“Can you see yourself doing research this Summer?”

Dear 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 classmates to also apply because today’s classmates will be tomorrow’s colleagues.

Good Luck!

Tiffany Shaleen Reardon
Associate Director of Diversity and Achievement
UC Berkeley Department of Electrical Engineering & Computer Sciences/Engineering Student Services

REU’s at UC Berkeley

SUPERB-ITS
The goal of the Summer Undergraduate Program in Engineering Research at Berkeley - Information Technology for Sustainability (SUPERB-ITS) in the Electrical Engineering and Computer Sciences (EECS) Department is to prepare and motivate a group of diverse, competitive candidates for graduate study. The research focus of the REU site will be computer science in the context of information technology for sustainability.

Deadline: February 15, 2015

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

TRUST Student Transfer and Research
TRUST Student Transfer and Research (TRUST STAR) is a nine-week summer program in Cybersecurity, Privacy and Trustworthy Systems, was established to increase the number of eligible transfer students to 4-year programs in computer science and electrical engineering. TRUST STAR targets students who have been educationally or economically disadvantaged and who may not have exposure to the academic environment of a research university.

Deadline: February 15, 2015

http://www.truststc.org/education/reu/14/instructions2015.html

Transfer to Excellence
Transfer-To-Excellence (TTE) is a competitive merit-based program that is intended to inspire California community college students to ultimately transfer and complete their Bachelor’s degree in science and engineering. Participants experience life at UC Berkeley before the
completion of their community college studies. TTE participants can either enroll in a credited course or participate in research.

**Deadline:** January 30, 2015

http://www.e3s-center.org/education/edu-tte-reu-appl2.htm

**Team for Research in Ubiquitous Secure Technology**
The TRUST REU is a nine-week residential research program. The goal of this program is to increase the level of diversity among students entering graduate programs by providing research opportunities under the supervision of a faculty member and/or graduate student mentor.

**Deadline:** February 28, 2015

http://www.truststc.org/education/star/index.html

**UC Berkeley SROP**
The UC Berkeley Summer Research Opportunity Program (SROP) was established to promote access to graduate education among undergraduates who have been educationally or economically disadvantaged, and who may not have had exposure to the academic environment of a research university.

**Deadline:** February 1, 2015

https://adobeformscentral.com/?f=TbWbyJdKj9bM4mAlvr8Jcw

**SynBERC Research Experiences for Undergraduates in Synthetic Biology**
SynBERC runs a nine-week summer research program that provides undergraduates with basic training in lab fundamentals, exposes them to core concepts of synthetic biology, and engages them in mentored research in the collaborative environments of individual faculty labs.

**Deadline:** check website for dates

http://www.synberc.org/reu

**AMGEN Scholars Program**
The Amgen Scholars Program is a national program to increase research opportunities for students committed to pursuing careers in the sciences. This program provides outstanding science undergraduates with research experience and increases participants’ competitiveness as candidates for admission to prestigious graduate and professional institutions. Additionally, this program encourages participants to pursue a Ph.D. or the joint M.D./Ph.D. degree and research careers in the sciences and biotechnology. Applicants from diverse populations and backgrounds are encouraged to apply.

**Deadline:** check website for dates

http://amgenscholars.berkeley.edu/
Lawrence Berkeley National Laboratory
Science Undergraduate Laboratory
Internship http://education.lbl.gov/Programs/SULI/index.html
Community College Internship http://education.lbl.gov/Programs/CCI/index.html
Berkeley Lab Undergraduate Research http://csee.lbl.gov/Programs/BLUR/index.html
http://csee.lbl.gov/Programs/Internships.html

The Center for Energy Efficient Electronics Science (E3S) is accepting applications for summer internship positions at UC Berkeley, MIT, Stanford and University of Texas at El Paso.
The E3S Summer Research Program is a 9-week program that introduces energy efficient electronics science to undergraduates who are interested in pursuing a Ph.D. in science and engineering. Summer interns have the opportunity to join E3S researchers working in a collaborative and innovative environment to make fundamental breakthroughs in the underlying physics, chemistry, and material science of electronics systems.

