

Support Provided: Grants vary in amount, depending upon the needs and nature of the project and the potential for securing additional funds from other sources. At present, grants range from $500 to $12,000. The duration of each grant depends upon the particular project. Funds for multi-year grants are paid in annual installments. The maximum duration of support awarded at any one time is three years.

Applicant Information: Qualified personnel associated with accredited institutions or appropriate institutes or organizations may apply for grants. Support is not restricted to individuals or institutions within the United States. The salary of established scientists is not supported. Qualified graduate students with appropriate interests may apply for grants in support of their research. If justified, their salary may be supported. In general, travel to collect orchids is not supported. Other types of travel may be supported on a case-by-case basis. Projects that involve commercial sales of plant are generally not supported.

Application Information: Submissions are screened by a task force made up of members of the AOS's Conservation Committee and Research Committee, and thereafter directed to the appropriate committee for full review at their Spring and Fall meetings. Grants received by January 1 are reviewed at the Spring Members Meeting and those grants received by July 1 are reviewed at the Fall Meeting.

Field Museum of Natural History

Visiting Scholarships

Chair, Scholarship Committee
Office of Academic Affairs
1400 South Lake Shore Drive
Chicago, IL 60605-2496
Phone: (312)665-7627  Fax: (312)665-7641
E-mail: ezeiger@fieldmuseum.org
Web Site: http://www.fieldmuseum.org/research_collections/scholarships/default.htm
The Field Museum houses some of the world's finest collections in anthropology, botany, geology, and zoology. The Field Museum recognizes the need to support basic research in its collections by interested students and scholars throughout the world. Providing opportunities for scientists who wish to use the Field Museum's collections, funds are earmarked for travel and for subsistence while visitors are conducting their research. Young professionals and graduate students can be funded for periods of a few days to several weeks from the Thomas J. Dee, the Karl P. Schmidt, the Women's Board Women In Science, and the Visiting Scholar funds. Extended-term visits by distinguished national and international scientists can be funded for periods of several weeks up to one year through the Robert O. Bass Visiting Scientist Fund.

Support Provided: Owing to the limited availability of these funds, stipends are typically less than $1000 per scholar. Stipends for extended-term visits are negotiable.

Applicant Information: Applicants must be endorsed by a Field Museum curator. Please find a scientist from the list of curators who will agree to send a written recommendation to the Chair of the Scholarship Committee on the website: http://www.fieldmuseum.org/research_collections/scholarships/default.htm#curatorlist.

Application Information: Six (original plus five) copies of all application materials must be sent to the chair of the scholarship committee (see application form for materials needed). The application form is available on the website above. Applications will be reviewed twice per year by the scholarship committee. Deadlines for submission are May 1 and November 1. Proposals reviewed by the May 1 panel can be funded no sooner than the second week in June, and proposals reviewed by the November 1 panel can be funded no sooner than the second week in December.

FIRST (Floriculture Industry Research and Scholarship Trust)
Various Scholarships

P.O. Box 280
East Lansing, MI 48826-0280
Phone: (517)333-4617 Fax: (517)333-4494
E-mail: scholarship@firstinfloriculture.org
Web Site: http://www.firstinfloriculture.org/

DEADLINE ANNOUNCED: on or before 05/01/2007

FIRST is proud to offer 25 distinct scholarships geared toward students pursuing careers in all aspects of the floriculture industry; including production, research, business, marketing, and public gardens. Each scholarship is unique; having its own requirements and specifications.

All FIRST scholarships require a major or minor in horticulture or a related field. Scholarships are offered for graduate, undergraduate and vocational students in floriculture production, agribusiness, marketing, greenhouse
production, horticulture business, public gardens, international studies...and more! Scholarships encourage horticulture students to continue family businesses and to join horticulture firms as growers and innovators. The future health of our industry lies upon the success of today’s students. Through their scholarship program FIRST supports students whose academic excellence and dedication to the floriculture industry prepares them for influential professional careers ahead.

**Ball Horticultural Company Scholarship**
Ball Horticultural Company Scholarship goes to students pursuing careers in commercial floriculture.

**Barbara Carlson Scholarship**
The Barbara Carlson Scholarship goes to students who work or serve as interns for public gardens.

**Bettinger Vocational Scholarships**
The Bettinger Vocational Scholarships is named for Leonard Bettinger, a successful greenhouse grower in the Bettinger Farms family in Toledo, Ohio, who was president of the BPI trade association from 1974-1976. His scholarship goes to vocational students in a one- or two-year program with the intent to become a grower or greenhouse manager.

