

**“Can You See Yourself  
Doing Research This Summer?”**

**A Selected listing of Summer Research and Enrichment Programs  
for Undergraduates in STEM Majors**

**Summer 2010**



Dear MESA Student,

Congratulations on your desire to pursue a degree in a STEM Discipline. STEM or Science, Technology, Engineering, and Math degrees are considered by many to be the most difficult to pursue yet most will agree that they are among the most satisfying and can be the most lucrative. As you are probably already aware, your major will require more critical thinking skills, study time, more units, and more time in college. Summer Research and/or Summer Enrichment Programs are an excellent way to gain hands on research experience to prepare for graduate school and the world of academia in the scientific community. Therefore, I encourage you to peruse the programs listed and apply to more than one in case your top pick is not available. Also please encourage your fellow MESA Students to also apply because today's classmates will be tomorrow's colleagues. Good Luck!

Tiffany S. Reardon  
Assistant Director of Programs  
MESA Statewide Office

### **Important Tips for Successful Applications:**

- 1) Apply only to programs that you are eligible for.
- 2) If you have any uncertainties about applying for the program e-mail the contact person *before* you apply to the program.
- 3) Once you've submitted your application you may want to e-mail the program coordinator to let him/her know that you've applied. This will allow you to ensure that your application was received and will allow time to complete any missing information you may need to provide.
- 4) Meet all the Deadlines posted.
- 5) Make sure to give your recommender(s) adequate time to write a polished letter of recommendation for you. Give them as much information as possible about you, the program you are applying to and how you see this program as beneficial to your academic and career goals.
- 6) If possible, send your recommender a copy of your resume and personal statement or essay questions.
- 7) Allow yourself enough time to gather required documentation such as official transcripts, medical insurance coverage forms, if needed. Some residential programs require that you have medical insurance in order to participate. If this is the case, make sure you have this complete well before you begin the program.
- 8) Apply to more than one program.
- 9) Decide whether or not you can commit time to this program. If you are taking a summer course, decide how much time you will need to study and commute to class. Will this take time away from your research? In the past many of our MESA students have successfully participated in research programs while working and/or going to school. However, most students who have done this wish they had focused more on their internship by postponing the summer class for the fall semester.
- 10) Familiarize yourself with the program before you begin your application. Avoid blanket statements such as, "I want to be accepted to a summer research program at MIT because it's a good school." Instead talk about specific research being done at that institution and in this particular program.
- 11) Last but definitely not least, bring your applications to your MESA Director for feedback.



## **SUMMER OPPORTUNITITES AT UC BERKELEY**

### **Center of Integrated Nanomechanical Systems (COINS) Undergraduate Internship Program at Berkeley**

This program is designed for highly motivated students with interests in nanotechnology and nanoscience. Interns are matched with a COINS lab to work on a project as part of the research team. In addition to daily engagement in the lab, interns attend a weekly seminar, participate in a workshop on the graduate school application process, develop a scientific paper, and produce a poster for presentation of their research. The 8-week program (mid-June to mid-August 15) includes mentoring from faculty, graduate students, and postdocs; a \$4000 stipend; social activities; and on-campus room and board (students who reside locally during the summer receive a full meal plan). Underrepresented students are encouraged to apply. Applicants must be a US citizen or permanent resident.

**Deadline: February 1<sup>st</sup>**

<http://mint.physics.berkeley.edu/coins/files/UndergradInternApplication2010.doc>

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### **NSF Summer REU (Research Experiences for Undergraduates)**

#### **Site at Berkeley in Cell, Developmental and Evolutionary Biology**

This program is designed for highly motivated students with interests in biological research. Individual research projects are available in 22 faculty laboratories in biology at UC Berkeley and the Joint Genome Institute. The program integrates academic and professional development through group tutorials on cell, developmental and evolutionary biology, and bioinformatics; informal faculty research seminars; and workshops on the graduate school application process and career opportunities.

The 10-week program (June to August) includes mentoring from faculty, graduate students, and peers from the Berkeley Biology Scholars Program; a \$3,500 stipend; free on-campus housing in International House, including 19 meals/week; reimbursement for travel costs; and excursions and social programs

Note: Undergraduates who will be attending a 4 year college or university in fall 2010 to work toward the Bachelor's degree are encouraged to apply, i.e. rising sophmores. Applicants are not required to have previous research experience.

<http://mcb.berkeley.edu/nsfreu/>

**Deadline: February 1<sup>st</sup>**

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### **Bodega Marine Laboratory Summer Research Experience for Undergraduates**

Over 8 weeks (June to August), students will develop confidence and independence in conducting research and communicating scientific concepts.

Faculty and other mentors provide one-on-one training in a friendly, supportive

environment on choosing a research topic, writing a research paper, and more.

Students learn how to communicate their research results effectively. Students develop essential career survival skills, including scientific ethics. A goal of this National Science Foundation supported program is to increase the participation of underrepresented minorities in **marine science**. Participants will receive a stipend, laboratory housing, meals and travel costs.

**<http://www.bml.ucdavis.edu/student-info/researchexp.html>**    **Deadline : February 12**

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### **UC DAVIS**

The **Center for Biophotonics, Science and Technology (CBST)** was commissioned by NSF in 2002 to focus research efforts in the broad field of Biophotonics. Biophotonics can be defined simply as the study of the interaction of light with biological material – where “light” includes all forms of radiant energy whose quantum unit is the photon. Biophotonics is the science of generating and harnessing light (photons) to image, detect and manipulate biological materials. Research areas include: Bioimaging and Spectroscopy; Molecular and Cellular Biophotonics; and Medical Biophotonics - Sensors & Assays.

**Deadline: February 10, 2010**

**<http://cbst.ucdavis.edu/education/undergraduate/research/program-details>**

### **UC DAVIS**

#### **Research Experiences for Undergraduates Program in Physics**

During this 10-week program students live together on campus while working alongside faculty and graduate students on a research project. Throughout the summer students discuss their work at weekly lunchtime gatherings with a faculty mentor present. College students from two-year or four-year institutions may apply.

***Strong preference is given to students who have completed at least one year of calculus based introductory physics.*** Students receive housing and meals, a \$300/week stipend, and travel to and from the program.

***This program will accept non-citizens only if they can provide their own funding.***

**<http://london.ucdavis.edu/~zieve/REU/reu.html>**

**Deadline: Feb 12**

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The **Hugh Edmondson Summer Research Internship Program** provides a unique research opportunity for motivated college students who have demonstrated a strong interest in research in the health sciences. The internship program offers research opportunities under the supervision and mentorship of pathology faculty in various pathology laboratories located at the UC Davis campus or at the medical center/health sciences campus in Sacramento. In addition to research activities, the program offers weekly lectures and problem-based-learning exercises that promote investigative and critical thinking.