Deadline: January 31, 2015
http://www.e3s-center.org/education/edu-ugrad-appl.htm

REU Programs at Other Universities

MIT
MIT Lincoln Laboratory applies advanced technology to problems critical to national security. Behind the Laboratory's solutions are researchers with excellent technical abilities and imagination working in cross-disciplinary collaborations to develop systems from the initial concept stage, through simulation and analysis, to design and prototyping, and finally to real-world demonstrations. Majors: Electrical engineering, computer science, physics, mathematics, mechanical engineering, aeronautics/astronautics, materials science, molecular biology, biochemistry, and related fields.

http://www.ll.mit.edu/college/summerprogram.htm
National Science Foundation
REU Sites Links to NSF REU’s by major

[Image]

**Biological Sciences**  
**Chemistry**  
**Computer Science & Engineering**  
**Engineering**  
**Materials Research**

http://www.nsf.gov/crssprgm/reu/reu_search.jsp

**National Nanotechnology Infrastructure Network**
NNIN will host a Research Experience for Undergraduates (NNIN REU) Program from June through August, hiring approximately 85 interns to work at the fourteen NNIN sites. We are looking for engineering and science students with broad interests across disciplines focusing on nanotechnology. *Minority and female candidates are especially encouraged to apply, along with students with no previous research experience.*

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, opto-electronics, 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.

**Deadline:** February 11, 2015

http://www.nnin.org/research-experience-undergraduates

**For Pre Med and Pre Dental Students:**
**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 an personalized medical and dental school preparation.

The program is looking for freshman and sophomore college students with a minimum gpa of 2.5. Applicants must be US Citizens or permanent resident visas.

Each SMDEP site makes their admissions decisions on a "first come, first serve basis." *Please apply sooner rather than later to increase your change of being selected.*

http://www.smdep.org/sites/

**Johns Hopkins University**
The Institute for NanoBioTechnology at Johns Hopkins University offers undergraduate
students from colleges and universities around the country a chance to participate in research projects in the exciting and rapidly growing area of nanobiotechnology, a place where biology, medicine, and nanotech meet.

**Deadline:** Check Website

http://inbt.jhu.edu/education/undergraduate/reu/

**Department of Energy**

DOE CCI Program

Community College Internship Program Overview

The Community College Internship (CCI) program seeks to encourage community college students to enter technical careers relevant to the DOE mission by providing technical training experiences at the DOE laboratories. Selected students participate as interns appointed at one of 15 participating DOE laboratories. They work on technologies or instrumentation projects or major research facilities supporting DOE’s mission, under the guidance of laboratory staff scientists or engineers.

**Applications Due:** See website for dates

http://science.energy.gov/wdts/cci/how-to-apply/

**Princeton University**

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. 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.

**Deadline:** March 1, 2015

http://www.princeton.edu/pccmeducation/undergrad/reu/

**Summer REU (Research Experience for Undergraduates)**

The FREEDM Systems Center 2015 Summer REU program offers a research opportunity to domestic undergraduates from universities outside of the Center who are majoring in electrical and computer engineering, civil engineering, mechanical engineering, materials science engineering, computer science and related fields. The undergraduate student will spend 10 weeks during the summer of 2015 conducting research at one of the Center’s five partnering universities, experiencing different aspects of university research, and presenting their work at symposia. This program is open to U.S Citizens and permanent residents only. Women and members of under-represented minority population are encouraged to apply.

