

**The National Society of Black Engineers**



**National Academic Excellence Committee**

**I** ncreasing  
**M** inorities  
**A** ttaining  
**G** raduate  
**E** ducation



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# **The National Society of Black Engineers**



## **National Academic Excellence Committee**

**Dear NSBE Member,**

This handbook contains information on summer research opportunities that are available in 2002 to students studying in engineering, science, and related fields. Deadlines may vary or have changed from those given here so please check directly with the program or contact person when verifying information. This handbook does not provide an all inclusive list of the opportunities available; it is intended to provide students with a start, so please continue to research opportunities on your own. If any of these opportunities are no longer available or if you have found additional opportunities not listed here, please notify either your regional or national Academic Excellence Chair.

Yours in NSBE,

**The National Academic Excellence Committee**

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## National Academic Excellence Committee

### *Summer Undergraduate Program in Engineering Research at Berkeley*

The Summer Undergraduate Program in Engineering Research at Berkeley (SUPERB) offers outstanding underrepresented engineering students the opportunity to gain research experience by participating in research projects with engineering faculty and graduate students. Upon completion of this program students will be better prepared and motivated to attend graduate school. SUPERB is targeted to students of color, first-generation college students, educationally disadvantaged students, or students from historical minority institutions.

#### Eligibility:

The program targets students who have completed some upper division coursework in one of the following disciplines: Bioengineering and related Bioengineering disciplines, Civil Engineering, Electrical Engineering & Computer Sciences, and Mechanical Engineering. Even though it is not discouraged for all levels to apply, juniors and seniors will receive first consideration.

#### Awards:

SUPERB awardees will spend eight weeks on UC Berkeley's campus during the summer to work on a research project in their area of interest. Each participant will have a faculty and graduate student mentor who will supervise their work and provide guidance. Participants will receive a \$3,000 stipend, room and board in university housing, and up to \$600 for travel expenses.

#### Date of Appointment:

June - August, 2002

For more information visit [www.coe.berkeley.edu/cues/superb/](http://www.coe.berkeley.edu/cues/superb/) or contact:

Marie Mayne  
SUPERB Program  
312 McLaughlin Hall, College of Engineering  
Center for Underrepresented Engineering Students (CUES)  
University of California, Berkeley  
Berkeley, CA 94720-1702  
(510) 642-1734, Fax: (510) 643-5600  
email: [mayne@coe.berkeley.edu](mailto:mayne@coe.berkeley.edu)

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### ***The Summer Undergraduate Research in Engineering/Science Program at Georgia Tech***

SURE is a ten-week summer research program designed to attract qualified minority students into graduate school in the fields of engineering and science. Approximately thirty students of at least junior-level undergraduate standing are recruited on a nationwide basis and paired with both a faculty and a graduate student mentor to undertake research projects in the College of Engineering, College of Sciences, and the Packaging Research Center. The students are housed on campus, and in addition to a \$500 travel allowance, are provided with a meal plan and a \$4,000 stipend. Aside from their own research projects, the participants are provided with a series of seminars and field trips to expose them to the various topics of interest, both at Georgia Tech and in the Atlanta area.

At the conclusion of the program, the students prepare both oral and written summaries of their research projects. The program has received highly favorable evaluations from the past participants. It is hoped that this unique experience will encourage these students to become applicants for graduate school in ensuing years.

For more information, visit the webpage at  
<http://users.ece.gatech.edu:80/~gmay/sure.html>

Note: Dr. Gary May, the program director, served as National Chair of NSBE and is currently the National Advisory Board Chair.

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### *Massachusetts Institute of Technology*

The Massachusetts Institute of Technology offers a summer research program for students interested in mathematical, physical, and biological sciences. Participants work for 10 weeks in MIT laboratories under the direction of scientists and engineers. The program provides a stipend, travel expenses and housing. Students must have completed their sophomore year with at least a B average, have a genuine interest in research and teaching as a career in mathematics or the physical or biological sciences, and be from one of the following ethnic groups: African American, Native American, Mexican American or Puerto Rican. For more information and application materials, contact:

Massachusetts Institute of Technology  
Summer Research Program  
Graduate Education Office  
Room 3-138  
Cambridge, MA 02139-4307

or contact:

Dean Roy Charles  
MIT 3-138  
77 Massachusetts Ave.  
Cambridge, MA 02139  
(617) 253-9462  
E-mail: [mit-srp@mit.edu](mailto:mit-srp@mit.edu).

Number of Positions: 25-40

Deadline: **mid December**

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### *Colgate-Palmolive*

Colgate-Palmolive offers a Corporate Technology Summer Program for college juniors and seniors to learn within a corporate setting. Participants are responsible for a research project under the guidance and support of a mentor.

The program provides compensation for the work and dormitory housing at reasonable cost. The program is open to students majoring in chemistry, biochemistry, life sciences, polymer science, chemical engineering, mechanical engineering, and packaging engineering. To apply, send a resume, transcripts, and recommendation letter to:

Summer Internship Program  
Colgate-Palmolive Company  
Code S1-MG  
909 River Rd.  
P.O. Box 1343  
Piscataway, NJ 08855-1343  
(732) 878-7936, fax (732) 878-7443.

Number of Applicants: 500-600. Number of Positions: 12-15.

Deadline: **March 2002.**

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#### *Environmental Careers Organization*

ECO hires college juniors and seniors to work as environmental interns. Interns assist in shipboard research, perform laboratory tests on core samples, and participate in computer analysis of core and acoustic data. The internship runs for 12 weeks and pays \$300-\$600 per week. Interns generally have backgrounds in engineering (civil, environmental, or chemical); environmental health/industrial hygiene; computer science; a biological science, earth science, or physical science; environmental science; planning and public administration, or related fields. Applicants should have an excellent academic record, good computer skills, and experience in laboratory analysis. For more information, contact:

Environmental Careers Organization  
286 Congress St., 3rd Floor  
Boston, MA 02210

#### *GTE Laboratories, Inc.*

GTE Laboratories offers Industrial Undergraduate Research Participation Projects. Projects run for 10 weeks. Participants receive a stipend of \$330 per week, along with room and board at a local university, and travel expenses. Students must participate in a minimum of 40 hours per week. The following positions have been available to mathematics students in the past:

- Traffic Analysis in telecommunications. Knowledge of C is required.
- Provisioning of high-speed asynchronous transfer mode (ATM) networks.
- Wireless usage analysis. Experience with DOS is helpful.
- Application of discrete choice models to user interface design.
- UNIX/Mac/Newton shell.

Applicants must have finished their sophomore year in college with a GPA of 3.0 or better. For more information and application materials, contact:

Hida Khamsi  
GTE , IURP-98 Office  
40 Sylvan Rd.  
Waltham, MA 02254

Current projects and additional information are available at  
<http://lab.gte.com/iurp>. Number of Positions: 16. Deadline: **March 2002**.

