

# DEPARTMENT OF EPIDEMIOLOGY (GRAD)

The Department of Epidemiology, which is housed in the Gillings School of Global Public Health, is one of the world's leading academic departments in epidemiology. Renowned faculty members provide students with training in effective research practices and methods. The department conducts innovative research and provides classroom and real-world educational interdisciplinary opportunities that emphasize the integration of substantive area knowledge and cutting-edge epidemiologic methods. It also works with students to apply their epidemiology research to a variety of health problems in North Carolina and across the world. Research resources include diverse studies of disease endpoints (cancer, cardiovascular, infectious disease, injury, and reproductive/perinatal/pediatric epidemiology) and factors and methods that impact patterns of disease and population health (environmental, occupational, pharmacoepidemiology, genetic, social, and methods).

## Degrees and Certificates

The Department of Epidemiology offers a master's degree and a doctoral degree, and cosponsors a certificate. The master's and doctoral programs offer a body of research skills together with the opportunity to work closely with faculty on key research questions, and to share the challenge and rewards that epidemiology provides.

### Master of Science in Clinical Research (M.S.C.R.)

The M.S.C.R. program is an interdisciplinary research degree program housed within the Department of Epidemiology in the Gillings School of Global Public Health. The program is designed for physician-scientists and others who want to develop the skills necessary for a successful career as a principal investigator and collaborator in clinical and translational research. The M.S.C.R. requires a minimum of 36 semester hours of credit and is designed as a two-year program with at least two full semesters in residence. The program may be completed on either a part-time or full-time basis.

Those in the M.S.C.R. program must have a doctoral-level professional degree (M.D., Pharm.D., Ph.D., D.D.S., nurses with Ph.D., D.V.M., etc.) or extensive health professions experience (R.N.'s, P.A.'s). At the time of enrollment in the M.S.C.R., participants will simultaneously be residents, clinical fellows, post-doctoral fellows, or junior faculty at UNC or Duke University. We anticipate that each student will already be affiliated with a "home academic program," reflecting the funding source (e.g., T32 or K12 funding), training program (e.g., post-doctoral fellowship), or department.

### Doctor of Philosophy (Ph.D.)

The doctor of philosophy (Ph.D.) in epidemiology prepares students for careers in research and teaching, often at a university, federal, or state agency, or private research institution. Students develop research and teaching skills in epidemiology through coursework and practice opportunities. The doctoral program includes coursework, preliminary doctoral examinations, and doctoral research. Students typically complete the doctorate in four to five years after admission.

### Certificate in Field Epidemiology

The Certificate in Field Epidemiology (<http://sph.unc.edu/phlp/phlp-degrees-and-certificates/certificate-in-field-epidemiology/>) is cosponsored by the Department of Epidemiology and the Public Health

Leadership Program. The program is specifically designed for working practitioners and emphasizes practical, applied skills.

## Public Health, Master's Program (M.P.H.) – Applied Epidemiology Concentration

Epidemiology – the study of the distribution and determinants of disease or other influencing risk factors in a population – is the cornerstone of public health inquiry and problem-solving. Unlike clinical medicine which predominantly focuses on an individual's health and well-being, epidemiology uses a broader lens to examine the health of populations. Through this approach, epidemiologists identify public health threats and inform targets for interventions that reduce risk and improve health.

Our program, offered on-campus and online, you'll learn to apply epidemiologic tools and frameworks to describe patterns of disease and other public health issues affecting diverse populations. By clarifying problems, you'll drive effective solutions.

### Course Requirements

Requirements for the M.P.H. degree in the **Applied Epidemiology** concentration

Code	Title	Hours
<b>M.P.H. Integrated Core</b>		
SPHG 711	Data Analysis for Public Health <sup>Fall 1</sup>	2
SPHG 712	Methods and Measures for Public Health Practice <sup>Fall 1</sup>	2
SPHG 713	Systems Approaches to Understanding Public Health Issues <sup>Fall 1</sup>	2
SPHG 701	Leading from the Inside-Out <sup>Spring 1</sup>	2
SPHG 721	Public Health Solutions: Systems, Policy and Advocacy <sup>Spring 1</sup>	2
SPHG 722	Developing, Implementing, and Evaluating Public Health Solutions (MPH Comprehensive Exam administered in class) <sup>Spring 1</sup>	4
<b>M.P.H. Practicum</b>		
SPHG 703	MPH Pre-Practicum Assignments <sup>Spring 1</sup>	0.5
SPHG 707	MPH Post-Practicum Assignments <sup>Fall 2</sup>	0.5
<b>M.P.H. Concentration</b>		
EPID 710	Fundamentals of Epidemiology <sup>Fall 1</sup>	3
EPID 795	Data in Public Health <sup>Fall 1</sup>	3
EPID 716	Epidemiologic Data Analysis <sup>Spring 1</sup>	3
EPID 750	Fundamentals of Public Health Surveillance <sup>Fall 2</sup>	3
EPID 759	Methods in Field Epidemiology <sup>Spring 2</sup>	3
<b>M.P.H. Electives</b>		
Elective (Graduate-level courses, 400+ level at Gillings, 500+ level at UNC)		3
Elective (Graduate-level courses, 400+ level at Gillings, 500+ level at UNC)		3
Elective (Graduate-level courses, 400+ level at Gillings, 500+ level at UNC)		3
<b>M.P.H. Culminating Experience</b>		
EPID 992	Master's (Non-Thesis) <sup>Spring 2</sup>	3
<b>Minimum Hours</b>		<b>42</b>

## Admissions

Please visit Applying to the Gillings School (<https://sph.unc.edu/students/how-to-apply/>) first for details and information. Application to the residential M.P.H. is a 2-step process. Please apply separately to (1) SOPHAS and (2) UNC–Chapel Hill (via the Graduate School application). Visit the Graduate School website (<https://gradschool.sites.unc.edu/master-of-public-health/>) for more details. If you are interested in the online M.P.H., please visit the MPH@UNC (<https://onlinemph.unc.edu/>) website and fill out an inquiry form.

## Milestones

- Master's Committee
- Master's Written Examination/Approved Substitute (Comprehensive Exam)
- Thesis Substitute (Culminating Experience)
- Residence Credit
- Exit Survey
- Master's Professional Work Experience (Practicum)

## Master of Science in Clinical Research (M.S.C.R.)

The M.S.C.R. program is an interdisciplinary research degree program housed within the Department of Epidemiology in the Gillings School of Global Public Health. The program is designed for physician-scientists and others who want to develop the skills necessary for a successful career as a principal investigator and collaborator in clinical and translational research. The M.S.C.R. requires a minimum of 36 semester hours of credit and is designed as a two-year program with at least two full semesters in residence. The program may be completed on either a part-time or full-time basis.

Those in the M.S.C.R. program must have a doctoral-level professional degree (M.D., Pharm.D., Ph.D., D.D.S., nurses with Ph.D., D.V.M., etc.) or extensive health professions experience (R.N.'s, P.A.'s). At the time of enrollment in the M.S.C.R., participants will simultaneously be residents, clinical fellows, post-doctoral fellows, or junior faculty at UNC or Duke University. We anticipate that each student will already be affiliated with a "home academic program," reflecting the funding source (e.g., T32 or K12 funding), training program (e.g., post-doctoral fellowship), or department.