**Deadline:** February 27, 2015

http://www.freedm.ncsu.edu/index.php?s=5&p=139
The Oak Ridge Institute for Science and Education (ORISE) sponsors more than 50 research programs for undergraduate students at national laboratories and other federal research facilities in 24 states and some outside the United States. So whether you are seeking a summer internship, a scholarship to help fund your academic progress, or a longer-term research position to provide hands-on laboratory experience, ORISE has a program for you.

http://see.orau.org/AcademicStatus.aspx?type=Undergrad

Pathways to Science Search REU Programs from all over the country
Includes information about scholarships as well
http://www.pathwaystoscience.org/Undergrads.aspx

Are you a Math Major? The American Mathematical Society has tons of REU’s for students.
Check out their website to see
Deadline: varies by program site.
http://www.ams.org/programs/students/undergrad/emp-reu

Cornell University

The National Science Foundation NSF has renewed Cornell’s grant for a Research Experience for Undergraduates program in the Cornell Laboratory for Accelerator-based Sciences and Education (CLASSE), which encompasses the Laboratory for Elementary-Particle Physics (LEPP), the High-Energy Synchrotron Source (CHESS), and the Energy Recovery Linac (ERL) project. Under this program, approximately ten science and engineering students from around the country will be invited to participate in research at the Laboratory. In addition there are several other REU programs on campus with whom we share housing and programs

Deadline: Check Website

http://lepp.cornell.edu/Education/REU/WebHome.html

Rochester Institute of Technology

The NSF REU Program Imaging in the Physical Sciences is a new program that builds on the strength of the research and educational programs in the interdisciplinary Chester F. Carlson Center for Imaging Science at the Rochester Institute of Technology, extending a rich history of undergraduate research experiences with RIT students to students from beyond RIT’s walls. Our program introduces young scientists to research in a highly interdisciplinary, team-oriented setting, preparing the students for the type of goal-oriented research they are likely to encounter in real-world environments. RIT is now the third largest undergraduate private technical university in the United States.

Deadline: February 12, 2015

http://www.cis.rit.edu/outreach/summer-reu-program

University of Michigan

Interdisciplinary REU Program (Research Experiences for Undergraduates) in the Structure and Function of Proteins is designed to provide undergraduate students with a 10 week research experience in the areas of biochemistry, biophysics, cheminformatics, computational chemistry, enzymology, marine biology, molecular biology and plant biology. The research
projects featured in this program all involve studies of the structure and function of proteins.

REU Faculty Mentors represent the departments of Biochemistry; Chemistry; Medicinal Chemistry; Molecular, Cellular and Developmental Biology; Pathology, Pharmacology and Pharmaceutical Sciences.

**Deadline:** March 1, 2015

[http://pharmacy.umich.edu/reu](http://pharmacy.umich.edu/reu)

**Vanderbilt Institute for Nanoscale Science and Engineering**

VINSE brings ten students each summer to campus to work closely with VINSE faculty on research projects in cutting edge areas of nanoscale science and engineering. This summer program is funded by the National Science Foundation Research Experiences for Undergraduates (NSF-REU) program.

**Deadline:** February 15, 2015

[http://www.vanderbilt.edu/vinse/reu/](http://www.vanderbilt.edu/vinse/reu/)

**California Institute of Technology NASA Jet Propulsion Laboratory**

**Deadlines:** Vary


**NASA One Stop Shop Initiative** is where you can find REU’s for all things NASA.


**Brandeis University**

Research Experience for Undergraduates (REU) Program Materials Science and Engineering Center is a 10-week program for undergraduates.

**Deadline:** Feb 2, 2015

[Application for Brandeis University MRSEC REU 2015](http://polymerreu.mines.edu/)

Advancing Polymer Materials by Integrating Chemistry and Chemical Engineering REU

**Deadline:** Check website

[http://polymerreu.mines.edu/](http://polymerreu.mines.edu/)

**The Renewable Energy Materials Research Science and Engineering Center**

**Deadline:** Check Website

[http://remrsec.mines.edu/reu.htm](http://remrsec.mines.edu/reu.htm)
University of Washington

The Center for Sensorimotor Neural Engineering Research Experience for Undergraduates program will be held during the summer of 2015 (June 17 - August 22). This 10-week program on the University of Washington's Seattle campus will provide undergraduate students with opportunities to work on research projects with researchers and to take part in workshop training sessions in ethics, communication skills, and scientific presentation skills designed to provide the undergraduate scientist with a solid foundation for graduate study.