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#### *John F. Kennedy Space Center--NASA.*

NASA sponsors a six-week Space Life Sciences Training Program that is conducted by the Kennedy Space Center and Florida A&M University. The program is for college students interested in life sciences, bioengineering, or related fields. Participants gain insight into how space life sciences flight experiments are conducted, as well as explore current and future research opportunities. A stipend is paid. Applicants must be in one of the following majors: Animal Sciences, Biochemistry, Biology, Biophysics, Biostatistics, Chemistry, Computer Science, Ecology, Engineering, Environmental Science, Geology, Health Science, Life Sciences, Mathematics, Pharmacy, Physics, Plant Sciences, Psychology. For application materials, contact:

Program Director, Space Life Sciences Training Program  
Florida A&M University  
College of Pharmacy and Pharmaceutical Sciences  
106 Honor House  
Tallahassee, FL 32307, (850) 599-3636

Number of Applicants: 500. Number of Participants: 40.

Deadline: **end of January**

#### *Lincoln Laboratory, Massachusetts Institute of Technology.*

The laboratory hires students in their Summer Internship Program that have completed their sophomore year to work as technical assistants in designing hardware, programming scientific instruments, and providing technical support. Technical assistants work for 10 paid weeks and housing is subsidized. Applicants should have a background in electrical engineering, physics, or computer science, and a minimum GPA of 3.0. Eligible minority groups include: African American, Hispanic, Mexican, Puerto Rican, and Native American. U.S. Citizenship required. For more information and application materials visit [www.ll.mit.edu](http://www.ll.mit.edu) under career opportunities => summer programs => Application or contact:

Paul F. Hezel  
MIT Lincoln Laboratory  
244 Wood St.,  
Lexington, MA 02173-9108  
(781) 981-7048

Number of Applicants: 40-50. Number of Positions: 7-8

Deadline: **early March**

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### *Lunar and Planetary Institute--NASA Johnson Space Center*

The Institute invites students in the geosciences, physics, chemistry, engineering, computer science, and mathematics who have completed at least 50 hours of credit to participate in lunar/planetary research with scientists at the Institute and the NASA Johnson Space Center. The program runs for 10 weeks. Participants receive a stipend and a travel allowance. Selection is based on scholarship, curriculum, and experience; career objectives and scientific interest; and a match between the interests of the applicant and available research projects. To apply, send the following information:

- (1) name, address, and day and evening telephone number where you can be reached; permanent address and telephone number; school, class, GPA (A=4.0); Fall semester courses and GPA--if not available on the transcript; Date on which your spring semester ends; major field of study, three areas of interest from the potential areas of research listed above or from other areas of scientific research, and rank these from 1 to 3; information regarding relevant work experience or training (summer jobs, research assistantships, computer use or programming, photographic darkroom experience, specific instrumentation experience, etc.)
- (2) a brief biographical sketch
- (3) a description of academic goals, career plans, and scientific interests
- (4) a brief summary of why you wish to participate in the intern program; (5) official transcripts and three letters of recommendation covering academic achievement, career potential, and character (ask those providing references and transcripts to mail these directly to LPI to be received by the application deadline)

Send materials to:

LPI Summer Intern Program  
3600 Bay Area Blvd.  
Houston, TX 77058-1113

Questions can be addressed to Cecilia M. Hoelscher at (281) 486-2196 or [hoelscher@lpi.jsc.nasa.gov](mailto:hoelscher@lpi.jsc.nasa.gov),

Updated information available: [www.LPI.usra.edu/lpiintern.html](http://www.LPI.usra.edu/lpiintern.html)

Number of Applicants: 150-170. Number of Positions: 12.  
Deadline: **early February**

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### *McDonnell Douglas*

McDonnell Douglas Aerospace (MDA) offers a Student Development Programs (SDP) for engineering junior and seniors. Participants work in the high-tech environment of one of McDonnell Douglas' divisions, including:

- McDonnell Aircraft Co.
- McDonnell Douglas Training Systems Co.
- McDonnell Douglas Aerospace Information Services Co.
- McDonnell Douglas Electronic Systems Co.
- McDonnell Douglas Missile Systems Co.
- McDonnell Douglas Corporate Office

Electrical and computer engineering students may apply for the following positions:

- Software Engineer--design, develop, and test computer systems, software, and firmware;
- Technology Engineer--research, analyze, develop radar, lasers, flight controls, design computer, communications, guidance, and other avionic/electronic systems;
- Test Engineer--evaluate, test, and integrate avionic/electronic systems;
- Manufacturing Engineer--N/C controls, robotics, process technology, CAM, tool design, etc.;
- Design Engineer--design digital and analog circuits for electronic support an test equipment; design, develop, and integrate crew stations, power subsystems, instrument panels.

Aeronautical engineering students may apply for the following positions:

- Technical Engineer--analytical assignments including aerodynamics, propulsion, structures, guidance and controls, etc.;
- Design Engineer--develop and integrate structural, mechanical, power, and fluid subsystems;
- Test Engineer--test and evaluate wind tunnel models, full-size vehicles, flight simulation programs.

Mechanical engineering students may apply for the following positions:

- Design Engineer--structural, mechanical, equipment, and hydraulic subsystem design; liaison, flight simulation systems, and electronic packaging design;

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- Test Engineer--test and evaluate materials, structures, subsystems, and full-size vehicles;
- Manufacturing Engineer--production planning and scheduling, tool design, and materials research and development;
- Technical Engineer--analytical assignments involving structures, material and process development, thermodynamics, reliability, propulsion.

Civil engineering students may apply to work in the analysis, design, development, and testing of A/C structures, and the design and layout of computing facilities.

Industrial engineering and industrial technology students may apply to work in assignments in manufacturing methods, systems, production planning facilities, estimating and quality assurance.

For more information and application materials, contact:

Student Development Programs  
McDonnell Douglas  
P.O. Box 516,  
Mailcode 2741130  
St. Louis, MO 63166

Deadline: **January 31, 2002**

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### *Motorola*

Motorola offers a summer internship program to engineering students. The program provides participants with a salary, travel expenses, and a housing allowance for out of state students. Engineering interns work on assignments including (but not limited to): analog/digital/RR circuit design; development of hardware and software communication systems; design, modification implementation, and maintenance of applications software; and the mechanical design of product. Students may apply to three different locations. To apply, send a resume, transcript, and letter of reference to:

Staffing Department  
8000 W. Sunrise Blvd.  
Ft. Lauderdale, FL 33322  
(954) 723-6477, fax (914) 723-5560; 1-800-327-0415

Number of Participants: 100

Deadline: **mid February.**

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### *National Renewable Energy Laboratory/Department of Energy*

NREL, jointly with the DOE and Association of Western Universities, offers summer internships to junior and senior college students. Applicants must be studying mechanical engineering, physics, chemistry, biochemistry, electrical engineering, and environmental science. NREL programs include:

- Materials Science and Engineering (Photovoltaics, Solar Radiation Research and Measurement)
- Mechanical and Industrial Technology (Thermal, Buildings, and Wind Research)
- Fuels and Chemicals Research and Engineering (Chemical and Biological Science)
- Energy and Environmental Analysis (Energy Policy, Planning and Economics)

Interns receive a stipend and travel expenses. Required application materials include: a list of colleges attended and cumulative, a resume indicating professional interests and career goals, copies of transcripts, letters of recommendation, and a statement of interest that includes relevant research experience. For more information and application materials, contact:

Human Resources Office  
National Renewable Energy Laboratory  
NREL, 1617 Cole Blvd.  
Golden, CO 80401-3393

Deadline: **Second week of March**

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### ***National Science Foundation, Division of Astronomical Sciences: Research Experiences for Undergraduates (REU) Sites***

Sponsored by the National Science Foundation, specific sites provide undergraduate students with research experiences during the summer. The research conducted at these sites primarily focuses on topics in astronomy and astrophysics. Several sites also conduct research in physics and engineering. Contact the individual sites for current research opportunities.

### ***National Science Foundation, Engineering Directorate: Research Experiences for Undergraduates (REU) Sites***

Sponsored by the National Science Foundation, specific sites provide research opportunities for undergraduate students during the summer. Contact the individual sites for information on current opportunities.

### ***National Science Foundation. Division of Materials Research, Materials Research Science and Engineering Centers and Materials Research Laboratories***

Funded by the National Science Foundation, the Materials Research Science and Engineering Centers and Materials Research Laboratories conduct broad-ranging studies in all areas of materials research, including condensed matter physics. Specific Centers or Laboratories hire undergraduates each summer to join the research projects. Contact the individual sites for information on opportunities.

**For more information please go to [www.nsf.org](http://www.nsf.org) and search under summer research or REU.**

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### *Princeton Plasma Physics Laboratory*

The Department of Energy began the National Undergraduate Fellowships in Plasma Physics and Fusion Engineering to provide outstanding undergraduate students in US colleges and universities an opportunity to participate in projects in the forefront of research and development of fusion energy. Funding supports a 10 week program for 25 students with each receiving a stipend of \$4,800 and travel expenses of up to \$1,000. Students' housing and meals during the first week of the program are provided. For more information and application materials, contact:

Science Education Program  
Princeton Plasma Physics Laboratory  
P.O. Box 451  
Princeton, NJ 08543  
(609) 243-2116

Number of Applicants: 200. Number of Positions: 25

Deadline: **February 2002**

### *Woods Hole Oceanographic Institute*

the2002SummerStudent

Fellowship/Minority Fellowship Program at Woods Hole Oceanographic Institution. Summer Student and Minority Fellowships are awarded to undergraduate students with at least a tentative interest in the ocean sciences. Summer Student Fellows must have completed their junior or senior year of studies at their undergraduate institution. Fellowships are awarded to pursue an independent research project, chosen by the fellow, under the guidance of a member of the Research Staff. This program has been very popular and, consequently, very competitive, with an average of about ten percent of the applicants receiving awards. More information regarding all of our educational programs is available online at <http://www.whoi.edu/education/>.

The deadline for applications for the Summer Student Fellowship/Minority Fellowship Program will be February 15, 2002. Our 2002 applications are not yet available. Downloadable applications will be available in October, 2001 via the web at [http://www.whoi.edu/education/undergraduate/summer\\_application.html](http://www.whoi.edu/education/undergraduate/summer_application.html)

For more information, contact (508) 289-2709 or (508) 289-2950.

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### ***CIC Summer Research Opportunities Program***

Minority undergraduates are invited to apply for a summer program designed to prepare them for graduate study and faculty careers. Eligible applicants are African Americans, Native Americans, Mexican Americans and Puerto Ricans who are sophomores or juniors majoring in any field. During the eight-to-ten week summer session, students work on a research project guided by a faculty mentor and are able to explore a topic of interest at one of 15 host CIC universities in Illinois, Indiana, Iowa, Ohio, Wisconsin, and Minnesota. Each student receives a stipend of at least \$2,500 for the summer, plus up to \$1,100 toward board and travel to and from the host institution. The faculty mentor may receive \$500 toward the cost of the student's research project.

### ***The FASEB/MARC Minority Faculty/Student Summer Fellowships Program***

The FASEB/MARC Minority Faculty/Student Summer Fellowship Program is funded by the Minority Access to Research Careers (MARC) Programs through the National Institute of General Medical Sciences (NIGMS). One of the most successful MARC activities for talented minority students is the summer internship at major research laboratories. The objective of these activities is to develop better teaching and research programs at minority institutions. FASEB has enhanced this objective by providing an opportunity not only for MARC students, but for their faculty research advisers as well, to jointly visit and learn new research techniques at prominent research laboratories during the productive summer "recess". Through the FASEB/MARC Minority Faculty/Student Summer Fellowships Program a host institution will be able to tailor experiences to the interests and abilities of the minority pair, for example:

- A host institution might share parts of research programs that can best be done by the students with proper supervision.
- A minority scientist would have the opportunity to work in an intense and state-of-the-art science research environment, learn new techniques, and conduct experiments not possible at the home minority institution.
- The summer program might offer the opportunity to investigate hypotheses, from the mind's eye to the bench, by providing access to advanced instrumentation, e.g., brain imaging techniques, electron microscopy, x-ray crystallography.

It is FASEB's goal that the educational experiences and research opportunities provided to the minority faculty/student pair will lead to continuing collaborations between faculty at minority institutions and major research laboratories, in addition to enhancing the ability of the faculty member and student to work more productively as a research team.

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FASEB currently provides funding for 2 faculty/student pairs from minority institutions to visit a major research laboratory or institution to learn/update research techniques during the summer months. Faculty/student pairs from minority institutions that hosted a FASEB Visiting Scientist from the FASEB/MARC Visiting Scientists to Minority Institutions Program within the past two years are eligible to apply for these summer fellowships and scholarships.

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### *Spring 2001 Energy Research Undergraduate Laboratory Fellowship (ERULF) and Student Research Participation Programs*

The U.S. Department of Energy is directly sponsoring research participation programs at Argonne as well as 18 other DOE facilities. The Division of Educational Programs (DEP) serves as the interface between the Department of Energy, Argonne National Laboratory (ANL) and the academic community. Within ANL are unique capabilities which afford numerous opportunities for domestic and international participants interested in energy research and training in science and technology. DEP remains a full partner with scientific divisions at ANL in identifying and providing educational opportunities for persons at all educational levels. It continues to make serious investments in expanded opportunities, for career pursuits by all, including women, people of color, economically disadvantaged and those with disabilities. While the focus of the programs is primarily on individuals, DEP collaborates with several universities, colleges, technical institutes, informal educational centers, consortia, and the pre-college community. In support of the educational mission of ANL, DEP presents this information. The intent is to promote, develop, and facilitate educational and research interactions among ANL and interested institutions, organizations and agencies. The intended periods of program activity are the spring semester and summer of 2002. Your participation in programs described is invited and encouraged.