## Course Requirements

Code	Title	Hours
<b>Public Health Foundation Courses</b>		
SPHG 600	Introduction to Public Health <sup>1</sup>	3
<b>Core Courses</b>		
EPID 711	Clinical Measurement and Evaluation	3
BIOS 641	Quantitative Methods for Health Care Professionals I	4
EPID 804	Design of Clinical Research Studies	4
BIOS 642	Quantitative Methods for Health Care Professionals II	4
EPID 726	Epidemiologic Research Methods	3
EPID 790	Intervention Epidemiology	2
<b>Electives <sup>2</sup></b>		
Any SPH graduate level course, or approved graduate level course		7
Any Substantive Epidemiology Course of at least 3 credits (see list below)		3

## Thesis/Substitute or Dissertation Hours

EPID 992	Master's (Non-Thesis)	3
<b>Minimum Hours</b>		<b>36</b>

- <sup>1</sup> Students with a prior public health degree are not required to take SPHG 600; exemptions are available for those with non-public health degrees from accredited SPHs. Students should discuss with their Academic Coordinator.
- <sup>2</sup> Students interested in substituting a graduate level course (600 level or higher) outside of the Gillings School of Public Health should email a request to the Academic Coordinator for review by the MSCR Program Director for consideration.

Code	Title	Hours
<b>Substantive Epidemiology Course Options</b>		
EPID 625	Injury as a Public Health Problem	3
EPID 626	Violence as a Public Health Problem	3
EPID 735	Cardiovascular Epidemiology	3
EPID 738A	Methods and Applications of Cardiovascular Disease Surveillance	1
EPID 738B	Epidemiology of Stroke	1
EPID 743	Genetic Epidemiology: Methods and Applications	3
EPID 750	Fundamentals of Public Health Surveillance	3
EPID 754	Advanced Methods in Infectious Disease Epidemiology	3
EPID 755	Introduction to Infectious Disease Epidemiology	3
EPID 758	Methods and Principles of Applied Infectious Disease Epidemiology	3
EPID 759	Methods in Field Epidemiology	3
EPID 760	Vaccine Epidemiology	3
EPID 764	Hospital Epidemiology	1-2
EPID 765	Methods and Issues in Pharmacoepidemiology	3
EPID 766	Epidemiologic Research with Healthcare Databases	3
EPID 770	Cancer Epidemiology and Pathogenesis	3
EPID 771	Cancer Epidemiology: Survivorship and Outcomes	3
EPID 772	Cancer Prevention and Control Seminar	3
EPID 775	Advanced Cancer Epidemiology: Classic and Contemporary Controversies in Cancer Causation	2
EPID 785	Environmental Epidemiology	3
EPID 787	Advanced Environmental Epidemiology	2
EPID 814	Obesity Epidemiology	3
EPID 818	Analytical Methods in Nutritional Epidemiology	3
EPID 826	Introduction to Social Epidemiology	2
EPID 827	Social Epidemiology: Design and Interpretation	2
EPID 851	Reproductive and Perinatal Epidemiology	3
EPID 853	Advanced Topics in Perinatal and Pediatric Epidemiology	2

## Milestones

The following list of milestones (non-course degree requirements) must be completed; view this list of standard milestone definitions (<https://catalog.unc.edu/graduate/degree-programs/#milestonestext>) for more information.

- Master's Committee
- Master's Written Exam / Approved Substitute
- Thesis Substitute
- Residence Credit
- Exit Survey
- Master's IRB Compliance

## Epidemiology, Doctoral Program (Ph.D.)

The Doctor of Philosophy (Ph.D.) provides students with research and teaching skills in epidemiology through coursework, doctoral research, practice opportunities, and preliminary doctoral examinations.

### Course Requirements

Code	Title	Hours
<b>Public Health Foundation Course</b>		
SPHG 600	Introduction to Public Health <sup>1</sup>	3
<b>Core Courses</b>		
EPID 700 or BIOS 511	SAS and Data Management Introduction to Statistical Computing and Data Management	3
EPID 704	Socially Responsible Epidemiology	1
EPID 705	Introduction to Deductive and Probability Logic in Epidemiology	2
EPID 710	Fundamentals of Epidemiology	3
EPID 712	Readings in Fundamentals of Epidemiology	2
BIOS 600 or BIOS 662 or BIOS 650	Principles of Statistical Inference Intermediate Statistical Methods Basic Elements of Probability and Statistical Inference I	3
EPID 715	Theory and Quantitative Methods in Epidemiology	4
EPID 716	Epidemiologic Data Analysis	3
BIOS 645 or BIOS 663	Principles of Experimental Analysis Intermediate Linear Models	3
EPID 717	Advanced Epidemiologic Methods (Previously EPID 722)	3
EPID 718	Analytic Methods in Observational Epidemiology	3
EPID 726	Epidemiologic Research Methods	3
<b>Electives</b>		
	Must take a minimum of 2 Epidemiology courses consisting of at least 2 credits in the student's epidemiology program area of study and 2 credits in an area of epidemiology outside the student's program area of study. See list of Elective Options below.	4
<b>Advanced Statistics Course</b>		
	Must take one advanced statistics course. Currently approved options are: <sup>2</sup>	3
BIOS 664	Sample Survey Methodology	
BIOS 665	Analysis of Categorical Data	
BIOS 667	Applied Longitudinal Data Analysis	
HBEH 762	Applied Statistical Methods in Health Behavior Research II <sup>3</sup>	
SOWO 916	Structural Equation Modeling	
SOWO 917	Longitudinal and Multilevel Analysis	
SOCI 711	Analysis of Categorical Data	
SOCI 717	Structural Equations with Latent Variables	

SOCI 718	Longitudinal and Multilevel Data Analysis	
<b>Thesis/Substitute or Dissertation</b>		
EPID 994	Doctoral Research and Dissertation <sup>4</sup>	6
<b>Minimum Hours</b>		<b>49</b>

<sup>1</sup> Students with a prior public health degree are not required to take SPHG 600; exemptions are available for those with non-public health degrees from accredited SPHs. Students should discuss this with their Academic Coordinator.

<sup>2</sup> Other options can be approved by individual petition to Academic Coordinator for review by Graduate Studies Committee.

<sup>3</sup> HBEH 762 only meets the Advanced Statistics Requirement if it is the 3 credit version.

<sup>4</sup> Students must enroll in a minimum of two semesters (6 hours) of EPID 994.

### Epidemiology Elective Options

Code	Title	Hours
EPID 625	Injury as a Public Health Problem	3
EPID 626	Violence as a Public Health Problem	3
EPID 702	Systematic Review	2
EPID 719	Readings in Epidemiologic Methods	1
EPID 735	Cardiovascular Epidemiology	3
EPID 738A	Methods and Applications of Cardiovascular Disease Surveillance	1
EPID 738B	Epidemiology of Stroke	1
EPID 743	Genetic Epidemiology: Methods and Applications	3
EPID 750	Fundamentals of Public Health Surveillance	3
EPID 754	Advanced Methods in Infectious Disease Epidemiology	3
EPID 755	Introduction to Infectious Disease Epidemiology	3
EPID 757	Problem Solving Seminar in Advanced Infectious Disease Epidemiology	3
EPID 758	Methods and Principles of Applied Infectious Disease Epidemiology	3
EPID 759	Methods in Field Epidemiology	3
EPID 760	Vaccine Epidemiology	3
EPID 764	Hospital Epidemiology	1-2
EPID 765	Methods and Issues in Pharmacoepidemiology	3
EPID 766	Epidemiologic Research with Healthcare Databases	3
EPID 770	Cancer Epidemiology and Pathogenesis	3
EPID 771	Cancer Epidemiology: Survivorship and Outcomes	3
EPID 772	Cancer Prevention and Control Seminar	3
EPID 775	Advanced Cancer Epidemiology: Classic and Contemporary Controversies in Cancer Causation	2
EPID 785	Environmental Epidemiology	3
EPID 787	Advanced Environmental Epidemiology	2
EPID 790	Intervention Epidemiology	2
EPID 795	Data in Public Health	3
EPID 799A	Special Studies in Epidemiology I	1
EPID 799B	Special Studies in Epidemiology II	2
EPID 799C	Special Studies in Epidemiology III	3
EPID 810	Physical Activity Epidemiology and Public Health	3

