### Twin Cities Campus

# Clinical Research M.S.

School of Public Health - Adm

School of Public Health

Link to a list of faculty for this program.

#### **Contact Information:**

School of Public Health, MMC 819, A395 Mayo Memorial Building, 420 Delaware Street, Minneapolis, MN 55455 (612-626-3500 OR 1-800-774-8636, Fax: 612-624-4498)

Email: sph-ask@umn.edu

Website: http://www.sph.umn.edu

- Program Type: Master's
- Requirements for this program are current for Spring 2019
- Length of program in credits: 38
- This program does not require summer semesters for timely completion.
- Degree: Master of Science

Along with the program-specific requirements listed below, please read the General Information section of the catalog website for requirements that apply to all major fields.

The MS in clinical research is a graduate degree as well as a career development path for physician-scientists, clinical scholars, and biomedical researchers.

The program trains you to conduct patient-oriented research, directly interacting with human subjects to better understand disease, the development of therapeutic interventions, and the conduct of clinical trials. You will learn how to conduct epidemiologic and behavioral studies and understand issues related to outcomes-based research, and also develop grant writing and data analytic skills.

# Program Delivery

This program is available:

• partially online (between 50% to 80% of instruction is online)

## Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

Applicants must have an advanced health professional degree (MD, DDS, DVM, DO, DNP, DC, PharmD, PhD etc) or other advanced doctoral degree in a clinical biomedical field from an accredited university.

Other requirements to be completed before admission:

Students must have completed or must be at an advanced stage of their clinical practice training and be affiliated with someone at the University of Minnesota who can provide advising and access to a clinical project. The admissions committee considers exceptions on an individual basis.

## **Special Application Requirements:**

The M.S. has specific application requirements including an advanced health professional degree, and training sufficient to be eligible for a license to practice as supported in the form of an official transcript. One of the three required recommendation letters and a completed School of Public Health Recommendation form should be from the clinical director of training supporting the applicant's potential as a clinical researcher.

International applicants must submit score(s) from one of the following tests:

- TOFFI
- Internet Based Total Score: 100 - Paper Based - Total Score: 600
- IELTS
- Total Score: 7 MELAB

- Final score: 80

The preferred English language test is Test of English as Foreign Language

Key to test abbreviations (TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the <u>General Information</u> section of the catalog website.

## **Program Requirements**

Plan A: Plan A requires 26 major credits, 2 to 4 credits outside the major, and 10 thesis credits. The final exam is oral.

Plan B: Plan B requires 26 to 32 major credits and 6 to 12 credits outside the major. The final exam is oral. A capstone project is required.

Capstone Project: There are two options for capstone project: 1) A manuscript, for which the student is the first author who contributes to the design and analysis presented, and which is to be submitted to a peer-reviewed journal in the student's field. The manuscript cannot be a review article; however meta-analysis and formal systematic reviews are allowed. 2) A grant proposal, for which the student is Principal Investigator (PI) at the standard national institute grant mechanism level of R21, R03 or higher (example, R01), to be submitted to the National Institute of Health (NIH).

Students' choices regarding the topic and scope of their capstone project must be approved by the advisor and director of graduate studies.

This program may be completed with a minor.

Use of 4xxx courses towards program requirements is not permitted.

A minimum GPA of 3.00 is required for students to remain in good standing.

At least 1 semesters must be completed before filing a Degree Program Form.

Students must complete both sessions of the University's Responsible Conduct of Research course, validated by ORTTA. Students also must complete the NIH's online training, Protection of Human Research Subjects, validated by electronic certificate upon successful completion.

## **Required Coursework**

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All students take the following courses:

PUBH 6301 - Fundamentals of Clinical Research (3.0 cr)

PUBH 6450 - Biostatistics I (4.0 cr)

PUBH 6451 - Biostatistics II (4.0 cr)

PUBH 6742 - Ethics in Public Health: Research and Policy (1.0 cr)

PUBH 6250 - Foundations of Public Health (2.0 cr)

PUBH 6307 {Inactive}(2.0 cr)

Epidemiology options

PUBH 6341 - Epidemiologic Methods I (3.0 cr)

or PUBH 6320 - Fundamentals of Epidemiology (3.0 cr)

Clinical Trials options

PUBH 7420 - Clinical Trials: Design, Implementation, and Analysis (3.0 cr)

or PUBH 7415 - Introduction to Clinical Trials (3.0 cr)
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# **Plan Options**

## Plan A Requirements

The Plan Å curriculum prepares the next generation of clinical researchers and principal investigators. It covers clinical trials, epidemiology, biostatistics, ethics, grant writing, and research methods. Students are trained to conduct patient-oriented, epidemiological, and behavioral research.

#### Plan A Coursework

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PubH 6390: Clinical Epidemiology (2 credits); in consultation with your academic advisor or director of graduate studies.
PUBH 6303 - Clinical Research Project Seminar (2.0 cr)
PUBH 6348 - Writing Research Grants (2.0 cr)
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### **Supporting Coursework**

Take at least 4 credits in a related field to meet minimum course credit requirements.

## Thesis Credits

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Take at least 10 master's thesis credits.

PUBH 8777 - Thesis Credits: Master's (1.0 - 18.0 cr)
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-OR-

### Plan B Requirements (online)

The Plan B curriculum prepares the next generation of translational, clinical, and outcomes researchers. The flexible curriculum, determined through consultation with mentors and the director of graduate studies, includes a core of required courses covering clinical trials, epidemiology, and biostatistics, supplemented by elective courses in translational sciences, outcomes sciences, health services research, and other areas.

# **Supporting Coursework**

Take at least 6 to 12 credits in a related field to meet minimum course credit requirements, in consultation with your academic advisor or director of graduate studies.

## **Capstone Project**

Take 6 to 10 credits of PUBH 8394, in consultation with the advisor and director of graduate studies.

PUBH 8394 - Capstone Project: Clinical Research (1.0 - 10.0 cr)