

Public Health

“Public health extends beyond the emphasis on communicable diseases to environmental determinants of health, communication and informatics, prevention of non-communicable diseases, health disparities and vulnerable populations, policies, and laws and ethics. Cornell provides the background necessary to build the framework for contributing to all of these areas.”

Barbara Christie-Pope, Professor of Biology

Pursuing a degree program in public health allows the examination of how the human lifestyle can impact and improve health and quality of life for populations of people. Public health professionals advocate for preventive medicine and the impact of healthy lifestyle choices in a local community setting. They work with global teams to understand the characteristics of an infectious disease and identify how to prevent it spreading from nation to nation. And they may choose to fight for the rights of underserved populations to have equal access to quality health care and lobby local, regional, or national governments to create effective laws and policies.

Public health students become knowledgeable in epidemiology, biostatistics, community and behavioral health, occupational and environmental health, and health policy. Graduates are prepared to work in a variety of health-related sectors including governmental, non-governmental, and nonprofit organizations.

COOPERATIVE MPH DEGREE PROGRAM

Cornell College offers a five-year B.A./M.P.H. with the University of Iowa College of Public Health. Students pursuing their Master's in Public Health will earn both a B.A. from Cornell College and an M.P.H. from the University of Iowa in a total of five years, saving a full year of graduate level study required for many MPH programs.

Here's how the cooperative MPH program works:

First year: No specific course of study is required to enter the MPH program,

but a general course of study in biology, kinesiology, politics, or economics will create a good foundation in the first and second years at Cornell. Students should let their academic advisor know they are considering the MPH program in order to plan the sophomore year accordingly.

Sophomore year: Take the University of Iowa's online course Fundamentals of Public Health to understand the realm of public health and determine if this course of study is of interest. This course qualifies for 0.75 credits to the Cornell degree whether the student applies to the program or not. Work with the Berry Career Institute to identify internships and research opportunities related to public health to expand knowledge of the field.

Junior year: Take the GRE by Jan. 15, complete internships and job shadowing opportunities, and apply to participate in the MPH program by Feb. 1. You must have 80 semester hours at the end of the fall semester and a 3.25 GPA to be eligible to apply for admission. Additionally, at the time of application you must choose a course of study from one of the five subtracks at the College of Public Health:

- Community and behavioral health
- Epidemiology
- Occupational and environmental health
- Policy
- Quantitative methods

Senior year: Complete four graduate level courses (12 semester hours) through the University of Iowa College of Public Health that apply to both the B.A. (2.75 Cornell credits) and MPH (one course can be taken during the summer prior to the senior year). Complete the B.A. and graduate from Cornell.

Fifth year: Complete MPH coursework at the University of Iowa, and graduate

Faculty Bios & Courses

PROGRAM ADVISORS

BARBARA CHRISTIE-POPE

Professor of Biology

Teaches courses in biology, and biochemistry and molecular biology, including Neurobiology, Immunology, and Human Anatomy and Physiology. Ph.D., pharmacology, University of South Alabama.

AFFILIATED FACULTY

ANN CANNON

Professor of Statistics and Mathematics

Teaches epidemiology. Ph.D. in statistics, Iowa State University.

JEFF CARDON

Professor of Biology and Chemistry

Teaches courses in biology, biochemistry and molecular biology, and chemistry, including Cell and Molecular Biology, Microbiology and Organic Chemistry. Ph.D., molecular biology, UCLA.

MARTY CONDON

Professor of Biology

Teaches courses in biology and biochemistry and molecular biology, including Biological Problems, Diversity: an Evolutionary Perspective, Evolution, and Plant Morphology. Ph.D., University of Texas.

CHARLEY LIBERKO

Professor of Chemistry

Teaches courses in organic chemistry, Chemical Principles I and II, and nonmajor courses such as Chemistry of Artists' Materials. Ph.D., organic chemistry, University of Minnesota.

ANDY MCCOLLUM

Professor of Biology

Teaches courses in biology and environmental studies, including Animal Behavior, Entomology, Ecology, and Conservation Biology. Ph.D., zoology, Duke University.

from the College of Public Health at the University of Iowa.

DIMENSIONS PROGRAM FOR HEALTH PROFESSIONS

The Dimensions Program for Health Professions helps students prepare for successful careers across the health professions. Our students integrate the scientific knowledge necessary to do well in medical programs with the humanistic and practical knowledge they will need to work with patients and to become successful health care providers.

Dimensions supports a wide range of opportunities in and beyond the classroom, including interdisciplinary courses, research opportunities, internships at leading institutions, workshops and seminars, assistance with graduate school preparation, and more. The program is supported by a full-time associate director and a faculty advisor.