EPID 814	Obesity Epidemiology	3
EPID 818	Analytical Methods in Nutritional Epidemiology	3
EPID 826	Introduction to Social Epidemiology	2
EPID 827	Social Epidemiology: Design and Interpretation	2
EPID 851	Reproductive and Perinatal Epidemiology	3
EPID 853	Advanced Topics in Perinatal and Pediatric Epidemiology	2
EPID 889	Topics in Epidemiology Seminar	1
EPID 893	Pharmacoepidemiology Seminar	1
EPID 894	Infectious Disease Seminar	1
EPID 897	Advanced Seminar in Cardiovascular Research	1-3

### Substantive Epidemiology Course Options

Code	Title	Hours
EPID 625	Injury as a Public Health Problem	3
EPID 626	Violence as a Public Health Problem	3
EPID 735	Cardiovascular Epidemiology	3
EPID 738A	Methods and Applications of Cardiovascular Disease Surveillance	1
EPID 738B	Epidemiology of Stroke	1
EPID 743	Genetic Epidemiology: Methods and Applications	3
EPID 750	Fundamentals of Public Health Surveillance	3
EPID 754	Advanced Methods in Infectious Disease Epidemiology	3
EPID 755	Introduction to Infectious Disease Epidemiology	3
EPID 758	Methods and Principles of Applied Infectious Disease Epidemiology	3
EPID 759	Methods in Field Epidemiology	3
EPID 760	Vaccine Epidemiology	3
EPID 764	Hospital Epidemiology	1-2
EPID 765	Methods and Issues in Pharmacoepidemiology	3
EPID 766	Epidemiologic Research with Healthcare Databases	3
EPID 770	Cancer Epidemiology and Pathogenesis	3
EPID 771	Cancer Epidemiology: Survivorship and Outcomes	3
EPID 772	Cancer Prevention and Control Seminar	3
EPID 775	Advanced Cancer Epidemiology: Classic and Contemporary Controversies in Cancer Causation	2
EPID 785	Environmental Epidemiology	3
EPID 787	Advanced Environmental Epidemiology	2
EPID 790	Intervention Epidemiology	2
EPID 810	Physical Activity Epidemiology and Public Health	3
EPID 814	Obesity Epidemiology	3
EPID 818	Analytical Methods in Nutritional Epidemiology	3
EPID 826	Introduction to Social Epidemiology	2
EPID 827	Social Epidemiology: Design and Interpretation	2
EPID 851	Reproductive and Perinatal Epidemiology	3
EPID 853	Advanced Topics in Perinatal and Pediatric Epidemiology	2
EPID 889	Topics in Epidemiology Seminar	1

### Milestones

The following list of milestones (non-course degree requirements) must be completed; view this list of standard milestone definitions (<https://>

[catalog.unc.edu/graduate/degree-programs/#milestonestext](https://catalog.unc.edu/graduate/degree-programs/#milestonestext)) for more information.

- Doctoral Written Exam (Methods Qualifying Exam - QE)
- Doctoral Written Exam 2 (Substantive Qualifying Exam - QE)
- Doctoral Research Experience (Doctoral Research Practicum)
- Doctoral Teaching Experience
- Doctoral Intradepartmental Review
- Doctoral Committee
- Doctoral Oral Comprehensive Exam (Dissertation Proposal Defense)
- Prospectus Oral Exam (Dissertation Proposal Defense)
- Advanced to Candidacy
- Doctoral IRB Compliance
- Doctoral Preparatory Committee Review (Interim Meeting)
- Doctoral Manuscript Submission
- Dissertation Defense
- Doctoral Dissertation Approved/Format Accepted
- Residence Credit
- Exit Survey

## EPID

### Advanced Undergraduate and Graduate-level Courses

#### EPID 600. Principles of Epidemiology for Public Health. 3 Credits.

An introductory course that considers the meaning, scope, and applications of epidemiology to public health practice and the uses of vital statistics data in the scientific appraisal of community health. One lecture and two lab hours per week.

#### Rules & Requirements

**Grading Status:** Letter grade.

#### EPID 625. Injury as a Public Health Problem. 3 Credits.

This course examines unintentional injuries from a public health perspective. The course covers core concepts in injury prevention and control, including the epidemiology of unintentional injury, prevention strategies, behavioral models, child and adolescent injury, messaging framing, the Haddon matrix, and injury surveillance.

#### Rules & Requirements

**Requisites:** Corequisite, EPID 600.

**Grading Status:** Letter grade.

**Same as:** MHCH 625, HBEH 625.

**EPID 626. Violence as a Public Health Problem. 3 Credits.**

This course covers core concepts in violence prevention and control, including the epidemiology of violence, prevention strategies for inter-personal and intra-personal violence, behavioral models that describe power structures that reinforce personal and societal factors affecting self-harm and violence towards others, and violence directed towards children and adolescents.

**Rules & Requirements**

**Grading Status:** Letter grade.

**Same as:** MHCH 626, HBEH 626.

**EPID 695. Research in Epidemiology. 1-3 Credits.**

Permission of the instructor. A course for undergraduate students who wish to conduct research as part of an ongoing epidemiology project or as an independent activity.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit; may be repeated in the same term for different topics; 3 total credits. 3 total completions.

**Grading Status:** Letter grade.

**EPID 696. Problems in Epidemiology. 1-3 Credits.**

A course for undergraduate students who wish to make an intensive study of some special problems in epidemiology.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit; may be repeated in the same term for different topics; 3 total credits. 3 total completions.

**Grading Status:** Letter grade.

**Graduate-level Courses****EPID 700. SAS and Data Management. 3 Credits.**

An introduction to statistical analysis, programming, and data management, using the SAS programming language. Two lecture hours and two lab hours per week.

**Rules & Requirements**

**Grading Status:** Letter grade.

**EPID 701. R for Epidemiologists. 3 Credits.**

This course is intended to be the most effective and efficient way for UNC Epidemiology students to establish a foundation in the R programming language, RStudio IDE, and functional programming modalities. Special attention is given to R topics and packages relevant for epidemiological data management, analysis, and visualization.

**Rules & Requirements**

**Grading Status:** Letter grade.

**EPID 702. Systematic Review. 2 Credits.**

Course gives students background in assessing and conducting systematic reviews. Focuses on 1) reading, discussing, and critiquing systematic reviews on various topics; 2) reading background and methods articles on systematic reviews; 3) developing a focused question for systematic review; and 4) developing a protocol for a systematic review over the semester.

**Rules & Requirements**

**Grading Status:** Letter grade.

**Same as:** PUBH 702.

**EPID 704. Socially Responsible Epidemiology. 1 Credits.**

EPID 704 aims to provide level-setting and foundational content on ethics, equity, and anti-racism, with the goal of facilitating a transition into later equity content in the other epidemiology methods courses. Designed for first-year Epidemiology PhD students, second priority to Applied Epidemiology MPH students and permission of instructor required for others to enroll.

**Rules & Requirements**

**Grading Status:** Letter grade.

**EPID 705. Introduction to Deductive and Probability Logic in Epidemiology. 2 Credits.**

Permission of the instructor for nonmajors. Covers properties of logical relations, truth tables and Euler diagrams, valid and fallacious arguments, cognitive heuristics and biases, interpretations of probability, the probability calculus, Bayes' theorem, binomial and normal distributions, applications of probability logic and probabilistic fallacies, all in an epidemiologic context.

