Health Systems, Management & Policy
Health Services Research Track
## Core HSMP Global Public Health Faculty

<table>
<thead>
<tr>
<th>Faculty Name</th>
<th>Research Interests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cathy Battaglia PhD, RN, Co-Director HSR PhD Program</td>
<td>Health Behavior Change; Tobacco Cessation; Rural Health Outcomes, Program Evaluation Research</td>
</tr>
<tr>
<td>Cathy Bradley, PhD</td>
<td>Health Economics and Policy, Disparities, Cancer Health Services Research, Labor Market Outcomes, Health Insurance, Medicare/Medicaid</td>
</tr>
<tr>
<td>Richard Lindrooth PhD, Interim Department Chair, Co-Director HSR PhD Program</td>
<td>Health Economics; Health Care Finance, Health Policy; Hospital Markets; Mental Health Service Delivery</td>
</tr>
<tr>
<td>Beth McManus, PhD</td>
<td>Medicaid Policy; Children With Special Needs And Developmental Disabilities</td>
</tr>
<tr>
<td>Elaine Morrato, DrPH</td>
<td>Dissemination and Implementation of Medical Evidence and Policy; Drug Safety and Risk Management; Pediatric Health Outcomes</td>
</tr>
<tr>
<td>Marcelo Perraillon, PhD</td>
<td>Health Economics and Policy, Aging and Long-Term Care, Health Outcomes, Cost Effectiveness, Mental Health Services</td>
</tr>
<tr>
<td>Angela Sauaia MD, PhD</td>
<td>Health Disparities; Trauma Epidemiology; Health Education</td>
</tr>
<tr>
<td>Gregory Tung, PhD</td>
<td>Injury Prevention, Tobacco Control Policy, Translational Research</td>
</tr>
<tr>
<td>Virginia Visconti, PhD</td>
<td>Public Health Practice, Community Engagement and Coalition Building, Health Disparities, Qualitative inquiry</td>
</tr>
</tbody>
</table>

### What HSMP-HSR offers for you:

- Preparation, training and studies of the interplay of financing systems, organizational structures and processes, health technologies, social factors and personal behaviors which affect access to health care, the quality and cost of health care, and quantity and quality of life.
- Development of sophisticated analytic and research skills, as well as an understanding of the environmental, social and ethical factors that contribute to health and wellness in the community.
- Tools grounded in theory that can be applied by professionals who make management and policy decisions or who deliver care in the health care system.
## Basic MPH/HSR Requirements

### MPH Public Health Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biostatistical Methods I</td>
<td>BIOS 6611</td>
<td>3</td>
</tr>
<tr>
<td>Social/Community Factors in Health</td>
<td>CBHS 6610</td>
<td>3</td>
</tr>
<tr>
<td>Occupational/Environmental Health</td>
<td>EHOH 6614</td>
<td>3</td>
</tr>
<tr>
<td>Epidemiology</td>
<td>EPID 6630</td>
<td>3</td>
</tr>
<tr>
<td>Foundations in Public Health</td>
<td>PUBH 6600</td>
<td>2</td>
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</table>

**Total MPH Core Credits**  14

### HSMP Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>Health Care Economics</td>
<td>HSMP 6604</td>
<td>3</td>
</tr>
<tr>
<td>Health Policy</td>
<td>HSMP 6605</td>
<td>3</td>
</tr>
<tr>
<td>Cost Benefit/Effectiveness</td>
<td>HSMP 6609</td>
<td>2</td>
</tr>
<tr>
<td>Management Selective</td>
<td>HSMP 6606/6633</td>
<td>2</td>
</tr>
<tr>
<td>Intro to Health Policy Analysis</td>
<td>HSMP 6616</td>
<td>1</td>
</tr>
</tbody>
</table>

