The El Camino Community College District is committed to providing equal employment and educational opportunities for all individuals, regardless of race, color, ancestry, religion, gender, national origin, marital status, sexual orientation, handicap, age and Vietnam-era status.
Dear MESA Students,

The MESA program would like to introduce the new **MESA 2006-2007 Internship Handbook**! This handbook will provide MESA students with a glimpse of 80 summer 2007 Research Experiences for Undergraduates available throughout California and across the country. Students will find a detailed description for internships listed, which will facilitate the ability to assess the student’s individual needs and requirements regarding a field of interest.

Please make sure that you thoroughly read each internship, with particular emphasis to the sections titled “Eligibility Requirements” and “Application Deadline.” Further information for the specified internship can be found by visiting the Web site address (URL) provided in this handbook. In addition, please note that some applications may only be completed directly from the internship’s Web site. Hence, it is highly recommended that you visit the specified Web site of your internship interest to verify whether you are able to submit your application online, print out a copy of the application to mail in, or in some cases you may have to ask to have an official application mailed to you. If a research opportunity is labeled as “Pending,” please do not discard the internship, as some institutions update their internship information late in December 2006 or sometimes not until January 2007. **Please check institution Web site for updates!** Failure to comply with the internship requirements may result in the delay or rejection of your application, as you will be competing for a position available to students throughout the country. Please keep in mind that you can always contact research coordinators directly for more information.

If you have any questions or concerns regarding the content of this handbook, please do not hesitate to contact us. This handbook edition has been a collaborative effort between MESA staff members. Good Luck!

Sincerely,

MESA Program
(310) 660-3887
mesa@elcamino.edu
Table of Contents

1. Cover Page

2. Introduction to Internship Handbook P.2

3. Table of Contents P.3

4. First Section
   i. Astronomy Related Internships P.4

5. Second Section
   i. Biology Related Internships P.12

6. Third Section
   i. Chemistry Related Internships P.31

7. Fourth Section
   i. Engineering Related Internships P.37

8. Fifth Section
   i. Mathematics Related Internships P.44

9. Sixth Section
   i. Physics Related Internships P.55

10. Seventh Section
    i. Multiple Math, Engineering and Science Related Internships P.65
First Section

Astronomy Related Internships
Cornell University
Areco Observatory

URL: http://www.naic.edu/science/summer_set.htm

Application Deadline: February 6, 2007

Program Description: The National Astronomy and Ionosphere Center will be conducting a summer student program for undergraduates at the Arecibo Observatory in Puerto Rico, funded by the National Science Foundation. Areas of research include radar and radio astronomy and atmospheric science. Each summer, Arecibo Observatory hosts at least six students and one Puerto Rican teacher for 10 weeks. The students work with staff scientists on projects related to ongoing research or instrumentation development programs. Research may be conducted in atmospheric science, radio astronomy, or planetary radar astronomy. The students are exposed to the interdisciplinary character of this unique research facility through lectures by the staff and visiting scientists, tours of the observatory facilities, hands-on labs, and frequent informal discussions with graduate students and scientists. A seminar series provides the students with a background in the major areas of research conducted at the Observatory and introduces them to the exciting science currently being done here. Students usually have the opportunity to conduct their own independent group observing experiment with the telescope. A bonus of the program is the opportunity to explore the beautiful island of Puerto Rico and its culture.

Eligibility Requirements: Must be an undergraduate who is a permanent resident or citizen of the U.S. Student must also be enrolled part- or full-time in a Bachelor’s Degree program for the fall of 2007.

Program Assistance: A stipend (amount not specified) and travel costs to and from Puerto Rico.

Contact Information:
Summer Research Assistantships/Arecibo Observatory
National Astronomy and Ionosphere Center
CORNELL UNIVERSITY
504 Space Sciences Building
Ithaca, NY 14853-6801
Indiana University Bloomington  
Department of Astronomy

URL: http://www.astro.indiana.edu/reu.shtml

Application Deadline: February 1, 2007

Program Description: The Astronomy Department at Indiana University Bloomington will host a summer Research Experience for Undergraduates program for highly motivated students interested in astronomy research. Students will work with faculty to carry out projects in observational stellar astronomy and other fields using ground-based photometric and spectroscopic data. The program will include a trip to the Kitt Peak National Observatory in Tucson, AZ, where students will observe on the WIYN 0.9-m telescope and/or the WIYN 3.5-m telescopes as well as tour Kitt Peak and other Tucson astronomical facilities. While in residence in Bloomington, students will also participate in seminars, field trips, and social events.

Eligibility Requirements: Must be a current sophomore or junior and U.S. citizen or permanent resident.

Program Assistance: A stipend of $5,100 will be rewarded along with reimbursement for travel from their home or campus to Indiana University.

Contact Information:
REU Program  
Indiana University Astronomy Dept  
Swain Hall West 319  
727 East Third Street  
Bloomington, IN 47405-7105  
Phone: (812) 855-6911  
Fax: (812) 855-8725  
E-mail: astroreu@indiana.edu
Lunar and Planetary Institute  
2007 Summer Intern Program

URL:  http://www.lpi.usra.edu/lpiintern/objectives.shtml

Application Deadline: Pending

Program Description: The Lunar and Planetary Institute invites undergraduates to experience cutting-edge research in the planetary sciences through our Summer Intern Program. As a summer intern, you would complete a research project of current interest in planetary science, working one-on-one with a scientist at the LPI or at Johnson Space Center. The Summer Intern Program gives participants experience with real research, the opportunity to learn from top-notch planetary scientists, and a chance to preview careers in research. The LPI is located near Johnson Space Center, on the south side of Houston, TX. The LPI provides, on NASA’s behalf, leadership in the scientific community for research in lunar, planetary, and solar system sciences, and linkage with related terrestrial programs.

Eligibility Requirements: College undergraduates with at least 50 semester hours of credit interested in pursuing a career in the sciences are eligible. Relevant fields of study include the natural sciences, engineering, computer sciences, and mathematics. Applicants will be considered for appointment without regard to race, creed, color, sex, national origin, age, handicap status, or other nonmerit factors. Selection is based on these criteria: (1) scholarship, curriculum, and experience; (2) career objectives and scientific interest; and (3) match of interest of applicant with available research projects.

Program Assistance: Interns receive a stipend of $500 per week to cover living expenses, and assistance with travel expenses to a maximum of $1000. Shared low-cost housing in apartments near the LPI can be arranged

Contact Information:

LPI Summer Intern Program  
Attention: Ms. Jodi Jordan  
3600 Bay Area Boulevard  
Houston, TX 77058  
Phone: 281-486-2180; Fax: 281-486-2127  
E-mail: jordan@lpi.usra.edu
National Optical Astronomy Observatory
Kitt Peak National Observatory

URL: http://www.noao.edu/kpno/reu/

Application Deadline: January 27, 2007

Program Description: KPNO, a division of the NOAO, will have available six research assistant positions for the summer of 2007. The KPNO REU program provides an exceptional opportunity for undergraduates considering a career in science to engage in substantive research activities with scientists working in the forefront of contemporary astrophysics. Each REU student is hired as a full-time research assistant to work on specific aspects of major ongoing research projects at NOAO which include the origin, nature, and evolution of stars, galaxies and stellar systems, observational cosmology, analysis of Hubble Space Telescope images, and cometary studies.

Eligibility Requirements: Students must be citizens or permanent residents of the United States.

Program Assistance: A salary of $570 per week and travel funds to and from Tucson, Arizona are provided. Summer housing is the responsibility of the student. Students may live on-campus, rent an apartment, or house off-campus.

Contact Information:
KPNO REU Program
NOAO Education Outreach
950 N. Cherry Avenue
P.O. Box 26732
Tucson, Arizona 85726-6732
E-mail: kpnoreu@noao.edu
Northern Arizona University
REU in Astronomy at NAU

URL: http://www.physics.nau.edu/~reu/

Application Deadline: February 1, 2007

Program Description: Northern Arizona University (NAU) in Flagstaff, Arizona, has been a Research Experiences for Undergraduates site sponsored by the National Science Foundation since 1991. They will be offering this program in the summer of 2007. Eight undergraduate students will work in Flagstaff in 2007. The program is expected to run from June 4 through August 8. Accommodations can be made for students on the quarter system who cannot start that early.

Eligibility Requirements: In order to be eligible, students must be citizens or permanent residents of the United States or its possessions, and be enrolled in an undergraduate degree program. Students graduating in the spring of 2007 are not eligible. We particularly encourage the applications of women and underrepresented minorities.

Program Assistance: Students will be enrolled at NAU and receive three hours of credit; tuition and fees will be covered by the program. The total stipend is expected to be $4,240, and each student will receive up to $400 toward travel expenses. Housing in an apartment dormitory is included with the program.

Contact information:
Dr. Kathy Eastwood
Northern Arizona University
Department of Physics and Astronomy
P.O. Box 6010
Flagstaff, AZ 86011-6010
reu (at) physics.nau.edu
Phone (928) 523-7159
FAX (928) 523-1371
National Solar Observatory
National Science Foundation
Research Experience for Undergraduates

URL: http://eo.nso.edu/reu/

Application Deadline: January 29, 2007

Program Description: The National Solar Observatory has two sites: one is in Tucson, Arizona, and the other in Sunspot, New Mexico. These facilities host ongoing research in solar physics, solar-terrestrial physics, solar stellar physics and instrumentation. Each participant is expected to work on an assigned project in close collaboration with a scientific staff mentor. Research programs will emphasize data reduction and analysis, computer programming, instrumentation, or theoretical modeling. In addition to research experiences, summer activities will include a number of social events and excursions, as well as interactions with other NSO and Kitty Peak National Observatory (KPNO) summer students and visitors. Participants will present their research results at a seminar near the end of the summer, and submit a written report, which will be presented to the NSF.

Eligibility Requirements: Students who have completed their freshman year in college by spring 2006 and who will be registered as an undergraduate by fall 2007 are invited to apply. All applicants must be US Citizens (or permanent residents). Students should be in good academic standing, and are expected to have an adequate preparation in basic math and science courses. Women, minorities, disabled persons, and veterans are especially encouraged to apply. To be considered in one of these categories, please let us know on your application form. Applicants need not be majoring in Astronomy, although a demonstrated interest is essential.

Program Assistance: Each participant will receive a stipend of $570 per week; the positions are normally full-time for 10-12 weeks between May and September. Travel and lodging allowances will also be provided, details of which will be given at a later date.

Contact Information:
For further questions about the NSO REU or SRA Program feel free to contact Jackie Diehl (505-434-7003) or send e-mail to nso-reu-ret@nso.edu. Our mailing address is:

NSO REU/SRA 2007 Program
ATTN: Ms. Jackie Diehl
National Solar Observatory
P.O. Box 62
Sunspot, New Mexico 88349-0006
Wyoming Infra Red Observatory
Summer Undergraduate Research Assistantship Program

URL: http://wyoskies.uwyo.edu/surap/

Application Deadline: February 15, 2007

Program Description: The Wyoming Infrared Observatory (WIRO) will offer its REU Summer Undergraduate Research Assistantship Program (SURAP) for 2007. Summer research assistants will work with individual staff members on current research projects. The assistantships are strongly oriented toward laboratory and observation projects. A short observational techniques and laboratory-oriented course will be part of the summer's activities. All students will learn observing techniques on the Red Buttes Observatory reflector (60 cm) located 12 miles from campus. SURAP students will be trained in image processing and data reduction using standard astronomical programs in the Research Laboratories. Under the guidance of their advisors, all SURAP participants will use the WIRO 2.3-meter telescope, located 40km southwest of Laramie, Wyoming on Jelm Mountain. Participants may work between May 29 and July 28, 2007. No official application form is needed. To apply, please submit the following forms: an official copy of your academic transcript; the length and dates of our desired period of employment; a summary of your academic and work experience (vitae); a typed one-page essay on why you want to work at WIRO; and your interest in the field of astrophysics. Two letters of reference need to be sent directly to the SURAP Director: Ron Canterna, or e-mailed to canterna@uwyo.edu, and must be received before the deadline to complete your application. The person giving the reference must be the sender. You may also apply electronically if you like.

Eligibility Requirements: Participants must be US citizens or resident. The program is open to freshmen in their second semester, sophomore, juniors, and seniors who will not graduate before the start of the summer program.

Program Assistance: The maximum length of employment is 9 weeks and a minimum period of 8 weeks is required. The stipend is $350 per week with free housing being provided. One round-trip airfare from the participant's home, college or university is also part of the assistantship. In addition, all participants will visit Grand Teton and Yellowstone national parks as part of their SURAP assistantship.

Send Application to:
Ron Canterna, SURAP Director
Summer Undergraduate Research Assistantship Program
Wyoming Infrared Observatory
University of Wyoming
P.O. Box 3905, University Station
Laramie, WY 82071-3905
E-mail: canterna@uwyo.edu
Second Section

Biology Related Internships
American Society for Microbiology
Microbiology Undergraduate Research Fellowship (MURF)

URL:  http://www.asm.org/Education/index.asp?bid=4322

Application Deadline:  February 1, 2007

Program Description:  The American Society for Microbiology (ASM) Undergraduate Research Fellowship is aimed for highly competitive students who wish to pursue graduate careers (Ph.D. or MD/Ph.D.) in microbiology. Students will have the opportunity to conduct full-time research at their home institution with an ASM member, and present research results at the ASM General Meeting the following year. Participants of the ASM Undergraduate Fellowship will agree to participate in an Undergraduate Research Program at any US institution other than their own. Additionally, participants must conduct research for a minimum of 8 weeks beginning in the summer of 2007. Finally, those who are selected for the Undergraduate Research Fellowship will work with a faculty mentor and present a research abstract at the end of their research project for presentation at 2007 ASM General Meeting.

Eligibility Requirements:  Eligible student candidates for the fellowship must be from groups that have been determined by the applicant's institution to be underrepresented in the microbiological sciences. These groups include African-Americans, Hispanics, Native Americans, Alaskan Natives, and Pacific Islanders. Additionally, participants must be U.S. citizens or hold permanent U.S. Visa status. Students must be enrolled as a full-time matriculating undergraduate student. Freshmen with college level research experience, as well as sophomores, juniors, and seniors who will not graduate before the completion date of the summer program will be considered. Those applying should have taken introductory courses in biology, chemistry, and preferably microbiology prior to submission of the applications. Finally, students should have a strong interest in obtaining a Ph.D. or M.D./Ph.D. in the microbiological sciences.

Program Assistance:  The program will provide a total of up to $5,850. Participants will receive a stipend $3,500 as well as $850 for student lodging. Additionally, students will receive $500 for round trip travel to the host institution. Students will also receive a one-year ASM student membership, and up to $1,000 in travel support to attend the 2007 ASM General Meeting.

Contact Information:
Microbiology Undergraduate Research Fellowship
Education Board
American Society for Microbiology
1752 N. Street, NW
Washington, DC 20036
E-mail:  fellowships-careerinformation@asmusa.org
Beckman Research Institute  
Eugene and Ruth Roberts Summer Student Academy

URL: http://www.cityofhope.org/SummerStudent

Application Deadline: February 28, 2007

Program Description: Every summer for the past twenty-six years, thirty to fifty high school and university students have spent ten weeks conducting original biomedical research at City of Hope. Spending a summer at City of Hope helps them to discover their aptitude and interests, and can serve as a foundation for their future career paths in medicine or biomedical research.

