



## INTRODUCTION

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As one of the world's leading institutions of higher education, the University of California at Davis is committed to serving a student population as diverse as society at large through the advancement of knowledge and discovery.

Founded as the University Farm in 1905, UC Davis has grown from an agricultural college into a comprehensive research university. It was formally designated an independent UC campus in 1959.

In 2016, *U.S. News & World Report* ranked UC Davis eleventh among public universities nationally, and the campus is among only 62 universities admitted into the prestigious Association of American Universities.

UC Davis is home to a diverse student body of more than 34,000 students from across California, the nation and the world.

### Advancing Knowledge

UC Davis offers 104 undergraduate majors and 96 graduate and professional degrees across four colleges and six professional schools. In 2010, the National Research Council ranked one third of UC Davis' 51 doctoral programs in the top 25 percent of their fields, with six of them placing in the top 5 percent.

In the QS World University Rankings for 2016, UC Davis held its standing as the world's best university for veterinary medicine and came out among the top two universities in agriculture and forestry for the fourth consecutive year.

The campus' reputation has attracted a distinguished faculty of scholars and scientists. Faculty honors include 8 U.S. Presidential Awards, more than 280 National Academy memberships, 52 Fulbright Scholars and two Pulitzer Prizes.

### A Place for Discovery

UC Davis researchers work toward solving the world's most difficult problems and support California's economic, intellectual and social development. Over the past decade, annual research funding increased by 45 percent, from \$542 million to \$786 million. Researchers explore the intellectual frontiers across the sciences, humanities and arts, with exceptional global leadership in agricultural science, food science and environmental sustainability.

Research is integral to teaching at UC Davis. Faculty members share their research findings in the classroom, and students learn first-hand about discovery while working with professors in the laboratory and field. Several undergraduate research programs offer students the opportunity to work on a research project in a faculty laboratory, in some cases as early as their freshman year.

### Leader in Public Service

In the tradition of land-grant universities, UC Davis uses knowledge and discovery in addressing the needs of the region, state, nation and world.

The UC Davis Health System serves 6 million people in 33 counties across northern and central California. It operates the Sacramento Valley's only Level 1 trauma center as well as a National Cancer Institute-designated cancer center, a comprehensive children's hospital and a world-renowned telemedicine network.

The School of Veterinary Medicine is involved in more than 30 nations, and its teaching hospital cares for more than 51,000 small and large animals each year. The School of Law offers community support in immigration, prison law, civil rights litigation and family protection.

The School of Education has prepared nearly 6,000 teachers for California classrooms since its inception in 2002.

The Betty Irene Moore School of Nursing, founded in 2009, is dedicated to improving patient safety and creating inter-professional opportunities for nurse leaders.

### Life at UC Davis

Students enjoy sports, community internships, public service, outdoor activities, concerts and clubs.

UC Davis is known for its student-run services. The Coffee House (CoHo), the radio station KDVS, Outdoor Adventures and the Unitrans bus service provide paying jobs to hundreds of students each year. Some 70 percent of UC Davis students gain work experiences through the Internship and Career Center, one of the largest programs of its kind in the nation.

The Robert and Margrit Mondavi Center for the Performing Arts features internationally renowned artists and speakers and showcases students' music, theater and dance performances.

Museums and galleries range from the Bohart Museum of Entomology's insects to contemporary Native American art at the C.N. Gorman Museum. The university will soon showcase its art collections in the Jan Shrem and Maria Manetti Shrem Art Museum, which is scheduled to open in November 2016.

In 2007, UC Davis transitioned to Division I of the National Collegiate Athletic Association. The university sponsors 13 varsity sports for women and 9 for men. The campus also fields nearly 40 student-organized intercollegiate sports clubs that compete against area colleges. Thousands of students also have fun playing with fellow Aggies in more than 30 men's, women's and coed sports, from flag football to ultimate Frisbee.

A city of more than 65,000 people, Davis is known as an environmentally aware, physically fit and socially innovative community. Davis has more bike-community residents per person than any other city in the U.S., with more than 100 miles of dedicated bike lanes and paths. Davis' proximity to the state capital and the San Francisco Bay Area make it easy to take advantage of big-city attractions while enjoying the lifestyle of a university town.

## THE UNIVERSITY OF CALIFORNIA

UC Davis is one of 10 campuses of the University of California, which was chartered as a land grant college in 1868 and has become the country's premier system of public higher education. Together, the campuses have an enrollment of more than 240,000 students and more than 1.7 million alumni living around the world. Some 150 laboratories, extension centers, research and field stations strengthen teaching and research while providing public service to California and the nation. The collections of the more than 100 UC campus libraries are surpassed in size in the U.S. only by that of the Library of Congress.

## VISITING THE CAMPUS

UC Davis Welcome Center  
530-752-8111; <http://visit.ucdavis.edu/>

Welcome Center operating hours are 8:00 a.m.-5:00 p.m. (PT), Monday-Friday and 9:00 a.m.-3:00 p.m. (PT) Saturday. Closed Sunday except for March 15-April 30. Monday-Friday campus tours are offered at 9:00 a.m. and 1 p.m. (PT) Saturday (and Sunday from March 15-April 30) tours are offered at 11:00 a.m. (PT). Over-the-counter admissions advising is offered during operating hours at the Welcome Center. To register for a tour, see <http://visit.ucdavis.edu> or call 530-752-8111. If you have questions regarding application procedures or entrance requirements, write or visit the UC Davis Welcome Center at 550 Alumni Lane, Davis, CA 95616.

## ACCREDITATION

The University of California, Davis is accredited by WASC Senior College and University Commission (WSCUC), 985 Atlantic Avenue, Suite 100, Alameda, CA 94501 510-748-9001, a regional institutional accrediting body recognized by the Council for Higher Education and the U.S. Department of Education.

UC Davis is also accredited by the Accreditation Board for Engineering and Technology, Accreditation Council for Graduate Medical Education, Accreditation Review Commission on Education for the Physician Assistant (ARC-PA), American Association for Accreditation of Laboratory Animal Care, American Bar Association, American Chemical Society, American Dietetic Association, American Psychological Association, American Society of Crime Lab Directors Laboratory Accreditation Board (ASCLD/LAB); American Society of Landscape Architects, Association of American Law Schools, Association of American Medical Colleges, Association to Advance Collegiate Schools of Business,; Commission on Collegiate Nursing Education; Commission on Teacher Credentialing, Computer Science Accreditation Commission, Council on Education and Public Health, the Council on Education of the American Veterinary Medical Association, Intersocietal Commission for the Accreditation of Vascular Laboratories (ICAVL), and the Liaison Committee on Medical Education.

Students interested in reviewing WSCUC accreditation documents may do so at <http://wasc.ucdavis.edu>. Those interested in reviewing profession-specific accreditation documents should contact the relevant dean's office.

## THE UNDERGRADUATE COLLEGES

### The College of Agricultural and Environmental Sciences

College Office  
150 Mrak Hall  
530-752-0108; <http://www.caes.ucdavis.edu>

The College of Agricultural and Environmental Sciences offers a diverse program of majors and courses and is committed to education that emphasizes a spirit of discovery. Based on the premise that tomorrow's citizens will need to anticipate, understand and solve emerging societal problems and contribute to the discovery and application of new knowledge, the college fosters:

- Critical thinking and an appreciation for diversity in thought and approaches to problem solving
- An ethos of lifelong learning—of teaching oneself and others while confronting challenges and solving problems
- An ability to move beyond either/or thinking and to pursue innovative and integrative understanding of the agricultural sciences, environmental sciences and human sciences
- Intellectual skills that prepare individuals to secure a life-affirming physical and cultural environment based on sound, respectful management of resources
- A commitment to serve the public with informed and open-minded dedication to understanding, critiquing and addressing complex societal needs and interests

The college is proud of its rich agricultural history. From this foundation, it has expanded its educational offerings to encompass programs that highlight interconnections among the environment, plant and animal sciences, biological sciences and human sciences. Through a wide array of major programs, the college prepares high-potential students for advanced studies in diverse disciplines and leadership in such arenas as public policy; research and development; managerial and natural resource economics; agricultural systems; environmental protection, safety and design; human nutrition, health and development; and the food, fiber, textile and apparel industries.

Undergraduate students enjoy early contact with faculty advisers, graduate students and postgraduate researchers, enriching and broadening the educational experience of all.

Several levels of academic advising are available that are designed to enhance your undergraduate experience. Advisers help you plan your courses, meet degree requirements and take maximum advantage of the resources available at UC Davis. You are encouraged to meet regularly with your assigned faculty adviser and with the Advising Associates and departmental peer advisers. Through a shared commitment to education for service to society, college faculty, staff and students work together to improve the relationship between humanity and the natural world.

## University of California, Davis

# Principles of Community

**T**HE UNIVERSITY OF CALIFORNIA, DAVIS, is first and foremost an institution of learning and teaching, committed to serving the needs of society. Our campus community reflects and is a part of a society comprising all races, creeds, and social circumstances. The successful conduct of the University's affairs requires that every member of the University community acknowledge and practice the following basic principles:

**W**E AFFIRM THE DIGNITY inherent in all of us, and we strive to maintain a climate of justice marked by respect for each other. We acknowledge that our society carries within it historical and deep-rooted misunderstandings and biases, and therefore we will endeavor to foster mutual understanding among the many parts of our whole.

**W**E AFFIRM THE RIGHT of freedom of expression within our community and also affirm our commitment to the highest standards of civility and decency towards all. We recognize the right of every individual to think and speak as dictated by personal belief, to express any idea, and to disagree with or counter another's point of view, limited only by University regulations governing time, place, and manner. We promote open expression of our individuality and our diversity within the bounds of courtesy, sensitivity, and respect.

**W**E CONFRONT AND REJECT all manifestations of discrimination, including those based on race, ethnicity, gender, age, disability, sexual orientation, religious or political beliefs, status within or outside the University, or any of the other differences among people which have been excuses for misunderstanding, dissension, or hatred. We recognize and cherish the richness contributed to our lives by our diversity. We take pride in our various achievements, and we celebrate our differences.