**Bud Ohlman Memorial Scholarship**
The Bud Ohlman Memorial Scholarship goes to students with the career goal of becoming a bedding plant grower for an established business.

**Carl Dietz Memorial Scholarship**
The Carl Dietz Scholarship goes to students with a career interest in horticultural allied trades (supply sales, trade press, greenhouse equipment, etc.)

**Dosatron International, Inc. Scholarship**
The Dosatron International, Inc. Scholarship goes to students of floriculture production with career goals to work in a greenhouse environment.

**Ecke Family Scholarship**
The Ecke Family Scholarship goes to undergraduate students pursuing a career in production floriculture.

**Ed Markham International Scholarship**
The Ed Markham International Scholarship goes to students studying horticulture marketing through international travel.

**Fran Johnson Non-Traditional Scholarship**
The Fran Johnson Nontraditional Scholarship goes to students who are reentering school after a minimum five-year absence and who have an interest in bedding and/or floral crops.

**Harold Bettinger Scholarship**
The Harold Bettinger Memorial Scholarship goes to students with a major or minor in business and/or marketing with the intent to apply it to a horticulture-related business.

**Jacob Van Namen Marketing Scholarship**
The Jacob Van Namen Scholarship is intended to develop knowledgeable, creative individuals to improve the floriculture industry. His scholarship goes to students with an interest in agribusiness marketing and distribution of floral products.
James Bridenbaugh Memorial Scholarship
The James Bridenbaugh Memorial Scholarship goes to students pursuing careers in floral design and marketing of fresh flowers and plants.

James K. Rathmell, Jr. Memorial Scholarship
The James K. Rathmell, Jr. Memorial Scholarship goes to students with a specific plan for horticulture work/study outside the USA.

Jerry Curtice Scholarship
The Jerry Curtice Scholarship goes to graduate students with an interest in woody ornamentals.

Jim Perry Memorial Vocational Scholarship
The Jim Perry Memorial Vocational Scholarship goes to vocational students in a one- or two-year program with the intent to become a grower or greenhouse manager.

John Carew Memorial Scholarship
The John Carew Memorial Scholarship goes to graduate students with an interest in greenhouse crops.

John Holden Memorial Vocational Scholarship
The John Holden Memorial Vocational Scholarship goes to vocational students in a one- or two-year program with the intent to become a grower or greenhouse manager.

John L. Tomasovic, Sr. Scholarship
The John L. Tomasovic, Sr. Scholarship goes to students with special consideration for financial need and a grade point average between 3.0 and 3.5/4.0.

Mike and Flo Novovesky Scholarship
Mike and Flo Novovesky have enjoyed over 30 years of active participation in the floriculture industry. The Novoveskys know first hand the hardships a young couple must overcome when balancing a career and family. Their scholarship fund aims to help young married students who are working to put themselves through college and have a GPA of 2.5 or higher. Depending on the availability of married applicants, the scholarship may also go to an undergraduate working his or her way through school with financial need and family obligations. The keys are strong interest in horticulture and financial need.

Paris Fracasso Production Floriculture Scholarship
The Paris Fracasso Production Floriculture Scholarship goes to students with a career goal in floriculture production.

Richard E. Barrett Scholarship
The Richard E. Barrett Scholarship goes to students pursuing careers in research and/or education.

Seed Companies Scholarship
The Seed Companies--Ball, PanAmerican, Goldsmith and Novartis--are leaders in the seed production and breeding industry, providing new, improved varieties. This scholarship goes to students with seed industry career goals, such as research, breeding, sales, or marketing.

Southeast Greenhouse Conference Scholarship
The Southeast Greenhouse Conference promotes and supports students studying floriculture within their membership area. Students must be studying horticulture at a college or university in one of the following states: Virginia, Tennessee, North Carolina, South Carolina, Alabama, Georgia and Florida.
The National Greenhouse Manufacturers Association (NGMA) Scholarship
The National Greenhouse Manufacturers Association (NGMA) Scholarship targets juniors or higher, majoring in horticulture and bioengineering or the equivalent, at a four-year college.