Eligibility Requirements: City of Hope welcomes high school and college students who meet the following criteria. Students must be at least sixteen years of age. They should have taken courses in chemistry and biology. Because City of Hope is also a hospital, state law requires students to submit immunization records and proof of a negative tuberculosis skin test. All students must have work authorization and, at the time of hire, be able to present documentation showing their right to work in the U.S.

Program Assistance: Most summer students receive a stipend of $4,000 for completing the ten-week program.

Contact Information:
Summer Student Research Program
Department of Professional Education
City of Hope
1500 E Duarte Road
Duarte, Ca 91010-3000
Telephone: 626-256-HOPE
California Academy of Sciences
Systematic Biology Research Experience for Undergraduates

URL: http://www.calacademy.org/research/internship/ssi/

Application Deadline: February 16, 2007

Program Description: The California Academy of Sciences announces an internship program in Systematic Biology for the summer of 2007. The eight-week long Summer Systematic Institute matches seven undergraduate students with Academy scientists to conduct research, as well as participate in tours, seminars and lectures related to biodiversity, evolutionary biology and global change. The 2007 Summer Systematic Institute will last 8 weeks: from June 18 to August 11, 2007.

Eligibility Requirements: This National Science Foundation funded-internship is open to U.S. citizens who are currently enrolled undergraduates (graduating seniors are not eligible) and have a background in natural science. Please view Web site for detailed application requirements.

Program Assistance: A $3,500 stipend will be awarded to each intern. In addition, some travel costs (up to $500) to San Francisco will be reimbursed and a $2,000 subsistence allowance is given for housing and food. Funding may be subject to federal and/or state income taxes.

Contact Information:

Summer Internships
c/o Dr. Rich Mooi
California Academy of Sciences
875 Howard Street
San Francisco, CA 94103-3009
Telephone: 415-321-8270  Fax: 415-321-8615
e-mail: rmooi@calacademy.org
URL: http://www.bmb.colostate.edu/reu.cfm

Application Deadline: February 1, 2007

Program Description: The Department of Biochemistry and Molecular Biology offers qualified undergraduates throughout the country the opportunity to join research projects in biochemistry and molecular biology for ten weeks each summer. This program allows students to participate in active research within a wide range of areas, including protein structure and function, transcriptional mechanisms, molecular neurobiology, neuronal growth and function, mechanisms of photosynthesis and light-induced electron transfer, and gene expression. Each student is assigned to a specific faculty member's research laboratory, where the student works closely with the faculty mentor, post-doctoral associates, and graduate students. In addition to the research program, students also participate in a variety of seminars, weekly meetings, and social functions. Students from groups that are traditionally under-represented in science (women, under-represented ethnic and racial minorities, and those with physical challenges) are especially encouraged to apply. Also, students from smaller undergraduate institutions with limited opportunities for research are encouraged to apply. Summer 2007 program will last from May 29 through August 3.

Eligibility Requirements: Students seeking a summer research fellowship should have completed, at minimum, college chemistry through organic chemistry with one year of college biology by the end of the spring 2007 term. A minimum cumulative grade point average of 3.0 is required. Students who will graduate at the end of the spring 2007 term are not eligible for this program. Participants must be either U.S. citizens or permanent residents of the U.S. or its possessions (NSF requirement). Students from groups that are traditionally under-represented in science (women, under-represented ethnic and racial minorities, and those with physical challenges) are especially encouraged to apply. Also, students from smaller undergraduate institutions with limited opportunities for research are encouraged to apply.

Program Assistance: Students receive a stipend of $3,200 for the 10-week summer program. Also, participants are provided with on-campus housing in nearby apartments, $1,400 for food, and up to $350 for travel expenses.

Contact Information:

Summer Undergraduate Research Program
Department of Biochemistry and Molecular Biology
Colorado State University
Fort Collins, CO 80523-1870
If you have any questions, call 970-491-5602, or e-mail at reubiochem@colostate.edu
Cold Spring Harbor Laboratory
Undergraduate Research Program

URL: http://www.cshl.edu/URP/

Application Deadline: February 1, 2007

Program Description: Cold Spring Harbor Laboratory offers research in cancer biology, neuroscience, plant Biology, cellular and molecular biology, genetics, macromolecular biology, and bio-informatics. Students learn about scientific ethics in the workplace, scientific research, and career opportunities for scientists. Approximately 25 students from around the world will be accepted to the 10-week summer program to work with senior laboratory staff members on independent research projects. The goals of the Undergraduate Research Program (URP) include giving college undergraduates a taste of original research at the forefront of the biological sciences, and to encourage awareness of the physical and intellectual tools necessary for biological research. Additionally, it is the objective of URP to foster an awareness of the major problem areas currently under investigation in the biomedical and life sciences, as well as promote an acquaintance with researchers and the research environment. Program dates are from June 10 – August 18, 2007.

Eligibility Requirements: Second and third-year undergraduates who have completed one or more years of academic training are invited to apply. Participants must be U.S. citizens or permanent residents.

Program Assistance: URP students will receive a stipend of $3,800 for their participation in the program. The program covers all room and board expenses. Unfortunately, the program cannot cover travel expenses but will assist in finding the best rates and making travel arrangements. Health insurance will be provided to foreign students. Generally, American students are covered by their parents' insurance policies but if this is not the case, we will provide insurance to those that need it.

Contact Information:

Undergraduate Research Program
Watson School of Biological Sciences
Cold Spring Harbor Laboratory
One Bungtown Road
Cold Spring Harbor, NY 11724 USA

Phone: (516) 367-6890
E-mail: urpadmin@cshl.org
Marquette University  
Summer Research Program in Biology  

URL: [http://biology.marquette.edu/biosummer/about.html](http://biology.marquette.edu/biosummer/about.html)  

**Application Deadline:** January 31, 2007  

**Program Description:** Participants conduct independent research projects in faculty laboratories in the areas of microbiology, molecular biology, cell biology, developmental biology, plant biology, and neurobiology or invertebrate/vertebrate physiology. The program pairs each student with a faculty mentor who will supervise the student projects. Students are involved daily in their selected research. At the end of the summer students present the results of their research at both a department-wide poster session and symposium. In addition, students attend weekly journal clubs, a workshop on ethical issues in research and medicine, as well as sessions on career options and post-graduate education. The program provides informal social and recreational events.

**Eligibility Requirements:** Students should have completed their sophomore or junior year by the start of the program with a cumulative grade point average of 3.0 or better. Minimum course requirements are the completion of a full year of college biology, general chemistry, and organic chemistry with laboratories. One semester of calculus and additional advanced work in biology are preferred, but not required. Students who graduate before December 2007 are not eligible. Students may not enroll in classes or hold outside employment during the term of the internship. Minorities underrepresented in the sciences, first generation college students and students with disabilities are particularly encouraged to apply.

**Program Assistance:** Students will receive a stipend of $3500 for the 2007 summer program. Additional assistance, including campus housing and partial costs of meals and travel expenses, will also be provided.

**Contact Information:**  
Ms. Deborah Weaver  
Department of Biological Sciences  
Room LS 109  
Wehr Life Sciences Building  
Marquette University  
PO Box 1881  
Milwaukee, WI 53201  
E-mail: deborah.weaver@marquette.edu
Morehouse College
Project: IMHOTEP

URL: http://www.morehouse.edu:16080/academics/cenins/publichealth/imhotep/program.html

Application Deadline: February 9, 2007

Program Description: IMHOTEP is an eleven-week internship designed to increase the knowledge and skills of rising juniors and seniors and recent graduates of an undergraduate institution in biostatistics, epidemiology, and occupational safety and health. The program begins with two weeks of intense educational training. The purpose of this training is to equip interns with the academic coursework and information necessary to complete the program. During the remaining nine weeks, interns conduct public health research with experts at the CDC, National Institute of Medical Research (NIMR), Mexico Negro, and various other public health agencies. Throughout the program, interns participate in a wide variety of seminars, workshops, and other educational initiatives and must complete a required number of community service hours.

Eligibility Requirements: Candidates must be a rising junior or senior, or a recent college graduate with a grade point average of 2.7 or better. Applicants must also demonstrate a keen interest in pursuing a career in public health. Candidates will be evaluated on their academic performance, extracurricular/volunteer activities, personal statement, and letters of recommendation.

Program Assistance: Students will receive a $5,000 (10-week summer session) or $7,500 (15-week fall session) stipend for the research experience plus one round-trip airfare or ground transportation costs to and from the NASA host center.

Contact Information:
Morehouse College
Public Health Sciences Institute
ATTN: Project: IMHOTEP
830 Westview Drive SW, Box 140086
Atlanta, GA 30314-3773

Email: publichealth@morehouse.edu
Mountain Lake Biological Station
University of Virginia REU

URL: http://www.mlbs.org/REU.html

Application Deadline: March 1, 2007

Program Description: Mountain Lake Biological Station’s Research Experiences for Undergraduates is sponsored by the National Science Foundation and takes students from around the country together for a ten-week summer program of guided, but independent, original research in the field of biology from late May through early August.

Eligibility Requirements: Applicant must be an undergraduate student who is either a U.S. citizen or resident. One page (600 words) essay, one letter of recommendation, and transcripts are required.

Program Assistance: All expenses are paid and students receive a stipend of $4,000.

Contact Information:
REU Coordinator
University of Virginia
Mountain Lake Biological Station
P.O. Box 400327
Charlottesville, VA 22904-4327 USA
street address (for FedEx or other express deliveries):
238 Gilmer Hall
485 McCormick Road

Phone: 434-982-5486
Fax: 434-982-5626
Email: mlbs-reu@virginia.edu
Harvard Medical School
Summer Honors Undergraduate Research Program (SHURP)

URL:  http://www.hms.harvard.edu/dms/diversity/shurpintrou.html

Application Deadline: February 1, 2007

Program Description: The Division of Medical Sciences administers research training programs for PhD students in the biomedical sciences at Harvard Medical School. The program is offered for college students from under-represented groups who are seriously considering research careers in the bio-medical sciences. SHURP will be entering its sixteenth year in 2007, and presently has more than 300 alumni from colleges across the country, over 90% of who are continuing or planning to continue training and careers in the sciences. Summer research opportunities will be available in a variety of biological and biomedical sciences including (but not limited to): cellular and developmental biology, cell cycle regulation, cardiac and vascular functions and pathology, studies of blood cells, endocrinology, immunology, microbiology, molecular biology, receptor structure and functions, transmembrane signaling mechanisms, study of clotting mechanisms, and virology. The research experience will be supplemented by an informal student-faculty seminar course, in which students meet on a weekly basis during supper to discuss their research projects with other student participants and faculty. Students also participate in a weekly career discussion luncheon series, in which they learn about the career paths of current minority faculty and graduate students and about many aspects of choosing graduate programs, preparing applications, and preparing for interviews. There are also informal opportunities for students to meet current minority and majority faculty and graduate students, including a peer-mentoring program.

Eligibility Requirements: Current college students who are US citizens or permanent residents, with good science course foundation, including at least one biology course beyond introductory biology (such as molecular genetics, biochemistry, microbiology, cell biology, etc.), and some previous research experience are invited to apply.

Program Assistance: The division will provide all research and course-related expenses, housing at the medical school dormitory, travel to and from the program, a stipend of approximately $390/week for 10 weeks, and health insurance if it is needed. The 2007 program is scheduled to run from June 4 through August 12, although arrival and departure dates of one week earlier or later may be arranged in a few cases, if deemed necessary.

Contact Information:
Inquiries about the Program are welcomed, and they may be directed to either: Jocelyn Spragg, Ph.D., Ed.M., Faculty Director, Minority Programs, Division of Medical Sciences, at 617-432-1342, or the SHURP Staff Assistant, Division of Medical Sciences, at 617-432-4980. Both Dr. Spragg and the SHURP staff assistant can also be reached at 1-800-367-9019, or via e-mail at SHURP@hms.harvard.edu.
National Institute of Health
Summer Internship Program in Biomedical Research

URL: www.training.nih.gov

Application Deadline: February 7, 2007

Program Description: The National Institute of Health maintains a database of 20 different centers that offer undergraduate internships, including:

National Cancer Institute
National Eye Institute
National Heart, Lung, and Blood Institute
National Human Genome Research Institute
National Institute on Aging
National Institute on Alcohol Abuse and Alcoholism
National Institute on Allergy and Infectious Diseases
National Institute of Arthritis and Musculoskeletal and Skin Diseases
National Institute of Child Health and Human Development
National Institute on Deafness and other Communication Disorders
National Institute of Dental and Craniofacial Research
National Institute on Diabetes and Digestive and Kidney Diseases
National Institute on Drug Abuse
National Institute of Environmental Health Sciences
National Institute of Mental Health
National Institute of Neurological Disorders and Stroke
National Library of Medicine
Center of Biologics and Evaluation and Research
Center for Information Technology
Warren Grant Magnuson Clinical Center
Office of the Director

*Links through the site are as follows: Under “What’s New” Click (SIP); Under Application Tips Click Summer Internship Program (SIP) Catalog.
Ohio State University
Research Experience for Undergraduates (REU)
Molecular Genetics Department and Biochemistry Department

URL: http://www.biosci.ohio-state.edu/%7Emgmajors/REU/

Application Deadline: February 9, 2007

Program Overview:

* Laboratory safety training and laboratory procedure workshops
* Full-time research activities
* Weekly seminars and scientific meetings
* Social activities
* Official Program Dates: June 18 through August 17, 2007

Eligibility Requirements:

* U.S. citizenship or permanent residency
* Current full-time enrollment in a U.S. college or university
* Completion of basic course work in chemistry, biology and physics
* Persons from groups underrepresented in science are strongly encouraged to apply

Program Assistance:

* Stipend of $3800
* Housing in university dormitory
* Meal allowance

Contact Information:

REU, 984 Biological Sciences
484 W. 12th Ave.
Columbus, OH 43210
dotter.4@osu.edu
Pepperdine University
Summer Undergraduate Research in Biology

URL: [www.pepperdine.edu/seaver/natsci/surb](http://www.pepperdine.edu/seaver/natsci/surb)

Application Deadline: *March 1, 2007*

**Program Description:** The Summer Undergraduate Research in Biology (SURB) at Pepperdine University offers research in cellular stress response, characterization of cell phenotype and cell function. Other subjects include apoptosis and cellular stress response, developmental biology: signal transduction and cellular stress, molecular biology: biochemical adaptations to UV-B stress in hylid frogs, neurobiology: anatomical, biochemical and behavioral stress response to traumatic brain injury, and plant ecology: environmental stress physiology of chaparral. The summer research program is geared specifically to sophomore and junior students.

**Eligibility Requirements:** To participate in SURB applicants must be available to begin May 14, 2007 and work full time until August 1, 2007. Students must be U.S. citizens or permanent residents. Additionally, students must have completed one year of biology by summer of 2007. Finally students should be classified as undergraduates during the summer of 2007.

