

STEM Undergraduate Research Programs

Undergraduate students are highly encouraged to pursue research experiences. Undergraduate research plays an important role in the educational experience and provides practical skills for future employment and graduate school. Science, Technology, Engineering, and Math (STEM) majors as well as those with interests in health professions have a wide range of opportunities available to participate in groundbreaking research with faculty and graduate students on-campus, off-campus, and abroad. Please keep in mind that this is **not an exhaustive list** but a good starting point to find and secure a research opportunity!

Additional Undergraduate Research Programs:

- UC Irvine site: http://www.urop.uci.edu/frame_opportunities_off_campus.html
- UCLA site: http://www.ugresearchsci.ucla.edu/pdfs/Off-Campus%20Summer%20Programs%202015.pdf

Additional Resources:

Career Services can assist you on your journey to securing a research position. Visit the Career Resource Room (CRR) to view handouts and books on various career paths, resources on graduate school admissions processes, get registered for our on-line job board Gaucholink, or stop by for drop-in hours with a counselor. You can also meet with counselors individually to get assistance with the application process for any research opportunity, including résumé and cover letter critiques, letter of interest critique, interview skills, and more!

- UCSB Programs Overview: https://undergrad.research.ucsb.edu/
- UCSB Career Services: http://career.sa.ucsb.edu/
- UCSB Office of Research: http://undergrad.research.ucsb.edu/get-started/programs-and-funding/
- UCSB Undergraduate Research and Creative Activities: http://www.duels.ucsb.edu/urca/opportunities/alert
- UCSB Center for Science and Engineering Partnerships: http://www.csep.cnsi.ucsb.edu/
- UCSB Biology Department Research: https://www.lifesci.ucsb.edu/undergrad/internships/internships.html
- UCSB Chemistry Department Research: http://www.chem.ucsb.edu/undergrad/research
- UCSB College of Engineering Research: http://engineering.ucsb.edu/current_undergraduates/research/
- UCSB Earth Science Department Research: http://www.geol.ucsb.edu/research
- UCSB Environmental Studies Department Research: http://www.es.ucsb.edu/student/research
- UCSB Geography Department Research: http://www.geog.ucsb.edu/research/research-units/
- UCSB Math Department Research: http://math.ucsb.edu/REU/
- UCSB Physics Department Research: http://www.physics.ucsb.edu/education/undergrad/research

| Name | Web Address | STEM TYPE | Deadline | Brief Description |
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| CAMP (California Alliance for Minority Participation) *UCSB | <u>http://www.mrl.ucsb.edu/</u> <u>education/undergrad/</u> <u>camp</u> | All | Usually early winter; check the website for details | CAMP sponsors undergraduate science and engineering majors who are interested in pursuing a research experience. This internship program will fund UCSB undergraduates from under-represented groups in science, technolo- gy, engineering, and mathematics for a 10 week summer research experience |

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| Center for Science and Engineering Partnership *UCSB | <u>http://csep.cnsi.ucsb.edu/</u> <u>undergrad</u> | AII | Usually early winter; check the website for details | CSEP provides opportunities for students to develop research projects under the mentorship of UCSB faculty, postdoctoral scholars, and graduate student researchers. |
| Early Undergraduate Research and Knowledge Acquisition *UCSB | http://eureka-csep.cnsi. ucsb.edu/ | All | Usually early winter; check the website for details | This program is focused on introducing students in their first year to the broader science community on campus and providing exposure to research through academic year internships. |
| Gene Lucas Undergraduate Research Fund *UCSB | http://academics.sa.ucsb. edu/research-funds// gene-lucas-research-fund | AII | Usually early winter; check the website for details | Freshmen and first-year transfer student participants will be funded up to \$1,000 towards on-site work experience in a research environment, including laboratory or field work. The fund will also support students' efforts to publish the results of their scientific research. |
| IGERT Network Science Internship | http://networkscience. igert.ucsb.edu/ undergraduate- internships | AII | Usually early winter; check the website for details | A select group of interns will work with graduate students and faculty on projects for an 8-week period, culminating in a formal research presentation. In addition to hands-on research in a lab setting, interns attend weekly group meetings as well as seminars about topics relevant to graduate school and professional skills development. |
| McNair Scholars Program *UCSB | <u>http://mcnair.ucsb.edu/</u> | AII | Check website for details | UCSB McNair Scholars Program provides undergraduates with opportunities to participate in academic year and summer research activities. McNair Scholars attend courses, seminars and workshops on topics related to graduate school preparation, complete a research project under the guidance of a faculty mentor, and have the opportunity to present their research at local, regional and national conferences. |
| Oak Ridge Institute for Science and Education | http://orise.arau.gov/ science-education/ internships-scholarships- fellowships/default.aspx | All | Usually early winter; check the website for details | 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. |
| Summer Institute in Math and Science | <u>http://csep.cnsi.ucsb.edu/</u> <u>k12/sims</u> | All | Usually early winter; check the website for details | SIMS is a two week intensive residential program for newly admitted UCSB freshmen to engage in academic preparation, professional development, educational presentations, and research projects. |
| UC LEADS (University of California Leadership Excellence through Advanced Degrees) *UCSB | <u>http://graddiv.ucsb.edu/</u> admissions/outreach/ uc-leads | AII | Usually early winter; check the website for details | UC LEADS is designed to identify upper-division UCSB undergraduate students with the potential to succeed in these disciplines, but who have experienced situations or conditions that have adversely impacted their advancement in their field of study. |
| URCA (Undergraduate Research and Creative Ideas) *UCSB | https://www.deuls.ucsb. edu/research/urca | All Majors | Fall | Encourages undergraduates conducting independent research projects or creative activities to apply for funding to support these efforts. The funding for URCA grants comes from university, federal, and private sources and is intended to cover a project's expenses, including research-related domestic travel. |