**Total HSMP Core Credits**  11

### HSMP HSR Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Grant Writing for Public Health Prof.</td>
<td>HSMP 6630</td>
<td>2</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethical and Legal Issues in Health Care</td>
<td>HSMP 6608</td>
<td>2</td>
</tr>
<tr>
<td>SAS Design and Management</td>
<td>BIOS 6680</td>
<td>3</td>
</tr>
<tr>
<td>Foundations in HSR</td>
<td>HSMP 7010</td>
<td>2</td>
</tr>
<tr>
<td>Methods in HSR 1</td>
<td>HSMP 7607</td>
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</tr>
<tr>
<td>Methods in HSR 2</td>
<td>HSMP 7609</td>
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</tr>
</tbody>
</table>

**Total HSMP HSR Credits**  13

### Practicum

2

### Capstone

2

**Total Credits** 42
## MPH/HSR Sample Schedule

### Fall Semester, Year 1
- Biostatistical Methods I  
  BIOS 6611  
  3 credits
- SAS Database  
  BIOS 6680  
  3
- Design/Management  
- Health Care Economics  
  HSMP 6604  
  3
- Intro to Health Policy Analysis  
  HSMP 6616  
  1
- Foundations in HSR Seminar  
  HSMP 7010  
  1
- Foundations in Public Health  
  PUBH 6600  
  2

**Total credits**: 13

### Spring Semester, Year 1
- Health Policy  
  HSMP 6605  
  3 credits
- Cost Benefit/Effectiveness  
  HSMP 6609  
  2
- Methods in HSR I  
  HSMP 7607  
  3
- Foundations in HSR Seminar  
  HSMP 7010  
  1

**Total credits**: 9

### Summer Semester, Year 1
- Practicum  
  PUBH 6606  
  2 credits

**Total credits**: 2

### Fall Semester, Year 2
- Methods in HSR II  
  HSMP 7609  
  3 credits
- Public Health Core Course #1  
  3
- Public Health Core Course #2  
  3
- Public Health Administration (Or HSMP 6606 in Spring)  
- Ethical and Legal Issues in Health Care (Or HSMP 6630 in Spring)  
  HSMP 6608  
  2

**Total credits**: 9/13

### Spring Semester, Year 2
- Public Health Core Course #3  
  3 credits
- Management of Nonprofit Orgs (Or HSMP 6633 in Spring)  
  HSMP 6606  
  2
- Grant Writing for Pub. Health Prof. (Or HSMP 6615)  
  HSMP 6630  
  2
- MPH Capstone Project  
  PUBH 6955  
  2

**Total credits**: 5/9

### MPH - HSR Total Credits

42
### MPH/HSR Program Summary

#### Required (42 Credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Title</th>
<th>PreReq</th>
<th>Fa</th>
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<tbody>
<tr>
<td>BIOS 6611</td>
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<td>Biostatistical Methods I</td>
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<td>EPID 6630</td>
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<td>Epidemiology</td>
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<td>Occupational &amp; Environmental Health</td>
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<td>Social &amp; Behavioral Factors &amp; Health</td>
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<tr>
<td>PUBH 6600</td>
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<td>Practicum</td>
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<td>HSMP 6604</td>
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<td>Health Policy</td>
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<td>X</td>
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<td>HSMP 6609</td>
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<td>Cost Benefit/Effectiveness</td>
<td>HSMP 6604</td>
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<td>HSMP 6608</td>
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<td>Ethical and Legal Issues OR</td>
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<td>HSMP 6630</td>
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<tr>
<td>HSMP 6606</td>
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<td>Public Health Administration OR</td>
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<td>HSMP 6633</td>
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<td>Management of Nonprofit Orgs.</td>
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<td>HSMP 6616</td>
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<td>Intro to Health Policy Analysis</td>
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<td>HSMP 7010</td>
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<td>Foundations in HSR Seminar</td>
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<tr>
<td>HSMP 7010</td>
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<td>Foundations in HSR Seminar</td>
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<tr>
<td>HSMP 7607</td>
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<td>Methods in Health Services Research I</td>
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<tr>
<td>HSMP 7609</td>
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<td>Methods in Health Services Research II</td>
<td>HSMP 7609</td>
<td>X</td>
<td></td>
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</table>
HSMP 6602 | Health Equity | 3.0 Credits | Campus: AMC - Fall
Addresses health inequities affecting the poor, racial and ethnic minorities, prisoners, rural residents, disabled, GLBTI and other populations. The course studies 1) measurement/data issues in health inequity research; 2) institutionalized, personally mediated and internalized causes; and 3) solutions/challenges.