FIRST (Floriculture Industry Research and Scholarship Trust)
Research Grants

P.O. Box 280
East Lansing, MI  48826-0280
Phone: (517)333-4617  Fax: (517)333-4494
E-mail: first@firstinfloriculture.org
Web Site: http://www.firstinfloriculture.org/research_grants.htm

DEADLINE ANNOUNCED:  on or before 9/1/07

FIRST funds research to improve the production and marketability of plants. Research projects that receive funding are selected by growers, for their potential to improve both greenhouse operating efficiency and your bottom line. All research reports are available, for free, to contributors, greenhouse growers and other horticulture industry professionals.

Gloeckner (Fred C.) Foundation
Foundation Grants

600 Mamaroneck Avenue
Harrison, NY  10528-1631
Phone: (914)698-2300  Fax: (914)698-0848
E-mail: thutter@fredgloeckner.com
Web Site: http://www.gloecknerfoundation.org/
E-Forms: http://www.gloecknerfoundation.org/fundingp.htm

DEADLINE ANNOUNCED:  04/01/2007
The Gloeckner Foundation awards grants for research and educational projects in floriculture and the supporting and allied fields, such as plant pathology, plant breeding, agricultural engineering, agricultural economics, entomology, and plant physiology related to floriculture and ornamental horticulture at universities, colleges, and federal research institutions in the United States only. The proposed research and education projects must be of substantial importance, and the results made available to the interested public.

**Support Provided:** The research grant may include, assistantships for qualified graduate students seeking advanced degrees and accepted by the university or college. The Gloeckner Foundation does not pay any indirect costs (overhead) on its research and education grants nor faculty or principal investigator's salary. Grants are awarded on an annual basis, subject to review and renewal.

**Application Information:** Grant requests (ten copies) must be postmarked on or before April 1st for consideration at the annual meeting of the Board of Directors held in early June. Grants are paid in August following approval at the June meeting.

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**Mycological Society of America**

**Graduate Student Awards**

**Mentor Student Travel Awards**

Dr. Andrea Gargas  
Botany Department, UW Madison  
132 Birge Hall  
430 Lincoln Drive  
Madison, WI  53706  
E-mail: agargas@wisc.edu  
Web Site: [http://msafungi.org/](http://msafungi.org/)  
E-Forms: [http://msafungi.org/mentors_travel.html](http://msafungi.org/mentors_travel.html)

**DEADLINE ANNOUNCED: 03/15/2007**

The Mycological Society of America (MSA) is a scientific society dedicated to advancing the science of mycology--the study of fungi of all kinds, including mushrooms, molds, truffles, yeasts, lichens, plant pathogens, and medically important fungi. The Mentor Student Travel Awards are given in the names of famous mycological forebearers.

**Support Provided:** The 2007 meeting of MSA is in Baton Rouge, Louisiana, 5-9 August.

**Applicant Information:** Applicants must be (1) student members of the MSA, (2) candidates for the Ph.D., (3) resident during the tenure of the fellowship in a university in Canada or the United States, and (4) The NAMA Fellowship comes with the stipulation that the awardee prepare an article for McIlvainea. Previous recipients of these fellowships are not eligible to apply.

**Application Information:** An abstract of the paper or poster; curriculum vita; one-page description of the research project, including an explanation of how this award will further the applicant's research/study; and a letter of support from the applicant's major professor are required. Detailed instructions are available online at the MSA Web site. In 2006, four copies of these documents should be sent to the committee chair, Dr. Andrea
Gargas, above and received by the deadline. Early applications are appreciated. Applications must be postmarked no later than 15 March 2007. Applications submitted by e-mail or fax will not be accepted.

**National Geographic Society (NGS)**

*Grants for Research and Exploration*

Committee for Research and Exploration
1145 17th Street, NW
Washington, DC  20090-8249
Phone: (800)647-5463
E-Forms: [http://www.nationalgeographic.com/research/grant_application.html](http://www.nationalgeographic.com/research/grant_application.html)

**DEADLINE ANNOUNCED:** Open

The National Geographic Society (NGS) awards grants for scientific field research and exploration through its Committee for Research and Exploration (CRE). All proposed projects must have both a geographical dimension and relevance to other scientific fields and be of broad scientific interest. Applications are generally limited to the following disciplines: anthropology, archaeology, astronomy, biology, botany, geography, geology, oceanography, paleontology, and zoology. In addition, the Committee is currently emphasizing multidisciplinary projects that address environmental issues (e.g., loss of biodiversity and habitat, effects of human-population pressures). Researchers planning work in foreign countries should include at least one local collaborator as part of their research teams. The Committee will not consider applications seeking support solely for laboratory work or archival research. While grants are awarded on the basis of scientific merit and exist independent of the Society's other divisions, grant recipients are expected to provide the Society with rights-of-first-refusal for popular publication of their findings.