**Program Assistance:** Students selected for the research program will receive a stipend of $3,600 for the summer months (May 14 through August 1). All students must be free from other responsibilities by May 15 so they can participate in the research orientation workshop. On-campus room and board will be provided.

**Contact Information:**

Stephen Davis  
Natural Science Division  
Pepperdine University  
Malibu, CA 90263-4321  
Phone: 1 (310) 506-4321  
Fax: 1 (310) 506-4785  
E-mail: davis@pepperdine.edu
University Of California, Irvine
Integrated Micro/Nano Summer Undergraduate Research Experience

URL: http://www.urop.uci.edu/im-sure.html

Application Deadline: March 26, 2007

Program Description: The Integrated Micro/Nano Summer Undergraduate Research Experience (IM-SURE) at the University of California, Irvine (UCI), provides a unique 10-week summer research opportunity for undergraduates to become fully immersed in cutting-edge micro/nano research and applications. Participants will have the opportunity to choose from a variety of challenging and original research projects that explore a diverse and exciting range of topics in biomedical, physical and engineering micro/nano-technology. Under the personal guidance of a UCI faculty mentor, students gain first-hand experience and training in state-of-the-art research facilities. A spectrum of seminars and workshops provides opportunities to build knowledge and enhance dialogue about micro/nano-systems engineering and applications. Students enjoy presentations from panels of speakers representing industry, national labs, and defense agencies, along with tours of campus research facilities and local industry field trips. Faculty also host workshops focused on career development, graduate school, research ethics, and writing and presentation skills. At the conclusion of the program, students share their research accomplishments by presenting their findings at the IM-SURE Research Symposium.

Eligibility Requirements: Applicants must be science or engineering juniors or seniors by the start of the IM-SURE program. They must be attending a four-year university after the conclusion of the program. They must be United States citizens or permanent residents. And they must be able to show proof of valid health insurance for the duration of the program.

Program Assistance: Students will receive a $3,000 stipend. They will receive furnished on campus housing at no cost. Travel costs will be reimbursed.

Contact Information:
G.P. Li
IM-SURE Principal Investigator
Professor, Electrical Engineering & Computer Science
Director, Integrated Nanosystems Research Facility
2230 Engineering Gateway
Henry Samueli School of Engineering
University of California, Irvine
Irvine, CA 92697-2625
E-mail: gpli@uci.edu
University of California, Riverside
Center for Plant Cell Biology

URL:  http://www.cepceb.ucr.edu/about/REUAd2007.htm

Application Deadline: March 1, 2007

Program Description: The Center for Plant Cell Biology (CEPCEB) in association with the Institute for Integrative Genome Biology (IIGB) at the University of California Riverside is committed to providing rewarding research experiences to undergraduate students. As a Research Experience for Undergraduates (REU) site, CEPCEB brings research experiences to students of two- and four-year colleges who have limited opportunity to learn about the excitement and career options that research in plant cell biology offers. Eight to twelve students are accepted into the nine-week residential program. The program will begin with a one-week workshop, in which students will be introduced to techniques and approaches used for analysis of plant and plant fungal pathogen cell function, including basic molecular biology, genomic and bioinformatics analyses, as well as microscopy methods used to study live cells. Students will then spend nine weeks working with a faculty mentor and a graduate or postgraduate mentor on a research project. Students will also participate in workshops to enhance learning skills and professional development, and to discuss ethics in science.

Eligibility Requirements: Undergraduate students enrolled in a two- or four-year college are eligible for the program. In addition, students must be citizens or permanent residents of the USA. Students are expected to have completed one year of chemistry and biology in preparation for this program.

Program Assistance: Students will live on campus and be given an allowance for meals and a stipend of $3,600 for the summer.

Contact Information:

Please mail application to:

Dr. Patricia Springer
CEPCEB REU Program
Department of Botany and Plant Sciences
University of California
Riverside, CA 92521

Students requesting information about the program should contact Dr. Patricia Springer at (951) 827-5785, patricia.springer@ucr.edu or the Center for Plant Cell Biology at (951) 827-2152.
University of Arizona
Research Experiences for Undergraduates in Molecular Biosciences

URL: http://ubrp.arizona.edu/visiting/default.cfm

Application Deadline: February 1, 2007

Program Description: The University of Arizona invites applications from non-UA students for a summer research experience in the molecular biosciences. The Research Experience for Undergraduates is an educational program sponsored by the National Science Foundation. This program is designed to teach students science by involving them as part of a research team in biologically related research. Students are paid for their time in the lab where they develop an understanding of scientific method and receive a realistic view of biological research. They also acquire the tools necessary to be successful in post-graduate studies in biology should they choose careers related to biology or biomedical research. This program demonstrates how the resources of a major research university can be brought to bear on undergraduate education. Research labs from a wide variety of disciplines participate in this program.

Eligibility Requirements: The applicant must be a current undergraduate in good academic standing, enrolled in a college or university in the United States. The applicant must also be a US citizen or permanent resident of the United States. The program runs from mid-May through mid-August 11, 2007, and therefore the students are required to be on the University of Arizona campus during this period. The University of Arizona is an equal opportunity employer and we encourage applications from women and minorities.

Program Assistance: Students in this program gain hands-on research experience in one of the U of A research labs. Students receive wages of $250/week for full-time work, as well as round-trip transportation to campus and a room and board allowance (out-of-town students only).

Contact Information:

Carol Bender, Director
Life Sciences South Building, Room 348
Telephone: 520-621-9348
FAX: 520-626-5491
E-mail: bender@u.arizona.edu
Yeshiva University
Albert Einstein College of Medicine
Summer Undergraduate Research Program

URL: http://www.aecom.yu.edu/home/sggd/summer.htm

Application Deadline: February 1, 2007

Program Description: The Summer Undergraduate Research Program (SURP) at the Albert Einstein College of Medicine offers college students the unique opportunity to work in a basic research laboratory at one of the world's top-ranking scientific institutions. SURP is national in scope: approximately 40 students from all over the country participate each year. These students arrive at Einstein in June and spend nine weeks in a laboratory in one of ten departments. These departments include anatomy and structural biology, biochemistry, cell biology, developmental and molecular biology, neuroscience, microbiology and immunology, molecular genetics, molecular pharmacology, pathology, physiology and biophysics. Finally, SURP students get to present their research findings in a poster session. Program dates are from June 11 through August 9, 2007.

Eligibility Requirements: Students considering applying for SURP at Einstein should be undergraduates with a strong background in the sciences, specifically those most related to biomedical research, such as biology, biochemistry or chemistry.

Program Assistance: SURP participants receive a stipend of $2,500.

Contact Information:

If you have any questions about the application for about the Summer Undergraduate Research Program at Einstein, please contact Rosa Garcia by phone at (718) 430-2345 or by e-mail at surp@aecom.yu.edu

Written and telephone inquires should be directed to:
Sue Golding Graduate Division
Albert Einstein College of Medicine
1300 Morris Park Avenue
Belfer Building Room 201
Bronx, NY 10461

Fax: 1 (718) 430-8655
Application Deadline: March 1, 2007

Program Description: The Summer Scholars Program at the University of Rochester provides summer undergraduate research opportunities to qualified students who are interested in summer research experiences in biomedical research. Summer fellowships and scholarships are provided, and this summer undergraduate research program is especially designed for undergraduate students who are interested in pursuing a career in research and who are considering applying to graduate school (Ph.D.) or to a combined degree program (M.D.-Ph.D.). The program provides an intensive immersion in laboratory-based scientific research at the University of Rochester (Rochester, New York), and it offers summer undergraduate research experiences in cellular and molecular biology, as well as a wide range of other scientific disciplines. The program is further enriched through research seminars, social activities, presentations on graduate school and careers, and a final minisymposium and poster session. A preparation course for the GRE General Test course is also offered.

Eligibility Requirements: All undergraduate students, both at the University of Rochester and elsewhere, are eligible. Preference will be given to students with a GPA of at least 3.0. Preference will also be given to students with an interest in obtaining the Ph.D. degree or entering a combined M.D./Ph.D. program. Students interested in enrolling only in a M.D. degree program should consider applying to the Strong Children’s Research Center summer program rather than to this program. The program runs from May 29, 2007 through August 3, 2007. Women and students from minority ethnic/racial groups that are under-represented in biomedical and biological research are particularly encouraged to apply.

Program Assistance: A stipend of $400 per week is awarded. On-campus housing will be available to qualified applicants, at no cost.

Contact Information:

Marcia Perotto
Summer Scholars Program
University of Rochester
601 Elmwood Avenue, Box 316-S
Rochester, NY 14642
Phone: (585) 273-1620
FAX: (585) 461-4927
E-mail: Marcia_Perotto@urmc.rochester.edu
Indiana University  
Department of Biology  
Research Experience for Undergraduates in Molecular Biology and Genetics

**URL:** [http://www.bio.indiana.edu/undergrad/opportunities/mbgreu/index.html](http://www.bio.indiana.edu/undergrad/opportunities/mbgreu/index.html)

**Application Deadline:** *February 14, 2007.*

**Program Description:** With funding from the National Science Foundation, the Molecular Biology and Genetics (MBG) Program at Indiana University now offers a unique opportunity for talented undergraduates to acquire experience in research. MBG Summer Internships allow students to participate in research addressing some of the fundamental problems in biology. This program is designed for students who are interested in attending graduate school and pursuing a career in research. Interns will have the opportunity to use state-of-the-art techniques. They will be hosted by research laboratories from biology, chemistry, and medical sciences, which are intermingled in three closely spaced, well-equipped buildings. Each student will become an active participant in a laboratory research group. Every student will be assigned a faculty mentor and will design a research project in close consultation with that mentor. Most often, students will also work closely with a graduate student or post-doctoral associate within the faculty member's laboratory. Graduate students or faculty will also introduce students to the type of research they might do in graduate school during weekly lunchtime seminars given from the Department of Biology about their own research. Presentations on science teaching, science, journalism, and careers in industry will introduce students to other types of careers that require a science education. Finally, students will tour the Eli Lilly & Co. pharmaceutical research laboratories in Indianapolis. The program will take place May 30 through August 8, 2007. Students will be expected to participate in research for at least 40 hours per week. Students may not enroll in classes or hold outside employment during the term of their internship.

**Eligibility Requirements:** This program is designed for students whose home institution is not Indiana University-Bloomington. Participants must be citizens or permanent residents of the United States and have a strong interest in research. The MBG Summer Internship is designed to encourage and enhance the participation of students from schools without large research programs and members of minorities currently underrepresented in the sciences, but all applications will be considered.

**Program Assistance:** Each student will receive a $4,000 stipend plus travel expenses to and from the university. While on campus, the students will live in the Indiana University graduate dormitory. The program will provide board and room.

**Contact Information:**

For more information and or an application form, contact the REU Coordinator at 812-856-5522 or e-mail iusummer@bio.indiana.edu.
Chemistry Related Internships
URL: http://chemsrvr2.fullerton.edu/reu/reu.html

Application Deadline: Mid-March 2007

Program Description: Applications are invited from students who are sophomores or juniors, majoring in a chemistry-related subject, who wish to spend the summer of 2007 conducting research in chemistry or biochemistry at California State University, Fullerton, The ten-week program runs from early June through mid-August.

Eligibility Requirements: Applicants must be either U.S. citizens or permanent residents. We provide a strong supportive environment for “late-bloomers” and re-entry students, and women and minority students are especially encouraged to apply.

Program Assistance: Students receive a stipend of $3,500. Some travel and subsistence funding is also available.

Contact Information:

Dr. Mark Filowitz
mfilowitz@fullerton.edu
Columbia University
Undergraduate Chemistry

URL: http://www.columbia.edu/cu/chemistry/ugrad/reu/

Application Deadline: Applications will be available in 2007

Program Description: This allows students to join research projects and experience first-hand how basic research is carried out. Each student is assigned to a specific research project, where he/she works closely with research faculty, post-docs, and graduate students. In addition, seminars, lunch meetings, and social functions are organized to facilitate interaction between undergraduates. Applications for summer 2007 will be available online beginning January 1, 2007.

Eligibility Requirements: Students who are in those groups traditionally under-represented in science (women, members of under-represented minorities, and those with disabilities) are particularly urged to apply. Students with special needs or requirements or who can attend a site only under special conditions, are also encouraged to apply, and to discuss this with directors in advance of the application dates. Students interested in the REU program should fill out an application.

Program Assistance: Students are granted stipends and assistance with housing.

Contact Information:

Leonard Fine
Director of Undergraduate Studies in Chemistry
fine@chem.columbia.edu
Syracuse University
Research Experience for Undergraduates (REU)
Undergraduate Chemistry Research

URL: http://chemistry.syr.edu/REU/

Application Deadline: March 1, 2007

Program Description: Participants will formulate their own research project with the help of a mentor within the fields of inorganic chemistry, physical chemistry, biochemistry, solid state science, chemical physics, surface chemistry, organic chemistry, organometallic chemistry, materials science, x-ray diffraction, and other related areas. Program dates are from June 5 through August 11, 2007.

Eligibility Requirements: This program is open to all students who have completed their first year of study and who have a serious interest in chemistry. Most students will have completed their junior year, although talented students with less experience will also be considered for acceptance in the program.

Program Assistance: Each participant will receive a summer stipend of $4,000. All participants will receive university housing at no additional expense in addition to travel and conference reimbursement (if applicable).

Contact Information:

Directors:
Professor Karin Ruhlandt
Professor Michael Sponsler

Research Experience for Undergraduates Program
Department of Chemistry, Center for Science and Technology
Syracuse University, Syracuse, New York 13244-4100
Secretary: Cathy Voorhees - clvoorhe@syr.edu
(315) 443-4109
University of Arizona  
Department of Chemistry  
Collaborative Research in the Chemical Sciences  
Research Experiences for Undergraduates  
Ten-Week Summer Program

URL: http://www.chem.arizona.edu/reu/

Application Deadline: February 15, 2007 (online application system available after Dec. 26, 2006)

Program Description: The Collaborative Research in the Chemical Sciences (CRCS) Program is a National Science Foundation funded REU site that focuses on exposing talented undergraduates to the collaborative nature of the chemical enterprise. The CRCS program is centered at the University of Arizona, Department of Chemistry at Tucson, Arizona. The chemical sciences thrive on the sharing of ideas within teams of investigators with complementing expertise. Shared ideas, paired investigatory approaches, opposing interpretations and cooperative responsibilities not only result in a significant advantage in the pursuit of science, but also is an exciting atmosphere, instilling the enjoyment of research and an enthusiasm for chemistry. The research projects in this program have been designed to be collaborative in nature in which personal interactions with intradepartmental and campus-wide collaborators will be fostered. Students will spend one or more weeks in the laboratory of a collaborator of the mentor, learning the techniques these investigators contribute to the research problem. Travel funds will be provided for off-campus collaborations.

Eligibility Requirements: Undergraduates of all levels with interest in chemistry, biochemistry or materials science. We strongly encourage women and persons from underrepresented minority groups to apply. U.S. citizenship or permanent residency is required.

