GETTING TO KNOW UCLA LIFE SCIENCES

INTRODUCTION

LIFE SCIENCES at UCLA brings together an extraordinary range of interests, from ecology and evolution to neuroscience. Our seven academic departments, eleven majors, and ten minors give you the flexibility to choose an academic program that will prepare you to meet your goals. You can learn about the most exciting advances in molecular biology today, the life in the depths of the ocean a few miles away from the campus, or the latest theories on how the brain affects behavior. And you can connect with the world of science through internships and hands-on research. The best preparation for joining one of our majors is to take the most challenging courses in math and science that you can. Consult the counselors at your school to find out the requirements for admission.

ACADEMICS in the DIVISION OF LIFE SCIENCES

DEPARTMENT OF ECOLOGY AND EVOLUTIONARY BIOLOGY

https://www.eeb.ucla.edu/

The Department of Ecology and Evolutionary Biology (EEB) is the home of the Biology Major. Other EEB majors include: Ecology, Behavior, & Evolution as well as Marine Biology. EEB also offers a Minor in Conservation Biology and Evolutionary Medicine. Its mission is twofold: to provide new knowledge of the ecological and evolutionary processes that produce and sustain life on Earth, and to educate the next generation of scholars, professionals, and citizens for the biological, environmental and biotechnological challenges of the future.

MAJORS:	BIOLOGY, B.S.
	ECOLOGY, BEHAVIOR AND EVOLUTION (EBE), B.S.
	MARINE BIOLOGY, B.S.
MINOR:	CONSERVATION BIOLOGY
	EVOLUTIONARY MEDICINE

DEPARTMENT OF INTEGRATIVE BIOLOGY AND PHYSIOLOGY <u>https://www.ibp.ucla.edu/</u>

Research in the Department of Integrative Biology and Physiology (IBP) is dedicated to explaining the function of complex biological systems, in cells, organs, and individuals. The recent rapid advances in molecular and cell biology and genetics, including the sequencing of numerous genomes, has provided an unprecedented opportunity to use this new information to understand how the genes interact to produce emergent phenotypes in complex systems.

MAJOR: PHYSIOLOGICAL SCIENCE, B.S.

DEPARTMENT OF MICROBIOLOGY, IMMUNOLOGY AND MOLECULAR GENETICS

http://www.mimg.ucla.edu/

The Department of Microbiology, Immunology, and Molecular Genetics (MIMG) aims to provide the highest quality research and education possible in the interdisciplinary fields of Microbiology, Immunology, and Molecular Genetics. Educators and students work together in MIMG to identify and address the most relevant problems in microbial pathogenesis and physiology, host cell biology and immune defense, and the host-pathogen interface.

MAJOR: MICROBIOLOGY, IMMUNOLOGY, AND MOLECULAR GENETICS, B.S.

DEPARTMENT OF MOLECULAR, CELL AND DEVELOPMENTAL BIOLOGY

https://www.mcdb.ucla.edu/

Research in the Department of Molecular Cell and Developmental Biology (MCDB) focuses on the basic mechanisms that regulate cell differentiation and function.

MAJORS: MOLECULAR, CELL AND DEVELOPMENTAL BIOLOGY, B.S.

DEPARTMENT OF PSYCHOLOGY

https://www.psych.ucla.edu/

The Department of Psychology employs systematic methods of inquiry to study and explain human and animal behavior, both normal and abnormal, in terms of a variety of underlying variables, including neural, physiological, and cognitive processes; developmental factors and individual differences; and social and interpersonal influences and contexts.

MAJORS:	PSYCHOBIOLOGY, B.S.
	PSYCHOLOGY, B.A.
	COGNITIVE SCIENCE, B.S.
MINORS:	COGNITIVE SCIENCE
	APPLIED DEVELOPMENTAL PSYCHOLOGY

INTERDEPARTMENTAL PROGRAMS

COMPUTATIONAL AND SYSTEMS BIOLOGY https://casb.ucla.edu/

The Computational and Systems Biology (CaSB) Interdepartmental Program is the home of the CaSB Major, which offers five concentrations, all listed below. The synergy for all is integrative systems, information and computational modeling sciences in biology. The focus is primarily quantitative, as mastery of advanced quantitative skills is essential for multidisciplinary understanding. Each Concentration emphasizes different systems or modalities, and computational or modeling approaches. Students normally choose one, but because the Concentration areas have substantial methodologic overlap, well-justified combinations are also possible. CaSB also offers Minors in Mathematical Biology, Structural Biology, and Systems Biology.

