MAJOR IN BIOMEDICAL SCIENCES, ENVIRONMENTAL PUBLIC HEALTH CONCENTRATION

Environmental Public Health is a branch of public health that studies how biological, chemical, and physical factors in natural and built environments impact human health and disease. Students will learn how to help prevent injuries and disease by managing environmental hazards and promoting healthier air, water, soil, homes, workplaces, and communities. The EPH concentration within the Biomedical Sciences major is one of only 25 programs nationwide to be fully accredited by the standards of the **National Environmental Health Science and Protection Accreditation Council**, and the only such program in Colorado.

Why study Environmental Public Health?

- According to the World Health Organization, 24% of all estimated global deaths are related to the environment, including 8 million people who die due to air pollution, 2 million due to waterborne diseases, and 3 million from work-related diseases and accidents annually.
- Abundant and varied career opportunities with local, state and federal health agencies as well as private sector businesses, consulting firms and universities with starting salaries of $60,000 - $75,000.
- Learn more in this quick video (https://www.youtube.com/watch/?v=6bmgGb_aPtE).

Academics:

Students begin their studies with foundational science courses in biology, physics, general chemistry, organic chemistry, biochemistry, microbiology, physiology, math, and statistics, and then use these basic sciences as tools to solve environmental public health problems. Students are involved in actual and simulated field projects with data gathering and analysis, characterization of environmental public health problems, evaluation of alternative solutions, and presentation of results in written and oral formats. All Environmental Public Health students complete a professional internship for academic credit with a private sector company or public health agency.

Learning Objectives:

Upon successful completion, students will be able to:

1. Effectively communicate the health consequences of actions, behaviors, or environmental degradation to the public, political community, legal experts, or the media,
2. Demonstrate critical thinking and problem solving abilities for environmental issues as an individual and as a member of a problem solving team,
3. Integrate knowledge in social, physical, and biological sciences to evaluate environmental issues, and
4. Apply knowledge of scientific methods to evaluate compliance with environmental health standards and assess risks to workers and the public.

Special Opportunities:

- A capstone internship which allows students to put their coursework into practice under the guidance of a qualified mentor. A pre-internship seminar course prepares students in the essentials of resume & cover letter writing, interviewing, networking and securing the internship.
- Access to exclusive internships for students from accredited EPH programs, such as National Environmental Public Health Internship Program (https://www.neha.org/nephip/) and the US Public Health Service JRCOSTEP (https://www.usphs.gov/students/).
- BS & MPH dual degree program which offers the opportunity to earn your bachelor's degree and the Master of Public Health degree (https://publichealth.colostate.edu/dual-degree/bs-mph/) in 5 years.
- BS & MS dual degree program which offers the opportunity to earn your bachelor's degree and the Master of Science in Radiological Health, Health Physics specialization (https://vetmedbiosci.colostate.edu/degree-programs/graduate/ms-radiological-health/health-physics/) in 5 years.

Potential Occupations:

Occupations of Environmental Public Health alumni include, but are not limited to: environmental public health specialist, industrial hygienist, toxicologist, epidemiologist, air quality analyst, water quality manager, pollution prevention specialist, hazardous and solid waste specialist, occupational safety specialist, radiation safety officer, disaster assistance team leader, emergency manager, environmental consultant, and health educator. In addition, Environmental Public Health is excellent preparation for entry into medical school, veterinary school and other health-related professional programs as well as masters and PhD programs in a variety of scientific disciplines.