Program Assistance: Students accepted into the CRCS program will receive compensation in the sum of $3500 for their participation. In addition, students are eligible for travel assistance. Students are housed in university dormitories. Once accepted into the program, details concerning compensation, reimbursements, travel and housing arrangements will be provided.

Contact Information:

CRCS REU Program  
Department of Chemistry  
University of Arizona  
PO BOX 210041  
Tucson, AZ 85721
University of Kansas
Summer Undergraduate Research in Chemistry

URL: http://www.chem.ku.edu/reu/

Application Deadline: March 1, 2007

Program Description: The summer 2007 Undergraduate Research Program provides an opportunity for undergraduate students to participate in paid laboratory research in the department of chemistry. Funding is provided by the National Science Foundation's Research Experiences for Undergraduate program (NSF-REU) and the department of chemistry. Students work under faculty supervision on a basic research problem of their choice in one of the four fields of chemistry; analytical, inorganic, organic, and physical—or combinations of these. Program dates begin on Wednesday, May 25 through Wednesday, August 3, 2007.

Eligibility Requirements: Undergraduates who are majoring in chemistry or a closely related field, and who are considering a career—and perhaps graduate work—in chemistry, are encouraged to apply. Courses in general, organic and analytical chemistry should be completed before the start of the program. At least a semester of physical chemistry is useful for some projects. Most applicants will probably be completing their junior year but well-prepared sophomores should also apply. A good academic record, especially in chemistry, will, of course, strengthen an application but evidence of interest in chemical research is a major consideration. The program is not designed for students who will have graduated. We especially encourage applications from women and underrepresented minorities.

Program Assistance: Students invited to participate will receive a stipend (previously $3,100) in three installments (one at the start of the program, one at the end of June, and one at the end of July). Research participants are expected to work full time for ten weeks. Travel expenses will be reimbursed up to $300. Dormitory housing and meals will be covered (a value of approximately $1,950). In order to receive various benefits (library, hospital, recreational), students must enroll in at least one hour of academic credit in CHEM 698, Undergraduate Research. One credit hour will be paid for by the program. Students are welcome to enroll in additional hours at their own expense.

Contact Information:
Jan Akers, REU
Department of Chemistry
University of Kansas
1251 Wescoe Hall Dr.
Lawrence, KS 66045-7582
Phone: (785) 864-4670 * FAX: (785) 864-5396 * e-mail: chemistry@ku.edu
Fourth Section

Engineering Related Internships
Boston University
REU in Biomedical Engineering

URL: http://www.bu.edu/eng/reu/

Application Deadline: February 15, 2007

Program Description: For the thirteenth consecutive year, the Biomedical Engineering Department of the College of Engineering at Boston University is proud to host a National Science Foundation Research Experience for Undergraduates (REU) site program. Boston University's College of Engineering is a national leader in biomedical engineering. Our faculty is world-renowned and our research facilities are second-to-none. If you are currently a sophomore or junior in any engineering, mathematics or natural science discipline, we encourage you to consider joining us this summer for an exciting ten-week research opportunity in the heart of Boston. Students will receive a stipend as well as free on-campus housing. Boston University and the National Science Foundation strongly encourage women and underrepresented minorities to apply to this program.

Eligibility Requirements:
- Minimum 3.30 GPA preferred
- Must be a U.S. citizen or permanent resident
- Current sophomore or junior standing
- Women and underrepresented minorities are strongly encouraged to apply

Program Assistance:
- $4,400 stipend
- Free on-campus housing
- Limited travel subsidies

Contact Information:
Submit one reference and official transcript to:

Research Experience for Undergraduates
Boston University, College of Engineering
44 Cummington Street, Room 107
Boston, MA 02215

E-mail: reu@bu.edu
Phone: 617/353-6447 or 1-800-578-1223
Clarkson University
REU Environmental Sciences and Engineering

URL: http://www.clarkson.edu/reu/

Application Deadline: March 1, 2007

Program Description: The objective of this summer program is to engage a diversified pool of undergraduate students in first-class research projects in environmental sciences and engineering at Clarkson University. Each program participant will be assigned a faculty mentor and a research project. You are expected to work 40 hours per week, and you will have opportunities to work with other undergraduate and graduate students. You may be asked to present interim reports on your research. At the end of the program, all REU participants will present their findings at the SURE Symposium and in a report written in publication format. REU participants are expected to attend skills development seminars on Web page development, presenting research, and other topics. Because the overarching theme of this program is sustainable management of environmental systems, you are required to attend a seminar series on environmental sustainability. The sustainability seminar requires a little bit of reading, lots of fun discussions with your fellow REU-mates and special guest speakers. Your faculty mentor might also ask you to attend other presentations that relate to your research project.

Eligibility Requirements: Engineering and science undergraduate students expecting to graduate within the next three semesters following the summer research program are eligible to apply. Upon equal qualifications, preference will be given to students from under-represented groups in the profession. All participants must be citizens or permanent residents of the United States.

Program Assistance: Program participants will receive a stipend of $3,500. The stipend will be paid in equal installments. The last paycheck will be sent upon the receipt of the final project. Free housing in the campus apartments is provided. In 2003 students lived in the Woodstock Apartments. In 2002, participants were housed in the Townhouse Apartments. The furnished apartments have a full kitchen and bathroom, living room, and double occupancy bedrooms. A food stipend of $75 per week is provided for the ten weeks of the program. You can use this money for groceries or dining out. Approximately $500 is available for travel expenses. The actual travel stipend may vary depending on where you are coming from and how you are getting here.

Contact Information:
Dr. Stefan Grimberg, Program Director
Environmental Sciences and Engineering REU
Center for the Environment
W.J. Rowley Laboratories
Clarkson University
Potsdam, NY 13699-5715
E-mail: grimberg@clarkson.edu
Cornell University
Center for Nanoscale Systems REU

URL: http://www.cns.cornell.edu/reu/

Application Deadlines:
   Early Decision: February 1, 2007
   Regular Admission: April 1, 2007

Program Information: An opportunity for undergraduate students to spend the summer of 2007 at CNS to: Experience independent research in the rapidly developing field of nanotechnology at a leading academic center, develop your practical skills for research, gain in-depth perspective on opportunities in the interdisciplinary science of nanotechnologies, become part of a nanotechnology research community, and recognize the importance of reporting and dissemination of results and development of skills in this integral and essential part of research.

Eligibility Requirements: Open to fall 2007 undergraduates who are U.S. citizens or permanent residents. Minority and female candidates are strongly encouraged to apply. All physical science and engineering majors are welcome to apply.

Program Assistance: Students receive: a $3,800 stipend, on-campus housing with fellow summer students, and a meal plan that includes on- and off-campus dining.

Contact Information:
Cathy J. Wetterer
REU Administrative Coordinator
Center for Nanoscale Systems
628 Clark Hall
Cornell University
Ithaca, NY 14853
Email: cjw7 (at) cornell.edu
Telephone: (607) 255 2103
Fax: (607) 255 5579
Keck Graduate Institute of Applied Life Sciences
Biotechnology and Bioengineering
Research Experience for Undergraduates

URL: http://faculty.kgi.edu/niemz/REUwebsite/reu/program.htm

Application Deadline: March 2, 2007

Program Description: The REU program for undergraduate research in biotechnology and bioengineering at the Keck Graduate Institute provides undergraduate students the opportunity for cutting-edge, interdisciplinary research in the areas of bioengineering, computational biology, and applied molecular and cellular biology, as well as exposure to related ethics and business topics. We will offer 10 positions funded through the engineering directorate of the National Science Foundation (NSF), plus additional positions dependent on other funding sources. The program will last for ten weeks beginning on June 11 through August 17, 2007.

Eligibility Requirements: We look for motivated, high-achieving individuals who have shown interest in interdisciplinary research and the ability to interact effectively in a team environment. Students majoring in engineering, biology, chemistry, computer sciences, mathematics, physics, or related disciplines are encouraged to apply. One of the program goals is to promote the success of women and underrepresented minorities in science and engineering. At least five of the ten NSF-funded positions will be dedicated to women students, and during the summer of 2004, 75% of the participants were female. We further would like to especially encourage students from underrepresented minorities to apply to this program.

Program Assistance: For NSF-funded positions: $3,950 stipend, housing, and travel allowance provided.

Contact Information:

REU in Biotechnology and Bioengineering
Attn: Anne McLoughlin
Keck Graduate Institute
535 Watson Drive
Claremont, CA 91711
Fax: (909) 607-9826

For further information, please contact
Dr. Angelika Niemz
(909) 607-9854
aniemz@kgi.edu
The University of Alabama in Huntsville
Research Experience for Undergraduates

URL: http://coeweb.eb.uah.edu/cee/Reu/index.htm

Application Deadline: Pending

Program Description: The Research Experiences for Undergraduates (REU) program at the University of Alabama in Huntsville focuses on the design, construction and application of advanced composite materials. Undergraduate students who participate in this nine-week program engage in a number of activities that help develop their research skills and ability to conduct unsupervised research work. Participants are given the opportunity to conduct research at NASA’s Marshall Space Flight Center, located at a short distance from the campus. Undergraduate students majoring in civil and environmental engineering or other related sciences are strongly encouraged to apply for this program.

Eligibility Requirements:
- U.S. citizen or permanent resident
- 3.0 minimum G.P.A
- Current undergraduate, preferably entering junior or senior year
- Women and minorities are encouraged to apply.

Program Assistance: Participants receive a stipend of $2,600 for the summer in addition to free housing and up to $250 travel allowance.

Contact Information:
Prof. Houssam Toutanji
Program Director
Dept of Civil and Environmental Engineering
University of Alabama in Huntsville
S 241, Tech Hall
Huntsville, AL 35899.
Tel: 824-6370
Fax: 256-1: 256824-6724
E-mail: toutanji@cee.uah.edu

Faxed or E-mailed Applications Will Not Be Accepted!
University of Minnesota  
Mechanical Engineering  
Summer Research Experiences for Undergraduates

URL: http://www.me.umn.edu/research/reu.shtml

Application Deadline: February 9, 2007

Program Description: The department of mechanical engineering at the University of Minnesota is offering a ten-week summer research program for undergraduates. Student research projects are available in a variety of research areas, including: medical device design, air quality and pollution control, engines and diesel research, flow visualization and turbulence, computational heat transfer, MEMS and nanotechnology, tissue engineering, supply chain and operations research. Student participants choose a research project from one of these areas and work closely with faculty and graduate students. Weekly lunch seminars and workshops cover topics such as applying to graduate school, oral and written communication skills, and ethics. Planned social activities (theater, canoeing, and MN Twins baseball) highlight the cultural and outdoor opportunities in the Twin Cities. Program dates: June 3 - August 11, 2007

Eligibility Requirements: The program is open to full-time college students who will have completed their sophomore or junior year by June 2007, and who expect to obtain their bachelor's degree in engineering, biology, chemistry, physics, mathematics, or related fields. Applicants are expected to have a GPA of 3.3 or higher and must be citizens or permanent residents of the United States or its possessions. Women, underrepresented minorities, and students from colleges and universities without significant research opportunities are strongly encouraged to apply.

Program Assistance: Participants will receive a stipend of $370/week, travel expenses within the US, meals and dormitory housing, and access to computer laboratories, libraries and recreational facilities.

Contact Information:  
John Garner – reu@me.umn.edu  
(612) 625-2009

Mail Application to:  
Attention: REU  
Department of Mechanical Engineering,  
University of Minnesota,  
111, Church St SE,  
Minneapolis, MN 55455

E-mail: REU@me.umn.edu
Fifth Section

Mathematics Related Internships
California State University, Northridge
Preparing Undergraduates through Mentoring toward PhD's
(PUMP) Program

URL: http://www.csun.edu/~mathgs/pump/

Application Deadline: Pending

Program Description: Selected applicants must transfer to CSUN as mathematics majors to start their studies in fall of 2007. A preliminary bridge course in the summer may be necessary. The program will pay a stipend of $2,000 for passing the course.

Eligibility Requirements: Applicants must have completed their calculus sequence and introduction to linear algebra. NSF requires applicants to be U.S. citizens or permanent residents.

Program Assistance: Students will receive a stipend of $8,000.

Contact Information:
Department Of Mathematics
ATTN: PUMP Program
California State University
Northridge, CA 91330-8313

Email:
alberto.candel@csun.edu
rabia.djellouli@csun.edu
Werner.horn@csun.edu
Maria.noronha@csun.edu
Cornell University
Department of Mathematics REU Program

URL: http://www.math.cornell.edu/Undergraduate/REU/REU.htm

Application Deadline: Pending

Program Description: There are 3 different projects students may work on: (1) Analysis on fractals, (2) Dynamical systems and computer-assisted proofs, (3) Geometric and topological combinatorics. Students will work on these projects for 8 weeks, June 12 through August 12, 2007.

Eligibility Requirements: Funding for this program comes from the National Science Foundation, which has set the following requirements: (1) Participants must be U.S. citizens or permanent residents; (2) Participants must be enrolled in an undergraduate program. High school students and graduating seniors are not eligible. These requirements cannot be waived.

Program Assistance: Students will receive a stipend of $3,500. Students will arrange for their own room and board; we will assist with local contact information.

Contact Information:
REU Program
Mathematics Department
Marlott Hall, Cornell University
Ithaca, NY  14853-4201
mathreu@cornell.edu
Hope College Mathematics
Research Experience for Undergraduates

URL: http://www.math.hope.edu/reu.html

Application Deadline: Pending

Program Description: Hope College will conduct an 8-week mathematics REU program. The Hope campus has over 100 students from Hope College and other colleges and universities doing research in the natural sciences and mathematics during the summer. There are substantial recreational opportunities, with the west Michigan beaches nearby. Joint social events will be planned with students in concurrent REU programs in physics, computer science, biology, and chemistry.

Eligibility Requirements: Undergraduate students from any college or university are invited to apply for research positions. Participants must be U.S. citizens or permanent residents.

Program Assistance: Participants will receive a stipend for the eight-week program. Free apartment-style housing will be provided. Funds for travel and books/supplies are also available.

Contact Information:
REU
Department of Mathematics
Hope College
Holland, MI 49422-9000
FAX: (616) 395-7123
pennings@hope.edu

For additional information, contact Tim Pennings at 1 (616) 395-7531.
James Madison University  
Department of Mathematics and Statistics  

URL: http://www.math.jmu.edu/reu/  

Application Deadline: March 7, 2007  

Program Description: Students will work in pairs under the supervision of a faculty mentor from June 4 through July 27, 2007. The general areas for the research topics are: probability and statistics, knot theory, mathematical biology.  

Eligibility Requirements: Participants must be U.S. citizens or permanent residents, and must be enrolled in an undergraduate program.  

Program Assistance: Students will receive on-campus housing and a stipend of $3,250.  