MAJORS:	COMPUTATIONAL AND SYSTENS BIOLOGY, B.S.
CONCENTRATIONS:	SYSTEMS BIOLOGY
	NEUROSYSTEMS
	BIOMEDICAL SYSTEMS
	BIOINFORMATICS
	BIOLOGICAL DATA SCIENCES
MINORS:	MATHEMATICAL BIOLOGY
	STRUCTURAL BIOLOGY
	SYSTEMS BIOLOGY

DEPARTMENT OF NEUROSCIENCE

http://www.neurosci.ucla.edu/

Scientific study of the brain requires the skills of many different disciplines. Thus, this major is interdisciplinary and interdepartmental. The faculty are biologists, psychologists, biochemists, mathematicians, and engineers, all of whom share a fascination with the function of the brain. The brain is studied at many different levels, including the molecular and cellular levels, the level of systems of neurons, and at the behavioral level.

MAJOR: NEUROSCIENCE, B.S. MINOR: NEUROSCIENCE

Revised: 10/14/19

BIOMEDICAL RESEARCH MINOR

https://www.biomedresearchminor.ucla.edu/

Independent research is complemented by coursework that develops important skills such as critical thinking, analysis of research literature and data presentation. In addition, an ethics and social science component trains students to recognize the political, social and philosophical issues facing science today.

MINOR: BIOMEDICAL RESEARCH

UCLA INSTITUTE FOR SOCIETY AND GENETICS

https://socgen.ucla.edu/

The Institute for Society and Genetics (ISG) is an interdisciplinary unit that encourages scholarly research and educates students and the public about the ethical, legal and societal implications and interconnections of modern biotechnology, genetics and genomics. ISG offers undergraduate courses, major degrees in Human Biology and Society, B.A. and in Human Biology and Society, B.S., a minor in Society and Genetics, and fellowships for graduate and postdoctoral study.

MAJORS:	HUMAN BIOLOGY AND SOCIETY, B.A.
	HUMAN BIOLOGY AND SOCIETY, B.S.
MINOR:	SOCIETY AND GENETICS

MAJORS in the LIFE SCIENCES

BIOLOGY

Department of Ecology and Evolutionary Biology https://www.eeb.ucla.edu/undergraduate.php

A major in **BioLogy** gives students an opportunity to design their own life sciences major to include courses from any of the life sciences departments, tailoring their major to their specific interests and career choices. Although biology is historically the classic major for pre-medical students, the Biology major also provides an excellent background for careers in public service, government, agriculture, environmental conservation, research and teaching. Many Biology majors participate in the Marine Biology Quarter (MBQ) or Field Biology Quarter (FBQ), with fieldwork off campus for most or all of the quarter. Students are also involved in undergraduate teaching apprenticeships, internships and research throughout the health and sciences departments at UCLA.

COMPUTATIONAL AND SYSTEMS BIOLOGY

Department of Computational and Systems Biology https://casb.ucla.edu/pre-major/

The Computational & Systems Biology (C&S Bio) major trains students to solve basic and applied biological problems by combining math, computing, and a strong base of biological knowledge and concepts. Students learn to approach problems and formulate questions that span the full range of biological systems, from genes to cells to medicine to ecology to evolution. A major goal is to understand whole systems, from cells to organs to individuals to ecosystems, both in terms of their components and emergent behaviors. The major is designed for students with a strong interest in applying math and computational approaches to study questions in the life sciences that range from how cells process information, to which genes influence disease risk or response to medication, to what determines rates of tumor growth, to which factors drive biodiversity.

ECOLOGY, BEHAVIOR, AND EVOLUTION

Department of Ecology and Evolutionary Biology https://www.eeb.ucla.edu/undergraduate.php

ECOLOGY, BEHAVIOR, AND EVOLUTION (EBE), the department's flagship major, includes students who are interested in field science, animal behavior and ecological studies, and evolution, the areas in which most of the Ecology and Evolutionary Biology faculty specialize. Research in this area can involve community structure and determinants of diversity, marine ecology of coastal ecosystems, physiological plant anatomy, social behavior in ant colonies, and population genetics. Field work and research are an integral part of the EBE major, both of which take place in many of the natural areas around UCLA, including Joshua Tree National Monument, the Mojave Desert and the local beaches and mountains. EBE majors participate in the Marine Biology Quarter or the Field Biology Quarter for the field research component of their major. These opportunities give students the experiential learning they need to prepare for graduate study, professional school or a career in field science.

