

Pre-Medicine

Here at Cornell College, we go beyond providing the education students need to succeed in medical school; through Dimensions, our purposeful academic enrichment program, we help them navigate the complex tasks of preparing for and applying to medical school.”

Jai Shanata, advisor, Dimensions Program for Health Professions

The pre-medicine program at Cornell College is designed to help students identify both prerequisites for admission to medical school and meaningful co-curricular experiences in and out of the medical field. It is coordinated by the Dimensions Program for Health Professions.

Many pre-medicine students major in biology, chemistry, or biochemistry and molecular biology (BMB) at Cornell College.

Most Cornell graduates accepted to medical school in recent years were BMB majors. Many had a second major or a minor, frequently one outside of the natural sciences. That combination can strengthen an application because it will help meet the prerequisites of medical schools and sets the student apart from other applicants.

APPLYING TO MEDICAL SCHOOL

Admission into medical school is an incredibly competitive process, and Cornell students do well above national averages. From 2012-2016 the national admission rate into medical school for M.D. and D.O. (doctor of osteopathic medicine) programs was just 39 percent, while Cornell's medical school acceptance rate is 75 percent over the same time period (based on latest data available).

Medical schools today are looking for well-balanced applicants. Most medical schools conduct a holistic review of applicants. Holistic review is an individualized way of assessing an applicant's capabilities by which balanced consideration is given to experiences, attributes, academic metrics (including GPA and MCAT score), and, when considered in combination, how the individual might

contribute value as a medical student and physician.

Cornell's pre-medicine advisors help students prepare for the process and, when it comes time to apply, assist at every step.

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 they require 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.

While at Cornell, students come to understand the importance of empathy and communication, of discipline and creativity, and of individual initiative and teamwork associated with any successful health care career.

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 MCAT and 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 engagement in every aspect of study—labs last for a whole block without interruption and small classes mean easy access to faculty and interactive group work. Each classroom and lab becomes a learning community in which students get to focus, discuss, and question the material to facilitate

Faculty Bios & Courses

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, University of California, Los Angeles.

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.

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.

TAMMY MILDENSTEIN

Assistant Professor of Biology

Teaches courses in biology, including Ecology, Environmental Biology, Conservation Biology and Organismal Biology. Ph.D., zoology, Duke University.

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
- Sleep neurophysiology at the Mayo Clinic
- Pediatrics and orthopedics at the Children's Hospital in Aurora, Colorado
- Health care policy and administration at Catalysis in Appleton, Wisconsin
- Cardiology, neuroscience, and pharmacology at the University of Iowa Carver College of Medicine
- Plant-derived therapeutics at University of Colorado, Anschutz Medical Campus
- Biotechnology at the University of Maryland
- Nutrition and pediatrics at the Baylor College of Medicine

Dimensions also supports several students each summer to do research in the Cornell Summer Research Institute side-by-side with faculty at Cornell.

CORNELL HEALTH PROFESSIONS SOCIETY (HPS)

Our students run an active Health Professions Society (HPS) that meets monthly and brings health care speakers to campus and participates in service projects. HPS and Dimensions, along with Cornell's chapter of the National Biology Honor Society, sponsor Hilltop events such as blood drives, and educational programs such as Heart Day and Brain Awareness Day. In fact, Cornell College is one of the international sites used for observance of Brain Awareness Week.

INTERNSHIPS/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. Since 2005, at the invitation of Operation Walk founder Dr. Lawrence D. Door '63, Cornell students have regularly assisted on Operation Walk missions in countries such as Cuba, El Salvador, Peru, Vietnam, and China.

Students have completed undergraduate internships around the world:

- Baylor College of Medicine, Houston, Texas
- Mayo Clinic, Rochester, Minnesota
- University of Iowa Carver College of Medicine, Iowa City, Iowa

- University of Iowa College of Public Health, Iowa City, Iowa
- University of Chicago Medical Center, Chicago, Illinois
- New York City Medical Examiner's Office, New York City, New York
- Community Health Center of Central Missouri
- HELPS International, Guatemala
- St. Luke's Hospital, Cedar Rapids, Iowa
- Maine Medical Center Research Institute, Scarborough, Maine
- University of Minnesota, Minneapolis, Minnesota
- University of Iowa Department of Pediatrics, Iowa City, Iowa
- University of Minnesota Department of Urology, Minneapolis, Minnesota
- Mercy Medical Center, Cedar Rapids, Iowa
- University of Colorado, Anschutz Medical Campus, Aurora, Colorado

AFTER CORNELL

Physicians earn some of the highest salaries in the American workforce. Salaries vary widely depending on speciality and geographic location. According to the Bureau of Labor Statistics, median salaries range from \$241,273 for primary care doctors to \$411,852 for medical specialists. Median pay for physicians and surgeons in 2017 was \$208,000.

CAREERS

Physician assistant at Allina Health MD CARE, Minnetonka, Minnesota (Class of 2011)

Doctor of Osteopathy, University of Wisconsin Department of Family Medicine, Appleton, Wisconsin (Class of 2010)

Physician assistant, Lone Tree Medical Center, Hastings, Nebraska (Class of 2007)

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

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

Production scientist, Integrated DNA Technologies, Coralville, Iowa (Class of 2006)

Physician, UnityPoint Clinic, Mount Vernon, Iowa (Class of 2005)

MEDICAL SCHOOLS ATTENDED

M.D., University of Texas Southwestern Medical School, Dallas, Texas (Class of 2016)

M.D., Medical College of Wisconsin, Milwaukee, Wisconsin (Class of 2015)

M.D., University of Hawaii, Manoa, Hawaii (Class of 2015)

M.D., University of Illinois, Urbana-Champaign, Illinois (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, First Year Seminar, 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. Ph.D., chemistry, California Institute of Technology.

CRAIG TEAGUE

Professor of Chemistry
Teaches courses in physical chemistry, Chemical Principles I and II, and other courses. Ph.D., chemistry, University of Illinois at Urbana-Champaign.

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.