Contact Information:  
REU  
Department of Mathematics and Statistics  
MSC1911  
James Madison University  
Harrisonburg, VA 22807  
Fax: (540) 568-6857  
E-mail: reu@math.jmu.edu  

Leonard Van Wyk  
vanwyk@math.jmu.edu
California State University, San Bernardino
Research Experiences for Undergraduates in Mathematics

URL: http://www.math.csusb.edu/reu/reu.html

Application Deadline: Pending.

Program Description: The principal goal of the REU in mathematics at CSUSB is to provide promising undergraduate math majors with a meaningful, exciting and challenging experience in mathematical research. During the eight-week residential program students will carry out guided independent and collaborative research. Research problems will come from the fields of combinatorics and knot theory, and will be chosen in consultation with a faculty mentor. The program culminates with participants submitting research papers based on their work, and presenting their results at a formal seminar. The National Science Foundation and California State University, San Bernardino funds this program.

Eligibility Requirements: Participants must be continuing their undergraduate education in the fall of 2007, and the NSF requires U.S. citizenship or permanent resident status.

Program Assistance: Successful applicants will receive a $2,500 stipend, as well as room and an allowance for board.

Contact Information:

Dr. Joseph Chavez
Department of Mathematics
California State University, San Bernardino
5500 University Pkwy
San Bernardino, CA 92407

E-mail: jchavez@csusb.edu
Rutgers University
Rutgers Mathematics Department REU


Application Deadline: **January 31, 2007**

**Program Description:** About 22-27 students will be chosen by DIMACS, DyDAn, and the math department. These students will spend eight weeks putting forth intense effort and on-site participation. Students are expected to attend all seminars and presentations scheduled for the REU program. Students should set up a Web page on the DIMACS site with a description of their research project (Assistance will be given to those students who need it.) Students should update the Web page with any progress he/she makes during and after the program.

**Eligibility Requirements:** Applicants should be undergraduates with a major in computer science, mathematics, or any closely related major. They should be current juniors or sophomores with outstanding strong backgrounds will be considered.

**Program Assistance:** A stipend of $2,400 will be given to those students who wish to have a single room and $3,300 will be given to those who wish to share a room with another person. Reimbursements will be made for travel costs up to $500 (Extra funds may be allotted on a case-by-case basis.)

**Contact Information:**
DIMACS
Rutgers University
4th floor Core Building
96 Frelinghuysen Road
Piscataway, NJ 08854-8018
University of California, Los Angeles
Research in Industrial Projects for Students


Application Deadline: *February 15, 2007*

**Program Description:** The Research in Industrial Projects (RIPS) Program provides an opportunity for high-achieving undergraduate students to work in teams on a real-world research project proposed by a sponsor from industry or a national lab. RIPS recruits its students from all over the world. Each RIPS team is comprised of four students, a faculty mentor, and an industrial sponsor. The research problem is developed by the industrial sponsor in consultation with IPAM - it is always a real problem of serious interest to the sponsor and one that offers a stimulating challenge to students. The students, with direction from their faculty mentor and industrial sponsor, spend nine weeks learning about the problem, mastering the latest analytical approaches and techniques to solve it, and developing report-writing and public-speaking skills to be able to make professional presentations about the progress and results of their work to a scientific audience. Industry mentors provide regular contact between the team and the sponsor, monitoring and helping to guide student work. Ultimately, RIPS provides valuable real-world technical and managerial experience for students as well as valuable research & development for sponsors.

**Eligibility Requirements:** RIPS is a program for students who are enrolled in or have just completed an undergraduate (bachelor’s) degree. Students with a strong background in mathematics and who are interested in seeing how mathematics is used in the real world are encouraged to apply. Competition is strong for the limited slots available and participant selection is based on academic standing. International students are eligible to apply for RIPS-LA.

**Program Assistance:** Travel (airfare or mileage reimbursement) to IPAM is covered, subject to certain rules and upper limits. Housing in the dorms is included. Most meals are covered as well. In addition, participants receive a stipend of $2,600.

**Contact Information:**
Institute for Pure and Applied Mathematics (IPAM)
Attn: RIPS2007
460 Portola Plaza
Los Angeles CA 90095-7121
Phone: 310 825-4755
Fax: 310 825-4756
Email: rips2007@ipam.ucla.edu
University of Notre Dame  
Research Experience for Undergraduates in  
Mathematics

URL: http://www.nd.edu/~Endreu/format.html

Application Deadline: March 1, 2007

Program Description: The goal of this REU is to introduce undergraduate mathematics students to the pleasures and challenges of research in mathematics. It also seeks to provide them with a mathematical background which goes beyond what is usually available in the undergraduate curriculum, one which will prove valuable to them in any graduate work in mathematics.

Eligibility Requirements: Funding of this REU is through the National Science Foundation. It is a requirement of NSF that its REU funds only be used for U.S. citizens and permanent residents. This program is designed for undergraduates who have completed at least two years of a strong undergraduate program leading to a bachelor's degree in mathematics. A further requirement is that the applicant be committed to pursuing some further work in mathematics beyond the bachelor's degree. The successful applicants will have a desire to experience how mathematical research is done. They will have a solid background in linear algebra and multivariable calculus. They will have completed the sophomore year of studies as mathematics majors. All students should have at least a slight acquaintance with Abstract Algebra.

Program Assistance: The stipend is $325 per week for each student. Housing, in an air-conditioned dorm room will be provided to each student free. There will be a board plan provided, sufficient to cover any 10 meals per week in the dining halls. (The additional cost to cover all 21 meals is not great). There will also be a travel allowance, which will vary with the distance from your home to Notre Dame.

Contact Information:
NDREU 2007
Attn: Judy Hygema
Department of Mathematics
255 Hurley Hall
University of Notre Dame
Notre Dame IN, 46556

To ask a question about this REU, e-mail us at connolly.1@nd.edu or hygema.1@nd.edu
A less reliable means is by phone: 574-631-6571
University of Tennessee
Research Experience for Undergraduates
In Mathematics

URL: http://www.math.utk.edu/Docs/reu.html

Application Deadline: Pending

Program Description: The Mathematics Department at the University of Tennessee has been awarded a National Science Foundation grant to host an REU program during summer 2007. The program will run for 9 weeks beginning the first week of June. During the summer students will attend mini-courses and work on research projects in groups of 3-5 students. When taking a break from mathematics, participants will find many opportunities for recreation East Tennessee, which includes the Great Smoky Mountains National Park. A finalized calendar and information on the research projects/areas, together with information about applying to the REU, will be posted in November.

Eligibility Requirements: Participants must be U.S. citizens or permanent residents. Applicants should send information requested on Web site, along with a current transcript, 2 letters of recommendation, and a one-page statement of interest to Dr. Conrad Plant.

Program Assistance: Each participant will receive a stipend of $3,600, plus on-campus housing and some local fees (e.g. health fee). Travel funds are also available.

Contact Information:
Dr. Conrad Plant
REU
Mathematics Department
University of Tennessee
Knoxville, TN 37996-1300
For further information, call Dr. Conrad Plant at 865-974-4319
or by e-mail at cplant@math.utk.edu
Williams College
The SMALL Program

URL: http://www.williams.edu/Mathematics/small_CES.html

Application Deadline: February 16, 2007

Program Description: The SMALL Undergraduate Research Project is a nine-week summer program in which undergraduates investigate open research problems in mathematics. The largest program of its kind in the country, SMALL is supported in part by a National Science Foundation grant for Research Experiences for Undergraduates and by the Science Center of Williams College. Students work in small groups directed by individual faculty members. Many participants have published papers and presented talks at research conferences based on work done in SMALL. Some have gone on to complete PhDs in mathematics.

Eligibility Requirements: Must be a U.S. citizen.

Program Assistance: Participating students receive a stipend of $3,000. Housing is provided free by Williams College and several board plans are available at reasonable rates. Funding is also available for non-U.S. citizens or permanent residents.

Contact Information:

Prof. Cesar Silva
SMALL Director
Cesar.Silva@williams.edu
Sixth Section

Physics Related Internships
Montana State University  
Department of Physics  
Summer 2007 REU Opportunities in Solar Physics

URL:  http://solar.physics.montana.edu/reu/

Application Deadline: Application available in December. Deadline to apply will be around Mid-February 2007.

Program Description: Projects range from theoretical research in solar magnetohydrodynamics and plasma physics to analysis of data from NASA missions such as Yohkoh and TRACE. Faculty members from the MSU BOZEMAN SOLAR PHYSICS GROUP will supervise participants. Applicants are encouraged to review projects planned for 2007, and the past years’ participant reports from 2001, 2002, and 2003, and to express a preference for faculty supervisor and type of research project (modeling, data analysis) on their application form. Further definition of the research is worked out with the pertinent faculty supervisor. The physics department of Montana State University is located in Bozeman at an elevation of 4700 feet in the Gallatin Valley, surrounded by spectacular mountains, only 90 miles north of Yellowstone National Park. The summer months in Montana offer unparalleled opportunities for biking, hiking, backpacking, fly fishing, whitewater rafting, and backcountry trail riding. The 2007 program will run from June 4 through August 10. Positions will be offered to 6-10 eligible students.

Eligibility Requirements: Participants must be full-time undergraduates, typically finishing their sophomore or junior years. Applications from underrepresented groups are particularly welcomed. There are no restrictions with regard to citizenship of the participants. Foreign participants are supported from non-NSF sources.

Program Assistance: Stipends will be $4,200 plus a $315 food allowance for the ten-week program. Travel costs to and from Bozeman are covered and university accommodation will also be provided. For overseas participants, travel support will be limited to the amount of economy roundtrip airfare from Bozeman to JFK/New York.

Contact Information:
Solar Physics REU Program  
C/o Prof. Richard Canfield  
Department of Physics  
Montana State University  
P.O. Box 173840  
Bozeman, MT 59717-3840  
Phone: (406) 994-7049  
Fax: (406) 994-4452

Contact Prof. Richard Canfield at canfield@solar.physics.montana.edu
Purdue University
College of Science
Department of Physics

URL: http://www.physics.purdue.edu/reu/

Application Deadline: March 1, 2007 or until all positions are taken

Program Description: Each summer the department of physics at Purdue runs a National Science Foundation-funded Research Experience for Undergraduates program. This year's ten-week program runs from May 29 until August 3, 2007. The main goal of the program is to give undergraduates an opportunity to participate in a forefront research project.

Eligibility Requirements: Not Specified

Program Assistance: Each student will receive a stipend of $400 per week. The costs of housing (in a campus residence hall) and meals will be covered by the program. A travel allowance will also be available.

Contact Information:
REU Program
Department of Physics
525 Northwestern Ave
Purdue University
West Lafayette, IN 47907-2036
E-Mail: research-undergrad@physics.purdue.edu
Rice Quantum Institute
Research Experience for Undergraduates

URL: http://rqi.rice.edu/academics/reu/reu.php

Application Deadline: Pending

Program Description: Students from many schools spend 10 weeks at Rice working on cutting-edge projects with individual RQI research groups. This provides an accelerated introduction to experimental and/or theoretical research work itself, as well as insight into how fundamental research in atomic, molecular, optical, surface, materials, chemical and biophysical sciences relate to many important technologies. In addition, each student is expected to attend special seminars and group discussions for REU participants, make a report of the project and participate in the RQI Research Colloquium at the end of the summer.

Eligibility Requirements: All applicants must be U.S. citizens or U.S. permanent residents enrolled in an undergraduate institution for the duration of the program.

Program Assistance: Students accepted into our summer REU Program this year will receive $3,400 for the total 10 week period. Student housing will be arranged and paid for by the REU Program. There is, however, a $35 nonrefundable housing application fee.

Contact Information:
Bruce R. Johnson
Executive Director
johnson@rice.edu

Yvonne Creed
Executive Assistant
vcreed@rice.edu
SRI International
Research Experience for Undergraduates in Atomic, Molecular, and Laser Physics
Molecular Physics Laboratory


Application Deadline: Pending.

Program Description: SRI is a nonprofit research organization located in the San Francisco Bay Area of California. The Molecular Physics Laboratory currently includes 20 professional scientists and 8 postdoctoral associates. Their work covers a wide range of topics in the areas of atomic, molecular, and optical physics as well as many areas extending into chemical physics, physical chemistry, and solid state physics. A wide variety of experimental and theoretical projects are available for undergraduate participation, including studies of combustion chemistry, spectroscopy, optical diagnostics, atmospheric chemistry, detection of atmospheric pollutants, and energy transfer in molecular collisions. Many of the projects involve the use of lasers for detecting and analyzing atoms, molecules, and surfaces. It is usually possible to accommodate individual participants if there are conflicts with their school end dates.

Eligibility Requirements: Undergraduate participants must be enrolled in a program leading to the bachelor's degree and must be U.S. citizens or permanent residents of the United States or its possessions.

Program Assistance: This program provides a stipend of $4,000, up to $1,500 in the form of SRI-subsidized housing, and travel funds for eight undergraduate students from colleges and universities across the United States to participate in on-going research projects at SRI for a 12-week period during the summer.

Contact Information:
REU Program
Molecular Physics Laboratory
SRI International
333 Ravenswood Ave.
Menlo Park, CA 94025
Fax: (650) 859-6196
e-mail (internet): [reu@sri.com](mailto:reu@sri.com)
Phone: (650) 859-3398 (Dr. Kostas Kalogerakis)
or: (650) 895-4131 (Dr. Gregory Faris)
Stony Brook University
REU Physics Summer Program

URL: http://www.sunysb.edu/ureca/physicsreu.htm

Application Deadline: Recommended to Apply by March 1, 2007

Program Description: The department of physics & astronomy at Stony Brook University is hosting an eight-week program for qualified undergraduate physics and/or astronomy majors. The program gives students an intensive research experience with leading researchers in the field. REU participants will be assigned to a faculty mentor and become fully integrated into active research groups using state-of-the-art facilities. Participants will have the opportunity to work closely with their faculty mentor, attend weekly seminars, participate in workshops and present their research results at a student symposium at the close of the program. Participants will be placed in one of the following areas:

Astronomy
Atmospheric Physics
High Energy Particle Physics
Instructional Apparatus Development
Laser and Optics
Nuclear Physics
Solid State Physics
Theoretical Physics

Eligibility Requirements: The REU Physics Program is open to all undergraduate students majoring in the field of physics and/or astronomy (program open to non-Stony Brook students as well as Stony Brook undergraduates). Applicants must be U.S. citizens or permanent residents. The State University of New York is an affirmative action, equal opportunity educator and employer.

Program Assistance: The program offers participants a fellowship of $3,000, a dormitory room (double occupancy), and an allowance for food and round-trip transportation to Stony Brook.

Contact Information:
For more information, contact Karen Kernan via e-mail kkernan@notes.cc.sunysb.edu or by telephone at (631) 632-7114. Questions regarding the content of the program should be directed to Dr. Erlend Graf at (631) 632-8173 or via e-mail at: Erlend.Graf@sunysb.edu
URL: http://science-education.pppl.gov/Nuf/Index.html


Program Description: The National Undergraduate Fellowship Program in Plasma Physics and Fusion Energy Sciences provides outstanding undergraduates with an opportunity to conduct research in the disciplines that comprise the plasma sciences in general and fusion research in particular. The goal of the program is to stimulate students' interest in the fields relevant to fusion research while providing capable assistants for fusion research projects. In order for students to obtain a sufficient background to begin their research projects, the nine-week project is preceded by a one-week introductory course at the Princeton Plasma Physics Laboratory in the basic elements of plasma physics. Students will then travel to the sites of their research projects.