HUMAN BIOLOGY AND SOCIETY

UCLA Institute of Society and Genetics https://socgen.ucla.edu/academics/undergraduate/

The **HUMAN BIOLOGY AND SOCIETY** major degrees provide an interdisciplinary education in current issues at the intersections of human biology, genomics and society. Has human history changed your DNA? What issues are raised by genetic modification of our food crops and animals? Who owns your body? How expansive is your right to medical and genetic privacy? What are the individual and social consequences of personalized genetic medicine? What, if

anything, can human biology and genetics tell us about such complex concepts as 'race' and 'identity?' Does commercialization threaten academic research? If questions like these interest you, then the Human Biology and Society major may be an important opportunity for you. Students in the major specialize in one of five areas: Bioethics and Public Science Policy; Medicine and Public Health; Evolutionary Biology, Culture and Behavior; Population Genetics and History; and Historical and Social Studies of Science. Community internship, research apprenticeship, and capstone seminar are mandated as well. The Human Biology and Society major is good preparation for a variety of careers, including medicine, law, business, academia, and public policy

MARINE BIOLOGY

Department of Ecology and Evolutionary Biology https://www.eeb.ucla.edu/undergraduate.php

MARINE BIOLOGY is the study of oceanography, ecology, fish, marine invertebrates, and many other subjects related to the oceans. Marine Biology majors take courses about marine organisms and physiology, ecology, and oceanography. They participate in the Marine Biology Quarter in the fall of their third or fourth year, and most participate in internships for credit at the Ocean Discovery Center, UCLA Marine Science Center, Los Angeles Dolphin Project, or Santa Monica Baykeepers. Many students also choose to do internships in the summer at Monterey Bay Aquarium Research Institute or other locations worldwide. Students go on to do research or graduate work and careers in environmental or governmental organizations (such as NOAA, EPA or the Coastal Resource Center) marine or environmental law and policy, medicine, dentistry or other professions.

MICROBIOLOGY, IMMUNOLOGY, AND MOLECULAR GENETICS

Department of Microbiology, Immunology, and Molecular Genetics https://www.mimg.ucla.edu/undergraduate-overview/

How does HIV become AIDS? What makes cancer cells tick? How does the immune system fight disease? These are some of the questions for which molecular microbiologists seek the answers. The study of microbiology, immunology, and molecular genetics encompasses the basics of bacteria and virus structure and focuses on the genetic mechanisms of single-celled organisms. For **MICROBIOLOGY, IMMUNOLOGY AND MOLECULAR GENETICS (MIMG)** majors, the preparation of the core curriculum leads to advanced study in systemic, genetic and infectious diseases, immunology, and molecular genetics. Our major also provides strong and valuable preparation for a variety of careers. Graduates usually head toward genetic and/or microbial research, health professions such as medicine or dentistry, or jobs in the biotechnology industry; there are countless possibilities, from law to teaching to culinary arts. MIMG students experience basic scientific laboratory work first hand, as virtually all of our faculty direct undergraduate researchers. Courses offered by our department may include field trips to biotech companies or special instruction by industry scientists.

MOLECULAR, CELL AND DEVELOPMENTAL BIOLOGY

Department of Molecular, Cell and Developmental Biology https://www.mcdb.ucla.edu/undergraduate

MOLECULAR, CELL AND DEVELOPMENTAL BIOLOGY (MCDB) majors take a concentrated grouping of life science courses designed to foster their understanding of biological design at the molecular level. Our majors study molecular processes at the single and the multicellular level, as well as the role of genes in multicellular organisms. In MCD Biology there is a strong emphasis on using model organisms in laboratories for molecular studies, including those arising during embryogenesis and even those relevant to mechanisms found in humans. These model organisms range from E.coli and yeast to plants and fruit flies to zebra fish. Our majors have classes in all aspects of cell and molecular biology including human genetics, the principles of neurobiology, molecular parasitology, and plant differentiation and development. One of our most popular lab classes teaches the techniques of genetic engineering, such as how to make recombinant DNA,

transform bacteria, and clone genes. MCDB majors develop powerful analytical skills and a sophisticated expertise in life sciences, which make our graduates highly valued in such diverse vocations as research, teaching, consulting, biotechnology, and the health professions. Our students have completed independent studies in molecular biology on such diverse topics as tuberculosis, breast cancer, brain development, genetic defects, and tracking coyote migration through DNA inheritance patterns.

NEUROSCIENCE

Neuroscience Interdepartmental Undergraduate Program <u>http://www.neurosci.ucla.edu/</u>

The **NEUROSCIENCE** major is an interdepartmental program which allows students to complete their major with courses from departments such as physiological science, molecular, cell and developmental biology, and psychology, as well as the core neuroscience courses. Neuroscience seeks to understand the brain in health and in disease. Our students' courses cover such topics of fundamental interest as perception, cognition, learning, memory, motor control, and regulation of body function. Neuroscience majors study a wide range of topics such as the anatomy of the central nervous system, the visual system, biological bases of psychiatric disorders, and neural mechanisms controlling movement. The undergraduate program draws many of its faculty from UCLA's Brain Research Institute, which includes faculty from a variety of departments in the College of Letters and Science and the Schools of Medicine and Dentistry. The Neuroscience Undergraduate Society is involved with community projects such as Project Brainstorm during Brain Awareness Week, in conjunction with the Brain Research Institute and the Neuroscience Graduate Program, during which our majors host students from elementary schools and show them around brain research laboratories (including a real brain!).