**Deadline:** February 1, 2015

[http://www.csne-erc.org/content/undergraduate](http://www.csne-erc.org/content/undergraduate)

UC Riverside

The NSF-funded Research Experience for Undergraduates (REU) Site is geared towards providing opportunities to students interested in the cellular and molecular biology of plants and their pathogens. The program is especially interested in exposing students from two- and four-year colleges with limited research infrastructure to the excitement and career options that studies of plant and plant pathogen biology offers, but students from all colleges are welcome to apply. The program is sponsored by the UC-Riverside Center for Plant Cell Biology (CEPCEB) which, in association with the Institute for Integrative Genome Biology (IIGB) and other college departments, includes many faculty that study plants, plant pathogens (fungi, bacteria, viruses, nematodes), other microbes, and allied fields.

**Deadline:** February 24, 2015

[http://cepceb.ucr.edu/reu/](http://cepceb.ucr.edu/reu/)

UC DAVIS

The Center for Bio Photonics Science and Technology hosts a Summer Internship Program for Undergraduate students. For a period of 8 to 12 weeks students get involved in on-going research projects in the following areas: Bioimaging, Molecular & Cellular Biophotonics and Medical Biophotonics.

Majors: Chemical, Biochemical or Biomedical Engineering, Biology, Chemistry, Physics, Biophysics, Biochemistry, Molecular Biology or related.

**Deadline:** check website


University of Notre Dame

The Department of Biological Sciences at the University of Notre Dame is sponsoring a NSF Research Experience for Undergraduates (REU) program during the summer of 2013 *pending funding*. The focal point of the proposed projects is Integrative Cell and Molecular Biology.

Current freshmen, sophomores, juniors and non-graduating seniors majoring in biological
sciences, who are U.S. citizens or permanent residents, are eligible to apply. Underrepresented minority students, disabled students, and students from small colleges without graduate biology programs are encouraged to apply.

http://www3.nd.edu/~biosreu/apply.html

MAYO CLINIC
Are a student currently in your sophomore or junior year at a U.S. college or university? Have a grade point average of at least 3.0? Are seriously considering a biomedical research career as a Ph.D. or M.D.-Ph.D.?

International students who are attending a U.S. college or university are eligible to apply.

**Deadline:** February 1
http://www.mayo.edu/mgs/programs/summer-undergraduate-research-fellowship/admissions

National Institute of Health (NIH) Community College Summer Enrichment Program (CCSEP)
All majors accepted, however, students must have successfully completed courses in biology and chemistry.

https://www.training.nih.gov/programs/sip

**Deadline:** March 1

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.

**Deadline:** February 1, 2015
http://www.rockefeller.edu/surf/

UCLA
The UCLA Summer Programs for Undergraduate Research (SPUR) offer upper division undergraduate students with outstanding academic potential the opportunity to work closely with faculty mentors on research projects. The programs are designed for students who wish to learn more about the graduate school experience and possibly pursue an academic career in teaching and research. Opportunities are available in virtually all academic fields (e.g., arts, humanities, social sciences, life sciences, health sciences, physical sciences, etc.).

**Deadline:** February 2, 2015
http://www.gdnet.ucla.edu/asis/srp/srpintro.htm
UC Davis
The Department of Physics has hosted an NSF-funded Research Experiences for Undergraduates site since 2004. During the 10-week program students live on campus while working alongside our faculty and graduate students on ongoing research projects. Students get a view of physics very different from typical coursework.

Deadline: February 13, 2015

http://london.ucdavis.edu/~reu/reu.html

UC San Diego

The University of California, San Diego Summer Training Academy for Research in the Sciences (STARS) program is an eight week summer research academy for undergraduate students, recent graduates, and masters students. STARS offers an exciting research internship for students by participating in an ongoing UCSD research project and experience the rigors and challenges of graduate study at a top rated research institution.