**W**E RECOGNIZE that each of us has an obligation to the community of which we have chosen to be a part. We will strive to build a true community of spirit and purpose based on mutual respect and caring.

The "Principles of Community" were prepared and adopted after extensive discussion within the campus community about the need for a statement that reflects UC Davis' commitment to a learning environment characterized by diversity, understanding and the acceptance of all people. This statement of common principles was published on April 20, 1990, carrying the endorsement of Chancellor Theodore L. Hullar and the leadership of the Davis Division of the Academic Senate, the Academic Staff Organization, the UC Davis Staff Assembly, the UC Davis Medical Center Staff Assembly, the Associated Students of UC Davis (ASUCD), and the Graduate Student Association.



## Educational Objectives for Students

The UC Davis Educational Objectives for Undergraduate Students were adopted by the Academic Senate in April 2002 to:

- Articulate what we aspire for student learning.
- Help to establish campus priorities and guide decision making related to student development.
- Guide academic programs in the review of how their classes and course requirements interact with the goals to demonstrate educational effectiveness.

The objectives for undergraduate education at UC Davis are that all students

- Develop effective communication skills:  
Written, oral, interpersonal, group.
- Develop higher cognitive skills:  
Critical thinking, creativity, analytical ability.
- Cultivate the virtues:  
Ethics, responsibility, honor, tolerance, respect for others, empathy.
- Develop focus and depth in one or more disciplines.
- Develop leadership skills:  
Ability to stimulate and direct collaborative learning and collaborative action.
- Develop a global perspective:  
Broad intellectual and cultural experience through active engagement, an understanding of the interactions among the individual, society, and the natural world.
- Prepare for lifelong learning:  
Independent thinking and learning, learning to find information, asking the right questions.

## Mission Statement:

# Philosophy of Purpose

The core purpose of UC Davis as a comprehensive research university is the generation, advancement, dissemination and application of knowledge. To that end, UC Davis is committed to offering leading programs throughout the academic disciplines and in its professional schools. These programs integrate three purposes: teaching students as a partnership between faculty mentors and young scholars; advancing knowledge and pioneering studies through creative research and scholarship; and applying that knowledge to address the needs of the region, state, nation and globe. UC Davis is committed to the land-grant tradition on which it was founded, which holds that the broad purpose of a university is service to people and society.

UC Davis offers its undergraduates an experience which comprises the central elements of a liberal education—a broad general education with specialization in a scholarly discipline—and opportunities for personal development and academic enrichment through undergraduate research, work-learn experiences and extracurricular student life. To its post-baccalaureate students, UC Davis offers an array of programs which draw upon its wide range of specialized academic fields. By stimulating cross-disciplinary approaches and using its distinctive graduate groups, UC Davis continues to follow and redefine the mandate of a major research university.

The campus is committed to advancing teaching and scholarly work in the arts, humanities and the social sciences – studies that enrich the life of each person and society as a whole, and infuse the pursuit of careers in education, law, management and medicine. UC Davis' prominence in the STEM fields, including distinguished programs in agricultural and environmental sciences, make the campus a leader in solving critical issues in local, state, national and global health and sustainability.

UC Davis extends service to the region, state, nation and the world in many forms, such as cooperative extension to agriculture and education; medical services to central California and beyond through the multifaceted UC Davis Health System in Sacramento; University Extension programs that share knowledge with the region; the emerging work of the World Food Center; voluntary contributions of faculty, staff and students; and athletic and cultural programs for the campus and community at large.

UC Davis is surrounded by vibrant, local communities and its proximity to the state capital gives this outreach urgency and opportunity. Collaborative studies and cooperation between UC Davis and state agencies and the Legislature are both a special responsibility and a unique opportunity. UC Davis is characterized by a distinguished faculty, a dedicated and high-achieving staff and students of great potential and accomplishment. As we move forward, we recognize that our continued excellence is dependent upon our ability to diversify our university community, consonant with the citizenry of California.

## The College of Biological Sciences

Biology Academic Success Center  
1023 Sciences Laboratory Building  
530-752-0410; <http://basc.ucdavis.edu>

The mission of the College of Biological Sciences is to prepare students to fully engage and actively participate in all areas of the exciting and rapidly expanding field of biology. Courses offered by the college span the basic biological disciplines of biochemistry, behavior, cell biology, evolution, ecology, genetics, physiology and neurobiology and apply these concepts to the study of microbes, plants and animals ranging from genetic model organisms to humans. Recent additions to the curriculum, including courses in genomics, bioinformatics and computational biology, reflect the profound changes sweeping biology as new technologies enable new areas of research.

Coursework in the college's majors is rich in hands-on laboratory instruction as well as lectures and seminars. Every department in the College offers laboratory courses in the Sciences Laboratory Building—a state-of-the-art facility featuring advanced instrumentation and a student-friendly environment. In addition, many students in the college participate in laboratory research and internships that enable them to bridge classroom experiences to life beyond the university.

Biology is integral to a multitude of career options. Whether interested in a professional career in the health sciences, research, education, environmental work, business, law, administration, pharmaceutical sales or communications, students in the College of Biological Sciences receive the attention and preparation they need to excel in their chosen field.

To learn more about the nine majors offered through the College of Biological Sciences, see <http://basc.ucdavis.edu>, select *Students*, then *Current Students*, and then select *Learn about the majors offered*.

## The College of Engineering

Dean's Office  
1042 Kemper Hall  
530-752-7642;  
<http://engineering.ucdavis.edu>  
<http://www.facebook.com/UCDEngineering>

The College of Engineering at UC Davis is among the top engineering colleges in the nation.

With a strong record of academic excellence, a rich tradition of interdisciplinary research and a diverse and distinguished faculty, the College's undergraduate program has earned a place among our nation's top twenty public undergraduate colleges of engineering and among the top twenty public university graduate engineering programs.

With an enrollment of 4,445 undergraduates and 1,005 graduate students, the College is one of the largest undergraduate engineering colleges in the University of California system.

We have 206 engineering faculty, with 21 current and emeriti members named to the National Academies of Engineering, Science and Medicine.

The Engineering Accreditation Commission of ABET (<http://www.abet.org>) accredits the following ten programs:

- Aerospace Science and Engineering
- Biochemical Engineering

- Biological Systems Engineering
- Biomedical Engineering
- Chemical Engineering
- Civil Engineering
- Computer Engineering
- Electrical Engineering
- Materials Science and Engineering
- Mechanical Engineering

The Engineering Accreditation Commission and the Computing Accreditation Commission of ABET accredit the following program:

- Computer Science and Engineering

The College maintains a long-standing commitment to undergraduate students, preparing them to contribute to the engineering professions as well as ongoing engineering research. To that end, our academic programs balance the fundamentals of engineering theory with practice, visionary research with practical application—preparing students for entry into engineering practice and graduate-level research.

Undergraduate research experiences and mentoring services smooth the transition from undergraduate to graduate study at UC Davis. Undergraduates are able to interact with faculty and graduate students from nine graduate engineering programs as well as researchers from a broad spectrum of disciplines university-wide. Award-winning faculty researchers strive to develop more effective, real world solutions to society's most complex problems in the uniquely friendly, open society of collaborative, cross-disciplinary and rigorous scholarship for which UC Davis is widely known. Undergraduates have opportunities to be contributing members of this rich learning environment.

In the proud tradition of America's great land-grant research universities, the UC Davis College of Engineering integrates teaching, research and service to society. While advancing the leading edge of engineering knowledge, the College trains the next generation of engineers who will make a difference in our world.

**The Department of Biological and Agricultural Engineering** combines study in engineering with instruction in the biological sciences to solve challenging environmental and technical problems.

**The Department of Biomedical Engineering** educates students in a highly interdisciplinary combination of the biological sciences and engineering as this combination applies to medicine.

**The Department of Chemical Engineering** offers curricula integrating knowledge of chemistry, biological sciences and engineering that enable students to solve problems in current and future chemical, biochemical and manufacturing technologies.

**The Department of Civil and Environmental Engineering** educates students to plan and design safe and sustainable infrastructure systems that have a direct impact on the quality of human life and on health and human productivity.

**The Department of Computer Science** offers programs in all aspects of the design and use of computer hardware and software systems. The department also plays a significant service role for programs throughout the campus.

**The Department of Electrical and Computer Engineering** offers programs in research and education crucial for the continued success of high technology industries in California and the nation, preparing students to design, analyze and use electronic and computer systems effectively.

**The Department of Materials Science and Engineering** offers curricula integrating knowledge of physics, chemistry, mathematics, micro-level structure, thermodynamics, and kinetics that enables students to select engineering materials and solve design problems in both current and future technologies or to analyze the nanostructure-properties relationships and behavior of materials.

**The Department of Mechanical and Aerospace Engineering** educates students in the design and manufacture of complex engineering systems for transport, industry or energy and in the design, manufacture and operation of aircraft and aerospace structures.

Every effort has been made to provide engineering students with the maximum flexibility consistent with rigorous professional education standards. The key to flexibility is academic advising. As an incoming student, you will be given the name and office hours of your departmental staff adviser; you should arrange to meet with your adviser before you register for courses for the first time.

Undergraduate education in engineering at UC Davis serves as a sound basis for beginning professional practice in engineering design and development, as a preparation for careers in corporate or governmental operations and as a foundation for graduate study. To these ends, the college emphasizes fundamental sciences to give students the maximum postgraduate flexibility. In order to remain relevant in a quickly changing technical world, engineering education must be based on fundamentals or rapidly become obsolete.

Engineers will continue to face new challenges in the race to improve the quality of life for everyone and keep our state and nation competitive in the global marketplace.

As part of one of the nation's 76 land-grant institutions, UC Davis Engineering's mission is to help maintain the United States' technical leadership and advance technology for the benefit of everyone.