PHYSIOLOGICAL SCIENCE

Department of Integrative Biology and Physiology https://www.ibp.ucla.edu/undergraduate.php

PHYSIOLOGICAL SCIENCE is the study of human anatomy and physiology. Our students learn all of the major systems of the human body in great detail including the brain and nervous system, the reproductive system, the cardiovascular system, and much more. After a rigorous group of foundation classes, Physiological Science majors can take a variety of electives including topics such as nutrition, history of physiology, computer modeling of physiology systems, and learning and memory. Many of our majors are considering careers in health care, and there is a world of opportunity available with this degree. Through UCLA's Athletic Department, students can serve as athletic trainers to our NCAA sports teams, travel with the teams to away games or meets, and gain valuable experience and connections for career options.

PSYCHOBIOLOGY

Department of Psychology https://www.psych.ucla.edu/undergraduate/undergraduate-student-services/majors-minors

The **PsychoBioLOGY** major involves the study of brain-behavior relations and laboratory training in standard brain research techniques. The major is designed for students who plan to go on to postgraduate work in physiological psychology, neuroscience, behavioral aspects of biology, or the health sciences. The requirements for the major include sufficient preparation for students planning to pursue graduate work in any of the above fields; however, additional advanced courses in psychology and related sciences are recommended. The Department offers opportunities for research and fieldwork experience through which students earn units toward their major and degree. Psychobiology majors can also participate in the Undergraduate Psychobiology Association and Psi Chi, the National Honors Society in Psychology.

MINORS in the LIFE SCIENCES

APPLIED DEVELOPMENTAL PSYCHOLOGY

Department of Psychology

https://www.psych.ucla.edu/undergraduate/undergraduate-student-services/majors-minors

The Applied Developmental Psychology (ADP) minor is designed to (1) provide a coherent, challenging academic program focused on investigating, understanding, and supporting the development of young children and their families, (2) teach undergraduate students how to apply theories, research methods, and research findings to practical concerns, and (3) prepare students to join or receive further training in various child-related professions.

BIOMEDICAL RESEARCH

https://www.biomedresearchminor.ucla.edu/

The UCLA Minor in **Biomedical Research** was officially launched in Spring 2007. Conceived by Prof. Utpal Banerjee and Dean Fred Eiserling as a logical extension of Dr. Banerjee's highly successful HHMI Professors program, the Undergraduate Research Consortium in Functional Genomics (URCFG; www.bruinfly.ucla.edu), the Minor was designed to make laboratory research a core part of the scientific curriculum as early as the first year of college. Independent research is complemented by coursework that develops important skills such as critical thinking, analysis of research literature and data presentation. In addition, an ethics and social science component trains students to recognize the political, social and philosophical issues facing science today. The UCLA Minor in Biomedical Research was made possible by generous support from the Howard Hughes Medical Institute

COGNITIVE SCIENCE

Department of Psychology

https://www.psych.ucla.edu/undergraduate/undergraduate-student-services/majors-minors

The Cognitive Science minor is designed to introduce students to cognitive science topics as addressed in a number of different disciplines, such as biology, computer science, engineering, linguistics, mathematics, philosophy, and psychology, while allowing them to pursue a more in-depth study of cognitive science topics within specific areas of their own choice.

CONSERVATION BIOLOGY

Department of Ecology and Evolutionary Biology https://www.eeb.ucla.edu/ugrad_convservation.php

The **Conservation Biology** minor seeks to provide students with a greater depth of experience and understanding the role that science can play in developing conservation policy. The minor was established in Spring, 2007. Students in the Conservation Biology minor are encouraged to participate in field research, especially as part of the Field Biology Quarter (FBQ) or the Marine Biology Quarter (MBQ). The FBQ and MBQ are quarter-long research opportunities for advanced undergraduates who wish to experience the life of a field or marine biologist.

EVOLUTIONARY MEDICINE

Department of Ecology and Evolutionary Biology https://www.eeb.ucla.edu/ugrad_evmed.php

The **Evolutionary Medicine** minor is designed for students who wish to augment their major program of study with courses that combine the disciplines of ecology and evolutionary biology, anthropology, psychology, and zoology with medicine to create new paradigms for investigating and understanding disease. The minor seeks to provide students with a greater depth of experience and understanding of the integration of evolutionary biology and medical education

MATHEMATICAL BIOLOGY

Computational & Systems Biology Interdepartmental Undergraduate Program

www.casb.ucla.edu

The Mathematical Biology minor introduces undergraduate students to an active interdisciplinary research field at UCLA. The minor core examines biological systems in a holistic and quantitative manner by emphasizing systems and integrative principles in biology. Students who complete the minor have sufficient training to apply the knowledge they learn in graduate school or employment of their choice.