**Rules & Requirements**

**Grading Status:** Letter grade.

**EPID 710. Fundamentals of Epidemiology. 3 Credits.**

An intensive introduction to epidemiological concepts and methods from a perspective of causal inference. This course is for students intending to lead, engage in, collaborate in, or interpret the results of epidemiologic studies. Some familiarity with biomedical concepts may be needed. Three lecture hours a week.

**Rules & Requirements**

**Requisites:** Corequisites, BIOS 600 or 662 or SPHG 712 or equivalent EPID 712 (EPID PhD students and EPID PhD minor students only).

**Grading Status:** Letter grade.

**EPID 711. Clinical Measurement and Evaluation. 3 Credits.**

Provide a broad-based introduction to the concepts and methods of epidemiology with particular emphasis on their application in clinical research, clinical practice and health care policy.

**Rules & Requirements**

**Grading Status:** Letter grade.

**Same as:** PUBH 760.

**EPID 712. Readings in Fundamentals of Epidemiology. 2 Credits.**

A course applying the concepts and methods introduced in EPID 710 (required co-requisite for EPID 712) to readings in the epidemiologic, biomedical, and public health research literature.

**Rules & Requirements**

**Requisites:** Corequisite, EPID 710.

**Grading Status:** Letter grade.

**EPID 715. Theory and Quantitative Methods in Epidemiology. 4 Credits.**

Required preparation, competence in SAS. An in-depth treatment of basic concepts and skills in epidemiologic research, including problem conceptualization, study design, research conduct, data analysis, and interpretation. Four lecture hours per week.

**Rules & Requirements**

**Requisites:** Prerequisites, EPID 705, EPID 710 or 711; Corequisite, BIOS 545; Permission of the instructor required for nonmajors.

**Repeat Rules:** May be repeated for credit; may be repeated in the same term for different topics.

**Grading Status:** Letter grade.

**EPID 716. Epidemiologic Data Analysis. 3 Credits.**

Required preparation, documented SAS proficiency. This course is a combined lecture/lab format where students get hands-on experience in the analysis and interpretation of data from cohort and case-control studies. Students may take the SAS exemption exam in lieu of taking EPID 700, EPID 795 or BIOS 511.

**Rules & Requirements**

**Requisites:** Prerequisites, EPID 710 or EPID 711; and EPID 700 or EPID 795 or BIOS 511.

**Grading Status:** Letter grade.

**EPID 717. Advanced Epidemiologic Methods. 3 Credits.**

Course covers epidemiologic analysis of time-to-event data and emphasizes weighing threats to the accuracy of inferences. Class time is spent discussing weekly readings and homeworks.

**Rules & Requirements**

**Requisites:** Prerequisite, EPID 705, 710, 712, 715, 716.

**Grading Status:** Letter grade.

**EPID 718. Analytic Methods in Observational Epidemiology. 3 Credits.**

This course provides an in-depth treatment of the analysis of data from observational epidemiologic studies, including both tabular and regression modeling approaches, and with an emphasis on the importance of study design in developing and executing an analysis plan. A major focus of the course is the semester-long, independent data analysis project in which students apply and integrate the concepts covered in class to a dataset and research question of their choosing.

**Rules & Requirements**

**Requisites:** Prerequisite, EPID 705, 710, 712, 715, 716, 717; Permission of the instructor for nonmajors.

**Grading Status:** Letter grade.

**EPID 719. Readings in Epidemiologic Methods. 1 Credits.**

A discussion in journal-club format of readings in general epidemiologic methods, from problem conceptualization to application of results.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit; may be repeated in the same term for different topics.

**Grading Status:** Letter grade.

**EPID 726. Epidemiologic Research Methods. 3 Credits.**

Minimum second-year standing in doctoral (with permission of the instructor) or MSCR program. A course in the design and conduct of epidemiologic research. Each student will comprehensively address the conceptual and practical aspects of developing a high-quality, detailed research proposal. EPID PhD or MSCR majors only.

**Rules & Requirements**

**Requisites:** Prerequisite, EPID 715 or EPID 804.

**Grading Status:** Letter grade.

**EPID 735. Cardiovascular Epidemiology. 3 Credits.**

Review of cardiovascular health and disease in populations and their population determinants. Topics include epidemiologic methods, risk factors, strategies for prevention, and a student research project. Three lecture hours per week

**Rules & Requirements**

**Grading Status:** Letter grade.

**EPID 738A. Methods and Applications of Cardiovascular Disease Surveillance. 1 Credits.**

This course helps students gain experience critiquing and interpreting national and international cardiovascular disease (CVD) surveillance programs, evaluate recommendations for future CVD surveillance research and policy, and to explore CVD surveillance data sources with hands-on experience with practical aspects of study conduct.

**Rules & Requirements**

**Requisites:** Prerequisite, EPID 735.

**Grading Status:** Letter grade.

**EPID 738B. Epidemiology of Stroke. 1 Credits.**

This course helps students become familiar with physiologic and pathologic aspects of cerebrovascular diseases, provides opportunity to explore research findings regarding major risk factors for stroke and evidence for prevention strategies, and offers a guided experience in critiquing, synthesizing, and communicating stroke related research findings.

**Rules & Requirements**

**Requisites:** Prerequisite, EPID 735.

**Grading Status:** Letter grade.

**EPID 738C. Contemporary Issues in Hypertension Research. 1 Credits.**

In this seminar, we examine several contemporary issues related to hypertension research, particularly pertaining to measurement of blood pressure. Each session will begin with an overview, likely didactic, followed by more in-depth discussion of the topics.

**Rules & Requirements**

**Requisites:** Prerequisite, EPID 735.

**Grading Status:** Letter grade.

**EPID 742. Biomarkers in Population-Based Research. 2 Credits.**

This course surveys the major issues relevant to the application of biomarkers in epidemiological research, including the logistical hurdles in biospecimen collection and storage, assessments of biomarker quality, analytic issues, and the interpretation of quantitative estimates.

**Rules & Requirements**

**Grading Status:** Letter grade.

**EPID 743. Genetic Epidemiology: Methods and Applications. 3 Credits.**

Concepts and methods of genetic epidemiology relevant to the study of complex human diseases, including segregation analysis, linkage analysis, and gene-environment interaction. Includes whole genome approaches, as well as nonhuman systems. Three lecture hours a week.

**Rules & Requirements**

**Requisites:** Prerequisites, BIOS 545 and EPID 715; permission of the instructor for students lacking the prerequisites.

**Grading Status:** Letter grade.

**EPID 750. Fundamentals of Public Health Surveillance. 3 Credits.**

This course provides the conceptual foundations and practical skills for designing and implementing surveillance systems, for using surveillance data for the conduct and evaluation of public health programs and research.

**Rules & Requirements**

**Grading Status:** Letter grade.

**EPID 754. Advanced Methods in Infectious Disease Epidemiology. 3 Credits.**

This course covers theories, concepts, study designs, and analytical methods of particular importance in studying infectious outcomes. Teaching methods include lectures, hands-on computer practicals, article discussions, and written assignments.

**Rules & Requirements**

**Requisites:** Prerequisites, EPID 715 and 716.

**Grading Status:** Letter grade.

**EPID 755. Introduction to Infectious Disease Epidemiology. 3 Credits.**

Permission required for non-majors. This course will cover concepts, theory, study designs, and analytical methods of particular importance in infectious disease epidemiology. Most topics will be introduced with a didactic lecture and readings, followed by an in-class exercise, discussion, or computer practical applying relevant theories, concepts, and methods to specific questions in infectious disease epidemiology.

**Rules & Requirements**

**Grading Status:** Letter grade.

**EPID 757. Problem Solving Seminar in Advanced Infectious Disease Epidemiology. 3 Credits.**

In this seminar, we will explore how a combination of the biological understanding of disease processes and advanced methods in infectious disease analytics are essential to understanding critical problems in infectious disease, including the interpretation of surveillance data, the design of control measures and projecting the course of epidemics. We will take a "problem based" approach to learning about these issues, with a focus on a rotating set of disease systems. Restricted to Epidemiology PhD students, though others may be admitted with permission of the instructors.