## The College of Letters and Science

Undergraduate Education and Advising Office  
200 Social Sciences and Humanities Building  
530-752-0392; <http://www.ls.ucdavis.edu>

The College of Letters and Science provides students with the opportunity to actively engage the central academic disciplines of the university. Founded in 1951, the College of Letters and Science is the largest of the schools and colleges at UC Davis, the University of California's most comprehensive university. The college is comprised of three divisions encompassing the broadest offering of disciplines at UC Davis: Humanities, Arts and Cultural Studies; Mathematical and Physical Sciences; and Social Sciences. The college's 650+ faculty members teach the core curriculum for virtually all 23,000 undergraduate students in the university as well as mentoring thousands of graduate students pursuing more than 50 fields of interest in the college. The college confers Bachelor of Arts (A.B.), Bachelor of Science (B.S.) and Bachelor of Arts and Science (B.A.S.) degrees.

The College of Letters and Science is a community of scholars and students sharing a commitment to liberal education rather than to specialized, vocationally-oriented training. The college exposes you to the worlds of human experience, of ideas, of artistic accomplishments and of matter and things. Within this curriculum you are able to explore a variety of academic fields, engage in the pursuit of fundamental knowledge and gain the capacity for independent study and thought. By learning to think carefully and critically, you will be able to continue the ongoing process of education that begins in the classroom but continues over a lifetime. You will have learned how to learn—the ultimate objective of a liberal arts education.

The educational goals of the college are reflected in the three primary groups of requirements established by the faculty: the English Composition Requirement, the Foreign Language and Area Requirements and the Major Requirements.

The **English Composition Requirement** ensures that you are well versed in written communication skills.

The **Foreign Language and Area Requirements** provide you with a broad background of knowledge, guide you in an exploration of the interdependencies of knowledge and acquaint you with other cultures.

The College of Letters and Science acknowledges the value of language learning and encourages students to acquire proficiency in a foreign language before graduating from UC Davis. The goals of language learning are the following: communicating complex ideas in the target language; acquiring understanding of a variety of cultural perspectives and differences; fostering intercultural communicative competence; gaining access to cultural production from another time and place; enhancing knowledge of other disciplines through the target language; recognizing the nature and structure of languages, including one's own; and developing the capacity to participate actively in multilingual communities both at home and abroad.

The **Major Requirements** provide you with intellectual depth and competence in a selected area of study.

The college has a well-developed system of faculty advisers, professional staff advisers and student peer advisers who are available for individual consultations with undergraduates in a variety of settings, from the college undergraduate education and advising office to departmental offices to campus residence halls.

The strength of the college lies in the faculty's commitment to advancing the frontiers of human knowledge through research, artistic expression and other creative endeavors and to the effective communication and application of that knowledge through teaching and public service. Together, faculty and students in the College of Letters and Science create a climate that enables students to achieve their highest potential.

## GRADUATE STUDY

Office of Graduate Studies  
250 Mrak Hall  
530-752-0650; <https://gradstudies.ucdavis.edu>

Graduate students at UC Davis have the opportunity to work with and learn from accomplished faculty, recognized for their contributions to research in their fields. The Office of Graduate Studies oversees nearly 100 graduate programs leading to master's and doctoral degrees, which together enroll approximately 4,800 graduate students. Many graduate programs are offered through gradu-

ate groups, an interdisciplinary concept that allows students to study and work with faculty in interrelated areas to broaden their intellectual experiences; see [Graduate Studies](#), on page 120.

## PROFESSIONAL STUDY

UC Davis has six professional schools—the School of Law (J.D.), the School of Medicine (M.D.), the School of Veterinary Medicine (D.V.M., M.P.V.M.), the School of Education (M.A., Ph.D., Ed.D.), the Betty Irene Moore School of Nursing (M.H.S., M.S., Ph.D.), and the Graduate School of Management (M.B.A, M.P.A.c.). These schools and programs are described in later chapters.

Students interested in reviewing WASC accreditation documents may do so at <http://wasc.ucdavis.edu>. Those interested in reviewing profession-specific accreditation documents should contact the relevant Dean's office.

## ACADEMIC RESOURCES

### The University Library

530-752-8792; <http://www.lib.ucdavis.edu>

The University Library is an integral part of the University of California, Davis, and one of the top research university libraries in the U.S. It also participates in and benefits from the collective activities of the University of California's system of libraries and the California Digital Library. The Library's omnidisciplinary and highly regarded collections and research services have long supported the faculty, students and researchers of the university, the health care professionals of the UC Davis Health System, and the citizens of California.

The Library's vision is to be the academic hub of UC Davis, advancing research, education, and innovation in a networked world. The Library is an interdisciplinary resource for the entire community that enables transformative research and education through its provision of critical scholarship, tools, and services.

The University Library is comprised of four facilities: the Peter J. Shields Library, the Physical Sciences & Engineering Library, the Loren D. Carlson Health Sciences Library, and the F. William Blaisdell Medical Library in Sacramento. The combined physical collections of the University Library total more than 4 million volumes. An extensive variety of journal titles, government documents, maps, microfilms, media, and other formats are also part of the collection. The law library, administered by the School of Law, is located in King Hall. The Library also has extensive digital holdings, such as e-journals and e-books and digital materials collected from the UC Davis community. These online collections are available anytime from anywhere, to support the needs of 21st Century scholars. The campus wireless network is available within all libraries and connects authorized users to library and campus resources and services.

Library services and resources information is available at <http://www.lib.ucdavis.edu>. In addition, the Library's online catalogs identify library collections at UC Davis and at the other nine UC campuses. The Library provides classes on the use of modern online tools for finding and using digital content, as well as subject-specific electronic journals and databases. Subject specialist and teaching librarians and digital scholarship experts are available for consultation to identify and use information resources for research, and to use those resources for new types of scholarship.

## UC Davis Arboretum and Public Garden

Arboretum and Public Garden Headquarters  
530-752-4880; <http://arboretum.ucdavis.edu>

UC Davis—already known for its heritage trees and park-like atmosphere—elevated the profile of its outdoor spaces by launching the UC Davis Arboretum and Public Garden in 2011. Through close partnerships with students, academic departments, and community members, the UC Davis Arboretum and Public Garden seeks to provide a visitor-friendly, living museum complete with educational and sustainable landscapes that showcase our campus's academically-diverse expertise hand-in-hand with programs that allow for a wide-range of community participation including student internships, volunteer opportunities, and all-ages programming highlighting environmental sustainability, the arts and sciences.

One of the gems of the campus landscape is the 103-acre UC Davis Arboretum, founded in 1936, which contains a documented collection of more than 50,000 trees, shrubs and perennials from Mediterranean-climate areas throughout the world. Here visitors enjoy winding paths for walking, jogging, and bicycling, benches for enjoying the views, and picnic tables for casual gatherings. Demonstration gardens of drought-tolerant flowering perennials and collections of California native plants, oaks, acacias, conifers, and eucalyptus are resources for teaching and research; these landscapes also serve as a backdrop for a diverse array of events in addition to operating as an outdoor gallery for student and community-created art.

Students are integral to the Arboretum and Public Garden's vision for transforming our campus grounds into an engaging outdoor experience. Through its Learning by Leading Program, students participate in internships where they gain environmental leadership skills in sustainable horticulture, edible landscaping, nursery management, naturalized land management, and education and outreach. In addition, students, as well as community members, are also invited to volunteer for short-term projects ranging from event management to garden planting.

Although still in its infancy, the UC Davis Arboretum and Public Garden is gaining national attention for its sustainable landscape management as well as its practice of harnessing community collaboration to enhance the visitor experience.

## Information and Educational Technology

Information and Educational Technology (IET) provides a wide range of services and support to undergraduate and graduate students. For more information, see <http://iet.ucdavis.edu/student/index.html>.

A good place to get more information about IET's services is [itcatalog.ucdavis.edu](http://itcatalog.ucdavis.edu).

For answers to your campus technology questions, you can find the IT Knowledge Base at <http://kb.ucdavis.edu>.

For campus IT help, contact the IT Express Service Desk at 530-754-HELP (4357); [ithelp@ucdavis.edu](mailto:ithelp@ucdavis.edu).

## Taking Care of Business Online

- Enroll in classes, add or drop courses, view and print your class schedule
- Access course grades

- View and print your unofficial academic record
- Check balances, view bills, make payments, and manage your student account
- Apply for and view financial aid awards
- Plan your class schedule and pre-check your registration status with Schedule Builder
- Make campus bookstore purchases; see <http://ucdavisstores.com>

### Learning and Teaching with Technology

- **The campus has two Learning Management Systems (LMS) in 2016-17: SmartSite, which is being retired, and UC Davis Canvas, which is being phased in.** Talk with your instructors to see which LMS they are using for your courses during 2016-17. You can use the LMS to communicate with your instructors and fellow students; work together on papers and projects; manage assignments, study, and more. See <http://movetocanvas.ucdavis.edu/> for information about UC Davis Canvas, and <http://smartsite.ucdavis.edu> for information about SmartSite
- **Searchable electronic databases.** Find them at Shields Library. You'll have free, easy access from on- or off-campus; see <http://www.lib.ucdavis.edu>
- **iTunes, YouTube and podcasting.** Digital audio recording equipment is installed in several lecture halls, and portable digital recorders are available for rental from IET-Academic Technology Services (Surge II). Audio and video podcasting services are available to all instructors and campus groups; see <http://podcasting.ucdavis.edu> & <http://itunes.ucdavis.edu>
- **Classroom technology.** All 128 general assignment classrooms have audio, network and projection capabilities, and include a projector, CD player, DVD player, VCR, built-in microphone and laptop hook-up. Classrooms with more than 50 seats also have assistive hearing systems; see <http://registrar.ucdavis.edu/faculty-staff/classroom/>
- **Lecture Capture.** Academic Technology Services is working with the Office of the University Registrar to provide automated lecture capture technology in 20 of our General Assignment classrooms. These lecture-capture rooms have the ability to record video, audio and lecture content and automatically publish these recordings to the instructors SmartSite for viewing by students. For more information, contact [ats@ucdavis.edu](mailto:ats@ucdavis.edu); see <https://video.ucdavis.edu>