Harold Myron  
Division Director  
Division of Educational Programs  
(630) 252-4114  
hmyron@dep.anl.gov

Application Deadline: **October 1, 2001**

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### *University of Oklahoma REU*

The University of Oklahoma's Human Technology Interaction Center (HTIC) has been funded by the National Science Foundation (NSF) to provide an interdisciplinary Research Experience for Undergraduates (REU) on human-technology interactions. Research fields in this program include:

Cognitive psychology  
Communications  
Social psychology  
Industrial engineering  
Computer science  
Library information studies  
History of science

#### ACTIVITIES

Students will participate in Research (approx. 20 hours per week)- You will work closely with a faculty member in one of the departments (listed above) that are associated with the HTIC.

- Team Research (approx. 10 hours per week) - You will participate in collaborative research with scientists and engineers from other disciplines.
- Collective Activities (approx. 10 hours per week) - You will attend activities like seminar series, workshop series, and special events.

#### STUDENT REQUIREMENT

1. Applicants may be at any level of undergraduate training, but preference will be given to those entering their 2nd or 3rd year.
2. Although this intensive research experience involves modern technologies, the successful applicant need not have had much research experience nor be technically sophisticated.
3. A keen interest in conducting research on human-technical systems, maturity, and an open-mindedness for multiple perspectives is sought.
4. Women and minorities are highly encouraged to apply.
5. The internship is a 40 hour a week commitment and may obligate the intern to some evening and weekend hours. Interns are prohibited from committing to other employment concurrent with the internship.
6. Undergraduate student participants supported with NSF funds must be citizens or permanent residents of the United States or its possessions. An undergraduate student is a student who is enrolled in a degree program (part-time or full-time) leading to a

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bachelor's degree. Students who are transferring from one institution to another and are enrolled at neither institution during the intervening summer may participate. High school graduates who have not yet enrolled and students who have received their bachelor's degrees and are no longer enrolled as undergraduates generally are not eligible.

DATES OF : June 1 - July 26

COMPENSATION: \$2000 + lodging/food

#### LODGING/FOOD

Interns will stay at the University's two-bedroom, furnished apartments. The complex has swimming pool and tennis courts and it is also conveniently located to the myriad of athletic opportunities OU provides. Mass transit is available, as is plentiful parking for those choosing to bring a vehicle. Students will be provided a pre-paid cafeteria meal plan. Limited funds are available to help off-set travel to the REU. Request for funds should be included in the application.

APPLICATION: Application forms and information regarding the Summer Research Experience may be obtained from:

Dr. Randa L. Shehab  
Human-Technology Interaction Center  
School of Industrial Engineering  
202 West Boyd, Room 124  
University of Oklahoma  
Norman, OK 73019

Deadline: **April 1**

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### *Research Experiences for Undergraduates in Lasers and Optics*

The Center for Research and Education in Optics and Lasers (CREOL) is pleased to announce that it is planning to run a National Science Foundation sponsored program of Research Experiences for Undergraduates (REU) during the summer of 2000. This is the ninth REU program sponsored by CREOL/NSF. The students selected for this program will have the opportunity to perform research projects alongside some of the world's foremost laser and optics researchers. The projects cover a range of topics in both science and engineering, including solid-state laser materials growth and spectroscopy, high energy/short pulse laser development, laser produced plasmas, optical signal processing, and optical switching circuits. Additionally, the REU participants will take specially designed short courses in Optics, Lasers and Interaction of Light with Matter. Other activities include weekly seminars, industrial visits, a course in Ethics in Research, and "round table" discussions between the REU participants and organizers. Some students will have the possibility of attending a national laser and optics conference. An International REU in Optics and Lasers is also being sponsored by CREOL and NSF. Students in this program will spend 12 weeks in a French laboratory.

Schedule: The summer program is expected to run from May 23 to August 11 (subject to revision). Stipends for the summer are expected to be \$3,800 with either accommodations provided or an allowance for housing. Some travel expenses are also available. The program is open to all students pursuing majors in science and engineering, but two semesters of Physics and Calculus are required (Juniors and Seniors majoring in Physics or Electrical Engineering will be most suited to the program.). A minimum GPA of 3.5/4.0 is recommended, but not an absolute requirement. Participants will be selected on the basis of academic merit, personal references and suitability for the program. Women, minorities, and persons with disabilities are especially encouraged to apply. This program is open to US citizens and permanent residents only.

For further information contact:

Dr. David Hagan  
Director, Summer Undergraduate Program  
School of Optics/CREOL  
University of Central Florida  
P.O. Box 162700  
Orlando, FL 32816-2700  
Telephone (407) 823-6800  
Fax (407) 823-6880  
Email: [hagan@creol.ucf.edu](mailto:hagan@creol.ucf.edu)

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### ***Undergraduate Research at Baylor College of Medicine at Rice University***

#### ***Biomedical Engineering***

<http://www.bcm.tmc.edu/smart>

Baylor College of Medicine (Feb 1, 2002)

The SMART program is a summer research program offered through the Baylor College of Medicine at Rice University. It is designed to give participants an experience with biomedical engineering and is geared for undergraduates with an interest in pursuing a PhD. Internships last a full 9 weeks and the start date is flexible depending on when the student's university ends for the summer. Participants will receive compensation pay of \$3000 - \$4000. The program includes a daily seminar, career counseling, and various social and cultural activities. Students should have sophomore or junior status with some background in biology and chemistry and a GPA > 3.0. We only require previous research experience of freshman. Please visit the web site for more information. Contact person: Dr. Gayle Slaughter.

### ***The Summer Undergraduate Research Experience (SURE) Program Biological and Chemical Sciences – University of North Carolina – Chapel Hill***

<http://www.med.unc.edu/pmbb/sure.htm>

UNC Chapel Hill (Feb1, 2002)

The Summer Undergraduate Research Experience Program provides opportunities for students to carry out independent research projects under the guidance of UNC faculty mentors. Students learn the latest methodologies in biological research while improving observation and communication skills. SURE is intended for students with a genuine desire to pursue careers in experimental research in the biological and chemical sciences. Students contemplating other occupations in which familiarity with experimental science would be valuable, e.g., science teaching, are encouraged to apply. Participants will receive a stipend of \$2500 and an allowance toward travel expenses. Housing and meals will be arranged and pre-paid by the Program. Preference is given to individuals completing their junior year, although students of other standing expressing persuasive plans for research or science-related careers will not be excluded from consideration.