**Rules & Requirements**

**Requisites:** Prerequisites, EPID 751, 755, and 799A.

**Grading Status:** Letter grade.

**EPID 758. Methods and Principles of Applied Infectious Disease Epidemiology. 3 Credits.**

This course will cover the interaction between an infectious agent, host, and environment; modes and dynamics of transmission; the role of immunity in infectious disease epidemiology; and disease elimination strategies. Three lecture hours per week.

**Rules & Requirements**

**Requisites:** Prerequisite, EPID 600.

**Grading Status:** Letter grade.

**EPID 759. Methods in Field Epidemiology. 3 Credits.**

Course will focus on epidemiological methods required to investigate urgent public health problems. Course covers the skills and tools needed to conduct outbreak investigations and communicate findings to the public. Three lecture hours per week.

**Rules & Requirements**

**Grading Status:** Letter grade.

**EPID 760. Vaccine Epidemiology. 3 Credits.**

An overview of vaccinology principles, mechanisms of action, and herd protection, and statistical considerations. Students will obtain understanding of how vaccines are produced by industry, undergo preclinical evaluation, and evaluated for efficacy in clinical trials.

**Rules & Requirements**

**Grading Status:** Letter grade.

**EPID 764. Hospital Epidemiology. 1-2 Credits.**

Comprehensive seminar in hospital infection control. Topics include issues in employee health, surveillance, outbreak investigation, environmental sampling, and policy formation. May be repeated for credit. Two to four seminar hours.

**Rules & Requirements**

**Requisites:** Prerequisite, EPID 710; Permission of the instructor required.

**Grading Status:** Letter grade.

**EPID 765. Methods and Issues in Pharmacoepidemiology. 3 Credits.**

Required preparation, introductory-level epidemiology and biostatistics. Application of the epidemiologic knowledge, methodology, and reasoning to the study of the effects (beneficial and adverse) and uses of drugs in human populations.

**Rules & Requirements**

**Grading Status:** Letter grade.

**EPID 766. Epidemiologic Research with Healthcare Databases. 3 Credits.**

Required preparation, competency in data management with SAS (BIOS 511, EPID 700, or equivalent). Learn how healthcare utilization data are generated and use databases to identify study populations and conduct epidemiologic analysis of the utilization and comparative effectiveness/safety of prescription drugs and healthcare services.

**Rules & Requirements**

**Requisites:** Prerequisite, EPID 710 OR EPID 600 (or equivalent);

Demonstrated SAS competency.

**Grading Status:** Letter grade.

**Same as:** DPOP 766.

**EPID 770. Cancer Epidemiology and Pathogenesis. 3 Credits.**

Equivalent experience for students lacking EPID 710. Undergraduate major or strong preparation in the biological sciences required. Permission of the instructor for nonmajors. Emphasis on integration of epidemiologic data with laboratory and clinical research findings. Issues in epidemiologic research design, analysis, and interpretation are presented within the context of substantive epidemiology. Three lecture hours a week.

**Rules & Requirements**

**Requisites:** Prerequisites, BIOS 600 and EPID 710.

**Grading Status:** Letter grade.

**EPID 771. Cancer Epidemiology: Survivorship and Outcomes. 3 Credits.**

Students will evaluate the strengths and weaknesses of data sources common to cancer survivorship and outcomes studies, focusing on epidemiologic study designs. The course addresses cancer detection, treatment strategies, medical surveillance, and personal behaviors as determinants for prognosis, late effects, and the long-term health of cancer survivors.

**Rules & Requirements**

**Requisites:** Prerequisite, EPID 710 or 711.

**Grading Status:** Letter grade.

**EPID 772. Cancer Prevention and Control Seminar. 3 Credits.**

An interdisciplinary overview of cancer prevention and control. Emphasis on projects and activities from perspectives of epidemiology, health behavior and education, and health policy and management. Appropriate research design and methodologies are covered.

**Rules & Requirements**

**Grading Status:** Letter grade.

**Same as:** HPM 765, HBEH 765.

**EPID 775. Advanced Cancer Epidemiology: Classic and Contemporary Controversies in Cancer Causation. 2 Credits.**

Readings and discussions on classic and contemporary controversies in cancer. Two seminar hours per week.

**Rules & Requirements**

**Requisites:** Prerequisites, EPID 715, 718, and 770 or 771; Permission of the instructor for students lacking the prerequisites.

**Repeat Rules:** May be repeated for credit.

**Grading Status:** Letter grade.

**EPID 780. Occupational Epidemiology. 3 Credits.**

Required preparation, introductory epidemiology and biostatistics. This course provides a background in the epidemiology of work-related illness and injury and the application of epidemiologic concepts and methods in protecting workers' health and safety.

**Rules & Requirements**

**Grading Status:** Letter grade.

**EPID 785. Environmental Epidemiology. 3 Credits.**

Epidemiologic ideas and methods applied to evaluation and control of human health consequences of environmental hazards. Pollution of environmental media and global change are considered from a human-ecological perspective, with local and international examples. Three lecture hours per week.

**Rules & Requirements**

**Requisites:** Prerequisites, EPID 710 and BIOS 600.

**Grading Status:** Letter grade.

**EPID 787. Advanced Environmental Epidemiology. 2 Credits.**

Discussion of the epidemiology of environmentally-related disease and the application of epidemiologic concepts/methods to protecting public health from environmental hazards. Examples illustrate discussions regarding exposure assessment, dynamic nature of environments, regulation/assessment of environmental hazards, and methods used for environmental hazard identification and risk assessments.

**Rules & Requirements**

**Grading Status:** Letter grade.

**EPID 790. Intervention Epidemiology. 2 Credits.**

Epidemiologic methods for evaluating interventions, primarily in infectious disease epidemiology and injury epidemiology. Covers randomized designs, such as community trials, and evaluation of non-randomized interventions, such as policies and laws.

**Rules & Requirements**

**Requisites:** Co-requisites, EPID 705 and 710.

**Grading Status:** Letter grade.

**EPID 795. Data in Public Health. 3 Credits.**

This course provides students with an overview of public health informatics and includes in-depth discussions on informatics approaches used in developing the public health information systems in use today.

**Rules & Requirements**

**Grading Status:** Letter grade.

**EPID 799A. Special Studies in Epidemiology I. 1 Credits.**

Experimental course to be offered by faculty to determine the need and demand for the subject. Topics will be chosen by faculty based on current public health issues. One credit option.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit; may be repeated in the same term for different topics; 3 total credits. 3 total completions.

**Grading Status:** Letter grade.

**EPID 799B. Special Studies in Epidemiology II. 2 Credits.**

Experimental course to be offered by faculty to determine the need and demand for the subject. Topics will be chosen by faculty based on current public health issues. Two credits option.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit; may be repeated in the same term for different topics; 6 total credits. 3 total completions.

**Grading Status:** Letter grade.

**EPID 799C. Special Studies in Epidemiology III. 3 Credits.**

Experimental course to be offered by faculty to determine the need and demand for the subject. Topics will be chosen by faculty based on current public health issues. Three credits option.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit; may be repeated in the same term for different topics; 9 total credits. 3 total completions.

**Grading Status:** Letter grade.

**EPID 801. Data Analysis in Oral Epidemiology. 2-3 Credits.**

Required preparation, basic knowledge of SAS. Permission of the instructor. Data analysis project in oral epidemiology: data cleanup, file construction, analysis. For three credit hours, student also completes multivariate analysis with linear, logistic regression. Project to result in publishable paper. Two to three seminar hours a week.