HSMP 6604 | Health Care Economics | 3.0 Credits | Campus: AMC – Fall
Uses economic theory to analyze and understand the U.S. health care system. Topics include: demand and supply of health and health care, health insurance, hospitals, pharmaceuticals, and physicians. Analyzes institutional and legal incentives that affect physician, patient, and insurer decision-making.

HSMP 6605 | Health Policy | 3.0 Credits | Campus: AMC – Spring
Course focuses on important U.S. health policy issues and the analysis, implementation, communication skills for the practice of health policy. Evaluation is based on in-class labs, group projects, and analysis paper of a health policy case example.

HSMP 6606 | Public Health Administration | 2.0 Credits | Campus: AMC - Fall
Course provides an introduction to public health management and administration. Components aim to stimulate interactions around important problems and issues including managerial decision-making and increasing practical knowledge, tools, and strategies required by organizational decision-makers. Business plans are produced.

HSMP 6608 | Ethical/Legal Issues - Public Health | 2.0 Credits | Campus: AMC - Fall
This course explores the legal and ethical dimension of public health. It focuses on topics that generate legal and ethical controversies, including governmental duties to protect citizens, the nature and extent of the government’s ability to regulate conduct, and responses to epidemics.

HSMP 6609 | Cost Benefit and Effectiveness in Health| 2.0 Credits | Campus: AMC – Spring (Prereq: 6604)
Introduces students to the basics of economic evaluations of health care interventions or technology. Economic evaluations provide a method to assimilate different cost and health outcomes associated with medical treatments into a common metric.
HSMP 6616 | Introduction to Health Policy Analysis and Communication | 1.0 Credit | Campus: AMC – Fall (students take one section for five weeks during the semester)

*Introduces a framework for systemically and critically evaluating the health policy literature. Reviews effective oral and written communication skills for presenting policy analyses. Evaluation is based on a written analysis of a policy paper of the student’s choosing.*

HSMP 6630 | Grant Writing for Public Health Professionals | 2.0 Credits | Campus: AMC – Spring

*This course focuses on the basic skills required to develop, fund and evaluate data-driven, evidence-based public health programs. The course involves the construction of a 3-step logic model: need, intervention and outcomes. In addition, organization/individual capacity, partnerships, and budget are discussed.*

HSMP 6633 | Management of Nonprofit Organizations in Public Health | 2.0 Credits | Campus: AMC - Spring

*Course introduces nonprofit theory, focuses on nonprofit leadership and management, and explores nonprofit innovation and change within the context of public health. A highly practical and applied approach for students working in the nonprofit sector or with nonprofit partners.*

HSMP 7010 | Foundations in HSR (seminar) | 1.0 Credit | Campus: AMC – Fall, Spring (permission of instructor required)

*Introduces students to the academic health services research literature. This seminar course requires students to participate in small seminars led by faculty on different health services research topics plus attending larger HSMP departmental seminars. Evaluation is based on weekly papers.*

HSMP 7607 | Methods in Health Services Research I | 3.0 Credits | Campus: AMC – Spring (Prereq: BIOS 6611)

*The first of a 2-course sequence in empirical methods in health services research. The statistical theory underlying basic empirical methods and the thoughtful implementation/practice of these methods are emphasized. Topics covered include: OLS, Gauss-Markov assumptions, logit/probit. Stata will be used.*

HSMP 7609 | Methods in Health Services Research II | 3.0 Credits | Campus: AMC – Fall (Prereq: HSMP 7607)

*Students will learn how to specify and estimate econometric models to test theory-driven hypotheses. The course builds on HSMP 7607 and covers advanced methods related to panel/longitudinal, multinomial, survival, and count data models. Stata software will be used.*
Biostatistics

BIOS 6611 | Biostatistical Methods I | 3.0 Credits | Campus: AMC – Fall
This course in applied statistics covers elementary probability, descriptive, parametric and non-parametric methods for one or two sample estimation/testing and some common simple cases of the univariate general linear model. The statistical package SAS is used extensively.

