



# EPIDEMIOLOGY PHD



Epidemiologists identify factors that contribute to population health and the risk of disease. Their work is highly applicable in the biological, clinical, environmental, behavioral, and social sciences.

A PhD in epidemiology trains students to examine public health trends, design and implement studies, and interpret study results for policy and program development.

**Preparing future leaders in epidemiology to push boundaries and drive the field forward in new and important directions.**

## PROGRAM OVERVIEW

The PhD Epidemiology program has two areas of emphasis, 61 to 63 credits each, which emphasize epidemiologic study design, advanced methodology, and analytic skills. Students typically complete the program in four to five years.

## AREAS OF EMPHASIS

### Social/behavioral epidemiology

Social/behavioral epidemiology recognizes that many of the major diseases affecting today's population are related to social forces and lifestyles. Poverty, structural racism, diet, exercise, and substance use are among the most important contributors to disease, death, and disability in developed countries. To understand modern disease epidemics and to develop ways of preventing them, students learn the origins of these patterns and the ways in which they may be mitigated or altered.

### Clinical/biological epidemiology

Clinical/biological epidemiology focuses on determinants and description of diseases. The program has particular strengths in the etiology of cardiovascular disease, cancer, genetics, and infectious disease. Students study with experts in cancer, cardiovascular and infectious disease; nutrition; maternal, child and reproductive health; genetic epidemiology; behavioral interventions; and epidemiologic methods for clinical, observational and community-based research.

## ADVANTAGES OF THE PROGRAM

**Connections.** A long and close partnership with the Minnesota Department of Health—one of the best health departments in the country—provides rich collaboration, professional mentorship, and career opportunities.

**Integrated Health Sciences.** The University of Minnesota's innovative infrastructure of six health sciences schools—one of three such models in the country—gives our students the ability to learn from and work with a diverse array of health experts.

**Support.** Students have access to more than 80 faculty for mentorship and advising. Faculty are located in the School of Public Health, in other University departments, and in partner organizations such as the Minnesota Department of Health.

**Comprehensive curriculum.** The Epidemiology PhD program offers doctoral-level courses in advanced research methodology.

## CAREER

Epidemiology PhD graduates are well-prepared to teach, research and provide leadership in universities throughout the world, at the highest levels of federal and international health agencies, and in numerous private and public foundations, institutions and industries.

## RESEARCH CENTERS

The University of Minnesota School of Public Health is home to nationally and internationally recognized centers that provide high-caliber research, outreach, and training.

### Epidemiology Affiliated Research Centers

- Center for Global Health and Social Responsibility
- Masonic Cancer Center
- Center to Study Human-Animal Relationships and Environments (CENSHARE)
- Minnesota Population Center
- Upper Midwest Agricultural Safety and Health Center
- Center for Leadership Education in Maternal & Child Public Health
- Center on Aging
- Epidemiology Clinical Research Center (ECRC)
- Obesity Prevention Center

## ADMISSIONS

### APPLICATION REQUIREMENTS

- Master's degree in a related field
- Prior coursework in biological or behavioral sciences

### RECOMMENDATIONS

Because of the program's strong emphasis on methodology, quantitative aptitude is very important for academic success. Priority is placed on applicants with satisfactory grades in college-level courses such as statistics, algebra, calculus or trigonometry as well as analytical writing skills.

## FACULTY PROFILE



**Ellen Demerath's** research interests include the developmental origins of chronic disease, with an emphasis on obesity, body composition, and cardiovascular disease risk factors in infancy and childhood. Most recently, professor Demerath's research is helping create a comprehensive understanding of the role of epigenetics—the study of the factors that influence genes—in chronic diseases in African Americans.

### FOR MORE INFORMATION:

#### Student and Academic Support Services

Division of Epidemiology & Community Health

Email: [epichstu@umn.edu](mailto:epichstu@umn.edu)

Phone: 612-626-8802

### SPH.UMN.EDU

© 2023 The University of Minnesota is an equal opportunity educator and employer. Printed on recycled and recyclable paper with at least 10 percent postconsumer waste material. This material is available in alternative formats upon request: 612-626-8802



SCHOOL OF  
**PUBLIC HEALTH**

UNIVERSITY OF MINNESOTA