**Rules & Requirements**

**Grading Status:** Letter grade.

**EPID 804. Design of Clinical Research Studies. 4 Credits.**

Permission required for nonmajors. Clinical research majors only. The goals of this course are to develop a strong fundamental understanding of the design of clinical research studies; to understand selection of study populations, exposure and outcome measurement, and choice of appropriate measures; to understand ethical oversight, project management and quality control.

**Rules & Requirements**

**Requisites:** Prerequisite, EPID 711, PUBH 741 or equivalent; Corequisite, PUBH 742 or equivalent.

**Grading Status:** Letter grade.



**EPID 810. Physical Activity Epidemiology and Public Health. 3 Credits.**

This course provides an overview of major issues in physical activity measurements, population distribution, correlates, impacts (physically and economically), and public health recommendations. Interventions, including relevant theories, will be reviewed. Three lecture hours per week.

**Rules & Requirements**

**Requisites:** Prerequisite, EPID 600.

**Grading Status:** Letter grade.

**Same as:** NUTR 810.

**EPID 814. Obesity Epidemiology. 3 Credits.**

Examines epidemiology research on the causes, consequences, and prevention of obesity. Emphasis on methodological issues pertinent to obesity research.

**Rules & Requirements**

**Requisites:** Prerequisites, BIOS 545, EPID 715, 716 and NUTR 812 or NUTR 813.

**Grading Status:** Letter grade.

**Same as:** NUTR 814.

**EPID 818. Analytical Methods in Nutritional Epidemiology. 3 Credits.**

Skills and techniques to study how dietary exposures, physical activity, and anthropometric status relate to disease outcomes. Focus is hands-on data analysis using STATA, and interpretation of results from statistical analysis.

**Rules & Requirements**

**Requisites:** Prerequisites, BIOS 545, EPID 600 or 710, and NUTR 813.

**Grading Status:** Letter grade.

**Same as:** NUTR 818.

**EPID 823. Integrating Social and Biological Perspectives on Human Health. 3 Credits.**

Student will learn key theories and methodological approaches for how social processes, socio-spatial organization, and social inequality are associated with health patterns, changes, and disparities; theories/ approaches for studying human health from a biological perspective; and strategies using integrated social and biological research perspectives and address advantages and challenges.

**Rules & Requirements**

**Grading Status:** Letter grade.

**Same as:** SOCI 823.

**EPID 826. Introduction to Social Epidemiology. 2 Credits.**

This course provides an overview of key concepts, methods and findings in research on social determinants of population health. Classes will consist of a didactic presentation followed by in-class group work modules and large group summary discussion.

**Rules & Requirements**

**Requisites:** Pre- or corequisite, EPID 600.

**Grading Status:** Letter grade.

**EPID 827. Social Epidemiology: Design and Interpretation. 2 Credits.**

Approaches to social epidemiologic research, with a focus on study design and interpretation of analytic techniques common in social epidemiology. Topics include causal inference for socially patterned exposures, racial equity research, and place effects on health.

**Rules & Requirements**

**Requisites:** Prerequisite, EPID 710; corequisite, EPID 715 or 716.

**Grading Status:** Letter grade.

**EPID 851. Reproductive and Perinatal Epidemiology. 3 Credits.**

Epidemiology of reproductive and perinatal health outcomes, including infertility, fetal loss, preterm birth, birthweight, congenital malformations, and infant mortality. Includes current knowledge regarding epidemiology of these outcomes and discussion of methodologic issues. Three lecture hours per week.

**Rules & Requirements**

**Requisites:** Prerequisite, EPID 600 or EPID 710 or EPID 711 or SPHG 712.

**Grading Status:** Letter grade.

**Same as:** MHCH 851.

**EPID 853. Advanced Topics in Perinatal and Pediatric Epidemiology. 2 Credits.**

Critical review of current topics in, and methods for, perinatal and pediatric epidemiology.

**Rules & Requirements**

**Requisites:** Prerequisites, EPID 710 and 851; Permission of the instructor for master's level students.

**Grading Status:** Letter grade.

**Same as:** MHCH 853.

**EPID 883. Teaching Experience in Epidemiology. 1-4 Credits.**

Open to EPID majors, second-year or above. Provides epidemiology majors with supervised experience in teaching and course preparation. Students act as assistants in departmental courses. Two to eight seminar hours a week.

**Rules & Requirements**

**Grading Status:** Letter grade.

**EPID 886. Readings in Epidemiology. 1-3 Credits.**

Permission of the instructor required. Independent reading and tutorial guidance in special areas of epidemiology.

**Rules & Requirements**

**Grading Status:** Letter grade.

**EPID 889. Topics in Epidemiology Seminar. 1 Credits.**

EPID majors only. Topics are chosen to reflect emerging issues in the field, as well as those that meet the interests of the students and faculty in the department.

**Rules & Requirements**

**Requisites:** Prerequisite, EPID 710.

**Repeat Rules:** May be repeated for credit; may be repeated in the same term for different topics.

**Grading Status:** Letter grade.

**EPID 891. Epidemiology Doctoral Seminar. 2 Credits.**

Exposes students to issues and debates in the philosophy of science, the object of knowledge in epidemiology, and the place of epidemiology in public health.

**Rules & Requirements**

**Grading Status:** Letter grade.

**EPID 892. Translating Health Equity Methods into Practice. 0.5 Credits.**

This course builds students' self-efficacy in using frameworks for equity assessment of programs and policies, articulating one's position on health inequity issues as well as in engaging opposing viewpoints. The course will also provide exposure to professionals who are advancing health equity in public health practice and research settings. Students will synthesize knowledge across their equity coursework and use that as a basis to define and build their health equity research or practice work. MPH Health Equity and Social Justice Students only

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit. 1 total credits. 2 total completions.

**Grading Status:** Letter grade.

**EPID 893. Pharmacoepidemiology Seminar. 1 Credits.**

This is a weekly seminar to explore current problems in pharmacoepidemiology. It supplements the introductory course, EPID 765. Required preparation, basic knowledge of epidemiology and biostatistics. May be repeated. One seminar hour a week.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit; may be repeated in the same term for different topics.

**Grading Status:** Letter grade.

**EPID 894. Infectious Disease Seminar. 1 Credits.**

Required preparation, introductory epidemiology and biostatistics. Detailed review of selected topics in infectious disease epidemiology. May be repeated for credit.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit; may be repeated in the same term for different topics.

**Grading Status:** Letter grade.

**EPID 895. Seminar in Oral Epidemiology. 1 Credits.**

Explores conceptual and methods issues in conducting epidemiologic investigations of oral conditions, specifically caries, periodontal disease, and oral cancer (topics rotate semesters).

**Rules & Requirements**

**Requisites:** Prerequisite, EPID 710.

**Grading Status:** Letter grade.

**EPID 897. Advanced Seminar in Cardiovascular Research. 1-3 Credits.**

Permission of the instructor. Review of substantive and methodological research in cardiovascular and cerebrovascular diseases. May be repeated for credit. Two to six seminar hours a week.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit; may be repeated in the same term for different topics.

**Grading Status:** Letter grade.

**EPID 900. Epidemiology Practice. 4 Credits.**

Designed to give epidemiology majors a supervised field experience in population health research.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit.

**Grading Status:** Letter grade.

**EPID 905L. Epidemiology Laboratory Practice. 0.5-9 Credits.**

Permission of the instructor. Students work individually with a faculty member on supervised laboratory research and skills development. May be repeated for credit. Two to 18 laboratory hours a week.

**Rules & Requirements**

**Grading Status:** Letter grade.

**EPID 910. Research in Epidemiology. 1-9 Credits.**

Permission of the instructor. Independent investigation in consultation with an instructor who must assign or approve the subject of research. Credits vary according to the effort and rigor of the research.