### The Essentials: Computers, Email, Software, Labs

- **Email.** Every student has a free Gmail-based email account; see <http://itcatalog.ucdavis.edu/service/davismail>
- **Computer purchases.** Our recommendations can help guide your purchases. Financial aid is available for qualified applicants; see <http://computerownership.ucdavis.edu>. To buy computers and accessories at the campus bookstore, see <http://ucdavisstores.com>
- **Software.** Various programs are available free of charge or at a discount; see <http://software.ucdavis.edu>
- **The Virtual Lab** lets you remotely log on to software in IET's computer labs after hours; see <http://virtuallab.ucdavis.edu>
- **Multimedia.** You'll want to check out the video, audio, and graphic design software, as well as printers, scanners, etc., in the IET Media Lab; see <http://ietmedialab.ucdavis.edu/>

- **Computer rooms.** Computer classrooms and labs distributed around the campus provide access to PCs, Macs and printers. Some labs have both Mac and PC computers, and many have extended hours during the week; see <http://ats.ucdavis.edu/services/computer-rooms/>
- **Printing.** All computer rooms are equipped with printers; see <http://clm.ucdavis.edu/rooms/printing>. You can also send a print job from your computer to any printer in five locations; see <http://wirelessprinting.ucdavis.edu>

### Networking

- **Wireless Internet.** Eduroam is the campus wireless network. For access requirements and instructions, see <http://itcatalog.ucdavis.edu/service/wireless-guest-access>
- **Wired Internet.** Students living on campus can also connect to the Internet by using ResNet, the high-speed residence hall network. Each residence hall also has a computer center with computers, printers, and scanners; see <http://www.housing.ucdavis.edu/computers/>

### Security

**Computer security.** Blocking computer viruses and preventing unauthorized access to computing systems are important parts of campus computing life; see more information at <http://security.ucdavis.edu>.

### Technical Support

**IT Express.** Free computing help with almost anything related to campus tech. Call 530-754-HELP (4357) or see <http://kb.ucdavis.edu>, <http://itexpress.ucdavis.edu>, or <https://www.facebook.com/ucditx>.

All information above is current as of spring 2016. News about campus technology is distributed via TechNews at <http://technews.ucdavis.edu>.

## RESEARCH PROGRAMS AND RESOURCES

### Organized Research Units

Organized Research Units (ORUs) are campus-wide interdisciplinary research programs that further the university's missions of teaching, research and public service, but do not offer courses of instruction. Members of an ORU come from more than one department and normally from more than one school, college division.

### Air Quality Research Center (AQRC)

3050 Bainer Hall 530-754-6558  
Anthony Wexler, Director; [aswexler@ucdavis.edu](mailto:aswexler@ucdavis.edu)  
<http://airquality.ucdavis.edu/>

The Air Quality Research Center provides support for teams of collaborative researchers to conduct scientific, engineering, health, social and economic research to inform planning and regulations for air quality and climate change. The AQRC educates through conferences, outreach, scholarly publications, and training grants. Researchers at UC Davis employ theoretical approaches, mathematical models, measurements in the field and in laboratories, and policy analysis to tackle state, federal and intercontinental air quality problems. The center is composed of over 60 faculty and

research staff members from six schools and colleges across campus. This breadth of expertise allows us to take a broad, interdisciplinary approach to air-quality problem solving.

### Bodega Marine Laboratory and Reserve

Bodega Marine Laboratory  
P.O. Box 247  
Bodega Bay, CA 94923  
707-875-2211; Fax 707-875-2009  
[ucdbml@ucdavis.edu](mailto:ucdbml@ucdavis.edu); <http://bml.ucdavis.edu>

The Bodega Marine Laboratory is dedicated to research and teaching in marine science. Research areas include: **Ecology and Evolution**—invasive species, biodiversity, community ecology, etc., **Coastal Oceanography**—upwelling, estuaries and land runoff, nearshore hydrodynamics, ocean observing, **Ocean Health**—developmental and reproductive toxicology, shellfish health, environmental assessment, **Physiology**—comparative physiology and biochemistry, reproductive physiology, seagrass and seaweed physiological ecology, **Conservation**—fisheries management, marine protected areas, endangered species restoration, **Climate Change**—ecological impacts, ocean acidification, paleoceanography. Well-equipped facilities feature running seawater in two classrooms and many laboratories, a marine science library, lecture hall, housing facilities, computer labs, state of the art microscopy imaging facility, experimental climate change facility, greenhouses, experimental freshwater system for anadromous/estuarine invertebrate and fish studies, network of automated environmental sensors on marine and terrestrial habitats, 42-foot research vessel and various small boats, and a dive locker and air station. Faculty teach a number of undergraduate and graduate courses during the academic year and summer session. The laboratory is located in Bodega Bay, Sonoma County, 100 miles west of Davis.

The Bodega Marine Reserve, part of the UC Natural Reserve System, is 362 acres of remarkably diverse habitats, including an excellent rocky intertidal zone, sand beaches, saltmarsh, lagoon tidal flats, freshwater marsh, coastal prairie and dunes. The reserve also administers adjacent subtidal sand and rock habitats in a marine life refuge. Areas of research include a broad spectrum of field studies of plants and animals in coastal marine, intertidal and terrestrial ecosystems.

### California National Primate Research Center

Primate Center  
530-752-0447; <http://www.cnprc.ucdavis.edu>

The California National Primate Research Center (CNPRC) is a local, regional, and national resource to furthering scientific discovery, using biomedical research to make breakthroughs in health and science, leading to new diagnostics, therapeutics, and clinical procedures that enhance quality of life for both humans and animals. The CNPRC is an Organized Research Unit of the University of California, Davis and part of the National Primate Research Centers Program at the National Institutes of Health.

Under the direction of UC Davis faculty, the CNPRC is comprised of four research units that emphasize translational studies in Brain, Mind and Behavior, Infectious Diseases, Reproductive Sciences and Regenerative Medicine, and Respiratory Diseases. Research projects using nonhuman primates contribute in substantial ways to health care and are developing a better understanding of, and new treatments for, a wide range of human health problems

including asthma, HIV/AIDS, childhood illnesses, Alzheimer's disease, emerging infectious diseases, and environmental toxins that impact our health.

The CNPRC supports self-sustaining, genetically characterized breeding colonies of rhesus macaques and titi monkeys that are also studied for natural behaviors and spontaneously occurring disorders. Educational experiences at the CNPRC are available for undergraduate and graduate students, as well as veterinary residents.

### Center for Health and the Environment

530-752-1340; <http://che.ucdavis.edu>

The Center for Health and the Environment (CHE) coordinates and engages in interdisciplinary research on environmental agents, including chemicals and radiation, and health outcomes in humans, animals and other organisms. Researchers conduct epidemiologic studies in human populations, as well as experiments in whole animals, organisms, cells and molecules. Research on the development of agents for population control of humans and wildlife seek to mitigate the adverse effects of overabundance on the environment. Studies on toxic, radioactive, mutagenic, carcinogenic and teratogenic compounds are carried out in special animal holding facilities. Laboratories are equipped for studies in analytical chemistry, biochemical toxicology, cell and molecular biology, endocrinology, inhalation toxicology, morphology and reproductive and developmental biology. The Center houses a major university-wide program and federally funded center in occupational and agricultural medicine, nanotechnology and, a School of Medicine program in reproductive biology.

### Crocker Nuclear Laboratory

530-752-1460; <http://crocker.ucdavis.edu>

The Crocker Nuclear Laboratory is an interdepartmental laboratory for the application of nuclear science to a variety of disciplines, including air pollution and visibility, nuclear physics and chemistry, medical therapy with proton beams, material damage studies, and the effect of background and extraterrestrial radiation on electronic components.

### Institute for Data Analysis and Visualization

2343 Academic Surge 530-752-0481  
Kenneth Joy, Director; [kjoy@ucdavis.edu](mailto:kjoy@ucdavis.edu)  
<http://idav.ucdavis.edu>

The mission of the Institute is the integration of research efforts at UC Davis in data analysis and visualization. The Institute draws students and faculty from a variety of departments and colleges, allowing researchers to work together on real-world, applied problems that deal with the massive data analysis and visualization problems encountered in science, engineering, and other fields. The integration of the two fields, especially in biological applications of high throughput biological assay data such as gene expression arrays, proteomics, metabolomics and NMR spectroscopy, produce methods that impact a substantial number of scientific fields. In neuroscience, computer science, computational science, computational physics, and engineering applications, the Institute contributes data exploration and problem-solving methods through visualization, computer graphics, data analysis, and expressive interfaces that enable discovery and analysis from massive information streams. The collaborative efforts of the faculty

and students of the Institute enable the University to address a wide-variety of application areas and contribute methods that enable scientists and engineers to make decisions from their data.

### Institute of Governmental Affairs

360 Shields Library  
530-752-0966; Fax 530-752-8666; <http://www.iga.ucdavis.edu>

The Institute of Governmental Affairs (IGA) serves as a research base for social science faculty at UC Davis. IGA serves approximately 60 faculty from 10 campus departments as well as scholars visiting from throughout the United States and around the world.

Located in the core of the UC Davis campus, IGA houses eight formal research programs: Center for International Data; Center for State and Local Taxation; Center for the Evolution of the Global Economy; Conflict Processes Group; Economy, Justice and Society (EJS); Migration Dialogue; the Network Sciences Group; the Public Opinion Workshop, and the Rural Economies of the Americas Program (REAP).

Specialized services include grant advising, preparation and administration; research program development; library and data services; social science computing, programming and statistical consulting; seminar, workshop and conference organization; and much more. The institute sponsors an active public affairs program and enhances the education of students by providing research opportunities. IGA serves as the UC Davis liaison to the system-wide program, Institute on Global Conflict and Cooperation (IGCC) and the All-UC Group in Economic History.

