

## DEPARTMENTS

Biochemistry  
Botany and Plant Sciences  
Chemistry  
Earth and Planetary Sciences  
Entomology  
Environmental Sciences  
Evolution, Ecology, and Organismal Biology  
Mathematics  
Microbiology and Plant Pathology  
Molecular, Cell, and Systems Biology  
Nematology  
Physics and Astronomy  
Statistics

## UNDERGRADUATE MAJORS

### Life Sciences Majors

Biochemistry  
Biology  
Cell, Molecular, and Developmental Biology  
Entomology  
Microbiology  
Neuroscience  
Plant Biology

### Mathematical Sciences Majors

Data Science  
Mathematics  
Mathematics for Teachers of Secondary School  
Statistics

### Physical Sciences Majors

Chemistry  
Earth Sciences  
Environmental Sciences  
Geology  
Geophysics  
Physics

## GRADUATE PROGRAMS

Biochemistry and Molecular Biology  
Biophysics  
Cell, Molecular, and Developmental Biology  
Chemistry  
Earth and Planetary Sciences  
Entomology  
Environmental Sciences  
Environmental Toxicology  
Evolutionary Biology Joint Doctoral Program  
Evolution, Ecology, and Organismal Biology  
Genetics, Genomics, and Bioinformatics  
Mathematics  
Microbiology  
Neuroscience  
Physics  
Plant Biology  
Plant Pathology  
Statistics and Applied Statistics



The College of Natural & Agricultural Sciences (CNAS) at the University of California, Riverside (UCR) is home to world-renowned scholars pursuing research that deepens our knowledge of the universe we live in and improves the quality of life for inhabitants of the state, the nation, and the world. Central to this research is educating the students who come to CNAS to learn science, and who leave with an integrated grasp of how they can change the world. These students, and the faculty who teach them, benefit from a structure that is unique among land-grant colleges: CNAS's 13 departments encompass the life, physical, mathematical, and agricultural sciences. This structure encourages an extraordinary degree of collaboration, reflected in the interdisciplinary research centers and the many cooperatively taught degree programs. Modern science is team-based, and CNAS embodies that principle in everything it teaches and practices.

## BY THE NUMBERS

UC Riverside is one of the most diverse student bodies at any Research 1 (R1) institution in the country. Of our UC Riverside students that were enrolled in fall of 2022, **39% were underrepresented minorities (URM)**, **40% identified as low income**, and **52% were first generation**.

In 2008, UCR became the first UC campus to be recognized as a Hispanic-Serving Institution (HSI). UCR is also designated as a Hispanic-Serving Agricultural Colleges and Universities (HSACU) Program as designated by the US Department of Agriculture. In fall of 2022, **36% of UCR students identified as Chicano or Latino**.

In 2019 the National Science Foundation ranked UCR **#3 in Hispanic & Latino STEM graduates in the nation**.

U.S. News & World Report recognized UC Riverside as the **No. 1 public university in the U.S. for social mobility** (2020, 2021, 2022, and 2023). For 2024, US News ranked UCR second among all universities in social mobility for the second year. In the five years that US News has ranked social mobility, UCR has always ranked **No. 1 or 2 among all universities**.

In 2018, UC Riverside attained status as an Asian American and Native American Pacific Islander-Serving Institution (AANAPISI). Of our UC Riverside students that were enrolled in fall of 2022, **33% identified as Asian**.

Each year, UC Riverside graduates more Pell Grant-eligible (or low income) students than all the Ivy League universities combined.

## ABOUT UC RIVERSIDE

As a proud member of the world's most prestigious public university system, UC Riverside both embodies and empowers the California Dream. Right here in Inland Southern California, on our nearly 1,200-acre campus, tomorrow's leaders come together today, finding new ways of thinking, doing, and achieving to make a difference in an increasingly multicultural and interconnected global society. At UCR, belonging, motivation, and sustainable progress for students, the region, and the world is real — and really important. We're among the top 1.3% of universities worldwide, according to the Center for World University Rankings, and have been named the nation's leader among public universities for social mobility by U.S. News for four of the past five years. For more information about UC Riverside, please visit [www.ucr.edu](http://www.ucr.edu).



# CNAS COMMUNITY ENGAGEMENT & WORKFORCE DEVELOPMENT

## Community Outreach Programs

Change in Scientific Importance for Youth, also known as **Delta SIFY**, provides immersive educational opportunities for local middle and high school students from underserved communities to explore the fields of STEM.

The **SISTERS** program, which stands for Success in Science and Technology: Engagement with Role-models, is designed to promote higher education and STEM-related fields to 7th and 8th-grade girls from the Riverside Unified School District.

**Little EINSTEINs**, or Little Explorers In 'Nterdisciplinary Sciences To Encourage INspiration, is a program founded to expose elementary school students to STEM, encourage them to enter higher education, inspire them to pursue a STEM-related career in the future, and also showcase the interdisciplinary nature of STEM.

**SMASH** is a program that aims to increase college enrollment in STEM fields among Riverside-area high school students, specifically those from underrepresented, low-income, and/or first generation backgrounds.

The **Geoscience Education Outreach Program** is a graduate student community outreach effort by the Earth and Planetary Sciences Department at UCR. Graduate students travel to local schools and give fun and interesting presentations about a variety of earth science topics to students, as a community service at no cost to the schools. Programs include short presentations, adjusted to a particular age/grade bracket, on a variety of topics, which are followed by hands-on activities meant to show students how fun and accessible science can be.

