# School of Public Health

Degree Information & Curriculum



# Clinical Research Certificate

This unique online 15 graduate credit certificate will prepare you to design, implement, and interpret clinical research studies. There is a growing need for health professionals to advance scientific discoveries to clinical applications through research on human beings. This includes observational studies and clinical trials. The aim of this certificate is to increase the research skills of health professionals in the United States and globally by creating relevant, distance accessible quality education.

The field of clinical and translational research is expanding, driven by changing disease patterns and emerging therapeutic approaches from the laboratory, clinical, and population sciences.

However, there are growing concerns about the quality and safety of research in humans, as evidenced by increasing regulations by the U.S. Food and Drug Administration and demands by industry. The result is an increasing need for well-trained individuals who bring knowledge to the design, implementation, and interpretation of clinical research studies.

#### **Student Learning Outcomes:**

- o pose clinical research questions
- review and critique the literature in the field
- understand and utilize different study design approaches
- understand research study implementation, data collection, and quality control
- understand the demands of regulatory agencies
- understand good clinical practice (GCP) in research studies
- perform statistical design, analysis, and data interpretation understand the factors associated with ethical conduct of research

#### Curriculum

The 15 graduate credits, six-course curriculum is conveniently offered online. It is anticipated that students will attend part time, completing one course per term.

- Fundamentals of Clinical Research, PubH 6301 (3 credits). Available online or in class.
- Fundamentals of Epidemiology, PubH 6320 (3 credits). Available online or in class. Students may take PubH 6341, in class, which is a more advanced course.
- Biostatistical Methods I, PubH 6414
   (3 credits). Available online or in class. Students may take PubH 6450
   (4 credits), in class, which is a more advanced course.
- Ethics in Public Health: Research and Policy, PubH 6742 (1 credit). Available online or in class.
- Clinical Research Seminar, PubH 6303 (2 credits). A hybrid course with didactic online and student presentations either on campus or through live video technology.
- Clinical Trials, PubH 7415 (3 cr, prereq: PubH 6320 and PubH 6414).
   Students may take PubH 7420 (3 credits) Clinical Trials (prereq: PubH 6341, PubH 6450, PubH 6451), in class, which is a more advanced course.

#### **Elective options:**

(These courses are not required)

# Contact Information

## **Public Health Practice Major**

Email: <a href="mailto:php@umn.edu">php@umn.edu</a>
Phone: (612) 626-5665
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#### **Program Director**

Russell Luepker, MD., MS. Mayo Professor

**Click here** for more information about the Clinical Research

#### **Student Services Center**

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sph.umn.edu/students/prospective

- Epidemiology and Control of Infectious Diseases, PubH 6385 (2 credits). In class.
- Data Handling and Management in Clinical Research, PubH 6xxx (1 credit). In class

# Qualifications for Admissions

The program is designed for clinicians and other health professionals interested in clinical research with degrees including:

- Baccalaureate degree or higher.
- Cumulative GPA of 3.0 is preferred.
- Strong writing skills, relevant work and/or educational experience.
- All applications are reviewed holistically.
- At least five years of relevant clinical research experience or GRE scores.

# **Application Deadlines**

Applications deadlines for the PubH Cert - Clinical Research are:

- November 15 to start spring term
- o March 15 to start summer term
- July 15 to start fall term.

### **Application Requirements**

Submit to the University of Minnesota School of Public Health:

- 1) Application and \$75.00 application fee.
- 2) Statement of Purpose and Objectives describing your past education, experience and current professional career objectives. Include how the certificate will help achieve your career goals; the needs and/or challenges you perceive as important in your field of study; and any personal qualities, characteristics and skills you believe will enable you to be successful in clinical research.
- 3) One letter of recommendation from a person qualified to assess your academic work, clinical and professional experiences.
- 4) GRE scores will be required for those with fewer than five years of relevant clinical research experience.

- 5) Official transcripts from each college/university attended.
- 6) Resume or C.V.
- 7) Required for international applicants: World Education Services (WES) evaluation of foreign academic credentials.

  Official TOEFL or IELTS score see application information for specifics.

The University of Minnesota offers a unique environment for clinical research training as a national center of academic clinical research.