### Institute of Transportation Studies

West Village, 1605 Tilia St, Suite 100; 530-752-6548  
Dan Sperling, Director; [dsperling@ucdavis.edu](mailto:dsperling@ucdavis.edu)  
<http://www.its.ucdavis.edu>

The Institute of Transportation Studies conducts multidisciplinary research on complex problems related to the transportation system and disseminates research results to the broader academic and professional community. Research priorities are travel behavior, alternative-fueled vehicle technology and policy, energy and environmental projects and advanced vehicle and highway systems. About 60 faculty members and 130 graduate students from more than 13 academic disciplines, including four Engineering departments, Economics, Environmental Science and Policy, Ecology, Agricultural and Resource Economics, and the Graduate School of Management, participate in the research activities of the Institute. The Institute administers a graduate program in Transportation Technology and Policy, and a number of research centers, including the National Center for Sustainable Transportation, the UC Davis Energy Efficiency Center (EEC), the UC Davis Plug-In Hybrid Electric Vehicle (PH&EV) Center, the Sustainable Transportation Energy Pathways (NextSTEPS) program, the UC Davis Western Cooling Efficiency Center (WCEC), the China Center for Energy and Transportation (C-CET).

### John Muir Institute of the Environment

Mark Schwartz, Director 530-754-9135

The John Muir Institute of the Environment (JMIE) supports innovation and discovery aimed at solving real-world environmental problems. The Institute's faculty are committed to strengthening the scientific foundation for environmental decision making through collective entrepreneurship, a team-oriented approach

that recognizes the complexities of environmental problems and the societal context in which they occur. JMIE champions science and technological innovation, provides campus-wide leadership, hosts centers and projects, and seeds research and educational initiatives to solve real-world environmental problems. Focal areas include water quantity and quality, impacts of particulates in human health, climate change and natural resource management. The Institute links science and technology to policy by providing the intellectual setting for interactions between researchers, regulatory agencies, policy-makers and the public.

### Nanomaterials in the Environment, Agriculture and Technology (NEAT)

4415 Chemistry Annex 530-752-3292  
Alexandra Navrotsky, Director; [anavrotsky@ucdavis.edu](mailto:anavrotsky@ucdavis.edu)  
<http://neat.ucdavis.edu/>

NEAT is a multidisciplinary research and education program linking the fundamental physics, chemistry, and engineering of small particles and nanomaterials to several challenging areas of investigation, including applications in ceramic, chemical, electronic, environmental, and agricultural technology; environmental transport and transformation and the resulting factors of environmental pollution and remediation; and interactions with the biosphere, especially microorganisms and the consequential effects on health.

### Program in International and Community Nutrition

Kathryn G. Dewey  
3253 Meyer Hall  
530-752-1992; Fax 530-752-3406; [kgdewey@ucdavis.edu](mailto:kgdewey@ucdavis.edu)  
<http://picn.ucdavis.edu>

Faculty members of the Program in International and Community Nutrition are studying the epidemiology and causal mechanisms of the major nutritional problems of human populations in low-income countries and in disadvantaged ethnic minority groups in the United States, with the ultimate objective of planning, implementing and evaluating programs to ameliorate these problems. Current areas of research include maternal and child nutrition, control of micronutrient deficiencies, determinants of food intake, nutrition and infection, nutritional assessment, and food and nutrition programs and policy.

## ADDITIONAL RESEARCH CENTERS AND RESOURCES

### Adult Fitness Program

UC Davis Sports Medicine Program  
916-734-6805

The UC Davis Adult Fitness Program is designed to help individuals improve their health and physical fitness to prevent disease and improve quality of life. Our team of exercise specialists includes sports medicine physicians, exercise physiologists and nutritionists trained by UC Davis Sports Medicine, Exercise Biology and Nutrition Faculty in exercise testing and prescription and sports nutrition. This program exists to provide a public health service to the university and surrounding communities; to provide clinical learning opportunities for UC Davis students; to provide opportunities to study the benefit of exercise and proper nutrition in the prevention of disease and assist individuals in evaluating their progress through discounted repeat testing and evaluation.

### Advanced Highway Maintenance & Construction Technology (AHMCT) Research Center

Academic Surge 1003 530-752-5981  
 Steve Velinsky, Director; [savelinsky@ucdavis.edu](mailto:savelinsky@ucdavis.edu)  
 Bahram Ravani, Director; [bravani@ucdavis.edu](mailto:bravani@ucdavis.edu)  
<http://www.ahmct.ucdavis.edu/>

In cooperation with state, federal, and private agencies as well as private industry, the Center for Advanced Highway Maintenance and Construction performs applied and basic research to develop innovative technologies in the areas of highway and civil infrastructure construction, maintenance, and operations. Our ultimate goal is the deployment of these technologies. Our efforts center on safety, mobility, lean operations, reliability, and the minimization of environmental impacts. To achieve these aims, we combine and leverage advanced automation and robotics, information technology, sensing and mechatronics, design and sustainability, life-cycle analysis, and advanced communication and computer technologies.

The Center works directly with California Department of Transportation (CALTRANS) also helps them access university and industry research, maintain a leadership position in maintenance and construction technology, access federal and pooled funds for research, test and evaluate new technologies, improve the Caltrans public image as a technology-oriented organization, and train students and professionals in transportation operations and technology.

### Advanced Materials Characterization and Testing Laboratory (AMCaT)

Kemper Hall; lower level  
 Lab Manager: Fred Hayes; [fahayes@ucdavis.edu](mailto:fahayes@ucdavis.edu)  
<http://chms.engineering.ucdavis.edu/research/amcat/index.html>

The AMCaT labs place their major emphasis on analytical electron microscopy (micro analysis) in the material sciences. The vision and goal of AMCaT is to embrace and support a multi-disciplinary user base of students (undergraduate and graduate), post doctoral fellows, and faculty researchers at UC Davis. The facility also offers its users a variety of sample preparation equipment, a light microscopy lab with image analysis, an x-ray lab, and a materials testing lab. AMCaT supports numerous lab classes in engineering.

### Advanced Transportation Infrastructure Research Center Facility (ATIRC)

West Campus  
 John Harvey, Director (UCPRC); [jtharvey@ucdavis.edu](mailto:jtharvey@ucdavis.edu)

The UC Davis Advanced Transportation Infrastructure Research Center (ATIRC) project provides a facility for two research programs: the UC Pavement Research Center (UCPRC) and the Advanced Highway Maintenance and Construction Technology Research Center (AHMCT). Research at the UCPRC at ATIRC includes accelerated pavement testing of new types of materials and pavement structures using the Heavy Vehicle Simulators, laboratory specimen preparation and testing, and analyses. ATIRC houses the UC Davis staff of the UCPRC.

### Agricultural Sustainability Institute

Thomas P. Tomich, Director  
 143 Robbins Hall  
 530-752-3915; Fax 530-752-2829; [asi@ucdavis.edu](mailto:asi@ucdavis.edu)  
<http://asi.ucdavis.edu/>

The Agricultural Sustainability Institute (ASI) is a hub linking research, education, and outreach in sustainable agriculture and food systems across all divisions of the College of Agricultural and Environmental Sciences at UC Davis, across the University of California, and with other partners across the state, nation, and planet. ASI includes:

- Advising and internship coordination for the UC Davis undergraduate major in Sustainable Agriculture and Food Systems.
- UC Davis Student Farm.
- UC Davis Russell Ranch Sustainable Agriculture Facility.
- UC ANR statewide Sustainable Agriculture Research & Education Program (SAREP).
- The Inter-institutional Network on Food, Agriculture and Sustainability (INFAS), a national academic network.

### California Agricultural Experiment Station

College of Agricultural and Environmental Sciences  
 530-752-1610

The California Agricultural Experiment Station has branches on the UC Davis, UC Riverside and UC Berkeley campuses. The UC Davis branch includes approximately 400 faculty and CE Specialists, mostly in the College of Agricultural and Environmental Sciences, but also in the College of Biological Sciences and the School of Veterinary Medicine. In addition to laboratory facilities, it has approximately 3,000 acres devoted to field research in the environmental and crop sciences, as well as facilities to support animal and long-term experimental research. The Experiment Station supports faculty in research involving agricultural production, food processing, nutrition, animal care and disease prevention, consumer sciences and community development and in natural resources and ecosystem science management, with an emphasis on maintaining and improving environmental quality of both natural and managed ecosystems.

### Center for Advanced Laboratory Fusion Science and Engineering (CALFUSE)

3001 Ghausi Hall 530-754-9069  
 Neville Luhmann, Director; [ncluhmann@ucdavis.edu](mailto:ncluhmann@ucdavis.edu)  
 David Hwang, Director; [dqhwang@ucdavis.edu](mailto:dqhwang@ucdavis.edu)  
<http://calfuse.ucdavis.edu/>

The purpose of Center for Advanced Laboratory Fusion Science and Engineering (CALFUSE) is to promote interaction between research and educational entities within the University and among the University, the national laboratories, and industrial laboratories. Fusion research is an extremely broad field, encompassing topics that cut across numerous engineering, science, and policy disciplines. The initial set of topics includes plasma accelerators, high-energy particle accelerators, plasma diagnostics (specifically, millimeter wave and Terahertz technology developments), advanced computing, advanced materials, and energy policy. The Center invites participation from all fields that may have relevance to fusion education and research.

## Center for Biophotonics (C4B)

2700 Stockton Blvd., Suite 1400  
Sacramento, CA 95817 916-734-8600  
Dennis Matthews, Director; [dmatthews@ucdavis.edu](mailto:dmatthews@ucdavis.edu)  
<http://cbst.ucdavis.edu/>

The Center for Biophotonics applies biophotonics—the science of light interaction with biological matter—to solve problems in biology and medicine. Work at C4B advances the research, development, and application of new optical/photonic tools and technologies in medicine and the life sciences, enabling engineers to collaborate with basic scientists and physicians at the UC Davis Medical Center to translate new technologies from the benchtop to the bedside. Center projects are highly diverse and include superresolution optical microscopies, advanced imaging and manipulation of living cells and other biological systems, engineered fluorescent proteins, label-free cell analysis by Raman spectroscopy and second harmonic generation, molecular sensors and assays, in vitro and in vivo devices and assays for diagnosis, monitoring and treatment of disease.

C4B is the successor of the NSF Center for Biophotonics Science and Technology, which was funded by the National Science Foundation and participating institutions between 2002-2013.