## CNAS Graduate Student Mentoring & Fellowship Programs

Majority of CNAS graduate students pursue Ph.D. degrees. They are well supported by a variety of multi-year funding opportunities that include stipends, payment of the majority of tuition and fees, training grants, teaching assistantships, and appointments as a graduate student researcher. The CNAS Graduate Student Affairs Center provides assistance to both applicants and enrolled graduate students. Examples of college mentoring and fellowship programs are indicated below.

### Career Mentoring of Underrepresented STEM Students for the Professoriate (CUSP)

This University of California HSI Doctoral Diversity Initiative provides mentoring and career development to graduate students who are interested in becoming professors and are from groups typically underrepresented in science, technology, engineering and math (STEM). ([cnasgrad.ucr.edu/cusp](https://cnasgrad.ucr.edu/cusp))

### Plants 3D National Research Training (NRT) Program

This NSF-funded graduate training program enables biologists, engineers, and computational scientists to combine plant and microbial biology with engineering technologies to discover, design, and deploy plant-inspired solutions for agriculture and biotechnology. ([plants3d.ucr.edu](https://plants3d.ucr.edu))

### T32 Training Grant in Environmental Toxicology

This NIH-funded graduate training program provides trainees with high-quality research training and a curriculum of study in subjects related to environmental toxicology, chemistry, statistics and research ethics.

### Graduate Assistance in Areas of National Need (GAANN) Training Grants

These Department of Education funded training grants provide support to trainees in 6 different college programs: Biochemistry and Molecular Biology; Evolution, Ecology and Organismal Biology; Entomology; Microbiology and Plant Pathology; Neuroscience; and Plant Biology.

### TRANSCEND

This California Institute for Regenerative Medicine (CIRM) funded training grant educates students in stem cell biology, engineering, bioethics, and science to policy, allowing them to contribute to the creation of new knowledge in stem cell biology and regenerative medicine. ([transcend.ucr.edu](https://transcend.ucr.edu))

## CNAS Undergraduate Student Success Programs

The **CNAS Learning Communities** program is designed to build community and academic excellence amongst first-year science students through the collaboration of faculty, advisors, and peers at UC Riverside. Learning Communities facilitate an environment where students feel they belong in a community of scholars. ([cnasscholars.ucr.edu/cnas-scholars-learning-community](https://cnasscholars.ucr.edu/cnas-scholars-learning-community))

The **Science Ambassador Program** empowers undergraduate students by developing communication and leadership skills. These students represent CNAS programs at official functions, make presentations, and serve as a student liaison to various communities both on and off campus with an emphasis on recruitment. ([scienceambassadors.ucr.edu](https://scienceambassadors.ucr.edu))

**CNAS Transfer Connections** provides support and advancement opportunities for community college transfer students through workshops and peer mentoring, as well as academic and professional skill building activities. ([cnastransfer.ucr.edu](https://cnastransfer.ucr.edu))

**California Teach/Science-Math Initiative (SMI)** prepares students for careers in teaching. SMI aims to increase the number of math and science teachers who are prepared to meet the educational needs of diverse learners and dedicated to teaching in high need schools. ([smi.ucr.edu](https://smi.ucr.edu))

In addition to the above programs, several of our majors offer capstone courses that provide extensive hands-on training to students to prepare them for high paying skilled jobs. Discover more student success programs at [cnas.ucr.edu/student-success-programs](https://cnas.ucr.edu/student-success-programs).

## CNAS Undergraduate Research Opportunities

**California Alliance for Minority Participation (CAMP)** encourages underrepresented students in the STEM fields to successfully complete science degrees and further pursue their studies at the graduate and professional level. ([ue.ucr.edu/initiatives/camp](https://ue.ucr.edu/initiatives/camp))

**Research in Science and Engineering (RISE)** is a summer research program that prepares students for graduate and professional study by providing valuable research experiences, training, seminars, meetings with the Divisional Dean, and professional development workshops. ([rise.ucr.edu](https://rise.ucr.edu))

**Maximizing Access to Research Careers Undergraduate Student Training in Academic Research (MARC U-STAR)** provides structured training programs to prepare high-achieving, underrepresented students for doctoral programs in biomedical research fields. ([marcu.ucr.edu](https://marcu.ucr.edu))

**Mentoring Summer Research Internship Program (MSRIP)** is a summer research program designed for rising juniors, seniors (and some rising masters students) from educationally and/or economically disadvantaged backgrounds to pursue their Ph.D. ([graduate.ucr.edu/graduateprep-programs](https://graduate.ucr.edu/graduateprep-programs))

**Next Generation Plant Biology Summer Research Program** is a NSF-funded Research Experience for Undergraduates (REU) program provides opportunities for students interested in the cellular and molecular biology of plants to perform research using next generation technologies. ([cepcub.ucr.edu/research-training/reu](https://cepcub.ucr.edu/research-training/reu))

**Artificial Intelligence for Sustainable Agriculture (AI4SA):** A key part of the AI4SA program is the Digital Agriculture Fellowship, which is designed for undergraduate students to gain hands-on experience in agriculture and research, and to provide the guidance necessary for entering the U.S. agricultural workforce. ([ai4sa.ucr.edu](https://ai4sa.ucr.edu))

**Building Bridges to the Professoriate (BB2P)** fosters collaboration between California State University, Fullerton and Fresno State University with the UCR to increase student engagement in undergraduate and graduate research in science and mathematics among underrepresented minorities (URM). ([cnasgrad.ucr.edu/bb2p](https://cnasgrad.ucr.edu/bb2p))

The majority of undergraduate students join research labs for hands-on experience in science research. Learn more about undergraduate research opportunities at [cnas.ucr.edu/student-research-opportunities](https://cnas.ucr.edu/student-research-opportunities).