The missions of the Edmondson Summer Research Internship Program are to:

- Provide interns with knowledge and skills in a research environment to instill love for science and foster lifelong learning experiences
- Promote new scientific research technologies that aid in patient diagnosis
- Promote professionalism, honesty, integrity, compassion, leadership, and respect for academic excellence and community services

During the eight-week period in the summer, the Hugh Edmondson Summer Research Interns will participate in research or work activities eight hours a day, Monday through Friday. The fellows are not expected to participate in other part-time work activities or to attend summer school during this 8-week period. Students have to arrange for their own housing and transportation during the fellowship. Students from outside of the Davis/Sacramento area will be given assistance to find appropriate housing.

[http://www.ucdmc.ucdavis.edu/pathology/education/edmondson\\_research\\_fellowship/Application.html](http://www.ucdmc.ucdavis.edu/pathology/education/edmondson_research_fellowship/Application.html)

**Deadline: March 1<sup>st</sup>**

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## **UC DAVIS**

### **Summer Undergraduate Research Program (SURP)**

SURP prepares students for the competitive application and admissions process to graduate programs. Participants in the paid 8- to 10-week program conduct research under the direction of a UC Davis faculty mentor, attend weekly seminars, participate in a GRE prep course, and present their findings at the end of the summer. Seminars include topics such as enhancing research skills, delivering research presentations, and successfully navigating the graduate application process. Students from historically underrepresented backgrounds are especially encouraged to apply. Participants receive a \$3,000 stipend, housing, board and roundtrip travel (within program limits). Computer, library, and recreational resources are available.

<http://www.gradstudies.ucdavis.edu/surp/index.html>

**Deadline: Feb 28, 2010**

Summer Research for aspiring engineers and scientists for careers or graduate studies in fields related to plant biotechnology at **UC Davis**.

**NSF CREATE-REU** is a summer residential undergraduate research experience program focused on transgenic plants and in-vitro plant systems. CREATE stands for **C**ollaborative **R**esearch and **E**ducation in **A**gricultural **T**echnologies and **E**ngineering and UC Davis is also home to the NSF CREATE-IGERT doctoral training program, which will provide an extended research family and pool of mentors for REU participants. Through the CREATE-REU program, students will be trained in interdisciplinary research approaches and will develop professional skills needed for success in graduate school and the workplace.

Eight trainees will be selected to participate in the CREATE-REU and will reside on campus for nine weeks (late June through mid-August). Participant housing and meals will be provided, along with a weekly stipend of \$450. Additional funds to offset travel costs may be available upon request.

**<http://create-reu.ucdavis.edu/>**      **Deadline: February 15<sup>th</sup>**

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## **UC IRVINE**

### **Chemistry Summer Undergraduate Research Fellowship (Chem-SURF)**

Chem-SURF provides a 10-week summer research opportunity for undergraduates. Women, underrepresented minorities, and individuals from economically and socially disadvantaged backgrounds are especially encouraged to apply. Under the personal guidance of a UCI faculty mentor, students gain first-hand experience and training in state-of-the-art research facilities. Seminars and workshops provide opportunities to build knowledge and enhance dialogue about chemistry science and applications. Students share their research accomplishments by presenting their findings at the Chem-SURF Research Symposium. In addition to a \$3,500 stipend, students receive free, furnished on-campus housing, travel reimbursement, and ongoing support after the program ends.

**<http://www.urop.uci.edu/chem-surf.html>**

**Deadline: March 2nd**

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## **UCLA**

### **Research in Industrial Projects for Students (RIPS)**

Sponsored by the Institute for Pure and Applied Mathematics, this program creates teams of four undergraduates paired with faculty mentors and industry liaisons to investigate real-world industrial problems. Students obtain technical and managerial experience and spend two months working on a specific problem posed by an industry sponsor. Students receive a \$2,600 payment for their 9-week participation in RIPS plus room and board. The program also assists with an airfare travel allowance. Applicants should have completed upper-division math classes and have some background in computer programming,

<http://www.ipam.ucla.edu/programs/rips2010/berlin.aspx>      **Deadline: February 14<sup>th</sup>**

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## **UCLA**

### **Research Experiences for Undergraduates (REU) Physics & Astrophysics Summer Program**

Undergraduates enrolled in physics or astrophysics degree programs are invited to apply for this 10-week summer program. Women and students from traditionally underrepresented groups and institutions are encouraged to apply. Students work with a faculty mentor, professors, researchers and graduate students in ongoing experimental or theoretical research programs in *physics and astrophysics*.

Participants attend weekly seminars, receive GRE preparation, write a research report and present their findings at the closing Symposium. Participants network with students in other campus research programs, explore the southern California area and participate in an astronomy camping trip. Participants receive a \$3,500 stipend, housing accommodations and travel costs.

<http://reu.physics.ucla.edu>

**Deadline: February 19<sup>th</sup>**

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## **UC SANTA BARBARA**

### **Research Internships in Science and Engineering (RISE)**

This program seeks approximately 15 undergraduate *science and engineering majors* who are interested in pursuing a 10-week summer research experience in a dynamic, collaborative research environment. Interns participate in weekly group meetings to develop oral presentation skills, attend special seminars and present their results at an end-of-summer poster session. Students receive a stipend of \$3,800, plus up to \$1,000 for housing expenses or free arranged accommodations, and up to \$500 for travel to and from the UCSB campus.

<http://www.mrl.ucsb.edu/mrl/outreach/educational/RISE/appinfo/RISESum10.html>

**Deadline: February 19, 2010**



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## UCLA

The *Center for Embedded Networked Sensing* (CENS) is developing *Embedded Networked Sensing* (ENS) systems and applying this revolutionary technology to critical scientific and social applications. ENS systems are massively distributed collections of smart sensors and actuators embedded in the physical world. Research areas include: Adaptive Self-Configuring Wireless Systems, Coordinated Actuation, Collaborative Signal Processing, and Micro/Nano Sensor Technology. The societal applications of this research includes: Habitat Sensing, Seismic Sensing and Structural Monitoring, Contaminant Transport Monitoring, and Monitoring of Marine Microorganisms. /

<http://www.ats.ucla.edu/cfapps/cens/onlineapplication/>      **Deadline: Feb 12, 2010**

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## UCSF

<http://graduate.ucsf.edu/summerprograms/applicants/summer-research-opportunities>

### **Summer Research Training Program (SRTP)**

The SRTP provides undergraduate and master's students with the opportunity to conduct research in the biological and biomedical sciences and make them more competitive candidates for Ph.D. programs. Students are supported in this program by funds from the Howard Hughes Medical Institute, NSF's Alliances for Graduate Education and the Professoriate, Genentech, the University of California Office of the President, and the UCSF Graduate Division

### **Molecular Biosciences Research Experience for Undergraduates (REU)**

The Molecular Biosciences REU program at UCSF combines and outstanding laboratory research experience with activities designed to foster scientific communication and facilitate a transition to graduate school. Funded by a grant from the National Science Foundation (NSF), this program provides 8 students with research opportunities

### **Biophysics Program Internship**

The Graduate Group in Biophysics offers you the opportunity to sharpen your research skills and enhance your graduate applications. We invite college sophomores and juniors who are considering a career in academic research to apply to our internship program, particularly students from groups underrepresented in the sciences. In addition to laboratory research, our interns will participate fully with the Summer Research Training Program (SRTP) for a comprehensive summer experience.