NEUROSCIENCE

Neuroscience Interdepartmental Undergraduate Program <u>http://www.neurosci.ucla.edu/neuroscience-minor.html</u>

The Minor in **Neuroscience** is designed to allow students in other majors an opportunity to explore the interdisciplinary field of neuroscience in a structured and rigorous way, while at the same time pursuing a major field of study in another discipline.

SOCIETY AND GENETICS

UCLA Institute of Society and Genetics

https://socgen.ucla.edu/academics/undergraduate/minor/

Learn about the various problems and possibilities of modern genetics, especially in their social context, by pursuing a minor in **Society and Genetics**. Genetically modified foods, forensic uses of DNA, new cloning technologies, gene testing and therapies, genetic privacy, gene patents, mapping DNA through human history, politics of race and heredity, and genetics of behavior are just some of the contested topics you are likely to encounter through coursework in the minor. Opportunities are also available for faculty supervised individual studies coursework and research apprenticeships.

STRUCTURAL BIOLOGY

Computational & Systems Biology Interdepartmental Program

www.casb.ucla.edu

The Structural Biology minor introduces undergraduate students to an active interdisciplinary research field at UCLA. It examines biological systems in a holistic and quantitative manner by emphasizing systems and integrative principles in biology and consists of lower-division courses basic to the minor, plus three core courses and one option course that provide the needed background in structural biology, biologic microscopy, and biochemistry. Students who complete the minor have sufficient training to apply the knowledge they learn in graduate school or employment of their choice.

SYSTEMS BIOLOGY

Computational & Systems Biology Interdepartmental Program

www.casb.ucla.edu

The Systems Biology minor introduces undergraduate students to an active interdisciplinary quantitative biosciences research and teaching field at UCLA. It offers a coherent course plan encompassing basic foundations of the field. Beside broadening student knowledge in systems biology, the minor provides students with enhanced perspective about computational and systems biology methods and applications and better prepares students to make more informed choices about their future directions and careers. The minor consists of lower-division courses basic to the minor, a survey seminar course, and four core courses and one option course that provide the needed background in molecular and cell biology, computational and systems engineering, and mathematical modeling and simulation methods for biological systems.

WHAT CAN YOU DO WITH A MAJOR IN THE LIFE SCIENCES?

Ever wonder what you could do with a major in the *Life Sciences*? Following is a *partial* list of potential career choices. Some of these careers may require additional education or training beyond a bachelor's degree, while others may not.

A listing of some career resources available on the web: **American Institute of Biological Sciences** Information about careers in biological sciences, includes job postings. <u>https://www.aibs.org/careers/</u>

U.S. Department of Labor, Bureau of Labor Statistics – Occupational Outlook Handbook Includes detailed information on hundreds of careers, including training, salaries and future employment outlook. (Retrieved July 24, 2013, from http://www.bis.gov/ooh/home.htm) http://www.bls.gov/ooh/home.htm

Princeton University, Outdoor Action Guide to Outdoor & Environmental Careers

A resource guide which presents resources to a career working outdoors or with the environment. (Retrieved July 24, 2013, from http://www.princeton.edu/~oa/jobs/careeroe.html) http://www.princeton.edu/~oa/jobs/careeroe.html

Ecological Society of America

Primary professional organization of ecologists, representing more than 10,000 scientists in the United States and worldwide. (Retrieved July 24, 2013, from http://www.esa.org/careers_certification/) http://www.esa.org/careers_certification/

FASEB: Federation of American Societies for Experimental Biology Includes Life Science Job Center. http://www.faseb.org/#sthash.a7VXYhMw.dpbs

JobWatch

Job posting and career development site for clinical research professionals of all levels. (Retrieved July 24, 2013, from http://www.centerwatch.com/jobwatch/) http://www.centerwatch.com/careers/careers.html

UCLA Career Center

Offers career counseling services, pre-professional advising services, career resource library, career workshops and events, internship and externship information.

http://www.career.ucla.edu

Over 580 Careers in Life Sciences . . .

Acarologist Activist Actuopalynologist Aerobiologist Agricultural Commodity Grader Agricultural Engineer

Agricultural Entomologist Agricultural Genetic Engineering Agricultural Inspector Agricultural Management Agronomist Agrostologist Algal Technician Algologist Allergist Anatomic Pathologist Anatomist Andrologist Anesthesiologist Anesthesiologist Assistant Animal Behaviorist **Animal Breeder** Animal Husbandry Technician **Animal Nutritionist Animal Pathologist Animal Trainer** Animal Wrangler for Film or TV Production Aquaculture Aquaculture Microbiologist Aquarist Aquarium Curator Aquarium Laboratory Assistant **Aquatic Botanist Aquatic Chemist** Aquatic Ecologist Arboretum Manager Arboriculture Arborist Archaeological Palynologist Artificial Life Modeler Art Therapist Assisted Living Coordinator Astrobiologist Athletic Trainer Audiologist **Avian Ecologist Avian Pathologist** Avian Veterinarian Aviculturist Bacteriologist **Bariatric Medicine Behavioral Ecologist Behavioral Geneticist**