Eligibility Requirements: Applications for the 2007 program, which runs from June 11 to August 17, 2007, are invited from students in engineering, mathematics, computer science, or physics, who are matriculated at a U.S. college or university and are U.S. citizens. The program is open to undergraduates who are currently in their junior year. Students should have taken at least one course in electricity and magnetism beyond introductory physics.

Program Assistance: Students will receive a stipend of $4,800 in addition to transportation to and from their university or permanent U.S. address. The program will pay room, expenses, and some meals during the one-week course at Princeton. However, students will be responsible for their housing and meal expenses during the remaining nine weeks.

Contact Information:

James Morgan, NUF Program Administrator
National Undergraduate Fellowship Program
P.O. Box 451
Mail Stop 40
Princeton, NJ 08543-0451
or E-mail: jmorgan@pppl.gov.
University of California, Davis
Physics Department
Research Experience for Undergraduates Program

URL: http://london.ucdavis.edu/~zieve/REU/ru.html

Application Deadline: Recommended by mid February

Program Description: In the summer of 2007, the Department of Physics will host an NSF-funded Research Experiences for Undergraduates site. During the 10-week program, students will live on campus while working alongside faculty and graduate students on an ongoing research project. Students will get a view of physics very different from typical coursework. Students can choose among the physics subfields represented at UC Davis, including some areas not available in Northern California REU programs. Each student will have a personalized project, to conclude with a 15-minute presentation to the rest of the REU group. The program will take place from June 17 through August 24, 2007.

Eligibility Requirements: Students must be U.S citizens or permanent residents. This is a condition of funding from the U.S. National Science Foundation. Students must have finished at least one year of college, including a year of calculus-based introductory physics, but may not have completed a B.S., B.A., or equivalent degree. College students from two-year or four-year institutions may apply. Students must be continuing education in fall 2007.

Program Assistance: Students will live together on campus. The program will provide housing and meals, and students will receive an additional $300/week stipend. Support is also available for travel to and from the program.

Contact Information:

REU Program
Physics Department
University of California
One Shields Avenue
Davis, CA 95616

Contact: Rena Zieve
Phone: (607) 254-5455
E-mail: zieve@physics.ucdavis.edu
University of Chicago
Summer 2007 REU Opportunities for
Minorities and Women

URL: http://physics.uchicago.edu/reu_phys.html

Application Deadline: February 15, 2007

Program Description: This University of Chicago Summer Research Experiences for Undergraduates (REU) Program in Physics, supported by the National Science Foundation, offers undergraduates (members of underrepresented minority groups (African-Americans, Hispanics, and Native Americans and women) the opportunity to gain research experience working in the laboratory or research group of a physics department faculty member. The program is particularly intended at encouraging participation by members of underrepresented minority groups (African-Americans, Hispanics, and Native Americans) and women. Supplementing this valuable practical experience, faculty and graduate students present special lectures to provide an overview of the wide-ranging research conducted in our Department. Ten to fifteen internships will be awarded for the ten-week program, June 11 through August 17, 2007.

Possible research areas include:
Experimental and Theoretical Condensed Matter Physics
Experimental and Theoretical Elementary Particle Physics
Non-linear Dynamics and Chaos
Space and Cosmic Ray Physics
Theoretical and Observational Astronomy and Astrophysics
Nanoscience and Ultracold Atoms

Eligibility Requirements: Participants must be U.S. citizens or permanent residents who are enrolled in (but not yet graduated from) an accredited undergraduate college degree program with a concentration in physics or related engineering field.

Program Assistance: The stipend for the full ten-week program will be $4,500. Housing will be provided, and there will be modest travel expense reimbursement.

Contact Information:
For further information contact: bthomas@uchicago.edu

The University of Chicago REU Program
Attn: Ms Zena Anderson
James Franck Institute
The University of Chicago
929 East 57th Street
Chicago, Illinois 60637-1433
University of Colorado, Health Sciences Center
Department of Pharmacology
Minority Summer Research Residency Program

URL: http://www2.uchsc.edu/pharm/ARCMSRRP.asp

Application Deadline: Pending

Program Description: In collaboration with the American Indian/Alaska Native Mental Health Programs and the Office of Diversity, the Minority Summer Research Residency program will introduce undergraduate students from diverse, disadvantaged and traditionally underrepresented groups to graduate/research career opportunities at the University of Colorado Health Sciences Center. Research scholars will participate in an 8-week summer research program. Scholars will be assigned and mentored by a distinguished expert/researcher in the fields of alcoholism/pharmacology/mental health. Scholars are expected to participate in journal club meetings on a weekly basis. A final presentation of research accomplishments will be presented at the end of the 8-week session.

Eligibility Requirements: Research scholars are selected on the basis of academic achievement, interest in a basic science research career and inclusion in an under-represented group (first generation college graduate, economically disadvantaged or ethnic identity such as African American, American Indian/Alaska Native, Latin/Chicano/Hispanic/Mexican-American, and Asian/Pacific Islander). Successful applicants will have completed two (2) years of college and demonstrated interest & aptitude in laboratory/basic sciences. Accepted students must complete the entire eight weeks.

Program Assistance: Scholars will receive a $3,000 stipend/living allowance for the 8-week program. Room and board will be paid out of the $3,000 stipend. Scholars will receive the first half of the stipend at the end of June and the remainder of the stipend at the end of the program. The department of pharmacology and the office of diversity staff will help identify summer accommodations. Scholars will receive round trip transportation (up to $300) for airfare or mileage to and from Denver. Students who drive to Denver will be reimbursed for mileage. Airline travel must be arranged through the department of pharmacology. The UCHSC student health clinic is available for routine, outpatient health services. The department of pharmacology will pay for student health insurance premiums for the eight weeks of the program. It is important to provide your own hospitalization insurance.

Contact Information:
James Sikela, Ph.D.
University of Colorado Health Sciences Center — Dept. of Pharmacology
4200 E. 9th Avenue — Campus Box C236
Denver, CO 80262
E-mail: James.Sikela@uchsc.edu
Seventh Section

Multiple Math, Engineering, and Science Related Internships
Arkansas State University
Research Internships in Science of the Environment
RISE

URL: http://www.cas.astate.edu/rise/RISE%20Summer.htm

Application Deadline: Pending

Program Description: Our summer program involves a combination of highly individualized research experience, group seminars and fieldwork. Undergraduate scholars work directly with faculty mentors, often as part of a research team. The summer experience involves "hands-on" research in the laboratory and/or field in the exciting and diverse field of aquatic and environmental science. Here at the university, students have access to state-of-the-art analytical facilities including ICP-MS and GC-MS as well as cutting-edge field equipment including data loggers and boat electroshockers. Scholars are afforded every opportunity to gain the analytical and field expertise needed to succeed in both post-graduate education and industry. Aside from analytical facilities, summer scholars have access to the university research library and computer facilities.

Eligibility Requirements: This program targets the educational needs of traditionally under-represented students. Rising junior and senior students who have completed their general science courses (general chemistry, general biology and or geology) are encouraged to apply.

Program Assistance: Over the summer participating students are housed in two-bedroom apartments on the university campus. All students have access to the recreation center, health center and library.

Contact Information: If you would like to know more about any of the undergraduate research programs please contact Dr. Robyn Hannigan by e-mail hannigan@astate.edu or:

Dr. Robyn Hannigan
Department of Chemistry and Physics
PO Box 419
Arkansas State University
State University AR 72467
1-870-680-4360
FAX: 1-870-972-3089
California Institute of Technology
Laser Interferometer Gravitational-Wave Observatory

URL: http://www.ligo.caltech.edu/LIGO_web/students/undergrads.html

Application Deadline: Pending

Program Description: The LIGO Project is an NSF-supported endeavor to design, build, and operate an astrophysical observatory for the detection and study of gravitational radiation. The observatory includes two sites (Hanford, Washington and Livingston Parish, Louisiana) with laser interferometric detector systems. (More information on LIGO can be found on the LIGO home page, and from "LIGO: The Laser Interferometer Gravitational-Wave Observatory," A. Abramovici, et al., Science, 256, 325, 1992.) The aim of the LIGO Summer Undergraduate Research Program is to organize the participation of undergraduate students in research associated with the LIGO Project.

Eligibility Requirements: All continuing undergraduate students (i.e. e. who will be students next year) may apply to the LIGO Summer Undergraduate Research Program. Because of funding constraints, some priority will be given to minorities and/or under-represented groups, and to U.S. citizens or permanent residents.

Program Assistance: Students receive a $5,000 stipend. The pay schedule will be communicated prior to the start of the summer. Federal withholding tax, FICA, and state disability insurance are deducted from each check. International students may or may not pay U.S. taxes depending on tax treaties between the U.S. and the student's country. Students working at Caltech may live in Caltech housing during the program. The cost is approximately $15 per day, although rates will not be finalized until late spring. There is no board contract but there is a cafeteria on campus. Non-Caltech students cannot move into Caltech housing before mid-June. Housing at LIGO's Hanford and Livingston sites will be provided, at a charge that is approximately the same as Caltech housing. Also, arrangements will be made for daily transportation to and from the sites.

Contact Information:

Mail Application to:
Professor Kenneth G. Libbrecht
LIGO Undergraduate Research Program
Caltech 264-33
Pasadena, CA 91125

If you have questions, see Web site, or contact Prof. Libbrecht at kgl@caltech.edu or by phone at 626.395.3722.
California State University, Fullerton  
Department of Chemistry and Biochemistry  
Summer Undergraduate Research

URL: http://chemsrvr2.fullerton.edu/reu/reu.html

Application Deadline: March 9, 2007

Program Description: The Department of Chemistry and Biochemistry at Cal State Fullerton has been home to a REU-site since 1990. Many of our former participants have gone on to successful careers (academic, industrial and government) in all areas of chemistry and biochemistry.

Eligibility Requirement: Applications are invited from students who are sophomores or juniors, majoring in a chemistry-related subject, who wish to spend the summer of 2007 conducting research in chemistry or biochemistry at California State University, Fullerton. We provide a strong supportive environment for “late-bloomers” and re-entry students, and women and minority students are especially encouraged to apply. The ten-week program runs from June 1 through August 10, 2007.

Program Assistance: Funding from NSF-REU, the National Science Foundation Research Experiences for Undergraduates program provides stipends of $4,000 for the ten-week period. Some travel and subsistence funding is also available.

Contact Information:
Dr. Mark S. Filowitz, NSF-REU Co-Director
Department of Chemistry & Biochemistry
California State University, Fullerton
P.O. Box 6866
Fullerton, California 92834-6866
Fax: (714) 278-5316
Phone: (714) 278-3621
E-Mail: mfilowitz@fullerton.edu
URL: http://www.gl.ciw.edu/interns/

Application Deadline: Pending

Program Description: The Geophysical Laboratory and the Department of Terrestrial Magnetism of the Carnegie Institution of Washington, a nonprofit scientific research foundation located in Washington DC, have been leaders in earth science research since their founding. The goal of our summer internship program is to provide eligible undergraduate students with a participatory introduction to scientific research. Fundamental investigations in the geosciences (experimental petrology, mineralogy, mineral physics, and seismology), planetary sciences and astronomy, and related chemical sciences (inorganic and organic geochemistry, cosmochemistry) are pursued. During a ten-week summer program, undergraduate students will conduct an individual research project with guidance from a GL or DTM staff member. Throughout the summer, students will also tour other DC area research facilities and participate in a weekly seminar program. The summer program will start June 6 and end August 11, 2007. This program has been funded by a grant from the National Science Foundation's "Research Experiences for Undergraduates" program and through support from the Carnegie Institution of Washington.

Eligibility Requirements: Undergraduate students pursuing a degree in geoscience, physics, chemistry, materials science, biology, astronomy or a related field, who are considering scientific research as a potential career, are encouraged to apply. To be eligible to participate in the program, students must have completed at least 30 semester-hour credits by the start of the summer program, and be either citizens or permanent residents of the United States. Graduating seniors are not eligible to apply. The Carnegie Institution of Washington is an equal opportunity/affirmative action employer. Qualified women and minorities are especially encouraged to apply.

Program Assistance: In addition a stipend of $3,700 for the ten-week program, housing is provided. All interns will be housed in dormitories at American University, about 1.5 miles from the Broad Branch Campus where both GL and DTM are located. Our campus can easily be reached from AU using D.C.’s METRO bus system. Participants will also receive support toward travel expenses to Washington DC.

Contact Information:
Dr. Stephen A. Gramsch
Summer Intern Program Coordinator
Geophysical Laboratory
Carnegie Institution of Washington
5251 Broad Branch Rd., NW
Washington, DC 20015-1305
Center for Integrating Research and Learning
National High Field Research Laboratory
Research Experience for Undergraduates
Summer 2007 Internship Program

URL: https://reu.magnet.fsu.edu/

Application Deadline: February 16, 2007

Program Description: The NHMFL Research Experiences for Undergraduates (REU) Summer Internship Program matches qualified undergraduate students with scientists and researchers at three sites of the National High Magnetic Field Laboratory in an 8-week research mentorship. The research experience offers unprecedented opportunities to explore science at the extremes of magnetic field, pressure, and temperature. The research experience offers many opportunities to explore contemporary science and engineering issues, and to work alongside some of the finest scientists, magnet designers and engineers in the world. The NHMFL offers a wide range of science, math, engineering, and interdisciplinary experiences in physics, chemistry, biological sciences, geochemistry, materials science, and magnet science and engineering. Summer interns, working closely with their NHMFL faculty mentors, are thoroughly integrated into these research and development activities. Internship dates are from June 5 through July 28, 2007. Placements are available at three sites: Florida State University, University of Florida, or Los Alamos National Laboratory.

Eligibility Requirements: Applicants must be registered undergraduate students pursuing degrees in science or engineering. Applicants must be United States citizens or permanent residents of the United States possessions.

Program Assistance: A $3,600 stipend is available. Housing is provided at the FSU site and reimbursed at UF and LANL. Funds to travel to and from the internship site may be requested.

Contact Information:

Center for Integrating Research & Learning
1800 East Paul Dirac Drive
Tallahassee, FL 32310
Program Manager: Jose Sanchez
Phone: 850.645.0033
URL: http://www.ccmr.cornell.edu/education/reu/

Application Deadline: March 10, 2007

Program Description: During a ten-week period, students will work with Cornell faculty on interdisciplinary materials research projects involving chemistry, physics, materials science and engineering disciplines. Students will also participate in an organized program of lectures, mini-courses (e.g. electronics, microscopy), laboratory visits and a variety of recreational activities. Application will be accepted beginning November 15, 2006.

Eligibility Requirements: This opportunity is open to Fall 2007 undergraduates who are U.S. citizens or permanent residents. Selection will be based primarily on academic standing and faculty recommendations. Minority female candidates are strongly encouraged to apply. All chemistry, physics, and engineering majors are welcome to apply.