**<https://graduate.ucsf.edu/application/apply/summer/2010/new.html>**

**Deadline: February 2, 2010**

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**UC SANTA CRUZ**

SURF-IT Program is encouraging MESA Community College Students to apply Applications for SURF-IT 2010 are due February 15



<http://surf-it.soe.ucsc.edu/apply>

The **University of California Santa Cruz (UCSC) Summer Undergraduate Research Fellowship in Information Technology (SURF-IT)** offers opportunities for both UCSC students and non-UCSC students. SURF-IT provides an intensive and personalized summer program for women, minority, or disadvantaged undergraduates. SURF-IT includes a research experience supervised by a UCSC Baskin School of Engineering faculty member. Scholars also have weekly meetings focused on graduate school preparation, how to present research results, research ethics, as well as field trips to local neighboring Silicon Valley research laboratories, and of course a number of social activities. SURF-IT is sponsored by the Department of Computer Engineering and the National Science Foundation.

**<http://surf-it.soe.ucsc.edu/>**

**Deadline: February 15<sup>th</sup>**

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**DOE Global Change Research Program.**

The U.S. Department of Energy-Office of Biological and Environmental Research ([BER](#)) funds the Global Change Education Program (GCEP) to promote undergraduate and graduate education and training supportive of the Department's global change research activities.

**<http://www.atmos.anl.gov/GCEP/>**

**Deadline: December 31, 2009**

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**US Department of Energy – Community College Institute**

This program places students from community colleges in paid internships in Science and Engineering and Technology at any of several different locations (see Choosing a Lab). Because of the comprehensive nature of this program many of the participants have felt it has had an enormous influence on their careers. Students work with scientists or engineers on projects related to the laboratories' research programs. They also attend

career planning and numerous training/informational sessions. The different laboratories each offer different research opportunities.

Argonne National Laboratory

Brookhaven National Laboratory

Lawrence Berkeley National Laboratory

Lawrence Livermore National Laboratory

Oak Ridge National Laboratory

Pacific Northwest National Laboratory

**<http://www.scied.science.doe.gov/SciEd/CCI/about.html>**

**Deadline: February 1st**

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## **SULI**

### **DOE Student Undergraduate Laboratory Internships**

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 (see Choosing a Lab).

Ames Laboratory

Argonne National Laboratory

Brookhaven National Laboratory

Fermi National Accelerator Laboratory

Idaho National Laboratory

Lawrence Berkeley National Laboratory

Lawrence Livermore National Laboratory

Los Alamos National Laboratory

National Energy Technology Laboratory

National Renewable Energy Laboratory

Oak Ridge National Laboratory

Pacific Northwest National Laboratory

Princeton Plasma Physics Laboratory

SLAC National Accelerator Laboratory

Thomas Jefferson National Accelerator Facility

**<https://applicationlink.labworks.org/applicationlink/default.htm>**

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The **National Oceanic and Atmospheric Administration (NOAA)** is a federal agency focused on the condition of the oceans and the atmosphere. The University of Colorado invites undergraduates to apply for a summer Research Experience for highly motivated students interested in solar and space physics. Students will work with scientists at the University of Colorado and at the National Center for Atmospheric Research (NCAR), NOAA's Space Weather Prediction Center (SWPC) and National Geophysical Data Center (NGDC), the Southwest Research Institute (SwRI), Cooperative Institute for Research in Environmental Sciences (CIRES) or NWRA's Colorado Research Associates on projects spanning the field of solar and space physics, from instrument hardware to data analysis to modeling of the Sun-Earth system.

The program begins with a summer school in solar and space physics and continues with seminars and discussions while you work at one of the participating laboratories. Additionally, the HAO summer undergraduate program will be run in conjunction with the LASP REU program, providing peer-to-peer collaboration opportunities. At the end of the summer, you will present your research findings, and the best projects will be considered for submission to a national scientific conference.

**Who should apply:**

Current Sophomore and Junior Undergraduate Students. Foreign students may apply but admission will be dependent upon funding.

<http://lasp.colorado.edu/reu/application.html>

**Deadline: Early January**

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Oak Ridge Institute for Science and Education

**Summer internships for undergraduate students at Federal Research Facilities**

- ☐ Funding available for Summer 2010
  - ☐ \$500/week stipend and travel expenses
  - ☐ U.S. citizenship required
  - ☐ Areas of research: homeland security related science, technology, engineering and mathematics
  - ☐ 10 weeks of support
  - ☐ Application Deadline: **January 5, 2010**
- [www.ornl.gov/dhsinternships](http://www.ornl.gov/dhsinternships)
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The National Aeronautics and Space Administration **Undergraduate Student Research Program (USRP)** offers undergraduates across the United States mentored internship experiences at NASA Centers and research support facilities. The NASA Undergraduate Student Research Program is NASA's largest nationwide internship program.

NASA USRP is an internship program that offers NASA research and development opportunities to undergraduate students. USRP internship opportunities give students the ultimate workforce preparatory experience for careers in Science, Technology, Engineering and Mathematics (STEM). USRP is one of most highly comprehensive internship programs for undergraduate students within the STEM majors. Students work on practical problems that will see real applications in aerospace or on future NASA missions. These immersive NASA opportunities combine scientific research with professional hands-on engineering. A USRP internship will be the first step toward a career at NASA, or within the science and engineering workforce. USRP internship opportunities are offered year round in the Fall, Summer and Spring.

The USRP experience is a NASA internship that places qualified undergraduates with outstanding NASA mentors in a challenging working environment. Students from around the country work on a NASA project developed to meet the needs and goals of the NASA Center and Mission Directorate. Through the USRP website students apply for the internship program and NASA mentors select students for available project positions. The USRP website is also a valuable resource of information in regards to NASA internships and NASA Centers and NASA research focus areas. Research NASA's wide

variety of scientific and technical research areas through the USRP website and find your career vision through a NASA USRP internship.

**<http://usrp.usra.edu/>**

***Deadline: January 22nd***

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**Description:** Offers talented students the opportunity to engage in the study and research of fusion energy sciences and technology, while fostering practical work experiences at recognized research facilities. Provides incentive and support to students as they continue their education in graduate school and prepare for careers in fusion energy.