Behavioral Pediatrician Benthic Marine Ecologist Bioanalyst **Bioethicist** Biohydrologist **Bioinformatics Biological Chemist Biological Engineering Biological Field Surveyor Biological Materials Supplier Biological Quality Assurance Manager Biological Systems Engineering Biological Warfare Research** Biomathematician **Biomedical Engineering Biomedical Physicist** Biometeorologist **Biometry Biophysicist Biophotonics Bioprocess Technician Biospace** Biostatistician **Biotechnology Research Biotechnology Sales Blood Bank Technician Botanical Garden Management** Botanist Brachiopodologist Brewmaster Bryologist **Cardiac Rehabilitation Specialist** Cardiologist Cardiothoracic Surgeon Cardiovascular Pathologist Cardiovascular Technologist/Technician **Career Counselor** Case Manager in Health Care **Cattle Rancher** Cell Biologist Cell Culture Technician Cell Physiologist **Certified Nursing Assistant** Chemotaxonomist Chiropractor **Clinical Data Specialist** Clinical Laboratory Technologist/Technician

Clinical Nutritionist Clinical Pharmacologist Clinical Psychologist Clinical Research Administrator Clinical Research Associate (Pharmaceutical company) **Clinical Trials Director Commercial Diver Commercial Nursery Plant Grower Community Health Nurse** Computer-assisted Drug Design **Conservation Biologist Conservation Planner Consultant Pharmacist Consultant in Hospital Management Consumer Safety Officer Cooperative Extension Service Worker** Coroner **Cosmetic Product Formulation Research County Agricultural Commission** Crime Lab Technician **Critical Care Physician** Critical Care Nurse **Crop Science Customs Inspector** Cytologist Cytopathologist Cytotechnologist **Dairy Management Dairy Quality Control Dance Therapist Database Curator** Deep-Sea Marine Biologist Dendochronologist **Dental Hygienist** Dentist Dermatologist **Developmental Biologist Diagnostic Medical Sonographer** Dietician **Dispensing Optician Documentary Filmmaker Dog Trainer** Drug Discovery **Drug Supplies Coordinator** Ecoenterpreneur Ecologist **Economic Botanist**

Ecosystem Ecologist Ecosystem Modeling **Ecotour Guide** Editor of a Scientific Journal Educational Coordinator (Zoos or Museums) Educational psychologist Educator at an environmental center Electroneurodiagnostic Technologists Embryologist **Emergency Medical Technicians Emergency Medicine Physician** Endocrinologist Endodontist Enologist Entomologist Environmental Law Attorney Environmental Biology (Public Health) **Environmental Business Specialist Environmental Consultant Environmental Educational Specialist Environmental Engineer Environmental Epidemiologist Environmental Health** and Protection Services **Environmental Impact Analyst Environmental Journalist Environmental Physiologist Environmental Planner Environmental Policy Advisor** Environmental Protection Agency **Environmental Toxicologist** Epidemiologist **Equine Veterinarian Ergonomic Consultant Estuarine Ecologist** Ethnobotanist **Ethnomedical Pharmacologist** Ethologist **Evolutionary Biologist Evolutionary Protistology Exercise Physiologist Exotic Animal Nutritionist** Exotic Animal Training and Management **Experimental Embryologist Experimental Pathologist Experimental Psychopharmacologist** Extension Agent (Farm Advisor)

Exterminator Family Medicine Physician Farmer FBI Special Agent (Forensics) **Federal Plant Protection** and Quarantine Officer **Fermentation Researcher Field Ecologist Field Sampling Supervisor Field Station Manager Fingerprint Identification Technologist Fire Management Officer Fish Culturist** Fish and Game Molecular Biologist Fish and Wildlife Law Enforcement **Fishery Biologist** Fisheries population dynamicist **Fisheries statistician** Floriculturist Florist **Food Science** Food Technologist **Forensic Ecologist** Forensic Entomologist Forensic Epidemiologist **Forensic Edontologist Forensic Palynologist Forensic Pathologist Forensic Psychiatrist Forensic Scientist Forensic Service Technician Forest Ecologist** Forest Economist Forester **Forest Geneticist** Forest Products Technologist **Forestry Technician** Freelance Writer on Scientific or **Environmental issues** Fundraiser for Environmental Organization Game Manager Game Rancher Gardener Garden seed production **Genetic Counselor** Genetics Geodesist