**Support Provided:** This grant program does not pay educational tuition, nor does it offer scholarships or fellowships of any kind. Grants funded by the CRE are for one year’s work in field and laboratory. While grant amounts vary greatly, most range from U.S. $15,000 to $20,000. There is no set quantity of grants awarded, but budget constraints keep the number to approximately 250 per year. As NGS grants are generally intended to function as complementary support, the Committee strongly encourages applicants to seek additional, concurrent funding from other funding agencies. Sometimes, but rarely, the committee will fund a maximum of two years of research. If the project director of one's project feels that there are distinctive and substantive reasons for submitting a two-year application, he or she should understand that competition is keen, and awards for two years are scarce. National Geographic Society grants may not be used for indirect costs, overhead, and other expenses not directly related to the project. Fringe benefits are also excluded, as are salaries. Funds may not be used for travel to scientific/professional meetings or conferences, legal actions, land acquisition, endowments, construction of permanent field stations, or publishing research results. Grant recipients are expected to provide the National Geographic Society with rights of first refusal for popular publication of their findings.

**Applicant Information:** Applicants are expected to have advanced degrees (Ph.D. or equivalent) and be associated with an educational organization or institution. Independent researchers or those pursuing a Ph.D.-level degree may apply, but competition is keen and awards to non-Ph.D. applicants are rare. As a general rule, all applicants are expected to have published a minimum of three articles in peer-reviewed scientific journals. Funding is not restricted to United States citizens.
Application Information: Applying for a grant from the Committee for Research and Exploration is a two-step process. Step 1 - Preapplication: Before receiving an application form, each principal investigator must submit a preapplication form on-line at the above E-Forms address. The Committee for Research and Exploration accepts preapplications throughout the year. Please submit preapplications at least ten months prior to anticipated field dates. Within eight weeks, the principal investigator will receive a decision. If the preapplication is approved, the principal investigator will be sent an e-mail with a link to complete their full application online. Step 2 - Application: After receiving the application, the principal investigator must complete and submit their application on-line. The Committee for Research and Exploration accepts applications throughout the year. However, please allow eight months from the CRE's receipt of one's application for the Committee to formally review and consider it. Previous grantees must first comply with all prior report and financial accounting obligations before submitting applications for additional support. CRE strongly encourages electronic submission of all documents. If this is not possible, please submit the information to the Committee for Research and Exploration at the above address.

National Science Foundation (NSF)

Interdisciplinary Training for Undergraduates in Biological and Mathematical Sciences (UBM)

See guidelines for contacts for various divisions
4201 Wilson Boulevard
Arlington, VA  22230

DEADLINE ANNOUNCED: 04/04/2007

The goal of the Undergraduate Biology and Mathematics (UBM) activity is to enhance undergraduate education and training at the intersection of the biological and mathematical sciences and to better prepare undergraduate biology or mathematics students to pursue graduate study and careers in fields that integrate the mathematical and biological sciences. The core of the activity is long-term research experiences for interdisciplinarily balanced teams of at least two undergraduates. Projects should focus on research at the intersection of the mathematical and biological sciences. Projects should provide students exposure to contemporary mathematics and biology, addressed with modern research tools and methods. That is, projects must be genuine research experiences rather than rehearsals of research methods. Projects must involve students from both areas in collaborative research experiences and include joint mentorship by faculty in both fields. In addition, it is expected that projects will strengthen the research and education capacity, infrastructure, and culture of the participating institutions. The program encourages collaborations that bring together biological and mathematical scientists from associate, baccalaureate, masters, or Ph.D. granting institutions, minority serving institutions, national and regional organizations, and that may involve industrial or government laboratories. Opportunities for partnering across institutions and for developing international collaborations are welcome.