**Discipline(s):** physical sciences; engineering; mathematics; related scientific disciplines

**Eligibility:** U.S. Citizens and Legal Permanent Residents. **Undergraduate seniors;** bachelor's recipients; and first and second year graduate students at the time of application

**Location(s):** Various locations across U. S. Participating universities with practicums at various U.S. Department of Energy research facilities

**Deadline(s):** January 31

**Benefits:** \$24,000 annual stipend and full payment of tuition and fees; \$750 per month practicum allowance; opportunity to attend professional meetings and to participate in long-term graduate research at DOE fusion research facilities.

**Funding source(s):** U.S. Department of Energy, Office of Fusion Energy Sciences

**How to apply:** Application materials available at **<http://www.ornl.gov/fusion>**.

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### **University of Colorado at Boulder**

#### **Summer Multicultural Access to Research Training**

The University of Colorado at Boulder offers 10-week summer research internships through the Summer Multicultural Access to Research Training (SMART) program. The internships provide hands-on experience in research and an introduction to graduate education at a leading university. Twenty to twenty five undergraduates from institutions nationwide take part in this challenging and informative program each summer.

SMART interns conduct research projects in science, math, and engineering fields under the guidance of a faculty mentor and see firsthand graduate student life at a major institution.

Interns also interact in the social environment of a large university and in a community of underrepresented peers.

<http://www.colorado.edu/GraduateSchool/DiversityInitiative/undergrads/smart/index.htm>

! **Application Deadline: February 15**

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**Description:** The DHS HS-STEM Summer Internship Program provides a 10-week summer research experience for undergraduate students majoring in homeland security related science, technology, engineering and mathematics (HS-STEM) disciplines. Students who demonstrate long-term goals aligned with the mission and objectives of the Department will have the opportunity to conduct research in DHS mission-relevant areas at various federal research facilities. The goal of this program is to prepare a diverse, highly talented, educated, and skilled pool of scientists and engineers to address HS-STEM issues. For full program details and application materials go to [DHS HS-STEM Summer Internship Program](#).

**Discipline(s):** life, health, and medical sciences; mathematics; computer science; physical sciences; earth, environmental, and marine sciences; social and behavioral sciences; engineering;

**Additional Discipline Information:** homeland security related science, technology, engineering and mathematics

**Eligibility:** U.S. Citizens Only. Summer Internships are intended for students that are rising juniors and seniors. For full eligibility conditions go to [DHS HS-STEM Summer Internship Program](#).

<http://www.orau.gov/dhsinternships/>

**Deadline January 10**

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### **Biophysics at University of North Carolina, Chapel Hill**

**Website:**

<http://www.biophysics.org/CareerCenter/CareerResources/InternshipSummerCourse/2009SummerCourse/tabid/898/Default.aspx> (

**APPLICATION DEADLINE:** March 5, 2010

**Course Title:** the Biophysical Society 2010 Summer Course in Biophysics: Case Studies in the Physics of Life

**Venue:** University of North Carolina, Chapel Hill

**Dates:** May 19, 2010 - August 6, 2010

**Course Director:** Dr. Barry R. Lentz  
Professor, Department of Biochemistry & Biophysics  
Director, Program in Molecular and Cellular Biophysics

**Applicant Eligibility:** Open to minority & Canadian aboriginal junior and senior undergraduate students involved in the areas of quantitative sciences. Two semesters of calculus level physics and 3.0 or greater GPA in science courses are required.

**Includes:** Three course credits, stipend, lab experience, career counseling, and more.

The Summer Course in Biophysics is open to 12 students.

For questions regarding the Summer Course, please contact Julianna Wittig (Course Administrator) at [jwittig@biophysics.org](mailto:jwittig@biophysics.org).

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SOARS encourages applications from individuals who are members of a group that is historically under-represented in the atmospheric and related sciences, including students who are Black or African American, American Indian or Alaska Native, and Hispanic or Latino, female, first generation college students, and students with disabilities. SOARS welcomes lesbian, gay, bisexual, and transgender students; students who have experienced, and worked to overcome, educational or economic disadvantage and/or have personal or family circumstances that may complicate their continued progress in research careers. A successful candidate should:

- Have completed the equivalent of two years of college
- Have at least one semester of college remaining after the initial summer program
- Have a cumulative GPA of 3.0 or higher
- 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; plan to pursue a career in atmospheric or a related science
- Have U.S.-citizen or permanent-resident

<http://www.soars.ucar.edu/apply/>

**Deadline: February 1st**

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*For engineering and science students with broad interests across disciplines focusing on nanotechnology*

**The National Nanotechnology Infrastructure Network ( NNIN )** is an integrated partnership of thirteen user facilities, supported by NSF, providing unparalleled opportunities for nanoscience and nanotechnology research.

The chosen undergraduates taking part in the ten-week NNIN REU program will receive hands-on nanoscience and technology experience through research with applications to bio-engineering, chemistry, electronics, materials science, optics, optoelectronics, physics, and the life sciences. The research projects are designed and supervised by the faculty and technical staff at the NNIN research facilities. Interns work with faculty and graduate students on projects using the unique resources offered at their award site. A three-day scientific convocation, attended by all the network interns, is held in August to allow each intern the opportunity to present their work to their peers in the form of a concise scientific presentation. Interns also must complete a written report, akin to a research paper, summarizing the findings of their research project. These reports are published as the NNIN REU Research Accomplishments.

The NNIN REU Program is supported by the National Science Foundation, and co-sponsored by NNIN and its industrial sponsors. Participants receive a \$3,800 stipend, plus housing and all travel expenses to their research site and the convocation site. Sites include

- ASU NanoFab, Arizona State University, Tempe, AZ
- Cornell NanoScale Science & Technology Facility, Cornell University, Ithaca, NY
- Nanotechnology Research Center, Georgia Institute of Technology, Atlanta, GA
- Center for Nanoscale Systems, Harvard University, Cambridge, MA
- Howard Nanoscale Science & Engineering Facility, Howard University, Washington, DC
- Penn State Nanofabrication Facility, Penn State University, University Park, PA
- Stanford Nanofabrication Facility, Stanford University, Stanford, CA
- Nanotech@UCSB, University of California Santa Barbara, Santa Barbara, CA
- Colorado Nanofabrication Laboratory, University of Colorado, Boulder, CO
- Lurie Nanofabrication Facility, University of Michigan, Ann Arbor, MI
- Nanotechnology Center, University of Minnesota-Twin Cities, Minneapolis, MN
- Microelectronics Research Center, University of Texas, Austin, TX
- Center for Nanotechnology, University of Washington, Seattle, WA
- Nano Research Facility, Washington University, St. Louis, MO

**[http://www.reu.nnin.org/nnin11\\_login.php](http://www.reu.nnin.org/nnin11_login.php)**

**Deadline: February 10, 2010**



The Center on Polymer Interfaces and Macromolecular Assemblies (CPIMA) at Stanford University is now accepting applications for our 2010 Summer Undergraduate Research Experience (SURE) program.