**Rules & Requirements**

**Repeat Rules:** May be repeated for credit; may be repeated in the same term for different topics.

**Grading Status:** Letter grade.

**EPID 992. Master's (Non-Thesis). 3 Credits.****Rules & Requirements**

**Repeat Rules:** May be repeated for credit.

**EPID 994. Doctoral Research and Dissertation. 3 Credits.****Rules & Requirements**

**Repeat Rules:** May be repeated for credit.

*Following the faculty member's name is a section number that students should use when registering for independent studies, reading, research, and thesis and dissertation courses with that particular professor.*

## Distinguished Professors

**Ralph S. Baric (142)**, Public Health Virology, Molecular Virology

**Myron "Mike" Cohen**, Infectious Disease Epidemiology

**Michael Emch (234)**, Spatial Epidemiology, Medical Geography, Infectious Diseases, Neighborhoods and Health

**Bradley Gaynes**, Psychiatric Epidemiology

**David M. Margolis (220)**, Infectious Disease Epidemiology

**Andrew F. Olshan (147)**, Cancer Epidemiology, Reproductive/Perinatal Epidemiology

**Robert S. Sandler (73)**, Cancer Epidemiology, Gastrointestinal Epidemiology

**H. June Stevens (172)**, Nutritional Epidemiology, Obesity Epidemiology

**Til Stürmer (224)**, Pharmacoepidemiology, Methodology

**David J. Weber (96)**, Infectious Disease Epidemiology

## Professors

**Christy L. Avery (233)**, Cardiovascular Epidemiology, Genetic Epidemiology

**Stephen R. Cole (225)**, Methodology, Infectious Disease Epidemiology

**Julie Daniels (206)**, Environmental Epidemiology, Reproductive/Perinatal/Pediatric Epidemiology

**Lawrence Engel (232)**, Environmental Epidemiology, Cancer Epidemiology

**Stephanie Engel (231)**, Reproductive/Perinatal Epidemiology, Environmental Epidemiology

**Jonathan Juliano**, Molecular Epidemiology and Genetics of Malaria

**Justin Lessler (255)**, Infectious Disease Epidemiology, Methodology

**Stephen W. Marshall (199)**, Injury Epidemiology, Methodology

**Hazel B. Nichols (239)**, Cancer Epidemiology, Women's Health

**Kari North (205)**, Cardiovascular Epidemiology, Genetic Epidemiology

**Brian W. Pence (236)**, Infectious Disease Epidemiology, Mental Health Epidemiology, Implementation Science Research, Quantitative Epidemiologic Methods

**Audrey Pettifor (215)**, Infectious Disease Epidemiology

**Wayne D. Rosamond (162)**, Cardiovascular Epidemiology  
**Jennifer S. Smith (212)**, Infectious Disease Epidemiology, Cancer Epidemiology  
**Melissa A. Troester (226)**, Cancer Epidemiology  
**Daniel J. Westreich (235)**, Infectious Disease Epidemiology, Methodology, Reproductive and Perinatal Epidemiology, Pharmacoepidemiology