Deadline: February 22, 2015

http://graduatedivision.ucsd.edu/degrees/summer-researches/stars/application.html

Lawrence Livermore National Laboratory

Offers a wide variety of summer internship opportunities in various disciplines, including chemistry and material science, computer science, criticality safety, engineering, and physics.

https://scholars.llnl.gov/

Harvard

Research Experience for Undergraduates Program
Numerous opportunities including projects in Materials Science, Computational Science, Security, Bioengineering, and more:

Deadline: See Website

https://reusite.seas.harvard.edu/application/

Carnegie Mellon

The Robotics Institute Summer Scholars (RISS) Program is an intensive summer research program for talented undergraduate students. Summer Scholars have the opportunity to participate in state-of-the-art research projects, interact with a diverse research team, and to be mentored by leading faculty and technical staff. The program introduces aspiring students to dynamic research resources and methods, RI graduate education programs and research projects. The Summer Scholars program lasts 11 weeks and begins June 1st and runs until August 15th

Deadline: December 31, 2015

http://www.ri.cmu.edu/ri_static_content.html?menu_id=464
Stanford University
Mechanical Engineering Majors department. Students who are accepted into the program will receive a summer stipend. On-campus housing and a meal plan through the Student Housing Office may be available but please note that this is a separate program and must be applied for separately. Participation in SURI is not a guarantee of room and board. Whether you are well into your major or still testing the waters, all engineering students are strongly encouraged to consider taking advantage of what the REU program can offer.

Deadline: There is no formal application for participation in the ME SURI. Students who are interested in participating in the ME program should seek out research opportunities directly with affiliated ME faculty and secure a commitment/position for the summer by the end of May.

http://me.stanford.edu/current_students/ug_research.html

EDGE Math Programs for Women
The EDGE Program (Enhancing Diversity in Graduate Education) was launched in 1998 by Bryn Mawr and Spelman Colleges, with the goal of strengthening the ability of women students to successfully complete graduate programs in the mathematical sciences, with particular inclusion of women from underrepresented groups.

Campuses
- Bryn Mawr College
- Florida A&M University, Tallahassee
- Morehouse College
- New College of Florida
- North Carolina A & T State University
- North Carolina State
- Pomona College
- Spelman College

Deadline: check website http://www.edgeforwomen.org/

Louisiana State University
Interdisciplinary Research Experience in Computational Sciences
This Research Experience for Undergraduates (REU) project is a ten week program where students work collaboratively on a wide variety of computational science projects. The Center for Computation & Technology (CCT) at Louisiana State University (LSU) provides an ideal setting for the REU student to become familiar with interdisciplinary research. With research groups exploring gravitational waves, complex emergent phenomena in material science, or computational music, the participants work on cutting edge research in Computational Sciences.

Deadline: March 1, 2015

http://reu.cct.lsu.edu/

The Louisiana Alliance for Simulation-Guided Materials Application (LA-SiGMA) is a 7-member alliance of universities throughout Louisiana. Members of LA-SiGMA provide six different sites and numerous projects for the REU student to become familiar with interdisciplinary research. With research groups exploring molecular interactions to model
hydrophobic solubility, parallel finite elements on unstructured meshes using PETSc and Sieve, simulations of hydrogen storage materials, etc., the participants work on cutting edge research in material sciences and computational tools. Minimum 2.75 GPA.

**Deadline:** March 1, 2015


**Department of Homeland Security**

The **DHS HS-STEM Summer Internship Program** provides a 10-week summer research experience for undergraduate students majoring in DHS-related science, technology, engineering and mathematics (HS-STEM) disciplines. Students have the opportunity to conduct research in DHS mission-relevant areas at federal research facilities located across the country. Participants receive a stipend plus transportation expenses to/from their internship location.

**Deadline:** check website

[https://www.dhs.gov/national-hs-steam-summer-internship-program](https://www.dhs.gov/national-hs-steam-summer-internship-program)

**Cornell University**

The Cornell Center for Materials Research is offering an REU in 2015. Students will have the opportunity to work directly with faculty on interdisciplinary materials research projects involving chemistry, physics, materials science, and engineering disciplines.