The CPIMA-SURE program is a 10-week program open to all U. S. citizen and legal U.S. permanent resident undergraduate students who will be sophomores, juniors, or seniors majoring in an engineering or physical science discipline. Students join interdisciplinary research teams in physical sciences & engineering related to polymer science, nanoscience, nanotechnology, and materials at interfaces.

Students are paid a \$4,500 stipend, housing is included and some travel can be reimbursed. Applications are especially encouraged from women, students who are members of underrepresented groups, and disabled students.

<http://cpima.stanford.edu/education/sure-program-reu/> **Deadline: February 1, 2010.**

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*BRAIN 2010* is looking for candidates who are enthusiastic, hard working, detail oriented, and who want to engage in cutting edge neuroscience research.

**Behavioral Research Advancements in Neuroscience** is the hallmark program of the undergraduate education arm of the Center for Behavioral Neuroscience (CBN), a National Science Foundation Science and Technology Center. The program consists of a 10-week summer research and education experience. BRAIN grows naturally from the scientific and education missions of CBN's member institutions, which are committed to increasing student interest in behavioral neuroscience and, ultimately, in the pursuit of research and other science careers (e.g. science policy, science education, and science journalism).

#### **Eligibility Criteria**

Enrollment as a full-time student at a two- or four-year college or university.

**B/C grade point average in science coursework; overall GPA of 2.7 or higher.**

*(Exceptions to the GPA requirements may be made for those students who have had previous research experience and/or a strong sense of future goals).*

Students may not be enrolled in any summer courses or hold a job during the duration of the BRAIN program.

Must be able to attend the entire BRAIN Summer Program

<http://www.cbn-atl.org/education/brainapp.shtml> **Deadline: February 2010**

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## **Pre Med Pre Dental Students**

### **SUMMER MEDICAL AND DENTAL EDUCATION PROGRAM**

**Summer Medical and Dental Education Program (SMDEP)** is a **FREE** (full tuition, housing, and meals) six-week summer academic enrichment program that offers freshman and sophomore college students intensive and personalized medical and dental school preparation.

Increase your chances of getting into Medical or Dental School

#### **Case Western Reserve University Schools of Medicine and Dental Medicine (OH)**

- **Columbia University College of Physicians and Surgeons and College of Dental Medicine (NY)**
- **David Geffen School of Medicine at UCLA and UCLA School of Dentistry (CA)**
- **Duke University School of Medicine (NC)**
- **Howard University Colleges of Arts & Sciences, Dentistry and Medicine (DC)**
- **The University of Texas Dental Branch and Medical School at Houston (TX)**
- **UMDNJ-New Jersey Medical and New Jersey Dental Schools (NJ)**
- **University of Louisville Schools of Medicine and Dentistry (KY)**
- **University of Nebraska Medical Center, Colleges of Medicine and Dentistry (NE)**
- **University of Virginia School of Medicine (VA)**
- **University of Washington Schools of Medicine and Dentistry (WA)**
- **Yale University School of Medicine (CT)**

SMDEP Program now online:

<http://www.smdep.org/progsites/start.htm>

About: <http://www.smdep.org/>

**Deadline: Rolling Deadlines Apply Early**

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***Rockefeller University Summer Undergraduate Research Fellowship Program***

*for Sophmores and Juniors interested in graduate school in the biomedical sciences*

The Rockefeller University Summer Undergraduate Research Fellowship (SURF) program provides a unique opportunity for undergraduates to conduct laboratory research. SURF students work with leading scientists in a broad range of areas including biochemistry; structural biology and chemistry; molecular, cell and developmental biology; immunology; virology and microbiology; neuroscience; physics; and mathematical biology.

College sophomores and juniors are eligible to spend 10 weeks during the summer in a Rockefeller University laboratory. The program begins the first week in June and ends the second week in August. Placement in laboratories is centralized through the Dean's Office. Students are matched with laboratories according to their stated research interests, and work on projects under the direct supervision of faculty, postdoctoral fellows and/or senior graduate students.

<http://www.rockefeller.edu/surf/application.php>     **Deadline: Feb 1, 2010**

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**MIT Massachusetts Institute of Technology**  
**MIT is located in Cambridge, MA**

The HST Summer Institute is part of MIT's effort to help facilitate the involvement of talented students in engineering and science research, in particular underrepresented minorities, first-generation college students, and those from disadvantaged backgrounds.

The HST and i2b2 Bioinformatics and Integrative Genomics program (BIG) introduces students to the intersection of quantitative and biomedical sciences, providing them with broad knowledge of clinical relevancy as well as specific skills in the information science of genomics. BIG brings together nationally recognized leaders from the basic biological sciences, computer science, genomics, bioinformatics and epidemiology. Undergraduate students interested in pursuing a career in bioinformatics and genomics are eligible to participate in the nine week Summer Institute in Bioinformatics and Integrative Genomics.

The Summer Institute offers unique, hands-on research opportunities to outstanding, highly motivated students who are currently sophomores, juniors, seniors, or in their first year of graduate school. Students engage in research in a scientific community internationally recognized for its leadership and commitment to excellence

<http://hst.mit.edu/servlet/ControllerServlet?handler=PublicHandler&action=browse&pageId=2043>

**Deadline: January 31, 2010.**



## CA ACADEMY OF SCIENCES

The Summer Systematics Institute, a hands-on, collections-based summer research program in evolutionary biology and the Internship in Biological Illustration are for undergraduate college/university students who are U.S. citizens or resident aliens

**Eligibility:** Any U.S. citizen or resident alien ("green card") who is an undergraduate student, and who will not have graduated before fall of 2010, is welcome to apply. An excellent academic record and participation in a wide range of campus activities are highly regarded, but not the sole criteria for the selection process.

**Stipend:** A \$3,600 stipend will be awarded to each intern. In addition, some travel costs (up to \$500) to San Francisco will be reimbursed and a \$2,100 subsistence allowance is given for housing and food. Funding is also provided to support research projects, and can be made available for return to the Academy after the end of the program to complete projects, or to attend a conference. Funding may be subject to Federal and/or State income taxes.

**<http://research.calacademy.org/opportunities/ssi>**

Deadline: **February 12, 2010.**

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## Seaver Undergraduate Research in Biology at Pepperdine

Pending NSF support for the summer of 2010, the biology faculty at Pepperdine University will conduct a summer research program geared specifically to undergraduate students who are interested in pursuing a career in ***biological research, science education, environmental science or biotechnology***. The program will begin with a 14-day research orientation workshop, May 16 - May 29. During the workshop, students will be introduced to the uses and limitations of specific research tools and techniques. The workshop will culminate with a visit to the James San Jacinto Mountains Reserve near Idylwild, California and the presentation of student proposals for summer projects. Over the remainder of the summer, students will pursue individual research projects under the direction of faculty. Visiting scientists will hold special research seminars in each research area. The research program will conclude with a student research symposium in late July in the new Keck science facilities

**<http://seaver.pepperdine.edu/surb/>**

Deadline: **February 15, 2010**

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The Molecular and Cellular Biology Program at *Dartmouth* offers opportunities for undergraduates to participate in a 10 week summer research program.

