Program in Clinical Effectiveness (PCE) and Targeted Degree Programs: Information Session

November 1, 2025

Agenda

- Description and history of the PCE
- PCE schedule and courses
- Targeted degree programs for PCE students
- Student and alumni introductions
- Application process
- Questions

Description and History of the PCE

What is the PCE?

- 6-week summer program designed for physicians and other healthcare professionals seeking quantitative and analytic skills for clinical, health services, or population health research
  - **Dates for next summer:** **July 6 – August 14, 2026**
- Provides essential training in Clinical Epidemiology and Biostatistics, as well as other relevant areas for designing, implementing, and interpreting research
- Can be completed as standalone certificate program or as beginning of degree program
  - **Degree applicants** (starting degree program with PCE): application deadline **12/1/2025**
  - **Non-degree applicants** (certificate program): application deadline **2/15/2026**

History: 1986 - 2025

- 39 years
- Over 4,000 students to date
- Over 2,000 who have completed a degree
- Two targeted degree programs developed:
  - MPH in Clinical Effectiveness
  - Summer-focused SM (Master of Science) in Epidemiology

20th Anniversary PCE Graduate Survey

- Performed in 2006/2007 by Mary Ellen Goldhamer, a former MPH in Clinical Effectiveness student
- 1,489 emails and letters sent
- 73% response rate

Protecting an endangered species: training physicians to conduct clinical research

Mary Ellen J Goldhamer [1], Amy P Cohen, David W Bates, E Francis Cook, Roger B Davis, Daniel E Singer, Steven R Simon

Affiliations + expand

PMID: 19318774 DOI: 10.1097/ACM.0b013e31819a7cb1

Abstract

Purpose: The Program in Clinical Effectiveness (PCE) at Harvard School of Public Health is a postgraduate program emphasizing clinical research. The authors sought to evaluate the research careers of physician graduates and to determine correlates of National Institutes of Health (NIH) grant funding.

Method: In 2006, all 1,489 graduates from 1986-2005 were sent a 48-item survey that collected information on demographics, program experience, chosen career path, grant awards, and research pursued postprogram. Reported NIH grants were verified on the NIH Computer Retrieval of Information on Scientific Projects Web site. Cox proportional hazard regression was used to determine participant and program features associated with NIH grant funding.

Results: Overall, 994 of the 1,365 located graduates (73%) responded to the survey. Graduates pursued research in the following areas: 437 respondents (44%) pursued clinical trials, 537 (54%) pursued epidemiology, and 408 (41%) pursued health services research. A total of 156 respondents (24%) were principal investigators on an NIH grant. Correlates of receiving NIH grant funding included age less than 40 years at time of program enrollment (hazard ratio [HR] 1.87, CI 1.03, 3.41), generalist status (HR 1.57, CI 1.14, 2.16), and publishing research begun as course projects (HR 1.65, CI 1.19, 2.31). Gender, academic status at enrollment, ethnicity, tuition sponsorship, and earning an advanced degree were not associated with receipt of NIH grant funding.

Conclusions: Physicians who enrolled in the PCE at an early age and generalist physicians were particularly successful in establishing careers as clinician-investigators. Programs such as the PCE can help to sustain the workforce of physician-investigators.

Survey Results

- **43%** received grant funding for Clinical Epidemiology research project
- **64%** indicated publication of Clinical Epidemiology research project
- **14%** received grant funding for class project from elective course(s)
- **30%** indicated publication of class project from elective course(s)