Program Assistance: The Cornell Center for Materials Research is offering a special summer research program with a stipend of $3,750, room and additional funds for travel and housing, but program does not cover food.

Contact Information:

Victoria Watts
REU Coordinator
Cornell Center for Materials Research
627 Clark Hall of Science
Cornell University
Ithaca, NY 14853

Phone: 1 (607) 255-4272
Fax: 1 (607) 255-3957
E-mail: reu@ccmr.cornell.edu
Minority Medical Education Program
Summer Medical and Dental Education Program

URL: www.aamc.org/mmep

Application Deadline: March 1, 2007

Program Description: The Summer Medical Education Program (SMDEP), formerly the Minority Medical Education Program (MMEP), has a long and distinguished history as a national academic enrichment program that helps promising, highly motivated students gain admission to medical school. SMEP prepares students for the competitive medical school admission process. Of all the SMEP graduates who have applied to medical school, 63% have been accepted. Created in 1988, and funded by The Robert Wood Johnson Foundation, the summer program accepts college undergraduate and post-baccalaureate students who are interested in careers in the health professions. SMEP is committed to helping create a well-trained, diverse physician and health-professions workforce. It is intended for students who are strong advocates for diversity and/or come from groups that are underrepresented in medicine. For instance, applicants may come from economically disadvantaged backgrounds, racial and ethnic groups that historically have been underrepresented in medicine, or parts of the country (such as rural areas) where residents historically have been underrepresented in medicine. All students with a commitment to diversity in the workforce--in the widest and most inclusive sense of the word--are welcome in SMEP.

Eligibility Requirements: Applicant must be a U.S. citizen or hold a permanent resident visa. In addition, applicant must have completed at least one year of college (in addition, qualified post-baccalaureate applicants are also eligible), have an overall GPA of 3.0, with 2.75 in the sciences; and have a combined SAT score of at least 950 or ACT score of at least 20. Applicants who are racially/ethnically underrepresented in medicine (as defined independently by each site), and come from a disadvantaged background (financial and/or educational), are encouraged to apply.

Program Assistance: Tuition housing and meals are provided.

Contact Information:
Summer Medical and Dental Education Program (SMDEP)
smdep@aamc.org, or call (866) 58-SMDEP
Mayo Graduate School
Summer Undergraduate Research Fellowship (SURF)

URL: http://www.mayo.edu/mgs/surf.html

Application Deadline: February 1, 2007

Program Description: The Mayo Summer Undergraduate Research Fellowship (SURF) program, sponsored by the Mayo Graduate School, is a great way to build your skills as a young scientist or test your inclinations toward research. Each year, 70-80 undergraduate students from around the United States come to Mayo Clinic in Rochester, Minn., to work beside both young and established scientists on a broad range of biomedical research questions. Fellowships are also available at Mayo's campuses in Scottsdale, Arizona, and Jacksonville, Florida. Program runs May 29 through August 3, 2007.

Eligibility Requirements: Students applying must be U.S. citizens or permanent residents. Additionally, students should be enrolled as full-time students in their sophomore and junior year with at least a 3.0 GPA. Finally, applicants should have a serious consideration for a medical research career as a Ph.D. or M.D.

Program Assistance: The SURF Program fellowship award is $4,000 for 10 weeks. From this stipend, students are responsible for their own travel, housing, and meals. Most students live together in a convenient summer student housing area, which costs about $130 per week.

Contact Information:

Summer Undergraduate Research Programs
Mayo Graduate School
200 First Street SW
Rochester, MN 55905

For a paper application, contact Glenda Mueller at gmueller@mayo.edu
Or call 1-(507)-284-3862.
Stanford University
Center on Polymer Interfaces & Macromolecular Assemblies
Summer Undergraduate Research Experience

URL: http://www.stanford.edu/group/CPIMA/education/general_info.html

Application Deadline: February 2, 2007

Program Description: The Center on Polymer Interfaces and Macromolecular Assemblies (CPIMA) provides qualified undergraduates in chemical engineering, chemistry, materials science, physics, and related fields with a ten-week summer research opportunity. The SURE program allows students to work on independent research projects involving direct interaction with research scientists, post-doctoral scholars, and graduate students at Stanford University, IBM Almaden, University of California - Berkeley, University of California - Davis, or a CPIMA Industrial Affiliate. Students participate in a number of SURE activities including the CPIMA Forum where they present their summer research in a poster.

Eligibility Requirements: Open to undergraduate students who will be sophomores, juniors, or seniors majoring in an engineering or physical science discipline. Applicants must have an interest in pursuing a graduate degree in engineering or physical sciences. Women, underrepresented minority students, and students with physical disabilities are especially encouraged to apply. Participants must be either US citizens or legal residents of the United States. Participants are required to work full time and may not have outside jobs or enroll in classes that interfere with normal working hours.

Program Assistance: Participants will receive a stipend of $4,500. Housing is included and some travel reimbursement is available.

Contact Information:

Marni Goldman
CPIMA Education Director
E-mail: mgoldman@stanford.edu
Stanford University
School of Medicine
Summer Health Careers Opportunity Program (HCOP)

URL: http://hcop.stanford.edu/

Application Deadline: March 16, 2007

Program Description: HCOP participants live on the Stanford campus for six weeks with a staff of Stanford Residential Program Coordinators who provide a supportive academic and living environment, focusing on promoting community spirit, team building, and problem solving. The program will last from June 25-August 5, 2007.

Other program role model experiences include:
♦ Minority medical students
♦ Medical school faculty
♦ Clinical researchers
♦ Hospital staff physicians
♦ Volunteer health professionals
♦ Center of Excellence staff

Eligibility Requirements: HCOP targets college sophomores who express a desire to pursue medicine as a career. Competitive candidates must:
♦ Be from educationally and economically disadvantaged backgrounds
♦ Have completed their sophomore year in college
♦ Be citizens of, or permanent residents of, the United States

In addition, thoughtful consideration will be given to candidates who:
♦ Have demonstrated potential for academic excellence by taking challenging college math and science courses (e.g., calculus, biology, and chemistry)
♦ Have substantial volunteer experiences
♦ Have demonstrated community or student leadership
♦ Have a commitment to be an advocate and provider of quality healthcare for the underserved and disadvantaged.

Program Assistance: Free housing, meals, and one-round trip from your home to Stanford.

Contact Information:
Kathryn Fitzgerald
HCOP Associate Director
Stanford University School of Medicine
251 Campus Drive, MSOB X347
Stanford, CA 94305-5413
kathrynf@stanford.edu
The Mickey Leland Energy Fellowship

URL: http://www.fossil.energy.gov/education/lelandfellowships

Application Deadline: Pending.

Program Description: This program offers internships for undergraduate and graduate students in science, math, and engineering academic disciplines. The program allows students to apply classroom theory to "real world" work experience while earning a stipend. The program includes a trip to a field site to participate in a technical forum and provides valuable presentation experience. Positions are available for 50 to 60 students. The length for the program will be 10 weeks, with an employment commitment.

Eligibility Requirements: Applicant must be enrolled in an accredited institution of higher and learning, and must be a U.S. citizen. Applicant must be a math, science/geo-science, or engineering major and maintain at least a 2.8 G.P.A.

Program Assistance: Second, third and fourth year students may receive up to $500/week. First year graduate students may receive up to $650/week. Travel costs for one round-trip to and from the site, and costs for a trip to a field site for technical presentation, are included in the fellowship award.

Contact Information:

Contact Mariann Bleazard at mariann@armanagement.org or call at 1 (888) 841-5745.
Tuskegee University  
Spaceflight and Life Sciences Training Program (SLSTP)

URL: [http://www.slstp.nasa.gov/](http://www.slstp.nasa.gov/)

Application Deadline: Pending

**Program Description:** NASA’s Spaceflight and Life Sciences Training Program (SLSTP) offers an intensive, hands-on, six week summer research course at the Kennedy Space Center (KSC) to undergraduate students. Program would like to accept students interested in learning how to successfully design and conduct biological research, manage operations in space, and assess the environmental impacts of a launch site. At the end of this program, trainees develop an unparalleled understanding of the NASA mission and the meaning of “…as only NASA can.” Students from all across the country who are pursuing majors such as biology, chemistry, horticulture, engineering, ecology, physics, computer science and math all contribute to this program. Students work in interdisciplinary teams. They spend approximately 70% of their day performing laboratory or field research, and the remainder of the day in lectures. In a real-world environment full of real-world obstacles, they design and implement experiments, analyze data, develop conclusions, and present their work to colleagues and/or the scientific community.

**Eligibility Requirements:** Applicants must be students U.S. citizens and at least eighteen years old who are currently enrolled and pursuing their first undergraduate degree, have a minimum cumulative G.P.A of 3.0 at the time of the application, and have completed their freshman, sophomore or junior year at the start of the program. Graduating seniors (those who will complete their senior year prior to the start of the program, mid-June) are not eligible to apply. Applicants must pursue an eligible major, such as: animal sciences, biochemistry, biology, biophysics, bio-statistics, chemistry, computer science, ecology, engineering, environmental sciences, geology, life sciences, mathematics, pharmacy, physics, plant sciences, pre-med/dent. /vet., and psychology.

**Program Assistance:** All students and counselors are provided with airfare, transportations, lodging, and a food allowance.

**Contact Information:**

SLSTP Applications Processing Office  
Tuskegee University  
100 Campbell Hall  
Tuskegee, AL 36088  
334.724.4589  
slstp@tuskegee.edu
University Corporation for Atmospheric Sciences  
Significant Opportunities in Atmospheric Research and Science (SOARS)

URL: [http://www.ucar.edu/soars/](http://www.ucar.edu/soars/)

**Application Deadline:** *February 1, 2007.*

**Program Description:** SOARS is dedicated to increasing the number of African American, American Indian, and Hispanic/Latino students enrolled in masters and doctoral degree programs in the atmospheric and related sciences with the goal of increasing ethnic diversity within the scientific community of the future. SOARS is a four-year program for undergraduate and graduate students interested in pursuing careers in the atmospheric and related sciences. The 10-week summer program will run from May 30 to August 11, 2007.

**Eligibility Requirements:** All applicants must be citizens or permanent residents of the U.S. Applicants must have completed the equivalent of two years of college, and have a cumulative G.P.A of 3.0 or higher. Students must have a major in atmospheric science or a related field such as the geosciences, biology, chemistry, computer science, earth science, engineering, environmental science, mathematics, meteorology, oceanography, physics, or social science. Moreover, applicant should be a member of a group that is historically underrepresented in the atmospheric and related sciences, as well as plan to pursue a career in atmospheric or a related science.

**Program Assistance:** Participants work 40 hours a week and earn a competitive wage, which increases with each year of participation. Furnished apartments are provided at no cost to participants. Round-trip airfare is provided to summer working locations from anywhere within the United States and Puerto Rico. Participants receive a regional bus pass that meets local transportation needs.

**Contact Information:**

University Corporation for Atmospheric Research  
SOARS Program Office  
P.O. Box 3000  
Boulder, CO  80307  
(303) 497-8622
University of California, Berkeley
Department of Electrical Engineering and Computer Science
Summer Undergraduate Program in Engineering Research
At Berkeley – Information Technology (SUPERB-IT)

URL:  http://www.eecs.berkeley.edu/Programs/ugrad/superb/superb.html

Application Deadline: January 31, 2007 at 4:00PM

Program Description: The Summer Undergraduate Program in Engineering Research at Berkeley - Information Technology (SUPERB-IT) in the Electrical Engineering and Computer Sciences (EECS) Department offers a group of talented undergraduate engineering students the opportunity to gain research experience. The program’s objective is to increase diversity in the graduate school pipeline by affirming students’ motivation for graduate study and strengthening their qualifications. SUPERB-IT participants spend eight weeks at UC Berkeley during the summer (June 10 - August 3, 2007) working on exciting ongoing research projects in information technology with EECS faculty mentors and graduate students. Students who participate in this research apprenticeship explore options for graduate study, gain exposure to a large research-oriented department, and are motivated to pursue graduate study.

Eligibility Requirements: SUPERB-IT strives to bring diversity to the graduate school pipeline. The program targets students who have been disadvantaged in the pursuit of engineering education and careers. To be eligible, students must be either U.S. citizens or permanent residents. Selection for this program is highly selective: considerations include first-generation college students, limited access to undergraduate research, economic disadvantage, and lack of exposure to graduate engineering study. A 3.4 GPA is required.

Program Assistance: SUPERB-IT participants receive a $3,750 stipend, room and board on campus in the International House, and up to $600 for travel expenses during the 8-week program.

Contact Information:

Rebecca Brown
205 Cory Hall
Phone: (510) 642-7372
Fax: (510) 643-7846
becca@eecs.berkeley.edu
University of California, Los Angeles
The Science, Engineering and Mathematics (SEM) Summer Programs in Undergraduate Research (SPUR)

URL: [http://college.ucla.edu/urc-care/spur.htm](http://college.ucla.edu/urc-care/spur.htm)

Application Deadline: *Friday, February 2, 2007*

Program Description: The Science, Engineering and Mathematics (SEM) Summer Programs in Undergraduate Research (SPUR) offer hands-on research experience working in the lab of a distinguished UCLA faculty member. Each student is matched with a faculty mentor and works as a member of their mentor’s research group for eight to ten weeks. Every effort is made to match each student with a compatible faculty mentor, based on the student’s area of interest. The 8-week program is held from June 24 – August 17, 2007 and the 10-week program begins June 24 – August 31, 2007. The program features seminars on topics such as the nature of academic life; career opportunities in science, engineering and mathematics; and applying to graduate school. Participants also attend workshops that provide practical information on such academic topics as how to write a personal statement, how to give a research presentation, and GRE test preparation. At the end of the program, each student is required to give a poster presentation describing his/her summer research project at an undergraduate research conference held at UCLA.

Eligibility Requirements: Applicants must be U.S. citizens entering their junior or senior year with a cumulative G.P.A. of 2.80. Students interested in pursuing degrees in medicine (MD) or dentistry (DDS) are not eligible for this program unless they also plan to pursue a Ph.D.

Program Assistance: $300 PER WEEK: $2,400 for 8 weeks or $3,000 for 10 weeks. On campus housing and meal allowance is provided.

Contact Information:
E-MAIL ADDRESS: [careoa@lifesci.ucla.edu](mailto:careoa@lifesci.ucla.edu)
TELEPHONE: 310/206-2182
University of California, Santa Barbara
Research Internships in Science and Engineering (RISE)
Research Experience for Undergraduates

URL:  http://www.mrl.ucsb.edu/mrl/outreach/educational/RISE/appinfo/RISESum06.html

Application Deadline: Pending

Program Description: The Materials Research Laboratory (MRL), the Advanced Optical Materials IGERT Program, and the College of Engineering at the University of California, Santa Barbara are seeking undergraduate science and engineering majors who are interested in pursuing a research experience. This internship program will bring undergraduate students from around the country to the UC Santa Barbara campus for a 10-week summer research experience. Interns will gain first-hand experience in scientific investigation in a dynamic, collaborative research environment. They will be matched individually with MRL, IGERT and College of Engineering faculty and graduate student lab mentors who will provide training and support. In addition to research, the interns also participate in weekly group meetings to develop oral presentation skills, attend special seminars and present their results at an end-of-summer poster session.