<http://www.dartmouth.edu/~surf/>

**Deadline February 1, 2010**

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*Summer Research at Princeton*



Princeton Institute for Science and Technology of Materials  
Princeton Center for Complex Materials

The Princeton Institute for the Science and Technology of Materials (PRISM) and the Princeton Center for Complex Materials (PCCM) are sponsoring research opportunities for undergraduates in disciplines related to Materials Science **summer of 2010**. Potential projects span a broad range of topics under the guidance of faculty from the departments of Physics, Chemistry, Molecular Biology, Chemical Engineering, Electrical Engineering, Mechanical and Aerospace Engineering, and Civil and Environmental Engineering. The research topics are chosen each year to complement the research of faculty associated with the Princeton Center for Complex Materials.

<http://www.princeton.edu/~pccm/outreach/reu.htm>

<https://pccmapps.princeton.edu/REU/application.php>

**Deadline: March 10, 2010**

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CORNELL

Cornell  
Ithaca, NY

The **Plant Genome Research Projects REU** are seeking students early in their academic careers, hoping that an early research experience might ultimately lead them to pursue science degrees and careers. Last year nearly 20% of their interns were from community colleges across the US. The program provides travel, housing, some meals and a generous stipend to limit the financial barriers that many of our students face.

Since 2003, undergraduate students from across the country have been coming to the Boyce Thompson Institute and Cornell University to participate in their 10-week summer internship program. By participating in PGRP summer internships, students gain a broader knowledge of plant genetics, take away a better understanding of genuine scientific research and connect with others that are interested in careers in science and research.

<http://www.bti.cornell.edu/educationInternships.php>

**Deadline: February 5<sup>th</sup>**

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## **SUMMER UNDERGRADUATE RESEARCH FELLOWSHIP (SURF) PROGRAM**

**Program Description** Each summer the **Yale SURF** Program brings a group of qualified undergraduates to Yale for eight weeks. The experience is meant to familiarize students with the kind of work they can expect to do in graduate school, provide them with insight into the many steps involved in building a career based on Ph.D. level training, as well as foster a sense of confidence regarding their own abilities.

<http://www.yale.edu/graduateschool/diversity/forms/surf.pdf>



## ***CRISP Research Experience for Undergraduates Fellowship Program***

The CRISP - Research Experience for Undergraduates (CRISP-REU) fellowship program provides students with the opportunity to conduct team-based interdisciplinary research. Participating students conduct an eight-week research project as members of a research team including university faculty and graduate students. Fellows will be exposed to other research available on campus through weekly meetings and faculty seminars. Professional development and social activities are also integral components of the program. At the end of the experience, participants present their work in a professional forum.

**Deadline February 1<sup>st</sup>**

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The [Molecular Physics Laboratory](#) at SRI International participates in the *Research Experiences for Undergraduates (REU)* program of the National Science Foundation. This program provides a stipend of \$4800 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.

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 6 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.

The REU program at the SRI Molecular Physics Laboratory provides opportunities for outstanding undergraduates to participate in research at SRI and to benefit from the collegial atmosphere of collaboration and communication among all members of the laboratory. SRI is proud to host its seventeenth year of the REU program. More than 150 students have participated in this program during the previous 16 summers and have had excellent experiences in laboratory research, frequently leading to publications..

Examples of on-going projects:

- Biomedical optics and imaging for cancer detection
- Spectroscopy of molecular dissociation
- Energy transfer in collisions of small molecules
- Laser diagnostics of flames and plasmas
- Laser detection of explosives and atmospheric pollutants
- Atmospheric chemistry and photophysics
- Combustion chemistry
- Microfluidics



- Nonlinear optics
- Laboratory studies of terrestrial and planetary atmospheric processes

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.

<http://www.sri.com/psd/reu/application.html>

**Deadline February 28, 2010**

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**Department of Chemistry and Biochemistry at Cal State Fullerton** has Applications are invited from students who are sophomores or juniors, majoring in a chemistry-related subject, who wish to spend the summer of 2010 conducting research in chemistry or biochemistry at California State University, Fullerton. The ten-week program runs from June 1 to August 6. Funding from NSF-REU, the National Science Foundation Research Experiences for Undergraduates program provides stipends of \$5,000 for the ten-week period plus housing and round trip travel costs for out-of-town participants. Local travel assistance is also available for residents of the greater Los Angeles/Orange County area. We provide a strong supportive environment for “late-bloomers” and re-entry students, and women and minority students are especially encouraged to apply.

<http://chemsrvr2.fullerton.edu/reu/reu.html>

**Deadline: March 12, 2010**

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## **SECTION II - Multiple Sites In State and Out of State**

The National Science Foundation Science & Technology Centers (STCs) offer summer internships at each of the 17 centers, located at prestigious universities around the United States. These summer internships provide undergraduates an opportunity to conduct research in a "graduate school" setting in the following fields:

**biological sciences**

**computer and information sciences**

**engineering**

**geosciences**

**mathematical and physical sciences**

**<http://www.nsfstc.org/centers.htm>**

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**JOHNS HOPKINS UNIVERSITY- JOHNS HOPKINS SCHOOL OF MEDICINE**  
Baltimore, Maryland

***Program Overview***

The Summer Internship Program (SIP) provides an independent research experience under the direct mentoring of established Hopkins researchers. The purpose of this exposure to biomedical and/or public health research is to encourage students to consider careers in science, medicine and public health.

**<http://www.hopkinsmedicine.org/graduateprograms/sip.cfm>** **Deadline: February 1st**

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**MATE** - Marine Advanced Technology Education Center's mission is to help prepare America's future workforce for ocean-related occupations. The MATE Center utilizes information from employers to improve and develop educational programs with a focus on marine technology. The Center focuses on community college education and the creation of strong links between community colleges and high schools, technical schools, 4 year institutions, research institutions, and industry, government, military, and labor organizations. All MESA Majors

**<http://www.marinetech.org/careers/internships.php>**

**Rolling Deadlines**

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***National Institute of Health NIH Summer Internship Program in Biomedical Research***

The Summer Internship Program (SIP) at the NIH provides an opportunity to spend the summer working side-by-side with some of the leading scientists in the world in an environment devoted exclusively to biomedical research. Students sixteen years of age or older who are U.S. citizens or permanent residents and are currently enrolled at least half-time in high school, an accredited U.S. college or university or an accredited U.S. medical/dental school are eligible to apply. Students who have been accepted into a college or university may also apply.