Support Provided: NSF anticipates making 6 to 9 standard grants, including 2 to 3 institutional awards and 4 to 6 group awards. The anticipated funding amount is $3.3 million in FY 2007, pending the availability of funds. The duration of projects may be up to five years (for Institutional projects), or up to three years (for Group projects), and NSF strongly encourages projects of these durations. Total award sizes for Institutional projects should not exceed an average of $200,000 per year. Total award sizes for Group projects should not exceed $80,000 per year. Cost sharing is not required by NSF. An administrative allowance, limited to 25 percent of the participant support stipend amount only, is allowed for UBM awards as partial reimbursement of indirect costs.
**Applicant Information**: The categories of proposers identified in the Grant Proposal Guide are eligible to submit proposals under this program solicitation. PLEASE NOTE: Only undergraduate students who are citizens or permanent residents of the United States or its possessions can be supported with NSF funds. NOTE: Foreign researchers at U.S. institutions may be able to apply for this award through their institution. Contact the program officer for details.

**National Science Foundation (NSF)**

*Research Coordination Networks in Biological Sciences (RCN)*

Dr. Machi F. Dilworth, Chair
Research Coordination Networks Working Group
Division of Biological Infrastructure
4201 Wilson Boulevard, Room 615 N
Arlington, VA  22230
Phone: (703)292-8470  Fax: (703)292-9063
E-mail: bioren@nsf.gov

**DEADLINE ANNOUNCED: 06/25/2007**

The goal of the Research Coordination Networks in Biological Sciences (RCN) program is to encourage and foster interactions among scientists to create new research directions or advance a field. Innovative ideas for implementing novel networking strategies are especially encouraged. Groups of investigators will be supported to communicate and coordinate their research, training and educational activities across disciplinary, organizational, institutional, and geographical boundaries. The proposed networking activities should have a theme as a focus of its collaboration. The focus could be on a broad research question, a specific group of organisms, or particular technologies or approaches. Support will be provided for groups of investigators to communicate and coordinate their research efforts across disciplinary, organizational, institutional, and geographical boundaries. The objectives are to facilitate open communication and exchange of information and resources, to integrate research activities of scientists working independently on topics of common interest, to nurture a sense of community among young scientists, and to minimize isolation and maximize cooperation so as to eliminate unnecessary duplication of efforts. NSF funds may not be used to support the expenses of the international scientists and students at their home institution. However, these are important activities and NSF encourages the international partners to secure support for their efforts from their own national programs.

**Support Provided**: NSF anticipates that approximately $1.2 million will be available for approximately 5-10 awards in FY 2006. Awards range in size from $50,000 - $100,000, and award duration is up to five years. Cost sharing is not required by NSF for this program. In RCN projects with an international scope, NSF funds may be used for: (A) travel expenses for US scientists and students participating in exchange visits integral to the RCN project; (B) RCN-related expenses for international partners to participate in networking activities while present as a visitor in a participating US host laboratory; and (C) RCN-related expenses for US participants to conduct networking activities in the international partner's home laboratory.

**Applicant Information**: Proposals may only be submitted by the following: Proposals are invited from U.S. academic institutions, U.S. nonprofit research organizations, including museums, research laboratories, professional societies, and similar organizations in the U.S. that are directly associated with educational or research activities, and consortia of such organizations with appropriate research and educational facilities.
Although the research coordination networks are expected to be multi-organizational, a single organization must serve as the lead and all other organizations as subawardees. Organizations ineligible to submit to this program solicitation may not receive subawards. If they are part of the proposed network, their participation is expected to be supported by non-NSF sources. NOTE: Foreign researchers at U.S. institutions may be able to apply for this award through their institution. Contact the program officer for details.

**National Science Foundation (NSF)**

*Informal Science Education (ISE) Program*

Informal Science Education (ISE) Program  
4201 Wilson Boulevard, Room 885 S  
Arlington, VA 22230  
Fax: (703)292-9044  

**DEADLINES ANNOUNCED:**  06/21/2007;  09/13/2007;  12/13/2007 (Note: these dates are for full proposals. Preliminary proposal dates are required and vary, depending on project type. See webpage for details.)

The Informal Science Education (ISE) program invests in projects that develop and implement informal learning experiences designed to increase interest, engagement, and understanding of science, technology, engineering, and mathematics (STEM) by individuals of all ages and backgrounds, as well as projects that advance knowledge and practice of informal science education. Projects may target either public audiences or professionals whose work directly affects informal STEM learning. ISE projects are expected to demonstrate strategic impact, collaboration, and innovation. Project Grants (Full Proposals) are the primary means in which the ISE program invests in projects that develop and implement informal learning experiences for the general public. These projects have as their primary audience informal learners, from young children to senior citizens. The program also supports projects that enhance the infrastructure of informal science education. See website for further details.