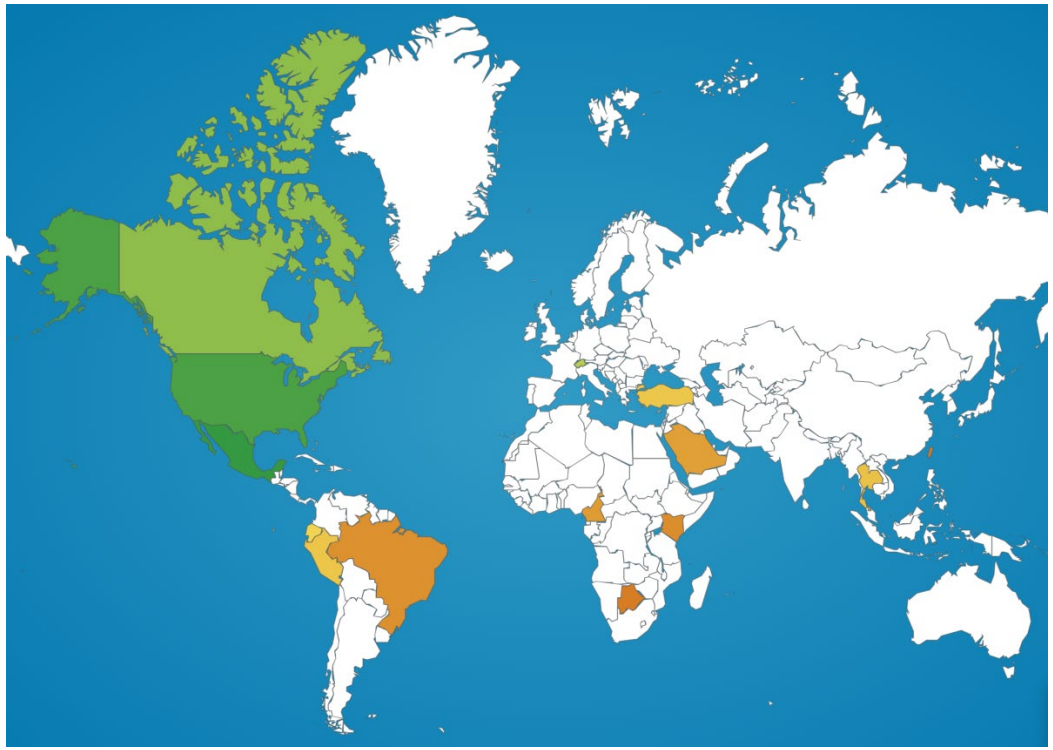
PCE Class of 2025

110
Students

14
Countries

34
MPH CLE
Candidates

3
MS EPI
Candidates



PCE Schedule and Courses

Overview of Schedule

	Summer 1 (3 weeks)	Summer 2 (3 weeks)
Morning core courses (8 am to 1 pm)	Introduction to Clinical Epidemiology (EPI 208) and Introductory Statistics for Medical Research (BST 206) – 10 credits total	
Afternoon electives (2-3:30 pm or 3:45-5:15 pm)	Choose one elective course – 2.5 credits each	Choose one elective course – 2.5 credits each

Total credits = 15 (one-third of MPH or SM degree)

EPI 208: Introduction to Clinical Epidemiology

- Covers principles and methods used in traditional and clinical epidemiologic research

- Course structure
  - Lectures and interactive in-class activities, homework assignments, quiz, etc.
  - Individual project on topic of choice, to apply concepts that are being taught in class
    - Proposal for research study (written as mini-grant proposal)
    - Small group workshops/presentations, individual office hours with faculty, and final paper
    - Approximately 60 faculty involved
    - Many students use this proposal to launch their research

BST 206: Introductory Statistics for Medical Research

- Covers
  - Principles: testing and confidence intervals
  - Presentation: graphics and summary statistics
  - Tests: parametric and non-parametric; two-sample, paired, ANOVA, time-to-event analysis, regression
  - Sample size and power calculations
  - Software: SAS, Stata, or R
- Integrated with EPI 208

2025 Afternoon Electives: Summer 1 (choose one)

- Medical Informatics (HPM 512)
- Implementation Research in Health and Healthcare (HPM 284)
- Decision Analysis in Clinical Research (RDS 286)
- Improvement by Design: Using the Science of Design, Test, and Spread to Innovate and Improve Healthcare (HPM576)

2025 Afternoon Electives: Summer 2 (choose one)

- Improvement in Quality of Health Care (HPM 253)
- Research with Large Databases (HPM 299)
- Effectiveness Research with Longitudinal Healthcare Databases (EPI 253)
- Machine Learning in Healthcare (BST 209)
- Linear and Longitudinal Regression (BST 215)

Targeted Degree Programs

MPH in Clinical Effectiveness (MPH CLE)

MPH CLE Overview and Schedule

- Provides students with analytical and quantitative training necessary to evaluate the impact of clinical practices, decisions, and interventions
  - Areas of interest: clinical epidemiology and biostatistics, cost-effectiveness and decision analysis, health services research, quality improvement in health care

- Schedule options:
  - Academic-year: full-time (1 year) or part-time (2 years)
  - Summer-focused: 2-3 summers; some online courses in between summers
  - 45 credits total

MPH CLE Required Courses

- Core requirements:
  - Introductory Statistics for Medical Research (BST 206)
  - Introduction to Clinical Epidemiology (EPI 208)
  - Foundations for Public Health (ID 100)
  - Qualitative Methods for Public Health (MPH 101)
  - Health Systems (MPH 102)
  - Leadership and Communication (MPH 103)
  - Social, Behavioral, and Structural Determinants of Health (MPH 104)
  - Public Health Policy and Politics (MPH 105)

Public Health core

- Applied Practice Experience and Integrative Learning Experience (EPI 946 or EPI 947)
  - Applied research project, culminating in a final presentation and final paper (draft manuscript)