Applications can be downloaded from the following web site: New Roman

<http://www.med.unc.edu/pmbb/apps.html> contact; Dr. Howard Fried@med.unc.edu  
919-962-8920

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#### ***Summer Research Programs; University of Minnesota***

[http://www.cbs.umn.edu/summer\\_research/AllPrgm.html](http://www.cbs.umn.edu/summer_research/AllPrgm.html)

Summer Research Programs; University of Minnesota (Feb 15, 2002)

Over 200 undergraduates have the opportunity to participate in summer research in a wide range of science and engineering disciplines at the University of Minnesota-Twin Cities. Approximately 1,500 faculty in basic and applied sciences are potential mentors to help students conduct independent research in these ten-week programs. In addition to a research experience, these programs provide structured learning experiences and emphasize the formation of a strong community through program activities, residence-hall housing, and social activities. Workshops on becoming a master graduate student, seminars for enhancing oral presentation skills, and assistance in preparing professional-quality posters, research abstracts, research papers, and personal statements are among the enrichment activities provided. Organized outings and social gatherings acquaint students with the cultural resources of the University and the Twin Cities. Depending on the specific program, participants must either be U.S. citizens, non citizen nationals of the U.S. (persons born in outlying U.S. possessions, i.e., American Samoa and Swains Island), lawfully admitted permanent residents, or holders of F1 or J1 visas for study at U.S. colleges/universities at the time of preparing and submitting an application. Please visit the web page listed above for more information about specific programs. Programs available: biomedical engineering, computational neuroscience, electrical and computer engineering, life sciences, physics, psychology, chemistry

Summer Undergraduate Research Programs

University of Minnesota - Twin Cities, College of Biological Sciences

Comments? Questions? write to [summer\\_research@cbs.umn.edu](mailto:summer_research@cbs.umn.edu).

Last updated 9/26/2001 [http://www.cbs.umn.edu/summer\\_research](http://www.cbs.umn.edu/summer_research)

#### ***AT&T Undergraduate Research Program; New Jersey***

<http://www.research.att.com/academic/urp.html>

AT&T Undergraduate Research Program; New Jersey (December 1, 2001)

Candidates are selected on the basis of academic achievement, personal motivation, and the compatibility of their interests with current AT&T Labs activities. Those selected are assigned to projects which reflect their background and future goals. Candidates should be available for 10 weeks beginning in early June. They are paid a salary commensurate with other AT&T Labs employees of similar education and experience. You will be reimbursed for your air or ground travel expenses to New Jersey. We will arrange living accommodations at a nearby college for participants who want to make use of them.

We'll also provide bus transportation between these campus housing facilities and AT&T

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Labs. You are free, though, to make your own arrangements for room, board, and transportation, if you so desire. Applications are available through the Internet or a paper version can be requested by submitting a letter of interest directed to the following address:

AT&T Labs  
Undergraduate Research Program Administrator  
Room D32-A04  
200 Laurel Ave  
Middletown, NJ 07748

#### *Summer Honors Undergraduate Research Program- Harvard Medical School*

<http://www.hms.harvard.edu/dms/diversity/shurpintro.html>

Summer Honors Undergraduate Research Program- Harvard Medical School 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 cardio-pulmonary functions and pathology, studies of blood cells, causes and treatment of high blood pressure, immunology, microbiology, molecular biology, receptor structure and functions, transmembrane signaling mechanisms, study of clotting mechanisms, and virology. 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 at least \$290/week for 10 weeks, and health insurance if it is needed. The 2002 Program is scheduled to run from June 9 through August 18, although arrival and departure dates of one week earlier or later may be arranged in a few cases if necessary. Students are expected to participate for the full ten weeks of the Program. Applications are available online or inquiries can be made to the following persons:

Jocelyn Spragg, Ph.D., Ed.M., Faculty Director, Minority Programs, Division of Medical Sciences, at 617-432-1342, or Mara Edmondson, SHURP Staff Assistant, Division of Medical Sciences, at 617-432-4980

#### *Research Experience for Undergraduates - National Science Foundation*

<http://www.nsf.gov/home/crssprgm/reu/>

Research Experience for Undergraduates - National Science Foundation (Varies) The National Science Foundation makes possible a number of opportunities for undergraduates to join research projects each summer. This allows students to experience first-hand how basic research is carried out, and to contribute consequentially. The principal support by NSF of such activities is through the Research Experiences for

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Undergraduates Program. Programs are available in many different disciplines. Interested applicants should visit the above web site for information and links to all REU locations sponsored by the NSF. Deadlines, qualifications, and program availability at individual sites may vary.

#### *DOE Energy Research Undergraduate Laboratory Fellowship Program (ERULF) and Student Research Participation Programs*

<http://www.dep.anl.gov/highered/summr.htm>

DOE Energy Research Undergraduate Laboratory Fellowship Program (ERULF) and Student Research Participation Programs; (Feb 1, 2002)

The U.S. Department of Energy's (DOE) Argonne National Laboratory, a major research center, is pleased to announce opportunities for college and university undergraduate students to participate in the Laboratory's ongoing research programs. In addition to such opportunities, the U.S. Department of Energy is directly sponsoring research participation at other DOE facilities. At Argonne, college/university students may obtain research experience through the Department of Energy's Energy Research Laboratory Fellowship Program or the Student Research Participation Program. To apply for the program at Argonne or another DOE Laboratory, you submit an application at color <https://www.scied.science.doe.gov/erulf/index.htm> which is the Department of Energy web site for this undergraduate program. Grade point average of at least 2.5 on a 4.0 scale; U.S. citizen or permanent resident alien status; sophomore, junior, or senior enrolled in a U.S. college or university. \$400.00 per week plus housing or housing allowance

#### *Summer Undergraduate Research Program, Virginia Polytechnic Institute*

<http://www.chem.vt.edu/chem-dept/NSF/STCweb1/SURPhomepage.html>

Summer Undergraduate Research Program & Virginia Polytechnic Institute

This summer program is for rising seniors and juniors studying chemistry, physics, and mechanical, chemical or materials engineering, or computer science in the USA. The program lasts for 11.5 weeks and participants receive a stipend of \$5000. Summer 2002 information will be available online in the near future. Please check the website for updates.

Virginia Polytechnic Institute and State University  
Department of Chemistry and  
Summer Undergraduate Research Program  
Blacksburg, VA 24061

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### ***Bucknell University Summer Research Program in Physics***

<http://www.eg.bucknell.edu/physics/reu.html>

Bucknell University Summer Research Program in Physics &; Bucknell University Participants must be enrolled in a program leading to the bachelor's degree. Research areas include Astronomy and Astrophysics, Biophysics (Experiment), Pattern Formation and Chaos (Experiment), Atomic Physics (Experiment), Quantum Optics (Theory), and Gravitation (Theory). Participants must be U.S. citizens or permanent residents of the U.S. or its possessions. (Persons holding F-1 student visas are not eligible.) For full consideration, applications must be received by March 2, 2001. Applications received after this date will be considered if openings remain. Women, members of minority groups, and persons with disabilities are strongly encouraged to apply. Participants receive a stipend (\$3100), housing, and reimbursement for travel expenses. Summer 2002 information will be available starting in December 2001 so check the website for details and updates.

