Health Research and Policy


The Department of Health Research and Policy has three principal areas of scholarly interest:

1. Biostatistics deals with scientific methodology in the medical sciences, emphasizing the use of statistical techniques.
2. Epidemiology is the study of the distribution and determinants of illness and impairment in human populations. Epidemiology training provides analytic tools for clinical and translational research, including studies of disease etiology, prevention, and therapy.
3. Health Services Research is concerned with many aspects of health policy analysis in the public and private sectors.

Graduate Programs in Health Research Policy

The Program in Epidemiology and the Program in Health Services Research are housed in the Department of Health Research and Policy. These programs offer M.S. degrees in Epidemiology and in Health Services Research. Students with an interest in pursuing advanced degrees with an emphasis on biostatistics can do so through programs offered by the Department of Statistics. Division of Biostatistics faculty participate in these programs.

For additional information, address inquiries to the Educational Coordinator, Department of Health Research and Policy, Stanford University School of Medicine, HRP Redwood Building, Room T-138C, Stanford, California 94305-5405.

Master of Science in Health Services Research

The master’s degree program in Health Services Research seeks to train students in the quantitative analysis of issues in health and medical care. The program emphasizes an individually designed program of course work and completion of a master’s project under the mentorship of a faculty member. The typical student in the program is either a physician who has completed residency training and is preparing for a research career, or a student with a strong background in policy analysis who wishes to focus on problems in health or medical care. Faculty interests include outcomes research, health economics, health care organization, health care access, quality of care, decision analysis, clinical guidelines, and assessment of patient preferences and quality of life.

To receive the degree, students are expected to demonstrate knowledge of issues in health services research and the quantitative skills necessary for research in this area. Students must take at least 45 units of course work and write a University thesis. The course work requirements are:

1. At least 8 units from the following group of Health Research and Policy (HRP) core courses:
   - HRP 256 Economics of Health and Medical Care 5
   - HRP 299 Directed Reading in Health Research and Policy 1-18

For additional information, address inquiries to the Educational Coordinator, Department of Health Research and Policy, Stanford University School of Medicine, HRP Redwood Building, Room T138C, Stanford, California 94305-5405.

Master of Science in Epidemiology

The Graduate Program in Epidemiology offers instruction and interdisciplinary research opportunities leading to the M.S. degree in Epidemiology. Epidemiology is the study of the distribution and determinants of illness and impairment in human populations. It is important in its own right, and epidemiologic methods are used by clinical investigators and by other scientists who conduct observational and experimental research on the identification, prevention, and treatment of human disorders.

Core and affiliated faculty come from the Department of Health Research and Policy; other Stanford University departments, and notable Bay Area research facilities. The Program has particular strengths in cancer epidemiology, cardiovascular disease epidemiology, infectious disease epidemiology, musculoskeletal disease epidemiology, neuroepidemiology, and aspects of epidemiologic methods, genetic epidemiology, and reproductive epidemiology and women’s health.

The mission of the Stanford University School of Medicine is to be a premier research-intensive medical school that improves health through leadership and collaborative discoveries and innovation in patient care, education and research. With support from a NIH Clinical and Translational Science Award, the graduate program in Epidemiology fosters this mission through the training of physician investigators in techniques of clinical research. The department also considers students from other disciplines who would benefit from formal training in epidemiologic methods.

A typical student has the M.D. degree and is in the fellowship stage of his or her postgraduate training, or in an early stage of faculty development. Other students may not have prior clinical training. These may include behavioral, social, and life scientists; law students; and students with the baccalaureate degree. They may wish to bring an epidemiologic
orientation to their research or practice, or they may be considering careers in epidemiology or a related discipline.

To receive the M.S. degree, students are expected to obtain a grounding in epidemiologic methods and applied biostatistics and to demonstrate research skills through the completion of a thesis. Students must complete at least 45 units of course work:

1. Epidemiologic methods:
   - HRP 225 Design and Conduct of Clinical and Epidemiologic Studies 3-4
   - HRP 226 Advanced Epidemiologic and Clinical Research Methods 3-4
   - HRP 251 Design and Conduct of Clinical Trials 3

2. Biostatistics:
   - HRP 259 Introduction to Probability and Statistics for Epidemiology 3-4
   - HRP 261 Intermediate Biostatistics: Analysis of Discrete Data 3
   - HRP 262 Intermediate Biostatistics: Regression, Prediction, Survival Analysis 3

3. Research seminars:
   - HRP 236 Epidemiology Research Seminar (at least 3 units) 1

4. Research:
   - HRP 399 Graduate Research (at least 12 units) 1-18

5. Research conduct:
   - MED 255 The Responsible Conduct of Research
   - Attend a Human Subjects Institutional Review Board meeting.