MPH CLE Field of Study Requirements

Course Number	Title	Credits
Regression course (choose one of the following):		
BST 210	Applied Regression Analysis	5.0
BST 215	Linear and Longitudinal Regression	2.5
EPI 236	Analytical Clinical Epidemiology	5.0
Upper-level CLE coursework (5.0 credits): any courses beyond the introductory level that provide students with analytic and/or quantitative skills for evaluating clinical/public health issues		
	Many options; few examples below (and many other elective courses available)	
BST 214	Principles of Clinical Trials	2.5
BST 224	Survival Methods in Clinical Research	2.5
BST 225	Introduction to Systematic Reviews and Meta-Analysis	2.5
EPI 210	Study Design in Clinical Epidemiology	2.5
EPI 235	Epidemiologic Methods in Health Services Research	2.5
EPI 271	Propensity Score Analysis: Theoretical and Practical Considerations	1.25

SM in Epidemiology (SM EPI)

SM EPI Overview and Schedule

- Master of Science degree (rather than MPH)
  - "Research" degree versus "professional" degree
  - Core public health courses are not required
  - Areas of interest: cancer epidemiology, cardiovascular epidemiology, clinical epidemiology, infectious disease epidemiology, neuroepidemiology, nutritional epidemiology, pharmacoepidemiology, psychiatric epidemiology, …

- Schedule for those starting with PCE:
  - Summer-focused: 2-3 summers; some online courses in between summers
  - 42.5 credits total

Summer-focused SM EPI Required Courses

- Required courses for those starting with PCE:
  - Introduction to Clinical Epidemiology (EPI 208)
  - Introductory Statistics for Medical Research (BST 206)
  - Analytical Clinical Epidemiology (EPI 236)
  - Study Design in Clinical Epidemiology (EPI 210)
  - Thesis (EPI 315)

- Many elective courses; similar to those for MPH CLE

Student Introductions

PCE and MPH CLE Students

- Sara Char (PCE 2024, MPH CLE 2026)
- Jesus Rosario Hernandez (PCE 2025, MPH CLE 2026)
- Leandra Ramin-Wright (PCE 2025, MPH CLE 2026)
- Luiza Sandes (PCE 2025, MPH CLE 2026)

Who Should Apply to the PCE?

- Individuals seeking quantitative and analytic skills for clinical, population, or health services research

- Eligible applicants should be healthcare professionals holding an advanced degree, such as:
  - MD, MBBS, MB Bch, DMD, PhD, PharmD, NP, or other equivalent degree

Degree Programs: How to Apply and Deadlines

Two-Step Application Process:

Degree Application Deadline: 12/1/2025

1. Degree Application in **SOPHAS**
2. Non-Degree Application in **SOPHAS Express**

- Most materials are same for both, but additional materials for degree application are:
  - Post-secondary transcripts or mark sheets
  - Three letters of reference (vs. two for non-degree application)

- Will pay SOPHAS application fee but get **Fee waiver** for SOPHAS Express Application Fee
  - *Email progclineffect@partners.org after submitting your SOPHAS application but BEFORE you submit your SOPHAS Express application to get the fee waiver.*

Apply at:
https://hsph.harvard.edu/fellowship-special-program/clinical-effectiveness/degree-option/

Non-Degree PCE: How to Apply and Deadlines

Application Process:

- Non-Degree Application in **SOPHAS Express**
  - Statement of purpose and objectives
  - Two letters of reference
  - Curriculum Vitae
  - English proficiency test if applicable (TOEFL, IELTS, or Duolingo)
  - $60 application fee

Non- Degree Application Deadline: 2/15/2026

There is no financial aid available for non-degree programs.

Apply at:
https://hsph.harvard.edu/fellowship-special-program/clinical-effectiveness/non-degree-option/

Websites and Contact Information

PCE Website:
https://hsph.harvard.edu/fellowship-special-program/clinical-effectiveness/

Tuition and Financial Aid Information:
https://hsph.harvard.edu/tuition-and-financial-aid/

PCE Program	progclineffect@partners.org
MPH CLE Program	mph@hsph.harvard.edu
SM EPI Program	heat@hsph.harvard.edu
Admissions Office	admissions@hsph.harvard.edu
Registrar	registrar@hsph.harvard.edu
Financial Aid Office	financialaid@hsph.harvard.edu

