In the current medical climate, there is a growing need for academic clinicians and health care professionals who are trained in clinical research. Unfortunately, there are few programs that offer the didactic preparation for the unique requirements of a clinical researcher.

The primary goal of this program is to provide a formal, structured program that will prepare certificate candidates to pursue a successful career in clinical research. The curriculum includes courses in biostatistics, epidemiology, clinical trials, decision and cost-effectiveness analysis, outcomes measurement, quality management, health care economics and policy, scientific communication, and SAS statistical analysis computing. The 15-credit program offers courses on weekday evenings, enabling the student to continue clinical or employment activities. Certificate candidates will be able to complete the 15-credit requirement in 2 semesters.

**Effective Date:** Spring Semester 2010  
**Expiration Date:** Spring Session 2020

### Admission Requirements
Applicants apply for admission to the program via the Graduate School application for admission (http://gradschool.psu.edu/prospective-students/how-to-apply). Requirements listed here are in addition to Graduate Council policies listed under GCAC-300 Admissions (http://gradschool.psu.edu/graduate-education-policies). International applicants may be required to satisfy an English proficiency requirement; see GCAC-305 Admission Requirements for International Students (http://gradschool.psu.edu/graduate-education-policies/gcac/gcac-300/gcac-305-admission-requirements-international-students) for more information.

The successful applicant must have completed a medical, nursing, or baccalaureate degree from a regionally accredited institution. Fellows and junior faculty members with current appointments at the Penn State College of Medicine, as well as nursing graduates and public health personnel, are target candidates for the certificate program.

### Certificate Requirements
Requirements listed here are in addition to requirements listed in Graduate Council policy GCAC-212 Postbaccalaureate Credit Certificate Programs (http://gradschool.psu.edu/graduate-education-policies/gcac/gcac-200/gcac-212-postbaccalaureate-credit-certificate-programs).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Required Courses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHS 520</td>
<td>Principles of Biostatistics</td>
<td>3</td>
</tr>
<tr>
<td>PHS 550</td>
<td>Principles of Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td><strong>Electives</strong></td>
<td></td>
<td>9</td>
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</tbody>
</table>

Select 9 credits of the following:

- PHS 500 Research Ethics for Clinical Investigators
- PHS 511 Methods Used in Translational Research
- PHS 518 Scientific Communication
- PHS 519 Patient Centered Research
- PHS 535 Quality of Care Measurement
- PHS 536 Health Survey Research Methods
- PHS 551 Advanced Epidemiological Methods
- PHS 580 Clinical Trials: Design and Analysis
- PHS 581 Clinical Trials: Case Studies
- PHS 801 Data Management

**Total Credits:** 15

### Courses
Graduate courses carry numbers from 500 to 699 and 800 to 899. Advanced undergraduate courses numbered between 400 and 499 may be used to meet some graduate degree requirements when taken by graduate students. Courses below the 400 level may not. A graduate student may register for or audit these courses in order to make up deficiencies or to fill in gaps in previous education but not to meet requirements for an advanced degree.

### Contact
- **Campus:** Hershey Med Ctr  
- **Graduate Program Head:** Vernon Michael Chinchilli  
- **Director of Graduate Studies (DGS) or Professor-in-Charge (PIC):** Li Wang
- **Program Contact:** Marjorie D Sawyer  
  90 Hope Drive  
  Public Health Sciences  
  Hershey PA 17033  
  mds21@psu.edu  
  (717) 531-7178
- **Program Website:** View (http://med.psu.edu/clinical-research-certificate)

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