**Support Provided:** The ISE program expects to make approximately 50 awards as Project Grants, Planning Grants, Conference, Symposia, and Workshop Grants, and Grant Supplements based on anticipated funding of $25 million in FY 2006 for new awards. They will be made as Standard or Continuing Grants, with the exception of the Informal Science Education Resource Center award, which will be made as a Cooperative Agreement and may be renewed for an additional five years, subject to external merit review and availability of funds. ISE Project Grants: Project duration may be from one to five years. Awards may range from $100,000 to a maximum of $3 million for up to five years, with the exception of the Informal Science Education Resource Center, which may be funded to a maximum of $5 million over five years. Planning Grants. Project duration is to be no more than two years. The maximum award is $75,000. Conference, Symposia, and Workshop Grants. Project duration is expected to be no more than two years. The range for these awards is approximately $50,000 to $250,000. Grant Supplements. The maximum award is $200,000 or 20 percent of the total amount of the original award, whichever is less. (This limitation does not apply to cooperative agreements.)
National Science Foundation (NSF)
Course, Curriculum, and Laboratory Improvement (CCLI)

Russell Pimmel, Myles Boylan, and Terry Woodin, Lead Program Directors
Course, Curriculum, and Laboratory Improvement (CCLI)
4201 Wilson Boulevard
Arlington, VA 22230
Phone: (703)292-4618 (Pimmel) or -4617 (Boylan) or -4657 (Woodin)


The Course, Curriculum, and Laboratory Improvement (CCLI) program seeks to improve the quality of science, technology, engineering, and mathematics (STEM) education for all undergraduate students. The program supports efforts to create new learning materials and teaching strategies, develop faculty expertise, implement educational innovations, assess learning and evaluate innovations, and conduct research on STEM teaching and learning. The program supports three types of projects representing three different phases of development, ranging from small, exploratory investigations to large, comprehensive projects. All proposals must contribute to the development of exemplary undergraduate STEM education. For more information, see the website above.

Support Provided: NSF anticipates having $34 million for new and ongoing CCLI awards, pending the availability of funds. The awards will be made as standard or continuing grants. Phase 1: Exploratory Projects: 70 to 90 awards expected, each with a total budget up to $150,000 ($200,000 when four-year colleges and universities collaborate with two-year colleges) for 1 to 3 years; Phase 2: Expansion Projects: 20 to 30 awards expected, each with a total budget up to $500,000 for 2 to 4 years; and Phase 3: Comprehensive Projects: 2 to 5 awards expected, each with a total budget up to $2 million for 3 to 5 years.

Applicant Information: Proposals are invited from all organizations and in any field eligible under the standard GPG guidelines. Specifically excluded are projects that address solely professional training in clinical fields such as medicine, nursing, and clinical psychology. NOTE: Foreign researchers at U.S. institutions may be able to apply for this award through their institution. Contact a program officer for details.

National Science Foundation (NSF)
Robert Noyce Scholarship Program

Joan T. Prival, Lead Program Director and Diana L. Burley, Program Director
4201 Wilson Boulevard, Room 835 N
Arlington, VA  22230
Phone: (703)292-4635 (Prival) or -4642 (Burley)   Fax: (703)292-9015
E-mail: jprival@nsf.gov or dburley@nsf.gov

DEADLINE ANNOUNCED: 03/29/2007

The NSF Robert Noyce Scholarship program awards grants to institutions of higher education (IHEs) in the United States or consortia of such institutions or nonprofit entities that have established consortia among such IHEs to provide scholarships for juniors and seniors who are majoring in science, technology, engineering, or
mathematics (STEM) and stipends for STEM professionals seeking to become teachers. A goal of the program is to recruit individuals with strong STEM backgrounds who might otherwise not have considered a career in K-12 teaching. The Robert Noyce Scholarship Program provides funding for two categories of proposals: Phase I proposals are invited from institutions that have not previously been funded under the Robert Noyce Scholarship Program or are requesting funding to support Noyce Scholars from a department or academic unit that has not participated in a previous Noyce award. Phase II proposals are invited from institutions that have previously been funded under the Robert Noyce Scholarship program and whose award expiration date occurs on or before December 31, 2007.