Eligibility Requirements: This program is open to any science or engineering undergraduate student who will be enrolled as a junior or senior in Fall 2007 and is a U.S. citizen, permanent resident, or non-resident alien currently enrolled at a U.S. university.

Program Assistance: The stipend for undergraduate interns is $3,800 total for 10 weeks at 35hrs/week. Up to $1,000 for housing expenses will be provided, or arranged accommodations will be given free of charge. Travel costs of up to $500 will be provided for travel to and from the UCSB campus.

Contact Information:

Dr. Patti Halpin
Materials Research Laboratory
University of California, Santa Barbara
Santa Barbara, CA 93106-5121

Fax: 1 (805) 893-8797
University of California, Santa Barbara  
Internships in Nanosystems, Science, Engineering and Technology

URL: [http://education.cnsi.ucsb.edu/inset.html](http://education.cnsi.ucsb.edu/inset.html)

Application Deadline: *Pending*

**Program Description:** The Internships in Nanosystems Science, Engineering and Technology (INSET) program brings science and engineering community college undergraduates to the UC Santa Barbara campus for a summer research experience. Interns gain first-hand experience in scientific investigation in a dynamic, collaborative research environment. They are matched individually with UCSB faculty and graduate student lab mentors who provide training and support. Interns attend weekly meetings, special seminars, and have the opportunity to develop their presentation skills throughout the summer. The INSET program is hosted by the *California NanoSystems Institute (CNSI)*, a collaborative effort established by the State of California, situated on the campuses of UC Santa Barbara and UCLA, which targets the scientific and technological possibilities of working at the molecular scale. It is an integrative venture that calls upon expertise from a very broad scope of disciplines, including biology, chemistry, physics, engineering, materials science, computation, and media arts. The research at CNSI begins with nanostructure building blocks and determines new ways of seamlessly integrating those building blocks into new materials, devices and systems. By ‘mixing and matching’ components having different electronic, magnetic, optical, and structural properties, our ultimate goal is to create ‘designer materials’ and designer systems that will have capabilities far exceeding those found in nature.

**Eligibility Requirements:** This undergraduate research program is open to any science or engineering undergraduate student who: *(1)* is currently enrolled at or has transferred from a community college in California *(2)* Intends to enroll as an undergraduate in Fall 2007. (In other words, seniors graduating in June 2007 are not eligible) *(3)* is a U.S. citizen or permanent resident *(4)* has satisfied the following course/unit requirements: *(1)* semester unit = 1.5 quarter units *(5)* Completed a minimum of 12 semester units in science and/or engineering courses *(6)* Completed or currently enrolled in a minimum of 4 semester units of Calculus

**Program Assistance:** The stipend for undergraduate interns is $2,800 total for 8 weeks at 35 hrs/week. We will provide up to $800 for housing expenses, or arranged accommodations in university apartments for free. (Students will arrange their own meals.). Travel costs to and from the UCSB campus will be provided.

**Contact Information:**

Trevor Hirst, INSET program coordinator  
CNSI University of California  
Santa Barbara CA 93106-6105  
(805) 893-8564, hirst@cnsi.ucsb.edu
University of California, Santa Cruz
Center for Adaptive Optics
Summer Research Internship Program

URL: http://cfao.ucolick.org/EO/internshipsnew/mainland/index.php

Application Deadline: February 14, 2007

Program Description: The Center for Adaptive Optics (CfAO) Research Internship Program offers community college students and undergraduates from four-year universities an opportunity to get involved in CfAO research. Each student is matched with a research adviser and is integrated as a member of the adviser’s research group with daily guidance by a research supervisor. The program dates run from June 18-August 12, 2007.

Eligibility Requirements: This program is designed for students who are interested in pursuing a career in science, technology, engineering, or math (STEM) fields, and who have had to overcome barriers to achieve their educational and/or career goals. All students must be U.S. citizens or permanent residents, and be at least 18 years on 06-18-06. The CfAO is committed to increasing diversity in the sciences. Underrepresented groups (African Americans, Native Americans, Hispanics, Pacific Islanders, women and persons with disabilities) are strongly encouraged to apply.

Program Assistance: The CfAO will pay interns $3,000, plus housing, roundtrip travel from your home to the internship site, and travel for other scheduled activities.

Contact Information:
http://cfao.ucolick.org/EO/

Hillary O’Bryan
831-459-2676
hilary@ucolick.org

or

Malika Moutawakkil
Phone: 1 (831) 459-4688
E-mail: malika@ucolick.org
University of Connecticut  
College Summer Fellowship Program

URL: http://medicine.uchc.edu/

Application Deadline: March 1, 2007

Program Description: The purpose of the program is to provide a research enrichment experience and some exposure to clinical or dental medicine. The faculty develops, and makes available, suitable project descriptions from which students may select a research opportunity. The student will meet with the faculty sponsor and develop a research protocol in June. The student will commit approximately 30+ hours per week for the project and will work with the faculty sponsor or designates. The program is for ten weeks during the summer with flexible start and end dates.

Eligibility Requirements: Undergraduate college students who are interested in careers in dental medicine, medicine, and biomedical research. Students who are completing their junior year are given preference. Applicants should have completed some college coursework in biology and chemistry (preferably through organic chemistry). Previous laboratory experience is desirable. A variety of projects are available. Applicants must submit an application, transcript, standardized test scores, and two letters of recommendation. A $25 application fee should also be submitted.

Program Assistance: A $2,500 - 3,000 salary is provided. Assistance in locating housing is also provided.

Contact Information:

For more information, contact Robin Walsh at (860) 679-3971 or rwalsh@nsol.uchc.edu.

Summer Fellowship Program
UConn School of Medicine
Student Services Center
Room AG062
263 Farmington Avenue
Farmington, CT 06030-1905
University of Minnesota
Life Science Undergraduate Summer Research Program (LSSURP)

URL: http://www.cbs.umn.edu/main/summer_research/


Program Description: The University of Minnesota LSSURP oversees and coordinates five life sciences programs (Biomedical Engineering, Ecology & The Environment, NSF-REU Molecular Biology, NSF-REU Neuroscience, and Independent Research). The programs begin with a joint orientation weekend (May 31 through June 3, 2007), followed by participation in a 10-week research project under the direction of a University of Minnesota faculty mentor, and numerous special activities focused on professional development as well as social interaction. The summer research experience concludes with a poster symposium and banquet on August 10, 2007.

Eligibility Requirements: LSSURP is designed to recruit highly qualified students to the graduate and professional life science programs of the University of Minnesota. Underrepresented minority students are encouraged to apply. Eligible students are expected to have a G.P.A of 3.0 or higher, and must be citizens or permanent residents of the U.S or its possessions.

Program Assistance: Please review the Web site in question for specific details regarding the area of interest.

Contact Information:

University of Minnesota - TC
College of Biological Sciences - LSSURP
124 Snyder Hall (Delivery Code 6174)
1475 Gortner Avenue
St. Paul, MN 55108-1095

Phone: 1(612) 625-2275
Fax: 1 (612) 625-8256

E-mail: summer_research@cbs.umn.edu
University of North Carolina, Pembroke  
Research on Chemical and Radiation Sensors

URL: http://www.uncp.edu/chem_phy/research/reu.htm

Application Deadline: June 6, 2007

Program Description: Six undergraduate students (three from UNCP and three from regional community colleges) will participate in a program of experimental research and related professional activities in the area of chemical and radiation sensor development. The research activity is scheduled for the summer months (May 30 - August 4, 2007) and will be followed by presentation at a scientific conference in the 2007 academic years.

Eligibility Requirements: Please view online application for details.

Program Assistance: Students will receive a $3,500 stipend, free housing (if needed) for the summer period, a tuition waiver for the online course, and travel funds for conference attendance.

Contact Information:

Submit form and supporting documents to:

Prof. Paul Flowers  
Chemistry & Physics Department  
UNCP POB 1510 Pembroke, NC 28372-1510
URL: http://www.scec.org/education/college/internships/sure.html

Application Deadline: December 1, 2005 - January 31, 2006: Applications accepted online.

Program Description: For the twelfth consecutive summer, the Southern California Earthquake Center (SCEC) will coordinate undergraduate research experiences in summer 2007, bringing students with a broad array of backgrounds and interests to work as student interns with the world’s preeminent earthquake scientists and specialists. SCEC/SURE has supported students to work on numerous issues related to earthquake science including the history of earthquakes on faults, risk mitigation, seismic velocity modeling, affects that earthquakes have on natural resources (such as groundwater), science education, earthquake engineering, and many other areas. In 2002, the program expanded to include an Information Technology component, which has evolved into the SCEC/USEIT program. Students participate in interdisciplinary, system-level earthquake science, and SCEC-funded activities throughout the summer. Most internships are full-time, but we are willing to consider some half-time arrangements. SCEC/SURE interns are required to work with their research mentor 10 weeks, to attend the activities described above, to create a poster describing their research, and to present this poster at the SCEC annual meeting. The NSF REU program supports the program.

Eligibility Requirements: SCEC/SURE applicants must be U.S. citizens or permanent residents of the United States. Applicants must also be continuing undergraduate students. SCEC’s mission spans a broad range of expertise and so does SCEC/SURE. Therefore, we welcome applicants from all disciplines.

Program Assistance: SCEC/SURE interns are each paid a stipend of $5,000 for the summer. Up to $300 will be provided toward travel expenses related to the intern program, and an additional $800 to put toward housing expenses (but SCEC/SURE interns are responsible for their own food and other living expenses).

Contact Information:
SURE Program Manager
Mark Benthien
SCEC Director for Communication, Education, and Outreach
e-mail: benthien@usc.edu

Important!!! If we offer you an internship, you will have two weeks to accept or decline. We understand that you may be applying to multiple summer programs and we want you to find the one that best suits you. We strongly encourage you to do fact-finding early, and decide -- well before February -- what you will do if you receive multiple offers.
University of Southern California
SCEC Undergraduate Summer in Earthquake Information Technology

URL:  http://www.scec.org/education/college/internships/useit.html

Application Deadline: December 1, 2006 - January 31, 2007: Applications accepted online.

Program Description:  The SCEC Undergraduate Summer in Earthquake Information Technology (SCEC/USEIT) unites 20 students from colleges and universities across the country to participate in a leading edge program at SCEC headquarters at the University of Southern California (USC). SCEC/USEIT interns interact in a structured yet flexible, team-oriented research environment and are mentored by some of the nation's most distinguished geoscience and computer science researchers. The name and the acronym communicate the central goals of the program, which are threefold: (1) To allow undergraduates to use, hands-on, the advanced tools of information technology (IT) to solve important problems in interdisciplinary earthquake research; (2) to close the gap between two fields of undergraduate study--computer science and geoscience--by cross-training students in the modes of understanding distinct to these disciplines; and (3) to engage non-geoscience majors in the application of earth science to the practical problems of reducing earthquake risk, and thereby inform students with diverse backgrounds how their classroom skills can be applied to significant social issues. SCEC/USEIT interns work 10 weeks. USEIT interns may take up to one week off during other portions of the summer.

Eligibility Requirements:  Summer 2007 USEIT applicants must be U.S. citizens or permanent residents of the United States. Applicants must also be continuing undergraduate students. SCEC’s mission spans a broad range of expertise and so does USEIT. While the majority of our interns have considerable computer programming skill or aptitude, we welcome applicants from all disciplines. We are particularly interested in additional students with strong graphics, visualization, and cinema experience.

Program Assistance:  SCEC/USEIT interns are paid a stipend of $4,000 for the summer ten-week program—the stipend is expected to cover food and incidentals. Check for information about housing accommodations.

Contact Information:

SCEC/USEIT Program Manager
Sue Perry
Manager, Earthquake Information Technology Student Programs
e-mail: perry@usc.edu
U.S. Department of Energy (D.O.E.)
Science Undergraduate Laboratory Internship

URL: [http://www.scied.science.doe.gov/scied/erulf/about.html](http://www.scied.science.doe.gov/scied/erulf/about.html)

Application Deadline: *March 1, 2007*

**Program Description:** This program places students in paid internships in Science and Engineering at any of several Department of Energy facilities. Many of the participants in the program have decided on a career in science and engineering because of the nature of the experience. Students work with scientists or engineers on projects related to the laboratories' research programs. The different laboratories each offer different research opportunities. The summer programs at the various laboratories will run from late May to mid-August, fall programs run from August through December and spring programs from January through May. The exact start date will depend on the laboratory and will be given to participants who have been accepted at that specific laboratory. Students are required to participate for the full term of the program. The program is for 10-weeks in May through August. Expect more than 8 hours: 40+hrs/wk in activities and/or research related to internship.

**Eligibility Requirements:** Applicants must be currently enrolled as an undergraduate student and completed at least one college semester. Students who will complete their undergraduate degree prior to starting their internship may apply as graduating seniors. Students must be 18 years or older at the start of the program. Students must be a U.S. citizen or permanent resident, and must have earned a high school diploma or GED. Students can participate in a maximum of two SULI internships, and must have coverage under a health insurance plan. It is the responsibility of each participant to secure insurance coverage before arriving at the appointment site. Students attending a community college are encouraged to apply to the Community College Institute for Science and Technology first, in order to be eligible for the maximum number of internships; however, community college students are also eligible to apply for the Science Undergraduate Laboratory Internship

**Program Assistance:** The stipend is $400.00 per week. Round trip costs to the lab are provided for students who live more than 50 miles from the lab (some restrictions apply). Details regarding housing vary from lab to lab. A housing allowance is available for interns at labs that do not provide housing arrangements. Information regarding housing will be provided to accepted interns prior to arriving at the lab. No tuition or fees are paid to your university.

**Contact Information:**
Todd Clark: Todd.Clark@science.doe.gov
202-586-7174
Ebony Sails: Ebony.Sails@science.doe.gov
202-586-9770
Sue Ellen Walbridge: Sue-Ellen.Walbridge@science.doe.gov
202-586-7231
Wabash College
Wabash Summer Institute in Algebra

URL: http://www.wabash.edu/academics/math/wsia

Application Deadline: Pending

Program Description: The Wabash Summer Institute in Algebra (WSIA) is an eight-week research experience in abstract algebra for undergraduates. Participants will explore three diverse areas in abstract algebra and conduct original research in small teams in one of these areas. In addition, participants will engage in seminars designed to investigate the ethics of research.

Eligibility Requirements: Student must be an undergraduate and U.S. citizen or resident. Student must also have taken math courses up to abstract algebra.

Program Assistance: Participants will receive a stipend of $2,400 and free lodging for the eight weeks.

Contact Information:

WSIA c/o Prof JD Phillips
Dept. of Mathematics and Computer Science
Wabash College
P.O. Box 352
Crawfordsville, IN 47933-0352

For additional information, please contact JD Phillips at 765-361-6431 or phillipj@wabash.edu