## Center for Child and Family Studies

Center for Child and Family Studies (main office in West House)  
530-752-2888; <http://ccfs.ucdavis.edu>

The Center for Child and Family Studies (CCFS) houses the Early Childhood Laboratory (ECL), a research, teaching and demonstration laboratory of the Division of Human Development and Family Studies in the Department of Human Ecology. At the ECL, students enrolled in human development courses learn observational techniques and participate with peers, children, parents and professionals in developmental programs for infants through preschoolers. Students study early development in a naturalistic setting, linking research and theory to principles of interaction, and learning about developmental differences. Selected undergraduate students participate in faculty and graduate student research at the laboratory. The CCFS also houses several research and outreach facilities, including the Eichhorn Family House.

## Center for Geotechnical Modeling

2655 Brooks Road 530-752-7929  
Ross W. Boulanger, Director; [rwboulanger@ucdavis.edu](mailto:rwboulanger@ucdavis.edu)  
<http://cgm.engineering.ucdavis.edu/>

The Center performs research in the broad area of geotechnical engineering, with a focus on earthquake engineering problems such as dynamic site response, liquefaction, ground failure, and soil-foundation-structure interaction for buildings, bridges, dams, tunnels, and port facilities. The Center emphasizes physical modeling using one of the world's largest and most advanced geotechnical centrifuge facilities, but also performs numerical simulations using advanced computational tools, develops design procedures, and develops new techniques for site characterization. The centrifuge is available for shared use by researchers from around the country and is supported by NSF's National Hazards Engineering Research Infrastructure program.

## Center for Information Technology in the Interest of Society (CITRIS)

2101 Academic Surge Building  
Bahram Ravani, Director and Professor of Mechanical & Aerospace Engineering;  
<http://ucdavis.citris-uc.org>

The Center for Information Technology Research in the Interest of Society (CITRIS) is one of the California Institutes of Science and Innovations with a mission of investigating information technology solutions for society's most pressing challenges. The Center involves a partnership among four UC campuses: UC Davis, UC Berkeley, UC Merced and UC Santa Cruz and operates within the greater ecosystem of the University of California and the innovative and entrepreneurial spirit of northern California.

CITRIS was created to “shorten the pipeline” between world-class laboratory research and the creation of start-ups, larger companies, and whole industries.

CITRIS facilitates partnerships and collaborations involving faculty members and students from numerous departments at the four UC campuses with industrial and other collaborators. Current CITRIS initiatives include Sustainable Infrastructures (pursuing research in cyber-infrastructure of a sustainable society); Connected Communities (supporting collaborative discovery, design, and governance through new technologies that enhance education, creative work, and public engagement); People and Robots (addressing approaches and challenges in Cloud Robotics, Deep Learning, Human-Centric Automation, and Bio-Inspired Robotics in the interest of the society); and Health (developing innovative technologies in telehealth, sensors, analytics and mobile devices to improve health outcomes and access to cost-effective healthcare).

## Center for Mind and Brain

267 Cousteau Place, Davis, CA 95618 530-297-4651  
Steven J. Luck, Director;  
<http://mindbrain.ucdavis.edu/>

The Center for Mind and Brain is an interdisciplinary research center that is dedicated to understanding the nature of the human mind. Our scientists probe the mind using state-of-the-art approaches from the social, biological, engineering, and medical sciences. Our core research areas include attention, development and aging, memory, multisensory integration, music, and disorders of mind and brain. We focus on both discovering the fundamental principles of the healthy human mind and understanding and treating conditions such as autism, schizophrenia, and Alzheimer's disease.

## Center for Molecular Genomic Imaging (CMGI)

451 Health Sciences Drive 530-754-8960  
Simon Cherry, Director; [srcherry@ucdavis.edu](mailto:srcherry@ucdavis.edu)  
<http://imaging.bme.ucdavis.edu/>

The Center for Molecular Genomic Imaging (CMGI) offers the research community dedicated, state-of-the-art imaging technologies for in vivo and biospecimen imaging. Imaging modalities include PET, SPECT, CT, MRI, ultrasound, autoradiography, and optical imaging (fluorescence and bioluminescence). CMGI also operates a biomedical cyclotron and radiochemistry facility for synthesis of radiotracers. The CMGI has become a core facility serving a wide range of campus investigators and is integrated into many major centers, programs, and institutes.

Imaging studies can provide new insights in many areas of biomedical research, including oncology, cardiology, neuroscience and pharmacology. Molecular and genomic imaging can play an important role in advancing basic science investigations and in the development of new diagnostic and therapeutic approaches for use in the clinical setting. CMGI staff provide services that include consultation, protocol planning and experimental design, animal handling and physiologic monitoring, injection of contrast agents and radiopharmaceuticals, scanning, data reconstruction and visualization, image analysis and data backup. CMGI facilities are open to all researchers at UC Davis, and are also open, on a space-available basis, to external researchers.

### Center for Nano and Micromanufacturing

West Wing Kemper Hall; Office: 1125 Kemper Hall;  
530-574-7138

Corey Wolin, Manager; [cdwolin@ucdavis.edu](mailto:cdwolin@ucdavis.edu)  
<http://mnc.ncengineering.ucdavis.edu/>

The Center for Nano and Micromanufacturing (CNM2) includes a 10,000 square-foot Class 100 cleanroom, offering a broad line of lithography tools with resolution capabilities down to 50nm, metal and dielectric thin-film deposition, dry etching, as well as numerous characterization tools to support device manufacturing for a variety of industries and applications. The facility has capabilities to accommodate a wide variety of substrate materials including: Si, SiO<sub>2</sub>, borosilicate glass, InP, GaAs as well as biocompatible polymer materials such as PDMS. External to the cleanroom we have an additional 5000+ square feet of research space which houses both a high-resolution SEM and FIB system used for sample characterization and TEM sample preparation. The staff is available from 9:00 a.m.-5:00 p.m. (PT) to assist internal and external users with process development and training to help streamline research projects.

### Center for Neuroscience

Cameron Carter, Director  
1544 Newton Ct., Davis, CA 95618  
530-757-8708; Fax 530-757-8827;  
<http://neuroscience.ucdavis.edu>

The Center for Neuroscience is an interdisciplinary unit that serves as the focal point for the study of the neurosciences at UC Davis. Faculty affiliated with the Center are from 13 departments and sections. The center sponsors a seminar series, conferences and symposia, provides research space for center members and supports graduate students, postdoctoral scholars and distinguished visitors.

Faculty and students are engaged in the study of brain mechanisms responsible for normal human cognitive and perceptual processes and in the study of fundamental aspects of nerve cell function and development. A core group of cognitive neuroscientists uses various imaging techniques and electrophysiological techniques to study both the normal and lesioned cerebral cortex to understand how the normal brain controls behavior. Other faculty members use either animal models to understand how information is processed in the brain or simple systems to study the fundamental biology of nerve function and development and disorders affecting them.

### Center for Population Biology

Storer Hall 530-752-1274  
Artyom Kopp, Director; [akopp@ucdavis.edu](mailto:akopp@ucdavis.edu)  
<http://cpb.ucdavis.edu>

The UC Davis Center for Population Biology (CPB) aims to advance understanding of the fundamental ecological and evolutionary processes that control the origins and maintenance of biological diversity, at all levels of organization ranging from molecules to ecosystems. Our activities promote integrative, multidisciplinary research in population biology through collaborations, mentorships, workshops and meetings. Faculty in the Center are drawn from nine academic departments and three colleges; Biological Sciences, Agricultural and Environmental Sciences, and Letters and Science.

### Center for Science and Innovation Studies

1246 Social Sciences and Humanities Building & 1127 King Hall  
Mario Biagioli, Ph.D., Program Director  
<http://innovation.ucdavis.edu/>

The Center for Science and Innovation Studies (CSIS) studies the many dimensions of the process of technoscientific innovation. We focus predominantly on the upstream spectrum of innovation—from the design, articulation, and funding of research programs to the patenting and publication of their outcomes—paying particular attention to the process, practices, instruments, and techniques of innovation and to the conceptual and practical problems of knowledge transfer. Through detailed case studies (contemporary as well as historical), CSIS analyzes the role that training, cultural background, and cross-disciplinary mobility play in the emergence of innovation, as well as the new institutional, technical, and social arrangements that sustain it (from innovative laboratory architecture and university-industry configurations, to distributed and cyberinfrastructure-based collaborations, to alternative systems of publication and new metrics of quality and performance assessment). Intellectual property (both traditional regimes and more recent platforms like free software, open source, science commons, and norm-based reward systems) is a central focus of CSIS, as are issues pertaining to bioprospecting and the access to and reward of traditional knowledge.

### Coastal and Marine Sciences Institute

Storer Hall 530-752-1274  
Rick Grosberg, Founding Director; [rhgrosberg@ucdavis.edu](mailto:rhgrosberg@ucdavis.edu)  
<http://cmsi.ucdavis.edu>

The UC Davis Coastal and Marine Sciences Institute (CMSI) aims to catalyze and foster innovative partnerships for discovering, understanding, and communicating science for effective stewardship of ocean and coastal environments in California and beyond. We especially strive to build collaborations with diverse stakeholders, including private-sector organizations and corporations that have significant economic, social, and environmental interests in the coastal ocean and at the land-sea interface. We believe that such partnerships can lead to the development of sustainable policies that protect biodiversity, nurture ecosystems, and enhance beneficial uses of the ocean in parallel with socio-economic development. With its focus on humans and the coastal oceans, the institute assembles globally-recognized experts from more than 20 academic units on the main campus and Bodega Marine Laboratory. CMSI also coordinates research and academic programs cross campus, including a new major in Marine and Coastal Sciences, as well as emerging graduate and professional programs.