### ***Summer Research Program for Undergraduate Students University of California – Los Angeles (UCLA)***

<http://www.gdnet.ucla.edu/asis/srp/srpintro.htm>

UCLA Summer Research Program for Undergraduate Students & UCLA  
The UCLA Summer Research Program offers upper division undergraduate students with outstanding academic potential the opportunity to work closely with faculty mentors on research projects. The program is designed for students who plan to pursue the Ph.D. degree and enter academic careers. Opportunities are available in virtually all academic fields (e.g., arts, humanities, social sciences, life sciences, health sciences, physical sciences, etc.). Students planning graduate study in the physical sciences and engineering are especially encouraged to apply. Each student participant will be assigned to a faculty mentor with special expertise and interests matched, as closely as possible, to the student's research interests and career goals. Students will either assist the faculty member in an ongoing research project or work collaboratively with their mentor in designing a new project of mutual interest. The program features regular workshops and seminars on academic career opportunities, standardized test preparation, writing and research skills, and strategies for enhancing success in applying to graduate school. Also scheduled are opportunities for informal discussion with UCLA faculty and graduate students as well as other cultural and educational activities. Please check the website for updates. 2002 program information will be available starting Nov 1, 2001

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#### ***The U.S. Army Summer Faculty Research and Engineering (SFRE) Program***

<http://www.battelle.org/army/sfrep/default.htm>

The U.S. Army Summer Faculty Research and Engineering (SFRE) Program (Feb 15) The twentieth U.S. Army Summer Faculty Research and Engineering Program will be conducted during the summer of 2001. Research positions at Army facilities around the country will be offered to a select group of faculty currently employed by U.S. universities, colleges, or technical institutions in the following disciplines:

- ENGINEERING
- MATHEMATICS
- METEOROLOGY
- MEDICAL/HEALTH SCIENCES
- PHYSICS
- CHEMISTRY
- COMPUTER SCIENCE
- BEHAVIORAL SCIENCES

Contact the site listed above or the person indicated below for more information:

**U.S. Army Summer Faculty Research and Engineering (SFRE) Program**  
**P.O. Box 12297**  
**Research Triangle Park, NC 27709-2297**  
**Telephone (919) 549-8291**  
**Fax (919) 549-8205**

***MINORITY ACCESS TO SCIENCE, ENGINEERING AND MATH (MASEM)***  
***University of California – San Diego (UCSD)***

<http://www-ogsr.ucsd.edu/outreach/masem/summerapp.htm>

MINORITY ACCESS TO SCIENCE, ENGINEERING AND MATH (MASEM) - UCSD  
Funded by the National Science Foundation, the goal of the MASEM summer research program is to increase the number of underrepresented minorities (African American, Hispanic, Native American, and Alaskan Native) in science, engineering and math doctoral programs and in faculty positions. The intent of this rigorous research training experience is to prepare students to become research scholars and to stimulate serious consideration of graduate study in the fields of science, engineering and math. Special consideration will be given to students who attend California State University campuses. MASEM participants conduct their research at the University of California, San Diego

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under the mentorship of a UCSD faculty member. MASEM program major areas include: aerospace engineering, applied mechanics, applied ocean science, biology, biomedical sciences, bioengineering, biophysics, chemistry/biochemistry, computer science, computational neurobiology, chemical , ngeineering, earth sciences, electrical engineering, engineering physics, materials science, mathematics (including statistics), mechanical engineering, molecular pathology, neurosciences, ocean science, physics, and structural engineering. All participants will attend a series of scientific lectures relevant to >current research in the fields of science, engineering and math as well as graduate school preparation and Graduate Record Examination workshops. Program participants will receive a \$2,500 stipend (in three installments), campus housing, and domestic travel expenses to and from UCSD. Please see the website for updated program information as summer 2002 info is not yet available. For more information contact Victor Chavez via e-mail (vchavez@ucsd.edu) or by telephone at (858) 822-2030.

#### *Undergraduate Research at the University of Chicago Materials Research Science and Engineering Center*

[http://physics.uchicago.edu/reu\\_sum.html](http://physics.uchicago.edu/reu_sum.html)

Undergraduate Research at the University of Chicago Materials Research Science and Engineering Center – (Feb 15)

With support from the National Science Foundation, the University of Chicago offers the opportunity to gain valuable research experience working with faculty members from the Departments of Astronomy & Astrophysics, Chemistry, Geophysics, Mathematics, and Physics. Through three programs, approximately twenty-five internships will be awarded for the summer quarter, June 17 through August 23, 2002. The stipend for the ten-week programs has not yet been announced. Department of Physics - 5640 S. Ellis Ave., Chicago, IL 60637

#### *SUNFEST: University of Pennsylvania Center for Sensor Technologies*

<http://pender.ee.upenn.edu/~sunfest/>

SUNFEST: University of Pennsylvania Center for Sensor Technologies

SUNFEST is a unique program that provides talented undergraduate students with hands-on research during the summer in the area of sensor technologies. Each year an average of 9 students, ending their sophomore or junior year of college, are selected from various universities nationwide based on their academic record and attitude towards research. The program is open to students in engineering and the physical sciences. The purpose of this program is to expose the students to real, in-depth research in the area of sensor

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technology and to motivate them to go on to graduate school. An application package can be downloaded from the homepage. A list of former SUNFEST students and a brief description of their research are given further in this document. This program is sponsored by the National Science Foundation as a REU Site (Research Experience for Undergraduates) and the Center for Sensor Technologies at the University of Pennsylvania. Please see the web site for updated summer 2002 information.