BIOS 6680 | SAS Database Design/Management | 3.0 Credits | Campus: AMC – Fall
Course introduces students to how SAS can be used to manipulate data and prepare it for analysis. Inputting, recoding, reformatting, subsetting, merging data, and simple reports and SAS Macros.
Principles and implementation of database design will also be discussed.

Community Behavioral Health

CBHS 6610 | Social and Behavioral Factors and Health | 3.0 Credits | Campus: AMC – Spring, Summer
Considers social, behavioral, and cultural factors that affect the health of individuals and populations, and contribute to health disparities.
Development, implementation and evaluation of programs and policies to promote and sustain health environments and lifestyles are examined. Online in summer.

Environmental and Occupational Health

EHOH 6614 | Occupational and Environmental Health | 3.0 Credits | Campus: AMC – Fall, Spring
Students will learn about the relationship between the environment, workplace and health. Topics include facets of industrial hygiene, air and water pollution, radiation monitoring, toxicology, occupational medicine, policy, environmental justice and sustainability. Methods include risk assessment, GIS and epidemiology.
EPID 6630 | Epidemiology | 3.0 Credits | Campus: AMC – Fall, Spring
This course provides an introduction to descriptive and analytic methods in epidemiology and their application to research, preventive medicine and public health practice.

A complete list of courses is available online at:
http://www.ucdenver.edu/academics/colleges/PublicHealth/resourcesfor/currentstudents/academics/Pages/CoursesRegistration.aspx
Practicum and Capstone

**Practicum**
- Public health experience outside the classroom
- Work with preceptor in a practice setting
- At least 120 hours
- 2 credits (PUBH 6606)
- Requires approval of Preceptor and Concentration Director or Academic Advisor

Practicum Guide: [http://www.ucdenver.edu/academics/colleges/PublicHealth/resourcesfor/currentstudents/academics/Pages/PracticeBasedLearning.aspx](http://www.ucdenver.edu/academics/colleges/PublicHealth/resourcesfor/currentstudents/academics/Pages/PracticeBasedLearning.aspx)

Contact: Olivia Jolly, Practicum Director - olivia.jolly@ucdenver.edu

**Capstone**

Two Options:
- Capstone project and coursework in PUBH 6955 (most common - 1 credit for project, 1 credit for Capstone activities); a concrete product is produced, often a continuation of the Practicum
- Publishable research paper (less common - requires 3 Research Paper credits, with 2 taken from the 8 electives, and 1 credit for Capstone activities)

Capstone Activities:
- Oral presentation at Public Health Forum
- Poster presentation at Public Health Forum
- Final report that describes the project in more detail

Capstone Experience Guide: [http://www.ucdenver.edu/academics/colleges/PublicHealth/resourcesfor/currentstudents/academics/Pages/PracticeBasedLearning.aspx](http://www.ucdenver.edu/academics/colleges/PublicHealth/resourcesfor/currentstudents/academics/Pages/PracticeBasedLearning.aspx)

- Requires approval of Academic Advisor and registration code from Capstone Faculty

Contact: Olivia Jolly, Capstone Director - olivia.jolly@ucdenver.edu
• Health Systems Management & Policy (HSMP) - MPH
• Health Systems Management (HSM) - MPH
• Global Public Health (HSMP) – MPH
• Health Services Research (HSR) - MPH
• Health Services Research (HSVR) – MS.

http://www.ucdenver.edu/academics/colleges/PublicHealth/Academics/departments/HealthSystems/Pages/welcome.aspx

Katie Rodriquez, Department Administrator
Katie. Rodriguez@ucdenver.edu
303.724.9263