

## CLINICAL RESEARCH



The Clinical Research MS program at the University of Minnesota School of Public Health trains the next generation of clinical and translational researchers and principal investigators who will advance our understanding of diseases and their outcomes, and contribute to the development and evaluation of new therapies for patients.

A certificate program is also offered for research coordinators, project managers, and health professionals.

The program provides rich learning and career development for physician scientists and biomedical researchers.

### **PROGRAM OVERVIEW**

The MS program can be completed online. A certificate option is also available. Courses focus on clinical research, epidemiology, biostatistics, clinical trials, and ethics.

#### MS, 38 CREDITS

The MS offers flexibility in choice of courses (six to 12 elective credits) and course availability (all coursework is offered online). A capstone project (six to 10 credits) designed by the student is required. The capstone project must reflect work on the design, implementation, and analysis of a research project culminating in a written product and orally defended. The capstone project could also include a grant at the level of a NIH R21, K-series, or R01

### **CERTIFICATE, 16 CREDITS**

The certificate program in clinical research is designed for research coordinators, clinical research project managers, and other health professionals who want to learn how to implement and manage clinical research studies.

The program includes 16 credits and most courses can be completed online. We welcome full- and part-time students. Certificate credits may transfer into the MS for eligible applicants.

### ADVANTAGES OF THE PROGRAM

**Career and impact focused.** The MS program provides career development for physician-scientists, clinical scholars, and biomedical researchers. The certificate provides training for research coordinators and project managers.

**Integrated Health Sciences.** The U of M's infrastructure of six health sciences schools, gives students the ability to learn from and work with a diverse array of health experts.

**Personal attention.** The director of graduate studies is a practicing clinician as well as an NIH–AHRQ–funded researcher who has completed a career development award and is available to mentor and advise students on academic career development.

**Flexible curriculum.** Students tailor the program with courses that fit their training needs. All courses are offered online.

### **CAREERS**

The field of clinical research is expanding, driven by changing disease patterns and emerging therapeutic approaches from the laboratory, clinical, and population sciences. There are growing concerns about the quality and safety of research in humans, and there are increasing regulations by the U.S. Food and Drug Administration. The result is an increasing demand for individuals trained in clinical research design and implementation.

The need and demand reaches beyond Minnesota. The epidemiologic transition, which posits increasing numbers of chronic diseases throughout the developing world, expands the need for testing innovative and appropriate therapies.

### THE CERTIFICATE PROGRAM PREPARES STUDENTS TO UNDERSTAND:

- · Different study design approaches
- · How to review and critique the literature in the field
- Research study implementation, data collection, and quality control
- · Good clinical practice in research studies
- · The factors associated with ethical conduct of research
- · Statistical approaches to analyze clinical research data
- · The role of the FDA, industry, and NIH in clinical research

# IN ADDITION TO THE SKILLS GAINED THROUGH THE CERTIFICATE, THE MS PROGRAM PREPARES STUDENTS TO:

- Conduct patient-oriented research, directly interacting with human subjects to better understand disease, therapeutic interventions, clinical trials, and more.
- · Conduct epidemiologic and behavioral studies
- Understand outcomes and the conduct of outcomes-based research

### **ADMISSIONS**

### **APPLICATION REQUIREMENTS**

- · Official transcripts
- · Resume or curriculum vitae (CV)
- 3 letters of recommendation (1 for certificate applicants)
- Statement of purpose and objectives

### **PREREQUISITES**

Applicants to the MS program must have an advanced health professional degree (MD, DDS, DVM, etc.) or any other advanced doctoral degree in a clinical biomedical field from an accredited college or university. Applicants with advanced nursing degrees (MS or MSN) will also be considered.

MS applicants must have the support of a University of Minnesota faculty member willing to mentor them through the program prior to applying to the degree. We are unable to assist students with securing a mentor, but if you have connections with another university, you may be able to work with a faculty member from that institution to complete the degree.

Certicate applicants must have a bachelor's degree and have at least two years of relevant clinical experience or research experience. The certificate program also accepts students enrolled in other master's programs such as MPH or in doctoral degrees. A GPA of 3.0 or better is preferred.

We welcome full- and part-time students.



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