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| Summer Research Early Identification Program | <u>http://www.</u> <u>theleadershipalliance.org/</u> <u>tabid 242/Default.aspx</u> | All Majors | Usually early winter; check the website for details | SR-EIP provides undergraduates with training and mentoring in the principles underlying the conduct of research and prepares them to pursue competitive applications to graduate schools. |
| ALERT (Awareness and Localization of Explosives-Related Threats) | http://www.northeastern. edu/alert/education- programs/ | Chemistry | Usually early winter; check the website for details | To conduct transformational research, develop technology, and provide educational development to improve effective characterization, detection, migration and response to explosives-related threats facing the country and the world. |
| Northeastern University Research Experiences for Undergraduates (REU) | http://www.northeastern. edu/cos/chemistry/ educational-degree- programs/reu-site/ | Biology & Chemistry | Usually early winter; check the website for details | Offers interdisciplinary research opportunities in Biochemistry, Organic, Physical and analytical Chemistry laboratories with an overarching focus on the theme of Catalysis. Students will do research in a vibrant academic setting with extensive connections to companies in the Boston area. |
| CIAN (Center for Integrated Access Networks) | <u>http://www.cian-erc.org/ undergraduate-students. cfm</u> | Computer Science | Usually early winter, check the website for details | To create transformative technologies for optical access networks where virtually any application requiring any resource can seamlessly and efficiently aggregated and interfaced with existing and future core networks in a cost effective manner. |
| NSF Engineering Research Center Research Experiences for Undergrads (REU) | http://erc-assoc. org/content/ research-experiences- undergraduates | Engineering | Check the website for details | The ERC's have developed many innovative programs to leverage the strong aspects of ERC research and education not only into the wider educational environment. |
| Math Summer Research Program *UCSB | <u>http://math.ucsb.edu/</u> <u>REU/index.html</u> | Math | Usually early winter; check the website for details | Provides an opportunity to undergraduate students to gain research experience in mathematics by helping students develop skills to communicate the results of their research, and produce scientific publications. |
| Minority Access Program (MAP) | http://www.endocrine. org/advocacy-and- outreach/minority-affairs/ minority-access-program | Chemistry | Usually early winter; check the website for details | Summer Research Internships at Endocrine Training Institutions for two consecutive summer. Research seminars/workshops and GRE prep courses. |
| National Oceanic and Atmospheric Administration – Undergrad Fellowships | http://coast.noaa.gov/ fellowship/undergrad opportunities.html | Biology, EEMB, & Environmental Science | Check the website for details | Fellowship and internship opportunities for undergraduate students and recent recipients of bachelor's degrees interested in coastal, marine, and environmental management or research. |
| Research Experience for Undergraduates in Physics at University of Texas at Brownsville | <u>http://www.phys.utb.</u> <u>edu/REUsite/</u> | Physics | Usually early winter; check the website for details | Students will work on projects involving astrophysics, gravitational wave detec2on, lasers and photonics, radio and op2cal astronomy, biophysics, and nano science. |

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| NIH Summer Internship Program (SIP) in Biomedical Research | <u>http://www.training.nih.</u> gov/programs/sip | Biology | Fall | Programs at NIH provide an opportunity to spend a summer working at the NIH side-by- side with some of the leading scientists in the world, in an environment devoted exclusively to biomedical research. |
| Van Andel Education Institute – Summer Internship Programs | http://www.vai.org/ vaei/undergraduate- opportunities/student- internship-programs.aspx | Biomedical | Usually early winter; check the website for details | Van Andel Education institute partners with UNCF to match students interested in biomedical research careers with summer research internships. Students will gain an understanding of the latest research methods, instruments, and testing procedures. They will learn how to design experiments and see how their test results can contribute to a larger research project. |