**<https://www.training.nih.gov/apps/publicForms/sip/forms/sipApp.aspx>**  
**Deadline: March 10**

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**Center for Nanoscale Chemical-Electrical Mechanical Manufacturing Systems**  
**University of Illinois , Urbana-Champaign**

The Nano-CEMMS Research Experience for Undergraduates (REU) program is held for a 10 week period over the summer. This is a chance for students to engage in full-time research on a nanotechnology-related topic and to gauge their interest and potential for future research at the graduate student level.

<http://www.nano-chemms.uiuc.edu/content/education/srop.php>

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**CAL TECH** The Student-Faculty Programs office at Caltech administers several undergraduate research fellowship programs. Application procedures and selection criteria vary among the programs, but the programs have similar elements:

- Students collaborate with mentors/co-mentors
- Students write research proposals or project plans
- Selected participants do their projects over a ten-week period in the summer
- Fellows submit technical papers and give oral presentations at the conclusion of the program

During the summer, SFP coordinates seminars, professional development workshops, and social and cultural activities open to participants in all programs.

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

<http://www.surf.caltech.edu/applicants/index.html>

<http://sfp.caltech.edu/>

**DEADLINE: JANUARY 13, 2010**

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The summer Undergraduate Research Program (URP) at **Cold Spring Harbor Laboratory (CSHL)** was established in 1959. It provides a unique opportunity for young people from around the world to learn first-hand about genetics, cell biology, neurobiology, and molecular biology by working and living in a scientific community that is renowned for its research and educational programs.

The fundamental objective of the URP program is to give students an opportunity to conduct first-rate research. Participants learn about scientific reasoning, laboratory methods, theoretical principles, and scientific communication. The specific objectives of the program are to:

- Give college undergraduates a taste of conducting original research at the cutting edge of science.
- Encourage awareness of the physical and intellectual tools necessary for modern biological research.
- Foster an awareness of the major questions currently under investigation in the biomedical and life sciences.

- Promote interactions with laboratory scientists through an immersion in the research environment.

<http://www.bu.edu/eng/reu/ece/details.shtml> Deadline : **January 15, 2010**

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For Science, technology, engineering and mathematics majors who are U.S. citizens or permanent residents.

***American Society of Plant Biologists***

ASPB created SURF to encourage students to pursue advanced degrees and careers in plant biology. SURF helps students conduct meaningful research in plant biology at their home institutions early in their college years. Ideally, students should conduct their SURF-funded research the summer following their sophomore year. Exceptionally well-prepared first-year students and juniors who provide evidence of a strong commitment to plant biology will also be considered. Recipients are expected to present their results at the ASPB national meeting in the following summer. Some funding to attend the meeting may be available through the SURF program

<http://www.aspb.org/education/undergrad.cfm>

**Deadline: February 26, 2010**

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*For students interested in a career in biomedical sciences*



**Gerstner Sloan-Kettering**  
Graduate School of Biomedical Sciences

This ten-week research program is designed for approximately 20 outstanding undergraduate students who are interested in pursuing a career in biomedically related sciences. Students in the program have the opportunity to:

- obtain hands-on research experience in cutting edge laboratories;
- interact with faculty, postdoctoral fellows, and graduate students;
- attend a weekly luncheon/seminar series of presentations by faculty;
- attend skills/development workshops to hone presentation skills, interview skills, etc.;
- attend and present at works-in-progress sessions with the cohort of SURP students;
- present their research at a special poster session at the end of the ten-week program.

GPA of 3.0 and should have completed at least college-level general biology and/or introductory chemistry.

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### **ACCESS- Summer Research Program for Underserved College Students**

*For students interested in PhD programs*

The Weill Cornell Graduate School of Medical Sciences (WCGSMS) has established an internship program for training under-served college students in the biomedical sciences. Interns are given hands-on experience in a biomedical research laboratory and are encouraged to apply to Ph.D. programs. Selected students are placed in laboratories at the Weill Cornell Medical College under the mentorship of an experienced faculty member. In addition to the laboratory experience, students attend lectures and discussions aimed at enhancing their understanding of the current status of biomedical research, the pathways available to enter a research career, and the range of career opportunities available. Students also participate in weekly journal clubs, attend workshops that teach them how to prepare for interviews and seminars, as well as taking part in various social activities

**[http://biomedsci.cornell.edu/graduate\\_school/html/15041.cfm](http://biomedsci.cornell.edu/graduate_school/html/15041.cfm)**

*For students interested in MD-PhD Programs:*

### **Gateways to the Laboratory Program Weill Cornell/Rockefeller/Sloan Kettering**

Every year, 15 students embark on a 10 week intensive journey of learning about the challenging and gratifying road of becoming a physician-scientist. Over the summer, students will:

- Work independently on a research project at Weill Cornell Medical College, The Rockefeller University or Memorial Sloan-Kettering Cancer Center, all located across the street from each other on the Upper East Side of New York City.
- Present and participate in weekly journal clubs.
- Participate in a hands-on tour of the Gross Anatomy Lab.
- Sit for a Mock MCAT exam.
- Partake in a Lab Techniques Workshop and Clinical Skills Workshop.
- Participate in Career Development Workshops (Presentation Workshop and Interview Skills Workshop).
- Scrub into surgeries at the NewYork-Presbyterian Hospital.
- Give an oral, written and poster presentation of your research in front of your family, friends and colleagues.
- Have on going mentorship by your "Big Sib" (a current MD-PhD student) as well as weekly meetings with the Program's leadership.

**<http://www.med.cornell.edu/mdphd/summerprogram/>**

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### **Cornell University Laboratory for Elementary-Particle Physics**

Under this program, up to ten science and engineering students from around the country will be invited to participate in research at the Laboratory. The program is enriched substantially by contributions from the Physics Department at Wayne State University, the CLEO Collaboration, and the Cornell High Energy Synchrotron Source (CHESS). In addition there are several other REU programs on campus with whom we share housing and programs.

The ten-week program to participation in research, the program will include informal seminars, formal lectures, tours of research facilities, social and recreational events, and a forum at summer's end in which participants present the results of their research.

Participants will receive a stipend of \$4200, a housing allowance, and a travel allowance for a round trip to/from Ithaca. Group housing will be available through Cornell University Campus Life and it is hoped that all the students can participate in this arrangement. Cornell Dining also has meal plans available at its various dining facilities.

**<http://www.lepp.cornell.edu/Education/REUatLEPP.html>**    **Deadline February 19, 2010**

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**University of Pennsylvania  
Philadelphia, PA**

The 10-week REU provides nanoscale research opportunities across a wide range of disciplines from materials science, mechanical engineering, chemistry, physics, bioengineering, physiology, chemical engineering, and electrical engineering

The Undergraduate Research at The Nano-Bio Interface program at Penn's NBIC is an REU that combines a rich research experience in nanobiotechnology with structured professional development focused on cross-cultural issues. The focus of the research is molecular interactions at the interface of physical and biological systems organized around themes of molecular motion, opto-electronic function of biomolecules, and single molecule probes. Faculties from two universities collaborate to provide a rich research experience for undergraduate students.

