

Avenues for Undergraduate Research

Through faculty-sponsored research, undergraduates help acquire new knowledge at the forefront of their fields, develop skills in critical thinking and problem solving, express their creativity, and benefit from mentoring by faculty. All of the 240+ faculty members in the College conduct research and other scholarly activity, and most are willing to involve undergraduate students. The following are specific examples:

Academic Recognition Programs

<http://www.usc.edu/student-affairs/LSS/arp/>

Through a variety of programs and services, ARP supports students' efforts to make the most of their academic experience at the university, and to seek further opportunities for study and research.

Center for Religion and Civic Culture

www.crcc.usc.edu/

Sponsors approximately 12 research grants (up to \$1,500) to undergraduates for faculty-sponsored research on religion and culture.

Discover Scholars Program

www.usc.edu/programs/ugprograms/discovery/about.shtml

Students have the opportunity to earn the Discovery Scholar designation in every major concentration offered at the University and be considered for a \$10,000 Prize. The objective is to honor creativity wherever it is found. USC recognizes all undergraduates who meet the program's criteria. Students will be certified by a panel of experts within their own school. In some cases the work done to earn the designation may be a senior honors thesis, design project, or other capstone activity.

Directed Research Courses*

www.usc.edu/programs/ugprograms/ugresearch/oncampus_directed

Student-proposed, faculty supervised research projects that earn 2-8 units of elective credit. Upon completion, the work is formally presented as a paper, publication, demonstration or performance.

East Asian Studies Center - Freeman Foundation Sponsored Research

www.college.usc.edu/east_asian_studies/programs/freeman.cfm

Scholarships for undergraduates performing research on East Asia as part of a study abroad semester.

Genome Research Experience for Undergraduates - GREU

<http://cegs.usc.edu/academics/greu/GREU.html>

One goal of the Center is to train members of those groups that are traditionally under-represented in the sciences. Students will be placed in a molecular lab or computational group, accordingly to their academic background and interests and based availability of positions. Students will work closely with graduate students and/or faculty on an assigned research project.

Global Scholars Program

http://www.usc.edu/dept/International_Offices/Globalization/scholars/global/index.shtml

The Global Scholars program recognizes undergraduates who have excelled in their studies both at home and abroad. Up to ten students will receive a \$10,000 prize to be applied toward graduate study. USC recognizes all undergraduates who meet the program's criteria. Applicants must have participated in an international program administered by USC or an outside institution. Global Scholars will be expected to complete a capstone paper, project, or research paper and a reflective essay in which they reflect on their international experience.

Integrated Media Systems Center - Undergraduate Research Grants, Viterbi School of Engineering

www.imscwww.usc.edu/

A National Science Foundation Engineering Research Center that offers opportunities in research and grant awards to undergraduate students.

Interdisciplinary Studies

www.college.usc.edu/interdisciplinary-studies

Collaborative Learning Projects allow students to work together on a student-designed learning experience and earn unit credit.

Jesse M Unruh Institute of Politics - Undergraduate Research Scholars

www.college.usc.edu/unruh/

Outstanding undergraduates participate in the research of Political Science faculty members.

Joint Educational Project

<http://college.usc.edu/joint-educational-project/>

Each year over 2,000 students enroll in one of several JEP courses that combine academic coursework with hands-on experience in neighborhoods surrounding the university. Students may also participate as volunteers on a non-credit basis.

Levan Institute

<http://college.usc.edu/levan-institute>

The Institute collaborates with departments, professional schools, and programs across the university to bring students and faculty together with authors and artists, philosophers and practitioners, and the ethical voices of our time.

Loker Hydrocarbon Research Institute

<http://www.usc.edu/dept/chemistry/loker/>

Offers basic research and graduate education in the field of hydrocarbon chemistry

McNair Scholars Program

www.mcnair.usc.edu/

Summer research grants of \$2,800 and special programs to help prepare for graduate school, for disadvantaged and underrepresented minority students.

PIBBS at USC: Programs in Biomedical and Biological Sciences

www.usc.edu/programs/pibbs/site/index_001.html

Faculty research topics include: marine, evolutionary, cancer, cell, and developmental biology; disease research, epidemiology and biostatistics, genetics, genomics and bioinformatics, immunology, molecular structure and function, neurobiology, & pharmacology and therapeutics.

Problems Without Passports

<http://college.usc.edu/problems-without-passports>

USC students have the opportunity this summer to participate in six Problems Without Passports courses that combine problem-based or inquiry learning research exercises with study in a foreign country, Washington D.C., or Los Angeles.

Program for Environmental and Regional Equity

<http://college.usc.edu/pere/home/>

PERE conducts research and facilitates discussions on issues of environmental justice, regional inclusion, and immigrant integration.

Renaissance Scholars Program

<http://www.usc.edu/programs/ugprograms/renaissance/index.shtml>

USC has created an academic honor that is awarded to select undergraduate students who graduate with a major and a minor (or two majors) in widely separated fields of study. In order to receive the Renaissance Scholar honor, each student must first meet all of the university requirements for his/her degree(s). The combination of disciplines each student is studying will be reviewed by a faculty panel. Certification will be based on the extent to which the two fields of study are widely separate and distinct, and require each student to stretch intellectually.

Research Departments Offering Undergraduate Opportunities

www.usc.edu/programs/ugprograms/ugresearch/oncampus_ongoing.shtml

Arts and Humanities, Life Sciences, Social Sciences, Physical Sciences, Math and Engineering, Medicine and Health

Shoah Foundation Institute for Visual History and Education

<http://www.college.usc.edu/vhi/>

Periodically offers research stipends for scholars and students who wish to use the testimony archive for research or teaching.