Support Provided: The anticipated funding amount in FY 2007 is $9 million. (A) Phase I Awards: Depending on the quality of submissions and the availability of funds, NSF expects to fund approximately 10-12 Phase II awards of up to $750,000 for a total award amount and duration of up to four years. (B) NSF expects to fund approximately 3-6 Phase II awards. Phase II S&S proposals may request up to $500,000 for a total award amount and duration of up to 4 years. Phase II M&E Proposals may request up to $150,000 in total budget for up to 3 years. Indirect costs may be charged in Phase II M&E proposals. Scholarships for STEM Majors Scholarship amounts must be at least $10,000 per year; however, no individual may receive a scholarship for any year that exceeds the yearly cost of attendance. Stipends of at least $10,000 are available for a maximum of one year for science, technology, engineering, or mathematics (STEM) professionals who hold a baccalaureate, masters, or doctoral degree in science, mathematics, or engineering and enroll in a teacher certification program.

Applicant Information: U.S. universities and two- or four-year colleges (including community colleges), or consortia of such IHEs, or nonprofit entities that have established consortia among such IHEs may submit proposals. Scholarship recipients must be U.S. citizens or nationals, or permanent resident aliens, must be majoring in mathematics, engineering, or a science discipline, and must be in the last two years of a baccalaureate degree program. It is expected that these students will graduate with a major in a STEM discipline (mathematics, science, or engineering) and will obtain teacher certification or licensing. Students enrolled in institutions requiring a fifth year or postbaccalaureate program for teacher certification may apply the scholarship to the postbaccalaureate program. A recipient may receive up to two years of scholarship support. Recipients of scholarships must commit to completion of two years of service as a mathematics or science teacher for each year the scholarship is received. Service must be performed within six years after graduation from the program for which the scholarship was awarded and must be performed in a high-need local educational agency. Stipend recipients must be U.S. citizens or nationals, or permanent resident aliens. Recipients of stipends must commit to serving two years as a mathematics or science teacher in a high-need local educational agency, within six years after graduation or completion of the program for which the stipend was awarded.

National Science Foundation (NSF)
Office of Polar Programs
Research Experiences for Undergraduates (REU)

4201 Wilson Boulevard
Arlington, VA 22230
Phone: (703)292-8031 or -4625 (NSF REU Coordinator)
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DEADLINE ANNOUNCED: 06/06/2007
The Research Experiences for Undergraduates (REU) program is a Foundation-wide program that supports active research participation by undergraduate students. The REU program seeks to expand student participation in all kinds of research—whether disciplinary, interdisciplinary, or educational in focus—encompassing efforts by individual investigators, groups, centers, national facilities and others. This solicitation features two mechanisms for support of student research: REU Supplements and REU Sites. Supplement and Site projects may be carried out during the summer months, during the academic year, or both. (1) REU Sites are based on independent proposals to initiate and conduct projects that engage a number of students in research. REU Sites may be based in a single discipline or academic department, or on interdisciplinary or multi-department research opportunities with a coherent intellectual theme. Proposals with an international dimension are welcome. A partnership with the Department of Defense supports REU Sites in DoD-relevant research areas. (2) REU Supplements may be requested for ongoing NSF-funded research projects or may be included as a component of proposals for new or renewal NSF grants or cooperative agreements. Funds for the establishment of REU Sites may be requested from any of NSF's disciplinary research directorates and the Office of Polar Programs. Proposals for REU Sites are invited to include an optional component addressing ethics in science or engineering. Some NSF directorates encourage inclusion in the REU program of K-12 teachers of science, technology, engineering, and mathematics. The REU program welcomes projects with an international dimension.

**Support Provided:** REU Sites may be proposed for durations of one to five years, with a three-year duration being typical in most NSF directorates. The term of REU Supplements may not exceed that of the underlying research project. As a guide to budget development, student stipends for summer projects are expected to be approximately $400 per week per student, in addition to other participant costs of room and board, fees, and travel, with academic-year stipends comparable on a pro rata basis. Total project costs are expected to be typically about $600 to $800 per student per week. This is a guideline figure, neither a floor nor a ceiling. Proposal budgets may include up to $4,000 per year in direct costs to support ethics activities; these funds are not included in the guideline of $600 to $800 per student per week.

**Applicant Information:** Undergraduate student participants in either Supplements or Sites must be citizens or permanent residents of the United States or its possessions. The categories of proposers identified in the Grant Proposal Guide are eligible to submit proposals under this program announcement. NOTE: Foreign researchers at U.S. institutions may be able to apply for this award through their institution. Contact the program officer for details.