## Computer Security Laboratory

2063 Kemper Hall; [seclab-contact@cs.ucdavis.edu](mailto:seclab-contact@cs.ucdavis.edu)  
 Matt Bishop, Hao Chen, Karl Levitt, Felix Wu, Directors;  
[bishop@ucdavis.edu](mailto:bishop@ucdavis.edu), [hchen@ucdavis.edu](mailto:hchen@ucdavis.edu), [levitt@ucdavis.edu](mailto:levitt@ucdavis.edu), [wu@ucdavis.edu](mailto:wu@ucdavis.edu);  
<http://seclab.cs.ucdavis.edu/>

The mission of the UC Davis Computer Security Laboratory is to improve the current state of computer and information security and assurance through research and teaching. The Security Lab investigates security problems in the network infrastructure, in computer security, and in information assurance in general. Current projects include research into data sanitization, vulnerabilities analysis, social links, the provision of a secure programming clinic, forensic logging and auditing, e-voting and the process of holding an election, biology-inspired security techniques, and security of mobile networks and smartphones. The Security Laboratory also researches and detects malicious code (viruses, worms, time bombs, etc.) in programs and detects attempts to penetrate or misuse computer systems. Research projects are supported by corporate and government organizations.

## Genome Center

4303 Genome and Biomedical Sciences Facility 530-754-9648  
 Richard Michelmore, Director; [rwmichelmore@ucdavis.edu](mailto:rwmichelmore@ucdavis.edu)  
<http://genomecenter.ucdavis.edu>

The UC Davis Genome Center integrates experimental and computational approaches to address questions at the forefront of genomics and bioinformatics. The Center is housed in a purpose-built research building with state-of-the-art computational and laboratory facilities. The Center has resident and non-resident research faculty and established five technology cores that serve the whole campus. The five service cores are DNA Technologies, Expression Analysis, Proteomics, Metabolomics, and Bioinformatics. These technology service cores have been established to provide researchers with access to the latest technologies on an at-cost, as-needed basis. Further details are available from the website.

## Health Sciences Research Laboratory—Animal Surgery

Buildings H and J; Center for Laboratory Animal Science  
 530-752-7756; [latalken@ucdavis.edu](mailto:latalken@ucdavis.edu), [wferrier@ucdavis.edu](mailto:wferrier@ucdavis.edu)

This unit is a surgical research facility in compliance with NIH, AAALAC and USDA standards. Instruction in surgical techniques is available including multiple training stations for larger groups. Surgical instruments, drapes, anesthesia machines, scrub suits, and equipment for monitoring vital signs and physiologic parameters are available. Assistance with animal procurement is available. Staff are available to perform or assist with both survival and non-survival surgical procedures depending on the investigator's requirements. Staff are also available for post-operative care, data and sample collection as required, and assistance with preparation of the IACUC Protocol for Animal Care and Use.

## Human Performance Laboratory

164 Hickey Gym  
 530-752-0965

The Human Performance Laboratory (HPL) was founded in 1963 and has a long history of basic and applied research and outreach in exercise physiology, biomechanics and sports psychology. The HPL has been involved in a variety of research areas since its

inception including metabolism, heat stress, fluid balance, injury prevention, body composition and health benefits of physical activity and fitness. The HPL is represented by full-time and adjunct faculty members with varying research backgrounds and scientific interests. The HPL facilities allow measurement of a comprehensive list of human performance characteristics. Investigators have access to advanced data acquisition systems for evaluation in the areas of biomechanics, motor learning, environmental physiology, cardiopulmonary and thermoregulatory physiology, human nutrition and exercise and muscle metabolism. Specific technologies and capabilities include extensive computing facilities, high speed 3-D video motion analysis, ground reaction force measurement, ultrasound imaging, a temperature and humidity controlled environmental chamber and systems for measurement of oxygen consumption, body composition and psychomotor performance. The HPL meets the needs of today's creative researcher and has the capacity to assist in answering tomorrow's research questions.

## Humanities Institute

David Biale, Director  
 Molly McCarthy, Associate Director  
 227 Voorhies Hall 530-752-1254; Fax 530-752-4263

The UC Davis Humanities Institute (DHI) is an interdisciplinary research center that fosters intellectual collaborations and facilitates access to resources for faculty and graduate students who are actively engaged in research and teaching in the humanities, the arts, cultural studies and the humanistically oriented social sciences. It advocates for the humanities within the UC Davis community and works with funding agencies to secure individual and programmatic resources for faculty. To explore emerging research areas and provide collaborative opportunities for faculty and graduate students, the Institute sponsors faculty and graduate research fellowships, interdisciplinary research clusters, and administers the Mellon Research Initiatives in the Humanities and the Mellon Public Scholars Program. The Institute also organizes conferences, workshops and lectures and provides partial funding for events that serve humanities scholars at UC Davis.

## Mann Laboratory

105 Mann Laboratory  
 Trevor Suslow, Faculty Contact  
 Lee Ann Richmond, Facility Manager and Safety Officer  
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Plant scientists in the Louis K. Mann Laboratory study the physiology, biochemistry, microbiology and molecular biology of pre-harvest and harvested fruits, ornamentals, and vegetables to improve and maintain their quality and safety during harvest, storage, processing, distribution and marketing. Four current faculty and two Emeritus Faculty are located or affiliated with this facility and are members of the Department of Plant Sciences. One USDA/ARS research scientist is also housed in the Mann Lab. Research and extension activities are supported by students, postdoctoral researchers and visiting scientists. Research includes basic plant molecular biology, plant physiology, applied postharvest biology and technology, produce safety microbiology, and practical storage technologies for horticultural crops, including whole and lightly processed products. Results are of interest to other researchers in the plant sciences and food science as well as to growers, shippers, transportation and logistics providers, marketers and consumers of fresh fruit and vegetables. This Special Postharvest Facility is a CAES resource and is equipped with 18 controlled-temperature

rooms, eight research laboratories, specialized postharvest analytical equipment, advanced rapid test equipment for human pathogens, and a small conference room for up to 25 with a 60" wall-mounted flat-screen monitor.

### Natural Reserve System

John Wingfield, Director  
Virginia Boucher, Associate Director  
The Barn  
530-754-7990;  
<http://mrs.ucdavis.edu>; <http://mrs.ucop.edu>

The UC Davis campus administers five reserves that are available for teaching and research.

- Bodega Marine Reserve, located at Bodega Bay, 100 miles west of campus, consists of both terrestrial and coastal marine habitats including grasslands, dunes, freshwater and brackish marshes, mudflats, sandy beaches, rocky intertidal and subtidal areas. There are facilities for overnight and longer stays.
- Jepson Prairie Reserve, located in Solano County 13 miles south of Dixon, consists of native California bunchgrass grasslands, vernal pools, playa lakes and freshwater sloughs.
- Donald and Sylvia McLaughlin Reserve, located near Clear Lake about 70 miles northwest of campus, consists of Inner Coast Range habitat with a mix of serpentine and non-serpentine soils. The reserve has a facility for overnight and longer stays and a camping area for class groups.
- Quail Ridge Reserve consists of Inner Coast Range habitat located about 30 miles west of campus on a peninsula jutting into Lake Berryessa. The reserve has facilities for overnight and longer stays and tent cabins for class groups.
- Stebbins Cold Canyon Reserve, located about 24 miles west of campus, has representative populations of several different plant communities found in California's Inner and Outer Coast Ranges. A five mile loop trail is popular with recreational hikers.

The University of California maintains 39 reserves throughout the state, many of which are available for teaching and research.

### Nuclear Magnetic Resonance Facility

Medical Sciences 1D  
530-752-7677;  
<http://www.nmr.ucdavis.edu>

The Nuclear Magnetic Resonance Facility provides access to state-of-the-art NMR instrumentation for spectroscopy and imaging to researchers in the biological, medical and physical sciences. At present, the facility operates ten spectrometers of varying purposes and capabilities at field strengths from 300 to 800 MHz. Applications include structural characterization of organic molecules, determination of protein structure and dynamics, metabolomics, imaging and in vivo spectroscopy of small animals, plants, and materials, and spectroscopy of solids. The Facility also has workstations for off-line data processing. Three full-time staff members are available to assist campus researchers in utilizing the instrumentation. A training course, Biological Chemistry 230, is offered in the fall quarter.

### UC Pavement Research Center

2001 Ghausi Hall;  
530-754-6409  
John Harvey, Director, UC Davis Site; [jtharvey@ucdavis.edu](mailto:jtharvey@ucdavis.edu)  
<http://www.ucprc.ucdavis.edu>

The UC Pavement Research Center (UCPRC) uses innovative research and sound engineering principles to improve pavement structures, materials and technologies. Work at the UCPRC focuses on asphalt and concrete pavements, including design, materials, rehabilitation, life cycle, maintenance and reconstruction; pavement cost analysis and strategy selection; the effects of pavement activities on traffic in urban areas; pavement performance modeling; and environmental life-cycle assessment for pavements.

### Social Science Data Service

105 Social Sciences and Humanities Building  
530-752-4009; <http://www.ssds.ucdavis.edu>

The Social Science Data Service (SSDS) is a unit in the Division of Social Sciences. SSDS provides quantitative computing and consulting services in support of faculty and graduate students involved in social science research on the UC Davis campus. SSDS provides consulting services for the wide range of software used by social scientists and assists with questions regarding the use of SSDS computers and statistical and data-related programming. SSDS manages a UNIX system and a PC research lab used for quantitative social science computing.

### Sustainable Transportation Energy Pathways (STEPS)

Institute of Transportation Studies, UC Davis  
Joan Ogden, Director; [jmogden@ucdavis.edu](mailto:jmogden@ucdavis.edu)  
Paul Gruber, Manager; [pwgruber@ucdavis.edu](mailto:pwgruber@ucdavis.edu)  
<http://steps.ucdavis.edu>

STEPS is an ongoing research consortium, started in 2007, that addresses the technical, operational, logistical, and strategic issues related to the transition to an alternative fuel-based economy. The program comprises 100+ interdisciplinary research projects addressing the potential transportation energy pathways: electricity, hydrogen, biofuels, and fossil fuels. These pathways are analyzed and compared across program threads: consumer demand and travel behavior; innovation and business strategy; infrastructure system analysis; environmental, energy and cost analysis; vehicle technology evaluation; policy analysis; and integrative scenarios and transition strategies.

The overarching program goal of STEPS is to generate new insights about the transitions to a sustainable transportation energy future and disseminate that knowledge to decision-makers in the private sector and governmental agencies so that they can make informed technology, investment, and policy choices.