**Deadline:** Check Website, applications online beginning December 15

[http://www.ccmr.cornell.edu/education/reu/](http://www.ccmr.cornell.edu/education/reu/)

**University of Michigan**

The Summer 2015 C-PHOM REU Program will run from June 1, 2015 to August 8, 2015. The program provides undergraduate students who are U.S. citizens or permanent residents with an opportunity to conduct tens weeks of summer research with faculty and students in the fields of nanophotonics, nanomaterials, and nanophysics. Opportunities are available in experiment, theory, and computation. Applicants are required to send transcripts and 2 letters of recommendation.

**Deadline:** February 1, 2015

[http://cphom.engin.umich.edu/research-experience-for-undergraduates/](http://cphom.engin.umich.edu/research-experience-for-undergraduates/)

**Georgia Tech**

Georgia Tech Materials Research Science and Engineering Center (MRSEC) REU is a ten-week summer research program designed to attract qualified, underrepresented, minority students into graduate school in the fields of materials and physical sciences.

**Deadline:** Check Website

[http://www.mrsec.gatech.edu/research-experiences-undergraduates-reu](http://www.mrsec.gatech.edu/research-experiences-undergraduates-reu)
NASA ACCESS

The Achieving Competence in Computing, Engineering and Space Science project, or ACCESS, provides summer internships to highly qualified students with disabilities. Students work for 10 weeks during the summer with a NASA mentor in either a lab or office environment. Summer jobs are related to the participant’s interests and abilities. ACCESS participants are full-time students, both graduate and undergraduate, from accredited four-year educational institutions. They must have an academic background in engineering, computer science, physics or mathematics with a B average in their major. Participants must also be U.S. citizens.

**Deadline:** See website

[http://www.nasa.gov/offices/education/programs.descriptions/Achieving_Competence.html](http://www.nasa.gov/offices/education/programs.descriptions/Achieving_Competence.html#UnLeMvlQFSA)

University of Pittsburgh

The iSchool Inclusion Institute (i3) is an undergraduate research program that prepares students from underrepresented populations for graduate study and careers in the information sciences. Students undertake a year-long experience that includes two summer institutes held at the University of Pittsburgh and a year-long team research project. Students are immersed in special-topics workshops, professional development seminars, research projects, and network-building opportunities.

**Deadline:** Rolling admissions, apply early.


Boston University

The Summer Undergraduate Research Fellowship (SURF) Program at Boston University is designed to promote access to graduate education for talented undergraduate students, especially those from minority groups traditionally underrepresented in the sciences: African-American, Hispanic, Native American/Native Alaskan, and Pacific Islander/Native Hawaiian/Polynesian. The SURF Program is supported by funds from the National Science Foundation (NSF-REU; NE-AGEP), the Department of Defense (ASSURE), and Boston University. The SURF Program is open to non-BU students who are rising juniors or rising seniors, and wish to conduct research in the sciences, technology, or engineering.

**Deadline:** check website

[http://www.bu.edu/urop/surf-program/about/](http://www.bu.edu/urop/surf-program/about/)

Cornell University

Cornell University LSAMP-REU is a paid summer research opportunity that provides undergraduate participants with the opportunity to work with distinguished faculty and staff as well as network with others in their field of interest through weekly luncheons. Must have a 3.0 or higher gpa.
Undergraduate students, interested in gaining a deeper understanding in an engineering-related field, have the opportunity to conduct and present research over a ten-week duration under the auspices of a Cornell Engineering faculty research mentor. Through this one-on-one partnership, participants will gain theoretical knowledge and practical training in academic research and scientific experimentation. CU LSAMP-R was developed to aid in the retention of traditionally underrepresented minority groups in the sciences, technology, engineering and mathematics (STEM).

Deadline: February 15, 2015

http://culsampreu.weebly.com/apply.html