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**Smithsonian Institution**

*Fellowship Programs*

*Horticulture Services Division*

*Enid A. Haupt Fellowship in Horticulture*

Horticulture Services Division  
Horticulture Collections Management and Education  
Post Office Box 37012  
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**Phone:** (202)357-1926  **Fax:** (202)786-2026  
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**Web Site:** [http://www.si.edu/ofg/fellowopp.htm](http://www.si.edu/ofg/fellowopp.htm)  
**E-Forms:** [http://www.si.edu/ofg/fell.htm#fhsd](http://www.si.edu/ofg/fell.htm#fhsd)
DEADLINE ANNOUNCED: 03/01/2007

The Smithsonian Institution, the world's largest museum complex and research organization, is composed of 16 museums and the National Zoo in Washington, D.C., metropolitan area, and 2 museums in New York City. The Smithsonian's exhibitions offer visitors a glimpse into its vast collection numbering over 142 million objects. The Smithsonian is committed to enlarging the shared understanding of the mosaic that is the U.S. national identity by providing authoritative experiences that connect people to their history and heritage as Americans and to promoting innovation, research and discovery in science. The Enid A. Haupt Fellowship in Horticulture is designed to encourage the study of, and professions in, the field of horticulture. This fellowship is full-time, in residence, and is available for 12 to 24 months. The candidate is eligible for a stipend and research allowances. Tenure must begin between June 1 and October 1. Applicants must be enrolled in a graduate program seeking (or have received) their Master's or Ph.D. in horticulture, botany, landscape architecture or a related field. Applicants whose native language is not English are expected to have the ability to write and converse fluently in English.

APPLICATION INFORMATION: The postmark deadline is March 1.

Smithsonian Institution

Internship Programs

National Museum of Natural History (NMNH)

Natural History Internship Program

Mary Sangrey, Program Director
National Museum of Natural History
NHB MRC 106, Room 59A
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E-mail: sangreym@si.edu
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DEADLINE ANNOUNCED: Open

The Smithsonian Institution, the world's largest museum complex and research organization, is composed of 16 museums and the National Zoo in Washington, D.C., metropolitan area, and 2 museums in New York City. The Smithsonian's exhibitions offer visitors a glimpse into its vast collection numbering over 142 million objects. The Smithsonian is committed to enlarging the shared understanding of the mosaic that is the U.S. national identity by providing authoritative experiences that connect people to their history and heritage as Americans and to promoting innovation, research and discovery in science. The Smithsonian offers internships which are prearranged, structured learning experiences under direct supervision of Smithsonian staff. The National Museum of Natural History offers internships in each of its research departments, offices, and specialized units with emphasis on current research initiatives of the staff. Research and collection management are carried out in the following natural history science disciplines: Anthropology--archeology, ethnology, and physical anthropology; conservation, scientific illustration and public information; Human Studies Film Archives, National Anthropological Archives and photo research for Handbook of North American Indians Project; Botany--plant systematics, comparative anatomy and morphology, economic botany, phytogeography, nomenclature and evolutionary theory; includes U.S. National Herbarium; Entomology--Diplopoda, Arachnida,
Pauropoda, Chilopoda and Symphyla research and curation; Invertebrate Zoology--marine and freshwater invertebrates; leaches, bryozoans, spiders crabs, gastropod mollusks, sea-stars, brittle stars, nudibranchs, cephalopods, polychaetes, ostracods parasitic copepods; Mineral Sciences--meteorites, petrology, mineralogy and volcanology; Paleobiology--biological and physical environments, evolution, and the systematics of fossil animals and plants; and Vertebrate Zoology--systematics, morphology, biogeography, life history, behavior and ecology of fishes, amphibians, reptiles, birds and mammals.

Support Provided: The length of the term of the internship is determined on an individual basis for each position. Each year NMNH engages approximately 200 students in internships. No stipend is available. Academic credit can sometimes be obtained. Registered interns receive 20% discount at the Smithsonian's gift shops and one free IMAX ticket each week.

Applicant Information: Undergraduate or beginning level graduate students are eligible; as well as some advanced placement for high school students (must be at least 16 years of age). Areas of study include: natural sciences; geographic information systems; scientific illustration; and public affairs. Although special week-long opportunities are sometimes available, internship appointments are generally at least six weeks in duration and require a minimum commitment of 16 hour per week.

Application Information: Applications are accepted on a year-round basis. The best way to secure an internship through the Natural History Internship Program (our overall general program) is to contact the project sponsor directly using the contact information (phone and e-mail, online) to discuss details and potential placement.