BENEFITS OF ONE COURSE AT A TIME

The One Course curriculum allows for intensive study in every aspect—labs last for a whole block without interruption and small classes mean easy access to faculty and interactive group work. Each classroom becomes a micro-community where students get to focus, discuss, and question the material to facilitate deep understanding. That's true whether the class is an intensive lab science course, a social science discussion, or a survey of historical literature.

STUDENT RESEARCH

Dimensions provides funding for students to work alongside active researchers in the biomedical sciences and to intern alongside health care professionals. Our students have researched and interned in:

- Neuroscience at the University of Chicago
- Biotechnology at the University of Maryland
- Nutrition and pediatrics at the Baylor College of Medicine
- Neuroscience at the Mayo Clinic
- Pediatrics and orthopedics at the Children's Hospital in Aurora, Colorado
- Cardiology, neuroscience, and pharmacology at the University of Iowa Carver College of Medicine

INTERNSHIPS AND FELLOWSHIPS

Graduate medical programs in the health sciences are particularly interested in students who have experience in their chosen health care field. Dimensions helps Cornell students find internships and job shadowing opportunities that allow them to fully explore their potential. At the invitation of Operation Walk founder Dr. Lawrence D. Dorr '63, Cornell students have regularly assisted on Operation Walk missions in countries such as Cuba, El Salvador, Peru, Vietnam, and

China. Recent internships include:

- Baylor College of Medicine, Houston, Texas
- Mayo Clinic, Rochester, Minnesota
- University of Iowa College of Public Health, Iowa City, Iowa
- Harvard T.H. Chan School of Public Health, Boston, Massachusetts
- University of Chicago Medical Center, Chicago
- New York City Medical Examiner's Office, New York City
- HELPS International, Guatemala
- University of Minnesota, Minneapolis
- University of Colorado, Anschutz Medical Campus, Aurora, Colorado

AFTER CORNELL

The first graduates of the Cornell College-University of Iowa dual degree program won't finish their MPH until 2019, but the examples below illustrate the success that recent graduates have had in pursuing careers in public health or related fields. MPH graduates find work as specialists such as epidemiologists, biostatisticians, policy makers, administrators, program planners, evaluators, and environmental specialists. An MPH can also lead to further graduate studies such as M.D., D.O., D.P.T., D.V.M., D.D.S., and M.S.N. In 2017, the median pay for epidemiologists was \$69,660 per year; for biostatisticians, \$84,670; and for health and medical services managers, 98,350 per year.

CAREERS

Research associate, Center for the Evaluation of Value and Risk in Health, Tufts Medical Center, Boston, Massachusetts (Class of 2013)

Genetic counselor, Minnesota Department of Public Health, Minneapolis, Minnesota (Class of 2007)

Otolaryngology resident, University of Minnesota, Minneapolis, Minnesota (Class of 2007)

Assistant Professor of Public Health, Augustana College, Rock Island, Illinois (Class of 2006)

GRADUATE DEGREES

Master's of Public Health candidate, University of Iowa, Iowa City (Class of 2018)

Master's of Public Health candidate (infectious disease concentration), Virginia Tech, Blacksburg, Virginia (Class of 2018)

Master's of Public Health candidate, University of Michigan, Ann Arbor (Class of 2018)

Master's of Public Health, Boston University (Class of 2013)

Master's of Public Health, University of North Carolina Chapel Hill (Class of 2014)

BRIAN NOWAK-THOMPSON

Associate Professor of Biology and Chemistry

Teaches courses in biology, chemistry, biochemistry and molecular biology, and environmental studies including Chemical Ecology, Foundations: Cellular Biology, and Biochemistry. Ph.D., biochemistry and biophysics, Oregon State University.

JAI SHANATA

Associate Professor of Chemistry, Director of Dimensions Program

Teaches courses in Organic Chemistry, Chemical Principles I and II, and an advanced topics course in pharmacology and chemical biology. Ph.D., chemistry, California Institute of Technology.

CINDY STRONG

Professor of Chemistry

Teaches courses in analytical chemistry, inorganic chemistry, and Chemical Principles I and II. She and her students pursue research projects in bioinorganic chemistry and analytical chemistry. Ph.D., chemistry, California Institute of Technology.

CRAIG TEPPER

Professor of Biology

Teaches a range of courses in biology, including Genetics and the BMB elective Developmental Biology. He regularly leads a section of the Biological Problems capstone course in the Bahamas and Belize. Ph.D., molecular plant pathology, Utah State University.