Space Science Center

http://www.usc.edu/dept/space_science/index.html

Research in the space sciences is carried out by the Space Sciences Center and Department of Physics and Astronomy. Missions include rocket launches at White Sands Missile Range (usually during the summer) as well as experiments aboard the Space Shuttle.

Student Senate Academic Research Fund

www.usc.edu/dept/student_senate/funding.php

Provides grants up to \$1,000 for undergraduate student projects with faculty sponsors.

Student Opportunities for Academic Research (SOAR)

www.college.usc.edu/soar

Provides students up to \$1,000 of support for any non-course related research activity conducted during the fall or spring semesters. Students must have a faculty sponsor.

Summer Undergraduate Research Fun (SURF)

<http://college.usc.edu/surf>

Through SURF, USC College students may receive up to \$3,000 to support a summer research project under the supervision of a USC faculty member.

The Rose Hills Foundation Summer Science and Engineering Research Fellowship

http://www.usc.edu/programs/ugprograms/ugresearch/rose_hill.shtml

The Rose Hills Foundation, which supports non-profit organizations that serve the citizens of Southern California, has generously provided funding for a limited number of students who would like to obtain Science and Engineering Fellowships in Summer 2012. Each undergraduate student funded by the program will receive a stipend in the amount of \$5000 to support full-time research in **science or engineering** for a period of not less than eight weeks during a period of time. Each faculty supervisor will receive \$2000 for his or her research account for each student supervised. All full-time USC faculty engaged in science or engineering research are eligible to serve as faculty supervisors.

WiSE-Women in Science and Engineering - College Undergraduate Research Grants

www.usc.edu/programs/wise/

Grants to participate in scholarly research with science or mathematics faculty in the College. The central aim is to increase the representation of women in the sciences.

USC Davis School of Gerontology

<http://www.usc.edu/dept/gero/research.shtml>

Interdisciplinary investigations in neurobiology, molecular biology, cognitive psychology, biodemography, family studies, long term care and other topics encompass the breadth of ongoing research at the Center.

USC Research Centers, Institutes and Departments

www.usc.edu/research/centers/

List of Research Centers and Institutes by Subject Area

USC Undergraduate Research Program

www.usc.edu/programs/ugprograms/ugresearch/

Information on undergraduate research opportunities, academic honors programs, financial support, and a forum for dissemination of student accomplishments.

USC Provost's Undergraduate Research Fellowship

<http://www.usc.edu/programs/ugprograms/ugresearch/fellowships.shtml>

The Office of the Provost provides a limited number of fellowships for undergraduate research. Each undergraduate student funded by the program will receive a stipend in the amount of \$3000 to support research in any academic field for a period of not less than eight weeks during a period of time. All full-time USC faculty engaged in research are eligible to serve as faculty supervisors.

USC Neuroscience Research

www.usc.edu/programs/neuroscience/research/

More than 60 Neuroscience faculty conduct externally funded research programs in areas ranging from the molecules that determine neuronal function to the principles of human cognition and emotion.

USC Undergraduate Symposium for Scholarly & Creative Work

www.usc.edu/programs/ugprograms/ugsymposium/

Using poster/panel sessions, art exhibits, and electronic media, students can exhibit and share their scholarly work with the university community. Monetary prizes awarded in several categories.

USC Wrigley Institute for Environmental Studies: Catalina Semester

www.college.usc.edu/wrigley/home/index.cfm

A 16-week intensive marine science research program for undergraduate juniors and seniors. This program explores the dynamics of marine organisms and ocean microbes, as well as the latest in scientific approaches to oceanic problems.

External Avenues for Undergraduate Research:

American Cancer Society (ACS)

www.cancer.org/docroot/RES/RES_0.asp

One of the nation's largest non-profit organizations which funds cancer research, projects and programming conducted worldwide.

American Diabetes Association (ADA)

www.diabetes.org/diabetes-research/ada-funded.jsp

The ADA funds peer-reviewed projects aimed at preventing, treating and curing all types of diabetes. The association also funds "targeted," or donor-driven

research grants that interest both donor and association.

American Heart Association (AHA)

www.americanheart.org/presenter.jhtml?identifier=1200050

AHA stimulates research and career development opportunities in primary and secondary prevention, outcomes, and quality of care. Types of research include directed, applied, basic, clinical, fundamental and targeted.

The Baxter Foundation

www.baxter.com/

A global healthcare company that assists healthcare professionals with medical developments including recombinant therapeutics, plasma-based therapeutics, vaccines, small molecule drugs, medication delivery systems, kidney dialysis, drug formulation technologies, and sterilization techniques.

The Doheny Eye Institute

www.usc.edu/hsc/doheny/

A center for patient care, vision research, and physician education; affiliated with USC's Keck School of Medicine.

National Institute of Health (NIH)

www.nih.gov/science/

Research and training opportunities including summer internship programs, summer research fellowship programs, post-baccalaureate research opportunities, and graduate education programs

National Science Foundation (NSF)

www.nsf.gov/news/overviews/

NSF supports a variety of science, engineering and education research in nearly every field.

The House Ear Institute

www.hei.org

A private, non-profit organization dedicated to advancing hearing science through research and education. Explore the developing ear, hearing loss, ear disease and the relationship between the ear and the brain.

Weill Cornell/Rockefeller/ Sloan-Kettering Gateways to the Laboratory Program

www.weill.cornell.edu/mdphd/summerprogram/

The program is highlighted by the NIH as one of the top ten summer programs for underrepresented and

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

W. M. Keck Foundation

www.wmkeck.org/

The philanthropic foundation focuses on five areas: Science and Engineering Research, Undergraduate Science and Engineering, Medical Research, Liberal Arts and Southern California.