Geriatrician Gerontologist **GIS Specialist (Geographic Information** System) **Golf Course Manager** Greenhouse Assistant Guide Dog Trainer Habitat Restoration Hand Surgeon Hazardous Waste Manager Head and Neck Surgeon Health Care Distributor Health Care Equipment Salesperson Health Care Law Attorney Health Care Management and Administration Health Department Inspector **Health Educator** Health Information Administrator Health Sciences Librarian Health Services Research Health Services Surveyor Health Systems Administration Hematologist Hepatologist Herbalist Herbarium Curator Herpetologist Histological Technician/Technologist Historian of Science Homeopathic Medicine Practitioner Horse Breeder Horticultural Therapist Horticulturalist **Hospice Manager** Hospital Administration Hydrologist Hygienist Ichthyologist Illustrator (Biological, Medical, Scientific) Imaging Science (Medical) Immunogenetics Immunologist Industrial Hygienist Industrial Quality Control Industrial Research and Development Industrial Waste Specialist **Infectious Disease Specialist**

Informational Biology Informatics Insect Molecular Biology Insect Quarantine Inspector Instructor at Children's Science Camp Intellectual Property Law Attorney **Intensive Care Nurse** Internist Interpretive Naturalist Invertebrate Biologist Laboratory Animal Science Laboratory Immunologist Landscape Contracting Landscape Design Lichenologist Limnologist Lobbyist Magazine/Newspaper Fact checker Mammalogist Manufacturing Associate (Biotechnology) Mariculturist Marine Archaeologist Marine Benthic Ecologist Marine Biologist Marine Economist Marine Illustrator Marine Issues law Attorney Marine Mammalogist Marine Mammal Rescue Marine Mammal Trainer Marine Toxicology Massage Therapist Maternal and Child Health (Public Health) Mathematical Biologist MediCal Case manager Medical Entomologist Medical Anthropologist **Medical Ethicist** Medical Imaging Medical Informatics Medical Librarian Medical Microbiologist Medical Record Administrator Medical Records Technician Medical Sociologist Medical Supply Sales Medical Transcriptionist

Medical Writer Medicinal Plant Cultivator **Microbial Ecologist** Microbiologist Microscopist Midwife Molecular Anthropology **Molecular Biologist** Molecular Diagnostician Molecular Geneticist Molecular Neurobiologist Molecular Pathology Molecular Pharmacology Molecular Psychiatry Molecular Toxicologist Morphologist Mortician **Museum Collections Manager Museum Curator** Museum Educational Director Museum Public Relations Director Music Therapist Mycologist National Park Service Naturalist Natural Product Chemist Natural Resource Management Natural Resource, Energy, and **Environmental Law Attorney** Nature Cartographer Nature Center Director Nature Photographer Nature Writer Nematologist Neonatologist Nephrologist Neurobiologist Neuroendocrinologist Neurologist Neurosurgeon Nuclear Medicine Technologist Nurse Nurse Anesthetist Nurse Practitioner Nursery Manager Nursing Home Manager Nutritionist Obstetrician/Gynecologist

Occupational Safety and Health Occupational Therapist Ocean Modeler Oceanographer Olericulturist **Oncological Pharmacologist Oncologist/Surgical oncologist Operating Room Nurse Ophthalmic Medical Technologist** Ophthalmologist Optician **Optometric Researcher** Optometrist **Oral Biologist Oral Pathologist Oral Surgeon** Orchardist Ornithologist Orthodontist **Orthopedic Surgeon Orthotics and Prosthetics** Osteologist Osteopathic Physician Otolaryngologist Pelagic Zoologist Paleobotanist Paleoecologist Paleogenomics Paleolimnologist Paleontologist Paleopalynologist **Palliative Care Specialist** Palynologist Paramedic Parasitologist Park Naturalist Park Ranger Parks and Recreation Planning Patent Agent Patent Attorney Pathologist Patient Advocate (Hospital) Peace Corps Representative Pediatrician Pediatric Oncologist Pediatric Pharmacotherapy Perfusionist Periodontist

Personal Trainer Pesticide Researcher Pet Psychologist Pet Store Manager Pet Supplies Executive Pharmaceutical Attorney **Pharmaceutical Materials Specialist** Pharmaceutical Researcher Pharmaceutical Sales Representative Pharmacist Pharmacogenetics **Pharmacogenomics** Pharmacokineticist Pharmacologist Pharmacy Assistant/Technician Phlebotomist Photojournalist Phycologist Physical Medicine and Rehabilitation Physical Anthropologist Physical Aceanographer **Physical Therapist** Physician Physician Assistant Physiological Ecologist Physiologist Phytochemist Phytogeographer Phytopathologist Plant Anatomist **Plantation Manager** Plant Biochemist Plant Breeder **Plant Ecologist** Plant Explorer Plant Hydrologist **Plant Pathologist** Plant Pest Control Inspector Plant Physiologist Plant Propagator Plant Quarantine Inspector Plant Taxonomist Plastic and Reconstructive Surgeon Podiatrist **Pollen Analyst** Polychaete Researcher Pomologist **Population Biologist**

