

CLINICAL INVESTIGATION SCIENCES (CERT)

Graduate Certificate in Clinical Investigation Sciences (CISCCCI)

Unit: Public Health and Information Sciences (<http://louisville.edu/sphis/>) (GH)

Department: Clinical Investigation Sciences (<http://louisville.edu/sphis/academics/clinical-investigation-sciences/>)

Program Webpage (<http://louisville.edu/sphis/academics/clinical-investigation-sciences/>)

Academic Plan Code(s): CISCCCI

Program Information

The Certificate in Clinical Investigation Sciences provides individuals with skills required for a career in a clinical research setting. The curriculum integrates biostatistical and epidemiologic methods. Students pursuing the Certificate take didactic courses while they engage in mentored and independent research that culminates in the preparation of a research paper.

The Certificate in Clinical Investigation Sciences requires completion of 15 credit hours.

Competencies

The successful student is able to:

- Address and discuss methods and issues of clinical epidemiology.
- Identify important clinical research questions and state as testable hypotheses.
- Apply the principles of data collection, monitoring, management and analysis within the context of a multidisciplinary team.
- Analyze human subject issues and perform and disseminate clinical research.

It is expected that prior to graduation, students in the program have demonstrated these competencies by completing the curriculum and successfully writing the research paper.

Admission Requirements

Applicants must have completed a baccalaureate degree from an accredited institution with a minimum of 3.0 GPA on a 4.0 scale. Applicants that have had research experience (e.g., research coordinator) or have completed a professional degree (e.g., DMD, DO, MD) are preferred.

The application requirements for programs at the University of Louisville are submitted to the Graduate School and include:

- Formal graduate application (<http://louisville.edu/graduate/futurestudents/apply-materials/application/>)
- Curriculum vitae
- Personal statement: a one-page essay that discusses the student's background and his or her long-term goals in clinical research
- Application fee
- A minimum of two letters of recommendation
- Official transcripts of all postsecondary coursework

- Official scores on the Graduate Record Examination (GRE) General Test. This requirement may be waived for applicants who have any of the following:
 - A graduate degree from a U.S. institution
 - ECFMG certification
 - Passed steps 1 and 2 of the USMLE (United States Medical Licensing Examination)
 - Four or more years of clinical research related experience in the U.S. or Canada.
- International students for whom English is not their primary language must show English language proficiency by one of the following:
 - TOEFL examination with a minimum score of 90 (after conversion for test type)
 - IELTS test score of 6.5 or higher
 - Duolingo test score 105 or higher
 - ECFMG (Educational Commission for Foreign Medical Graduates) certification
 - Successfully passing the exit examination for the advanced level of an Intensive English as a Second Language Program
 - Demonstration of a degree awarded from an institution with instruction primarily in English, as formally documented by an appropriate institutional official

For specific information about the degree program or the application process, students should contact Dr. Paul McKinney (mckinney@louisville.edu), Program Director, (502) 852-3019, or Bryan Mathis (bryan.mathis@louisville.edu), Program Coordinator Senior, (502) 852-6263.

Application Deadline

Fall semester - Completed applications and all required application materials are due by August 1. International students are encouraged to apply no later than 120 days prior to the start of the fall semester.

Spring semester – Accepted with Program Director approval.

Summer semester – Applications are not accepted.

Curriculum

The typical progression through the Certificate curriculum is:

- Required Coursework (14 credit hours)
- Complete research paper (1 credit hour)

Program Requirements

Code	Title	Hours
PHST 500	Introduction to Biostatistics for Health Sciences I	3
PHST 501	Introduction to Biostatistics for Health Sciences II	3
PHEP 614	Introduction to Clinical Epidemiology	2
PHST 624	Clinical Trials I: Planning and Design	2
PHST 625	Clinical Trials II	2
PHST 631	Data Collection for Clinical Research	2
PHPH 699	Mentored Research	1

Minimum Total Hours 15

If a student chooses to pursue the Master of Science in Clinical Investigation Sciences degree at any time after enrolling in or completing

the certificate program, then all coursework completed within the preceding five years with a grade of B or better may be applied towards the MSc in Clinical Investigation Sciences degree.

PHPH 699 Mentored Research

Each student in the Certificate Program is required to prepare a research paper as part of the mentored research course. The research paper can be a literature review or a research project. Data collection is not required. The paper is to be submitted in completed form to the program coordinator at least two weeks before the end of the semester in which the candidate expects to graduate.