Graduate Certificate in Clinical Investigation Sciences (CISCCCI)
Unit: Public Health and Information Sciences (http://louisville.edu/sphis) (GH)
Program Webpage (http://louisville.edu/sphis/academics/clinical-investigation-sciences)

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 for graduate programs at the University of Louisville can be found at louisville.edu/graduate/apply

Application requirements are submitted to the Graduate School, Graduate Admissions and include:

• Formal 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 that have a doctoral degree or who have four or more years of clinical research related experience.

For specific information about the degree program or the application process, students should contact Dr. Paul McKinney, Program Director, (502) 852-3019, or Winton Reynolds, Program Coordinator, (502) 852-1992.

Curriculum
The typical progression through the Certificate curriculum is:

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

Program Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHST 500</td>
<td>Introduction to Biostatistics for Health Sciences I</td>
<td>3</td>
</tr>
<tr>
<td>PHST 501</td>
<td>Introduction to Biostatistics for Health Sciences II</td>
<td>3</td>
</tr>
<tr>
<td>PHEP 614</td>
<td>Introduction to Clinical Epidemiology</td>
<td>2</td>
</tr>
<tr>
<td>PHST 624</td>
<td>Clinical Trials I: Planning and Design</td>
<td>2</td>
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<tr>
<td>PHST 625</td>
<td>Clinical Trials II</td>
<td>2</td>
</tr>
<tr>
<td>PHST 631</td>
<td>Data Collection for Clinical Research</td>
<td>2</td>
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<tr>
<td>PHPH 699</td>
<td>Mentored Research</td>
<td>1</td>
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</tbody>
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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 CIS 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.