6. Additional approved selective and elective courses to complete the program total of at least 45 units.

Students are assigned a methodology mentor from the Department of Health Research and Policy, and they also select a research mentor, who may be from another department. For physicians, the research mentor is often an affiliated faculty member from the department of the student’s clinical specialty.

University requirements for the M.S. degree are described in the "Graduate Degrees (http://exploredegrees.stanford.edu/archive/2013-14/graduatedegrees) " section of this bulletin. Other programmatic requirements are in Graduate Program in Epidemiology, Information and Guidelines, available from the educational coordinator in the Department of Health Research and Policy.

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**Health Research and Policy**

*Emeriti: (Professors)* Dan Bloch, John Farquhar, Victor R. Fuchs

*Chair: Phil Lavori*

*Co-Chair: Robert Tibshirani*

*Professors: Laurence Baker, Bradley Efron, Trevor Hastie, Victor W. Henderson, Mark Hlatky, John Ioannidis, Iain M. Johnstone, Abby C. King, Philip W. Lavori, Ying Lu, Yvonne Maldonado, Richard A. Olshen, Julie Parsonnet, Robert Tibshirani, Alice S. Whittemore, Dee W. West, Wing Wong*

*Associate Professor: M. Kate Bundorf, Lorene M. Nelson, Chiara Sabatini*

*Assistant Professors: Marc Coram, Allison Kurian, Mei-Chiung Shih, Weiva Sieh, Lu Tian*

*Assistant Professors (Clinical): Rita Popat, Kristin Sainani*

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**Health Services Research**

*Director: Mark Hlatky (Professor, Health Research and Policy, and Medicine)*

*Executive Committee: Laurence Baker (Professor, Health Research and Policy), M. Kate Bundorf (Associate Professor, Health Research and Policy), Mary Goldstein (Professor, Medicine), Mark Hlatky (Professor, Health Research and Policy, and Medicine), Douglas Owens (Professor, Medicine)*

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**Anesthesia:** Alex Macario (Professor)

**Business:** Alain Enthoven (Professor, emeritus)

**Health Research and Policy:** Laurence Baker (Professor), Paul Barnett (Consulting Associate Professor), M. Kate Bundorf (Associate Professor), Victor Fuchs (Professor, emeritus), Trevor Hastie (Professor), Mark Hlatky (Professor), Philip Lavori (Professor), Richard Olshen (Professor), Ciaran Phibbs (Consulting Associate Professor), Joseph Selby (Consulting Professor), Robert Tibshirani (Professor)

**Law:** Henry Greely (Professor), Daniel Kessler (Professor)

**Management Science and Engineering:** Margaret Brandeau (Professor)

**Medicine:** Jay Bhattacharya (Associate Professor), Jeremy Goldhaber-Fiebert (Assistant Professor), Mary Goldstein (Professor), Michael Gould (Associate Professor), Paul Heidenreich (Associate Professor), Mark Hlatky (Professor), Grant Miller (Assistant Professor), Douglas Owens (Professor), Wolfgang Winkelmueller (Associate Professor)

**Pediatrics:** Paul Wise (Professor)

**Psychiatry:** Rudolph Moos (Professor, emeritus)

**Sociology:** Richard Scott (Professor, emeritus)

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**Epidemiology**

*Director: Victor W. Henderson (Professor, Health Research and Policy, and Medicine)*

*Associate Professor: M. Kate Bundorf, Lorene M. Nelson, Chiara Sabatini*

*Assistant Professors: Marc Coram, Allison Kurian, Mei-Chiung Shih, Weiva Sieh, Lu Tian*

*Assistant Professors (Clinical): Rita Popat, Kristin Sainani*
Core Faculty and Academic Teaching Staff: Raymond R. Balise (Lecturer, Health Research and Policy), Gary D. Friedman (Consulting Professor, Health Research and Policy), Victor W. Henderson (Professor, Health Research and Policy, and Neurology and Neurological Sciences), Abby C. King (Professor, Health Research and Policy, and Medicine), Allison Kurian (Assistant Professor, Medicine, and Health Research and Policy), Philip Lavori (Professor, Health Research and Policy), Yvonne A. Maldonado (Professor, Pediatrics), Lorene M. Nelson (Associate Professor, Health Research and Policy), Julie Parsonnet (Professor, Medicine, and Health Research and Policy), Rita A. Popat (Clinical Assistant Professor, Health Research and Policy), Kristin L. Sainani (Clinical Assistant Professor, Health Research and Policy), Weiva Sieh (Assistant Professor, Health Research and Policy), Dee W. West (Professor, Health Research and Policy), Alice S. Whittemore (Professor, Health Research and Policy)