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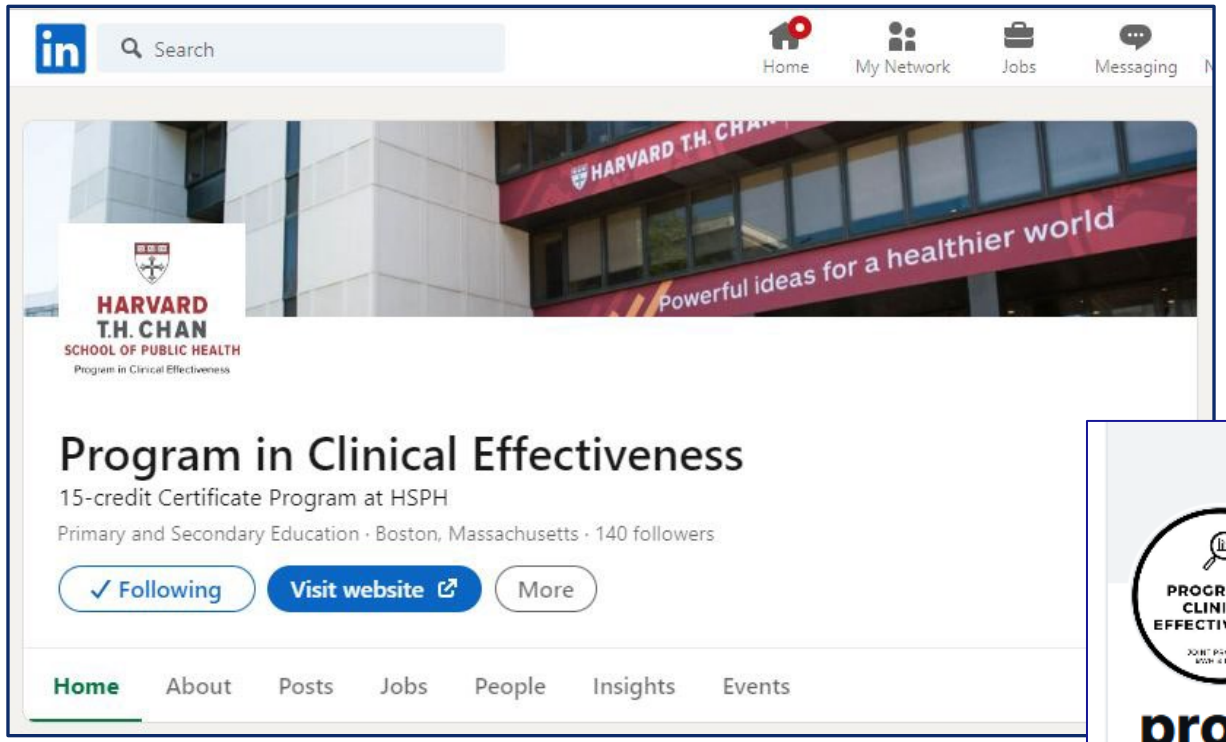
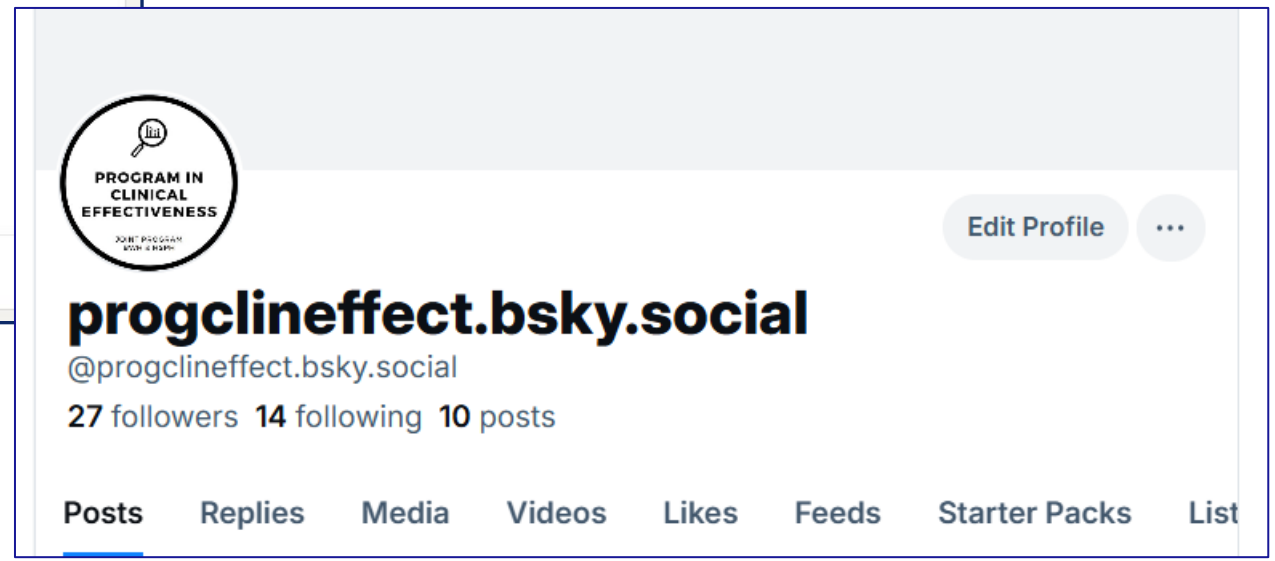


Program in Clinical Effectiveness



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Questions?