### Tahoe Environmental Research Center (TERC)

UC Davis Administration Office; Watershed Sciences Building;  
530-754-8372  
TERC site Laboratories in Incline Village, NV 775-881-7560  
Geoffrey Schladow, Director; [gschladow@ucdavis.edu](mailto:gschladow@ucdavis.edu)  
<http://terc.ucdavis.edu/>

The Tahoe Environmental Research Center is dedicated to research, education and public outreach on lakes and their surrounding watersheds and airsheds. Lake ecosystems include the physical, biogeochemical and human environments, along with

the interactions among them. The Center is committed to providing objective scientific information for the restoration and sustainable use of the Lake Tahoe Basin and for freshwater ecosystems worldwide. Two public education centers in the Tahoe basin provide information and organize programs for K-12 and adult audiences throughout the year.

### UC Agricultural Issues Center

252 Hunt Hall;  
530-752-2320; [agissues@ucdavis.edu](mailto:agissues@ucdavis.edu)  
<http://www.aic.ucdavis.edu>

The UC Agricultural Issues Center is a university-wide research and outreach unit with core competencies in economics while drawing on expertise from many disciplines. The Center focuses on California's agricultural issues related to science and technology, international trade and markets, agribusiness trends, rural-urban issues, natural resources and the environment, human resources and agricultural policy.

### UC Davis Center for Plant Diversity

Formally the UC Davis Herbarium  
Dr. Dan Potter, Director; Ellen Dean, Curator  
1026 Sciences Laboratory Building, Department of Plant Sciences  
530-752-1091; <http://herbarium.ucdavis.edu>

The UC Davis Center for Plant Diversity provides information on the names, uses, toxicity and distribution of plants. Anyone can visit the Herbarium to use its dried plant collections (300,000 specimens), botanical library and microscopes, but a phone call is suggested to make sure staff will be available to assist you. The collections are used most commonly to check plant identifications, but they are also used by campus faculty and students for teaching and research in plant systematics and ecology. Herbarium staff answer hundreds of public service requests each year (especially identification of weeds and poisonous plants). Collections include vascular plants, bryophytes, lichens and algae. The majority of these specimens are angiosperms (flowering plants), mainly from California, but the collections are worldwide in scope, with strong holdings from North America, Ecuador, Baja California and regions with Mediterranean climate regimes. The Herbarium is well known for its collection of weeds and poisonous plants, although it also has world-class collections of grasses, oaks and spurges. The Herbarium's support group, the Davis Botanical Society, hosts a wide range of botanical events, workshops and trips each year.

### UC Davis Energy Institute

West Village, 1605 Tilia St, Suite 100; 530-752-4909  
Dan Sperling, Director; [energy@ucdavis.edu](mailto:energy@ucdavis.edu)  
<http://energy.ucdavis.edu>

The Energy Institute at UC Davis is home to energy research and education programs of the University of California, Davis. It was established to accelerate the global transformation to a sustainable energy future and is structured to coordinate the world-class strengths of UC Davis in energy research, education and outreach to foster new innovations, expand public service and inform decision-making about new energy solutions. The Energy Institute encompasses critical areas of energy research at UC Davis—

including renewable and sustainable energy systems, energy efficiency, fuels and transportation, infrastructure, environment, and economics. The Institute actively targets the demand for well-trained energy professionals.

### UC Davis J. Amorocho Hydraulics Laboratory (JAHL)

Dept. of Civil and Environmental Engineering;  
530-752-2385  
M. Levent Kavvas, Director; [mlkavvas@ucdavis.edu](mailto:mlkavvas@ucdavis.edu)  
Kara J. Carr, Co-Manager; [kjcarr@ucdavis.edu](mailto:kjcarr@ucdavis.edu)  
Ali Ercan, Co-Manager; [aercan@ucdavis.edu](mailto:aercan@ucdavis.edu)  
<http://jahl.engr.ucdavis.edu/>

The research areas at the UC Davis J. Amorocho Hydraulics Laboratory include engineering hydraulics, fisheries protection, and ecological and environmental hydraulics. UC Davis JAHL was built to perform hydraulic modeling studies for the California State Water Project and has been conducting hydraulic investigations through scaled physical, prototype and numerical models to provide modeling services to federal, state, and local water agencies and private entities. With the recently constructed large flume, which has a circulation capacity of 200 cfs, it is now possible to perform prototype physical modeling studies at the laboratory, including dam removal and sediment transport studies without scaling the sediment and fluid properties. Recent research projects have included the assessment of hydraulics, fish behavior, and swimming, near unscreened diversions; studies of sturgeon passage; and investigations of the effects of California riparian vegetation on flow, roughness, and erosion. With the help of the state and federal agencies, researchers have actively participated in the development of solutions to fish protection for the Bay Delta river system and are developing a better understanding of the hydraulic and biological issues in the Sacramento River and Bay Delta system. Fish biologists, hydraulic engineers and other UC Davis JAHL researchers have many years of experience in testing Sacramento River and Bay Delta fish species under various hydraulic and environmental conditions and in handling invasive water plant species that occur in the Delta fish facilities.

### X-Ray Crystallographic Laboratory

James C. Fetting, Ph.D.  
Department of Chemistry  
530-754-7822

The X-Ray Crystallographic Laboratory, located in the Department of Chemistry, provides crystal structure determinations for researchers. Single crystals from all branches of chemistry are studied. The laboratory is equipped with three single crystal Bruker X-ray diffractometers, a Kappa Photon 4-circle with both Cu and Mo micro-sources, an APEX Duo equipped with both a Cu micro-source and Mo sealed tube anode sources, and an APEXII Mo source system. The lab also has a Bruker Eco Advance Powder X-ray diffractometer with 9 position sample changer. The laboratory also possesses a stereo-microscope. All single crystal instruments have variable low temperature systems including one with the added capability of cooling the crystal to 5K. Consultation and collaboration on a variety of single crystal related projects can be arranged.

**Average Yearly Salary Offered to Graduates With Bachelor’s, Master’s, and Doctorate Degrees <sup>1</sup>**

Field of Study:	Average Yearly Salary		
	Bachelor’s	Master’s	Doctorate
Engineering	\$62,564	\$68,100	Not reported
Humanities/Social Sciences	\$38,045	\$49,100	Not reported
Health Sciences/Life Sciences	\$47,050	\$61,500	Not reported
Physical Sciences	\$45,400	\$57,950	Not reported

**Average Salaries by Discipline**

**Bachelor’s Degree**

Broad Category	2016 Average Salary	Responses
Engineering	\$64,891	499
Computer Science	\$61,321	205
Math & Sciences	\$55,087	83
Agriculture & Natural Resources	\$48,729	24
Social Sciences	\$46,585	69
Humanities	\$46,065	46

**Master’s Degree**

Engineering	\$73,871	224
Computer Science	\$72,080	87
Business	\$71,663	221
Math & Sciences	\$67,891	38
Social Sciences	\$52,333	9

**Doctorate Degree**

Computer Science	\$101,324	17
Math & Sciences	\$98,693	16
Engineering	\$95,055	62

National Association of Colleges and Employers (NACE), Salary Survey–Winter 2016, <http://naceweb.org/uploadedFiles/Content/static-assets/downloads/executive-summary/2016-january-salary-survey-executive-summary.pdf>

<sup>1</sup>Source:2010-2013 National Salary Survey data provided by the National Association of Colleges and Employers.

### Proportion of UC Davis Graduates Finding Work in Their Fields of Choice

The percent of alumni whose full-time job is in the field of their choice is shown by field of study. Figures do not include the five percent of graduates who had not decided on a career field at the time of the survey.

#### Field of Study<sup>1</sup>, Percentage finding work in field of choice

Agricultural Sciences, 80%	Humanities, Arts and Cultural Studies, 75%
Biological Sciences, 79%	Mathematical and Physical Sciences, 78%
Engineering, 86%	Social Sciences, 72%

#### Total 77%

<sup>1</sup>Source: A A 2015 survey of June 2010-14 graduates conducted by Budget & Institutional Analysis.

<sup>2</sup>Fields of Study are groups of related undergraduate majors as organized into UC Davis colleges or divisions.

### Retention Data and Graduation Rates at UC Davis

#### Freshmen\*

Retention and graduation rates through Summer 2014 for all undergraduates entering UC Davis as freshmen.

Fall Quarter of Initial Enrollment:	Number of Students**	Percent Returned for Second Year	Percent Graduating in Four Years	Percent Graduating in Five Years	Percent Graduating in Six Years
1999	3789	91%	42%	75%	80%
2000	4290	91%	43%	76%	81%
2001	4360	91%	43%	74%	80%
2002	4613	91%	48%	77%	82%
2003	4737	91%	50%	75%	80%
2004	4259	91%	51%	78%	82%
2005	4374	90%	51%	77%	82%
2006	5504	90%	52%	77%	81%
2007	4950	90%	51%	76%	81%
2008	4967	92%	53%	79%	83%

#### Transfer Students

Retention and graduation rates through Summer 2014 for all undergraduates transferring to UC Davis from California community colleges.

Fall Quarter of Initial Enrollment:	Number of Students**	Percent Returned for Second Year	Percent Graduating in Two Years	Percent Graduating in Three Years	Percent Graduating in Four Years
2001	1607	89%	40%	75%	83%
2002	1669	90%	46%	78%	84%
2003	1582	90%	47%	78%	83%
2004	1734	89%	48%	78%	85%
2005	1588	88%	53%	79%	84%
2006	1617	90%	49%	80%	85%
2007	1650	88%	48%	77%	84%
2008	1703	90%	49%	80%	86%
2009	1990	89%	48%	79%	85%
2010	2529	90%	50%	80%	85%

Retention is defined as enrollment at the third week census point of the fall term one year from initial fall term.

Graduation is defined as having received a degree from UC Davis (does not include students who transferred to another institution to complete their degree).

\* Retention and graduation tracking limited to students enrolled full-time in their initial term of enrollment.

\*\* Students excluded from these counts include those who are now deceased or participated in any of the following: Military Service, Foreign Service, Religious Mission.

Source: Budget & Institutional Analysis, UC Davis (February 10, 2016).