**<http://www.nanotech.upenn.edu/reu.html>**    **Deadline: February 26, 2010**

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**Projects in summer will focus on:**

- *Invasive Plants, Pests & Pathogens*
- *Plant Biology, Population and Community Ecology*
- *Large Ecosystem Experiments and Permanent Plot Studies*
- *Conservation Biology and Biodiversity*
- *Forest Ecosystem Response to Global Change*
- *Soil Carbon and Nitrogen Dynamics*
- *Reading and Conserving the New England Landscape*

Students are paid a stipend of \$4920 for the 12-week session.  
Excellent on-site housing and a full meal plan are included as part of the program.

Assistance with travel costs to and from Harvard Forest is also provided.

We seek a diverse group of students from a variety of undergraduate programs across the country

Visit <http://harvardforest.fas.harvard.edu/education/reu/reu.html> for the on-line application.

Applications are due February 5, 2010.

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**SPUR Program at University of Oregon**

Research areas include evolution, developmental biology, genomics, structural biology & biophysics, molecular biology, bioinformatics, genetics, cell biology, neuroscience, ecology, marine biology, computational biology, biochemistry, bioorganic chemistry, neurobiology & physiology, psychology, exercise and movement science, human physiology, cognitive neuroscience.

<http://biology.uoregon.edu/SPUR/SPUR2010onlineApplication.html>

**Deadline: Rolling Deadline but early Feb is recommended**

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***MIT Summer Undergraduate Research Program***

This summer program seeks to identify talented undergraduates from around the country who could benefit from spending a summer on MIT's campus, working in a

research laboratory under the tutelage and guidance of experienced scientists and engineers - MIT faculty members, postdoctoral fellows, and advanced graduate students.

<http://web.mit.edu/odg/undergraduate/msrp/2010MRSPAppContent.pdf>

**Deadline: February 1, 2010**

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**ENTRY POINT!** is a program of the American Association for the Advancement of Science (AAAS) offering outstanding internship opportunities for students with apparent and non-apparent disabilities in science, engineering, mathematics, computer science, and some fields of business. To meet the challenge of the competitive global economy in the new millennium, private industry and government research agencies must expand the pool of technical talent.

<http://ehrweb.aaas.org/entrypoint/apply.htm>

<http://ehrweb.aaas.org/entrypoint/>

AAAS has developed unique partnerships with **IBM, NASA, Merck, Google, Lockheed Martin, CVS, NAVAIR, Pfizer, Infosys, Shell, Procter & Gamble** and university science laboratories to meet their human resources needs. Working with its partners, AAAS identifies and screens undergraduate and graduate students with disabilities who are pursuing degrees in science, engineering, mathematics, computer science, and some fields of business, and places them in paid summer internships.

**Rolling Deadlines but generally early Spring**

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Kitt Peak Summer 2010 Research Experience for Undergraduates program provides an exceptional opportunity for undergraduates considering a career in science to engage in substantive research activities with NOAO 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 and Spitzer Space Telescope images, and Kepler Mission light curves. As part of their research activities, REU students gain first-hand experience with KPNO's state-of-the-art telescopes and develop expertise in astronomical data reduction and analysis.

<http://www.noao.edu/kpno/reu/>

**Deadline: January 29, 2010**

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## USC Chemistry NSF Research Experience for Undergraduates

Spend 10 weeks of your summer carrying out research in residence in our Chemistry Department. The title "Snapshots of Chemistry" implies ways of visualizing chemical processes in which the student becomes easily aware of the qualitative significance of a result via visual images without lengthy mathematical manipulations. Projects involve experimental techniques such as molecular-scale imaging, femtosecond time-resolved observations, X-ray crystallography, etc. Theoretical investigations exploit computer simulations and graphics to investigate processes of biochemical and material applications. Also included are projects in other areas of organic, inorganic, and physical chemistry.

In our summer program, you will work one-on-one in a lab with a faculty advisor and graduate student mentor. We will have weekly meetings on scientific topics as well as graduate school applications and scientific ethics. Included will be tours of the Loker Hydrocarbon Research Institute, the Molecular Robotics Lab, the Jet Propulsion Laboratory, and other research labs in the LA area. Social activities might include a visit to the Getty Museum, a Dodgers game, a beach party, a trip to the IMAX Theater, Disneyland, the Hollywood Bowl, the Aquarium of the Pacific, or an overnight camping trip in the Angeles Mountains. The summer will end with a poster session, where you will display your summer research and discuss it with Chemistry faculty and graduate students.

[http://chem.usc.edu/undergraduate/summer\\_prog.html](http://chem.usc.edu/undergraduate/summer_prog.html)

March 15, 2010

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## IBM Almaden Research Center

The internships are salaried positions typically 10 weeks long at the IBM Almaden Research Center in San Jose, CA and include the opportunity to work with an IBM mentor. Research areas of the internship are individually chosen so as to optimize the match between the skills and interests of the student, and the ongoing research programs of the laboratory. Information about IBM research and the Almaden site may be found at:

- Must be under-represented minority with sophomore or junior standing at a US college or university at the time of application
- Must be majoring in chemistry, physics, materials science or engineering, computer science or engineering, chemical, electrical, mechanical engineering
- Must have a minimum 3.0 GPA
- *No citizenship restriction*

<http://www.almaden.ibm.com/almaden/diversity/diversityform.shtml>

February 1, 2010

**The American Physical Society and IBM co-sponsor a research internship program for undergraduate women.** The goal is to encourage women students to pursue graduate studies in science and engineering.

The internships are salaried positions typically 10 weeks long at one of three IBM research locations (San Jose, CA, Austin, TX, or Yorktown Heights, NY), and give the opportunity to work closely with an IBM mentor. The Watson lab has a full range of research, as does the Almaden lab, and the Austin lab focuses on software and systems. Research areas of the internship are individually chosen so as to optimize the match between the skills and interests of the student, and the ongoing research programs of the laboratory. Information about the sites and their research may be found at:

[IBM Research](#)

[Almaden Research Center](#)

[Watson Research Center](#)

[Austin Research Laboratory](#)

The starting and ending dates are chosen so as not to conflict with the student's school schedule. Assistance in finding and renting housing will be provided

Must be female with sophomore or junior standing at a U.S. college or university at the time of application

Must be majoring in chemistry, physics, materials science or engineering, computer science or engineering, chemical, electrical, mechanical engineering

Must have a minimum 3.0 GPA

No citizenship restriction.

<http://www.aps.org/programs/women/scholarships/ibm/index.cfm>

**Deadline: February 1st**

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For additional summer research opportunities please check with your MESA Director who can let you know about additional programs that you may be eligible for.