Population Geneticist Poultry Technologist Producer of Educational films **Protein Purification Scientist** Protozoologist Psychiatrist **Psychotherapeutics** Psychotropist Pteridologist Public Health worker Public Health Researcher **Public Policy Organization Public Relations Officer** Publisher of Scientific Books **Quality Assurance Tester Pulmonary Medicine** Radiation Safety Radiobiologist Radiological Technician Radiologist Rancher **Range Conservationist Rangeland Management Recycling Plant Manager Registered Dietician Rehabilitation Counselor** Research Technician/Assistant **Research Vessel Captain Researcher for Environmental** Organization **Resource Manager Respiratory therapist Restoration ecologist** Review Course Tutor (Kaplan, etc.) Rheumatologist Science Editor Science Librarian Scientific Information Analyst Scientific Photographer Scientific Proofreader Scientific Supply Catalog Copywriter Scientific Writing and Journalism Seed Analyst Serologist Sewage Treatment Plant Manager Show Dog Handler Sign Language Interpreter Silviculturalist

Small Animal Veterinarian Social Ecologist Soil Conservationist Space Medicine Specialist Speech Language Pathologist Sports Medicine State Fish and Wildlife Service Structural Biologist Supply House Purchaser Surgeon Surgical technologist Systematist Systems Ecologist Taxonomist Teaching at the College Level **Teaching Elementary School Teaching Science in Middle school Teaching Science in High School Technical Editor Technical Recruiter Technical Services Representative for Biosupply firm Technical Writer** Technology Transfer and Patent Law Test Preparation Instructor (SAT, MCAT, etc.) **Textbook Publishing and Sales** Toxicologist **Transfusion Medicine** Translator of Scientific Material **Travel Medicine Physician Tropical Ecologist Turfgrass Culturist** Ultrasound Technologist Underwater Photographer Urologist Vector Control Specialist Veterinarian Veterinary Anatomy Veterinary Assistant/Technician Veterinary Epidemiologist Veterinary Geneticist Veterinary Pathologist Viticulturist Virologist Vision Rehabilitation Specialist Vivarium Manager Vocational Rehabilitation Counselor

- Volunteer Coordinator for an Environmental or Health Care Organization Waste Management Water Conservation Officer Water Pollution Investigator Water Quality Controller Water Quality Modeller Water Quality Technician (Aquarium) Watershed Manager Website Designer Wildlife Biologist Wildlife Conservation Wildlife Inspector
- Wildlife Management Wildlife Photographer Wildlife Refuge Manager Wildlife Rescue Wood Products Manager Workers' Compensation Case Manager Xenobiologist Zoo Director Zoo Geneticist Zoo Geneticist Zoo Registrar Zoo Veterinarian

U.S. Government Careers

Job opportunities with the federal government https://www.usajobs.gov/

Department of Agriculture (http://www.usda.gov/)

Animal and Plant Health Inspection Service Center for Nutrition Policy and Promotion Food and Nutrition Service Food Safety and Inspection Service Foreign Agricultural Service Forest Service Natural Resources Conservation Service

Department of Commerce (http://www.doc.gov/)

National Marine Fisheries Service Office of Protected Resources Office of Ocean Resources Conservation and Assessment (ORCA) Northwest Fisheries Science Center National Oceanic and Atmospheric Administration Pacific Marine Environmental Laboratory

Department of Energy (http://www.energy.gov/)

Office of Health and Environmental Research Office of Science Education and Technical Information

Department of Health and Human Services (http://www.hhs.gov/)

National Health Information Center Office of Disease Prevention and Health Promotion Office of Public Health and Science Office of Disease Prevention and Health Promotion Office of Minority Health Resource Center

Department of the Interior (http://www.doi.gov/)

Fish and Wildlife Service U.S. Geological Survey National Biological Service National Park Service Environmental damage assessment Natural resource restoration Wild Horse and Burro Program

Department of Justice (http://www.usdoj.gov/)

Drug Enforcement Administration FBI Forensic Laboratory Specialist

Department of Labor (http://www.dol.gov/)

Mine Safety and Health Administration Occupational Safety and Health Administration (OSHA)

Department of the Treasury (http://www.ustreas.gov/) U.S. Customs Service California State Government Careers

Job opportunities with the California state government https://www.calcareers.ca.gov/

Job opportunities with Los Angeles County government https://www.lacounty.gov/job-opportunities/

Job opportunities with the City of Los Angeles <u>https://www.lacity.org/find-jobs</u>

Job opportunities with UCLA http://www.ucla.edu/about/careers