#### ***National Institutes of Health (NIH) Research Opportunity***

<http://www.training.nih.gov/student/internship/internship.asp>

National Institutes of Health Research Opportunity (March 1, 2002)

NIH offers several summer internships in biomedical engineering through its various centers. Interested students are advised to visit the NIH web page (<http://www.nih.gov>) for more information about the research being conducted at NIH. The summer program has no official start or end date, but students must commit to at least 8 weeks, ending no later than September 30th. Summer 2002 information will be posted on the website starting November 15, 2001. Please see the following web page for each center's respective contact person: <http://www.training.nih.gov/student/summercoords.asp>

#### ***Purdue University REU Program in Biomedical Engineering***

<http://www.ecn.purdue.edu/BME/REU/>

Purdue University REU Program in Biomedical Engineering

Participating students spend 10 weeks conducting independent, hands-on research projects. In addition to the industry and clinical medicine exposure, the experience has various social benefits as well. Students are generously compensated in salary, and are given stipends for board, room, and travel. For applications and more information please contact:

**Professor Karen Haberstroh**  
**Dept. of Biomedical Engineering, Purdue University**  
**1296 Potter Engineering Center**  
**West Lafayette, IN 47907-1296**  
**Phone (765) 494-2995**  
**Fax (765) 494-1193**  
**khaberst@ecn.purdue.edu**

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*Laboratory for Research on the Structure of Matter at  
the University of Pennsylvania*

<http://www.lrsm.upenn.edu/lrsm/nsf-reu.html>

Laboratory for Research on the Structure of Matter at the University of Pennsylvania The LRSM, a National Science Foundation supported Materials Research Science and Engineering Center (MRSEC), will offer twenty-five Summer Research Fellowships to undergraduates from colleges and universities in the United States who are majoring in science or engineering. Successful applicants must be American citizens or permanent residents. Each will work under the supervision of a faculty member on a current materials research project in chemistry, physics, biochemistry, biophysics, materials science or engineering. Summer Fellows will have access to all the research facilities of the LRSM and of other laboratories, as required. University faculty will give a series of lectures on materials science and the Fellow will be expected to both write a short research report at the end of the fellowship period and also give an oral presentation to the group. An award will be given for the best paper. Fellows will also have access to the libraries, computer centers and recreational and athletic facilities of the University. Fellowships will normally be for a ten-week period, from June 3 through August 9, 2002, and will carry a stipend of \$3,750. Fellows should have completed their junior year by the beginning of the fellowship period, although consideration will be given to exceptionally well-qualified sophomores. Students requiring accommodation will be housed in university dormitories at reduced rates. Applications from women and minorities (defined as African-Americans, Hispanics, Native American Indians and >Pacific Islanders) are especially encouraged and should be so identified. Applications are available online and should be sent to:

**Dr. A. R. McGhie**  
**Associate Director Laboratory for Research on the Structure of Matter**  
**University of Pennsylvania**  
**3231 Walnut Street Philadelphia, PA 19104-6202**  
**Tel. (215) 898-6461**  
**Fax (215) 898-8296**  
**mcghie@lrsm.upenn.edu**

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#### ***Nuclear Regulatory Commission Historically Black Colleges and Universities Summer Research Participation***

<http://www.ornl.gov/orise/edu/uggrad/nrcsrp1.htm>

Nuclear Regulatory Commission Historically Black Colleges and Universities

Summer Research Participation (third Tuesday in January)

The Nuclear Regulatory Commission's (NRC's) Historically Black Colleges and Universities (HBCU) Research Participation Program offers opportunities for faculty and students to participate in research education and training at federal facilities or designated university research programs. Its purpose is to benefit Historically Black Colleges and Universities, their faculty members, their students, and their programs by involving them in NRC research and development activities. The program offers a variety of summer research opportunities for faculty, graduates, and undergraduates to conduct research with NRC contractors.

**NRC HBCU Research Participation Program  
Oak Ridge Institute for Science and Education  
P.O. Box 117, MS 36  
Oak Ridge, Tennessee 37831-0117  
ATTN: Barbara Dorsey**

#### ***Materials Research Center at Northwestern University***

[http://mrcemis.ms.nwu.edu/mrc/org/educational\\_outreach.html#REU](http://mrcemis.ms.nwu.edu/mrc/org/educational_outreach.html#REU)

Materials Research Center at Northwestern University (Feb 15, 2002)

Sponsored by the National Science Foundation, the REU program provides opportunities for undergraduates to participate in hands-on materials-related research at Northwestern University during the summer. The program begins with an informal orientation, during which participants are familiarized with laboratory safety procedures and the layout of the campus. Over the next nine weeks, each undergraduate works with Center scientists on their materials-related research project, and meets regularly as a group to discuss progress. At the end of the research residency, interns give a short talk on their research at the closing symposium and submit an 8-10 page paper. Interns are paid a stipend of \$3,500 for their summer work. Applications are available online but CANNOT be submitted via email or online.

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*The Center for Research and Education in Optics and Lasers  
University of Central Florida*

<http://www.creol.ucf.edu/reu/reu.html>

The Center for Research and Education in Optics and Lasers - University of Central Florida (March 1, 2002)

Students selected for this program will have the opportunity to perform research projects alongside some of the world's foremost laser & optics researchers. The projects cover a range of topics in both science and engineering, including solid state laser materials growth & spectroscopy, high energy/short pulse laser development, laser produced plasmas, optical signal processing, and optical switching circuits. Additionally, the REU participants will take specially designed short courses in Optics, Lasers and Interaction of Light with Matter. Other activities include weekly seminars, industrial visits, a course in Ethics in Research, and "round table" discussions between the REU participants and organizers. The CREOL also has an associated international program, as well as a similar program for chemistry sponsored by the University of Florida. Applications and information for these programs are available online.

**Dr. David Hagan Director  
Summer Undergraduate Program School of Optics/CREOL  
University of Central Florida  
P.O. Box 162700  
Orlando, FL 32816-2700  
Telephone (407) 823-6800  
Fax (407) 823-6880  
hagan@creol.ucf.edu**

*Materials Research at Massachusetts Institute of Technology*

<http://web.mit.edu/mpc/www/Programs/SummerInternship/summerscholar.html>

Materials Research at Massachusetts Institute of Technology

Advanced materials research and educational programs require the collective talents and expertise of a broad spectrum of disciplines: chemistry; physics; mathematics; chemical, electrical, civil, and mechanical engineering; computer science; as well as materials science and engineering. The Materials Processing Center and the Center for Material science and Engineering at MIT has chosen undergraduates from the following disciplines to experience and contribute to advanced materials research through our summer internship program. Participants will receive a stipend and a round-trip travel expenses. Please see the web site or contact the director for more information.

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Ms. Frances Page, Room 12-007, MIT, Cambridge, MA 02139; fmpage@mit.edu;  
(617)253-5179; fax (617)258-6900

#### *Center for Nonlinear Analysis - Carnegie Mellon University*

<http://www.math.cmu.edu/users/wow/summerinst/>

Center for Nonlinear Analysis - Carnegie Mellon University (March 1, 2002)  
Carnegie Mellon University will offer a summer institute for twelve undergraduates considering research careers in mathematical sciences. Students who have finished their sophomore or junior years and who have strong academic records will be given preference. Among applicants who are otherwise comparable, admission to the program will be designed to create an ethnically diverse group of participants. Applications from women and minorities are especially encouraged. Students selected into the program will receive a stipend of \$2200, housing in university dormitories, and allowances for food and travel. They will spend seven weeks in Pittsburgh participating in a course in analysis, a computer laboratory, and working on projects under the direction of research faculty. Program participants will receive Carnegie Mellon credit. Faculty who are actively engaged in applied mathematics research and who have a particular interest in undergraduate education will provide the instruction. Applications are available online or can be received by contacting:

**Department of Mathematical Sciences  
Carnegie Mellon University  
Pittsburgh, PA 15213-3890  
Telephone: 412-268-2545  
Fax: 412-268-6380  
fh0d@andrew.cmu.edu**

#### *Abbott Laboratories Summer Internship Program*

<http://www.abbott.com/career/internships.html>

Abbott Laboratories Summer Internship Program (Nov 1, March 1)  
Abbott laboratories has summer internships available in the following areas: Research and Development, Computing and Information Science, Engineering, Finance and Accounting, Human Resources, Manufacturing, and Marketing. Interns are given an opportunity to work on meaningful projects and to participate in social and professional networking. Students should submit an electronic resume through Abbott's website. The

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12-week long internship is meant for students in the following majors: Biomedical, Molecular Biology and Biochemistry, Electrical Engineering, Materials Engineering, Mechanical Engineering, Chemistry, and Economics

#### ***Associated Western Universities, Inc. Undergraduate Student Fellowships***

[http://www.awu.org/students\\_default.asp](http://www.awu.org/students_default.asp)

Associated Western Universities, Inc. Undergraduate Student Fellowships

These fellowships are intended to enhance the educational experience of qualified science, math, engineering, and technology students. Fellowships are available in the summer, fall and spring. Participating institutions are listed on the AWU website. Eligible majors include Biomedical, Development and Cell Biology, Ecology, Evolution and Environmental Biology, Genetics, Molecular Biology and Biochemistry, Neuroscience, Aerospace Engineering, Chemical Engineering, Civil Engineering, Computer Engineering, Electrical Engineering, Environmental Engineering, Materials Engineering, Mechanical Engineering, Information and Computer Science, Chemistry, Earth Systems Science, Mathematics, Physics, Applied Ecology, Environmental Analysis and Design.

#### ***Baxter Internship Programs - Deerfield, IL***

>[http://www.baxter.com/job\\_seekers/build.html?recruiting/internships.html](http://www.baxter.com/job_seekers/build.html?recruiting/internships.html)

Baxter Internship Programs - Deerfield, IL (March 1, 2002)

Baxter's summer interns are offered practical opportunities to apply their skills in their particular field of study. Assignments are matched with background and interest in the areas of finance, accounting, engineering, chemistry, biochemistry, human resources, information technology and marketing. Interns receive an overview of Baxter business operations, including plant tours, and take part in an internship conference highlighted by a presentation from Baxter Chief Executive Officer Vernon Loucks. The company also provides networking activities with other Baxter teams. Interns receive ongoing feedback and two formal appraisals during their summer experience. In some cases, Baxter extends offers at the conclusion of the program.

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#### ***Minority Undergraduate Research Fellowships – California Institute of Technology***

<http://www.cco.caltech.edu/~murf/>

Caltech's Minority Undergraduate Research Fellowships

Each student will work in the laboratory of a Caltech faculty member or a JPL technical staff member, in a research area matched to the interests expressed in the student's application. Guidance and supervision of the research project will be provided by the faculty member along with a postdoctoral fellow and/or advanced graduate student. The stipend for participants is \$400 a week, with roundtrip transportation and housing provided.

#### ***Center on Polymer Interfaces and Macromolecular Assemblies (CPIMA) Summer Undergraduate Research Experience (SURE)***

<http://www.stanford.edu/group/CPIMA/education/>

Center on Polymer Interfaces and Macromolecular Assemblies (CPIMA)

Summer Undergraduate Research Experience (SURE) (Feb 9, 2002)

The CPIMA Program provides research opportunities in the area of interfacial science of organic materials for qualified undergraduates. It allows students to work on independent research projects with direct interaction with research scientists, post-doctoral scholars and graduate students at Stanford, IBM Almaden or UC Davis. The program is designed to capitalize on the materials science research of high-tech Silicon Valley. Research topics include: molecular engineering of self-assembled monolayers and langmuir films, surface and electro-optical characterization of thin organic films, and polymer/liquid crystal interactions.

#### ***Environmental Protection Agency's National Network for Environmental Management Studies (NNEMS) Program***

<http://www.epa.gov/enviroed/students.html>

Environmental Protection Agency's National Network for Environmental Management Studies (NNEMS) Program

The Program is designed to provide students with a research/training experience, promote high-quality research efforts on environmental issues that are directly linked to a theses or other school-related activity and that are in the interest of the public, create a catalyst for increased public awareness of and involvement in environmental issues, and encourage students to pursue careers in environmental fields. Because NNEMS is a rather competitive program, students are encouraged to apply for more than one research

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project, as listed in the NNEMS catalog. Students must submit a separate application package for each project they apply for.

#### ***Fermilab Summer Internships in Science and Technology for Minority Students***

<http://sist.fnal.gov/>

Fermilab Summer Internships in Science and Technology for Minority Students

This Fermilab summer program focuses on giving opportunities in science and technology to the minorities that historically have been underrepresented in science in the United States of America. This program is for undergraduate college students currently enrolled in four-year colleges in the US. Internships are offered in physics, electrical engineering, computer programming and mechanical engineering. These internships offer a chance for approximately twenty college students to work with Fermilab scientists or engineers on a project within the context of laboratory research. Summer 2002 information will be available shortly.

#### ***Genentech Internships***

<http://www.gene.com/careers/college/internship.html>

Genentech is a company that is world-renowned for its leadership in the biotechnology industry. Interns participate as a member of a project team in a research, development, manufacturing or business area that will bring relevance to their college work. Students will experience the real world application of scientific knowledge to the treatment and cure of serious human diseases. Interested students should submit a resume and cover letter with details of relevant laboratory and/or business skills. This 12-week summer program is open to students after completion of their undergraduate sophomore year and who are of the following majors: Biomedical, Development and Cell Biology, Ecology, Evolution and Environmental Biology, Genetics, Molecular Biology and Biochemistry, Neuroscience, Chemical Engineering, Information and Computer Science, Chemistry, Economics.

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*REU Experience - Harvard University Materials Research Science and Engineering Center*

<http://www.mrsec.harvard.edu/education/REU.html>

REU Experience - Harvard University Materials Research Science and Engineering Center (March 15, 2002)

The Center offers opportunities to work on summer projects drawn from the larger areas of its current research focus including: the synthesis, characterization, and theory of new material; the study of the structure, wetting properties, and motion of interfaces; the fabrication and theoretical investigation of electronic and photonic nanostructures; and a program integrating methodology for manufacturing and design as well as efforts studying biosurfaces, electrodeposition, and thermoelectric materials.

For more information about this program contact:

**Robert Graham, Assistant Director**  
**Materials Research Science and Engineering Center**  
**Nine Oxford Street**  
**Cambridge, MA 02138**  
**Tel.:(617)495-4595**  
**Fax:(617)496-4654**  
**mrsec@harvard.edu**

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