## Associate Professors

**Jessie Buckley**, Environmental Epidemiology

**Jessie Edwards (247)**, Infectious Disease Epidemiology, Methodology, Global Health

**Emily Gower (243)**, Ocular Epidemiology, Infectious Disease Epidemiology

**Michele Jönsson Funk (216)**, Pharmacoepidemiology, Women's Health

**Jennifer L. Lund (238)**, Cancer Survivorship and Outcomes, Pharmacoepidemiology, Healthcare Database Utilization

**Joanna "Asia" Maselko (242)**, Social Epidemiology, Mental Health Epidemiology

**Evan Mayo-Wilson**, Pharmacoepidemiology

**Charles L. Poole (193)**, Methodology

**Kimberly A. Powers (237)**, Infectious Disease Epidemiology, Global Health

**Jaime Slaughter-Acey**, Social Epidemiology, Maternal and Child Health Epidemiology

**Caroline Thompson (253)**, Cancer Epidemiology

## Assistant Professors

**Ganga Bey**, Social Epidemiology

**Eboneé Butler**, Cancer Epidemiology

**Marc Emerson (251)**, Cancer Epidemiology

**Lisa Gralinski**, Public Health Virology, Infectious Disease Epidemiology

**Shakia Hardy**, Cardiovascular Epidemiology, Social Epidemiology

**Juan Hincapie-Castillo (249)**, Pharmacoepidemiology, Legal Epidemiology, Health Services Research

**Chantel Martin (250)**, Social Epidemiology

**Elizabeth McClure**, Perinatal Epidemiology

**Shabbar Ranapurwala (254)**, Injury Epidemiology

**Timothy Sheahan**, Public Health Virology, Infectious Disease Epidemiology, Genetic Epidemiology

**Mollie Wood (248)**, Pharmacoepidemiology

## Research Professors

**Kelly R. Evenson (209)**, Cardiovascular Epidemiology, Physical Activity

**Nora Franceschini**, Cardiovascular Epidemiology

**William Miller**, Infectious Disease Epidemiology, Clinical Epidemiology

**Eric A. Whitsel (221)**, Cardiovascular Epidemiology

## Research Associate Professors

**Sylvia Becker- Dreps (246)**, Evaluation of Immunization Programs, Rotavirus Vaccines, Pneumococcal Vaccines

**Tania Desrosiers**, Reproductive/Perinatal Epidemiology; Birth Defects

**Kathleen C. Dorsey**, Cancer

**Mariaelisa Graff**, Genetic Epidemiology

**Anna Kucharska-Newton**, Cardiovascular Epidemiology

**Sonia Napravnik (223)**, Infectious Disease Epidemiology

**Anne Starling**, Environmental Epidemiology, Chronic Disease Epidemiology, Infectious Disease Epidemiology

**Weiming Tang**, Infectious Disease Epidemiology

## Research Assistant Professors

**Christopher Baggett**, Chronic Disease Epidemiology

**Ross Boyce**, Infectious Disease

**Thibaut Davy-Mendez**, Infectious Disease

**Stephanie DeLong**, Infectious Disease Epidemiology, Injury Epidemiology

**Bethany DiPrete**, Infectious Disease Epidemiology

**Rachel Graham**, Public Health Virology, Molecular Virology

**Heather Highland**, Genetic Epidemiology

**Sara Levintow**, Infectious Disease Epidemiology, Methodology

**Alexandra Schaefer**, Infectious Disease Epidemiology

**Kristin Young**, Genetic Epidemiology, Health Disparities, Obesity Epidemiology

**Paul Zivich**, Infectious Disease

## Clinical Professors

**Timothy S. Carey (138)**, Clinical Epidemiology

**David F. Ransohoff (160)**, Health Care Epidemiology

**Ross Simpson Jr.**, Cardiovascular Epidemiology, Clinical Epidemiology

**Ronald Strauss**, Dental Epidemiology, Social Impacts

## Clinical Associate Professors

**Lorraine Alexander**, Public Health Preparedness, Distance Education

**Anissa Vines (245)**, Social Epidemiology, Health Care Epidemiology

**Karin Yeatts**, Applied Epidemiology, Environmental Epidemiology

## Clinical Assistant Professors

**Patricia Basta**, Cancer Epidemiology

**Sara Berkeley**, Cardiovascular Epidemiology

## Adjunct Professors

**Allison Aiello**, Social Epidemiology, Infectious Disease Epidemiology

**Donna D. Baird**, Reproductive Epidemiology

**Douglas Bell**, Cancer Epidemiology

**Jane H. Brice**, Clinical Epidemiology, Cardiovascular Epidemiology

**Donald Budenz**, Ocular Epidemiology

**Leigh Callahan**, Chronic Disease Epidemiology, Health Care Epidemiology

**Patricia Chang**, Cardiovascular Epidemiology

**Benjamin H. Chi**, Clinical Epidemiology, Global Health, Reproductive Health

**Dennis A. Clements**, Infectious Disease Epidemiology

**Evan Dellon**, Health Care Epidemiology

**John Dement**, Environmental Epidemiology, Occupational Epidemiology

**Nancy Dreyer**, Pharmacoepidemiology

**Joseph Eron Jr.**, Infectious Disease Epidemiology

**Aaron Fleischauer**, Applied Epidemiology, Surveillance, Preparedness and Response

**Robert Fletcher**, Health Care Epidemiology

**Suzanne Fletcher**, Health Care Epidemiology

**Alicia Gilsean**, Pharmacoepidemiology

**Cynthia Girman**, Pharmacoepidemiology

**Laura Hanson**, Clinical Epidemiology, Geriatrics

**Louise Henderson**, Health Services Research, Cancer Epidemiology

**Jane Hoppin**, Environmental Epidemiology

**Cathrine Hoyo**, Cancer Epidemiology

**Michael Kappelman**, Clinical Epidemiology, Pharmacoepidemiology

**Jay Kaufman**, Methodology, Social Epidemiology

**Stephen Kritchevsky**, Aging Epidemiology

**Jay Levine**, Veterinary Epidemiology

**Stephanie London**, Cancer Epidemiology

**Matthew Longnecker**, Environmental and Occupational Epidemiology

**Dana P. Loomis**, Environmental and Occupational Epidemiology

**Timothy Mastro**, Infectious Disease Epidemiology

**Prema Menezes**, Infectious Disease Epidemiology

**David Peden**, Environmental and Occupational Epidemiology

**Miquel Porta**, Cancer Epidemiology, Clinical Epidemiology, Pharmacoepidemiology

**David Richardson**, Cancer Epidemiology, Environmental Epidemiology

**Dale Sandler**, Environmental Epidemiology

**Arlene Sena-Soberano**, Infectious Disease Epidemiology

**Nicholas Shaheen**, Health Care Epidemiology

**Mark Sherman**, Molecular Epidemiology, Cancer Epidemiology

**Ilene C. Siegler**, Aging

**Gary Slade**, Oral Epidemiology

**Betsy Sleath**, Pharmacoepidemiology, Outcomes Research

**Jeffrey S. A. Stringer**, Global Women's Health, HIV/AIDS in Women, Child Health

**Jack A. Taylor**, Environmental and Occupational Epidemiology

**John Thorp Jr.**, Reproductive Epidemiology

**Hugh H. Tilson**, Pharmacoepidemiology

**Anthony J. Viera**, Hypertension, Cardiovascular Disease Prevention

**Clarice Weinberg**, Environmental and Reproductive Epidemiology

**Allen J. Wilcox**, Reproductive Epidemiology

**David Wohl**, Infectious Disease Epidemiology

## **Adjunct Associate Professors**

**Deverick Anderson**, Health Care Epidemiology, Infection Prevention

**Elizabeth B. Andrews**, Pharmacoepidemiology

**Kimon Divaris**, Oral Epidemiology

**Alan Ellis**, Health Services Research, Mental Health Services Research

**Sara Ephross**, Chronic Disease Epidemiology

**Yvonne Golightly**, Injury Epidemiology

**Virginia Guidry**, Environmental and Occupational Epidemiology

**Debra E. Irwin**, Cancer Epidemiology, Reproductive Epidemiology

**James Bradley Layton**, Pharmacoepidemiology, Comparative Effectiveness Research

**Thomas Luben**, Environmental Epidemiology, Adverse Reproductive Outcomes

**Pia MacDonald**, Applied Epidemiology

**Christina Mack**, Pharmacoepidemiology, Comparative Effectiveness Research

**Ugwuji Maduekwe**, Cancer

**Anne-Marie Meyer**, Outcome Research, Comparative Effectiveness Research

**Michelle Meyer**, Cardiovascular, Epidemiology

**David Miller**, Pharmacoepidemiology, Molecular Epidemiology

**Lucas Neas**, Environmental Epidemiology

**Amanda Nelson**, Osteoarthritis

**Matthew E. Nielsen**, Clinical Epidemiology and Health Services, Cancer Outcomes

**Whitney Robinson**, Cancer

**David Rosen**, Social Epidemiology, Criminal Justice/Incarceration

**Paul E. Stang**, Chronic Disease Epidemiology

**Vani Vannappagari**, Infectious Disease Epidemiology

**Emily Vavalle**, Infectious Disease Epidemiology

**Timothy Wade**, Environmental Epidemiology

**Emmanuel Walter**, Infectious Disease Epidemiology

**Sharon S. Weir**, Infectious Disease Epidemiology

**Suzanne West**, Health Care Epidemiology, Pharmacoepidemiology

**Jose Zevallos**, Cancer Epidemiology

## Adjunct Assistant Professors

**Emily Bratton**, Infectious Disease Epidemiology, Pharmacoepidemiology, Cancer Epidemiology

**Alexander Breskin**, Epidemiologic Methods, Pharmacoepidemiology, HIV

**Remy Coeytaux**, Health Care Epidemiology

**Kourtney Davis**, Pharmacoepidemiology

**Jennifer Deese**, Infectious Disease, Epidemiology

**Mohamed El Hag Ahmed**, Environmental/Occupational Epidemiology, Injury Epidemiology

**Lydia Feinstein**, Psychosocial Determinants of Health, Health Disparities in Aging

**Kelly Ferguson**, Reproductive Epidemiology, Environmental Epidemiology

**Lindsay Fernandez-Rhodes**, Genetic Epidemiology, Social Epidemiology

**Mugdha Gokhale**, Pharmacoepidemiology, Comparative Effectiveness Research

**Christine Gray**, Social Epidemiology, Environmental Epidemiology

**Quaker Harmon**, Reproductive and Perinatal Epidemiology

**Jessica Islam**, Cancer

**Chandra Jackson**, Social and Environmental Determinants of Health Equity

**Candice Johnson**, Occupational Epidemiology

**Anne Jukic**, Reproductive Epidemiology

**James Lewis**, Infectious Disease Epidemiology

**Ann M. McNeill**, Cardiovascular Epidemiology

**Victoria Mobley**, Infectious Disease Epidemiology

**Keri Monda**, Genetics, Obesity Epidemiology

**Sarah Nyante**, Cancer Epidemiology, Molecular Epidemiology

**Priya Palta**, Cardiovascular Epidemiology, Aging

**Scott Proescholdbell**, Injury Epidemiology

**Erika Samoff**, Infectious Disease Epidemiology

**Markus Steiner**, Methodology

**Lee Stoner**, Cardiovascular Epidemiology

**Steve M. Taylor**, Malaria, Tropical Disease Epidemiology, Hemoglobin Disorders

**Michael Udedi**, Global Mental Health Research

**Nadja Vielot**, Infectious Disease, Global Health

**Andres Villaveces**, Injury Epidemiology

**Catherine Vladutiu**, Perinatal Epidemiology, Injury Epidemiology, Cardiovascular Epidemiology

**Alexandra White**, Cancer Epidemiology, Environmental Epidemiology

**Rachel E. Williams**, Health Care Epidemiology

## Adjunct Instructor

**Amy Ising**, Public Health Informatics, Public Health Surveillance, Syndromic Surveillance

## Professors Emeriti

**Wilfrida Behets**

**Barbara S. Hulka**

**Michel A. Ibrahim**

**Victor Schoenbach**

**J. Richard Seed**

**Carl M. Shy**

**James Thomas**

## Contact Information

**Department of Epidemiology**

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**Chair**

Til Stürmer