Agenda

• Welcome/Introductions
• Epidemiology & Biostatistics Program Option
• Curriculum Requirements
• Course Planning/Sample Schedules
• SHIP Deadline Reminder & Other Important Fall Info
• Q&A
About the OOMPH Epidemiology & Biostatistics Concentration

• Concentration officially added to OOMPH in Summer 2021
• 55 students currently in the Concentration
• Specialized advising and support
Epi/Biostat Division Faculty in OOMPH

Patrick Bradshaw PhD
John Colford Jr. MD, PhD
Arthur Reingold MD
Rohini Haar MD, PhD
Sandra McCoy PhD, MPH
Maya Petersen MD, PhD
Veronica Miller PhD
What is Epidemiology & Biostatistics?

Students in the Epidemiology & Biostatistics Concentration study the factors that underlie health and disease in human populations, including the analysis of data to develop and evaluate strategies for disease prevention and control.

• **Epidemiology:** The study of the distribution and determinants of disease frequency in human populations and the application of this study to control health problems. *(Aschengrau & Seage)*

• **Biostatistics:** The application of statistical principles to questions and problems in medicine, public health or biology.
Why Study Epidemiology & Biostatistics?

- The foundation of all public health activities
- Influences resource allocation and policy decisions
- Essential for identifying the etiology of disease
- They’re omnipresent in our daily lives, so we must know how to interpret and evaluate epidemiologic information

**Students who study Epidemiology & Biostatistics often enjoy:**

- Designing studies to test hypotheses about drivers of population health
- Analyzing data using statistical software
- Applying statistical concepts to health problems
- Quantifying patterns of health and disease in communities
(Some) Skills Acquired in Epi/Biostat

- Quantifying patterns of disease in populations (PHW250, PHW250B)
- Frameworks for thinking about causation (PHW250, PHW250B)
- Designing epidemiologic studies to test hypotheses (PHW250, PHW250B)
- Statistical analysis of categorical data (PHW241, PHW250B)
- Statistical analysis of longitudinal data (PHW241, PH252, PHW250B)
- Analyzing health data using statistical software (PH251, PH290)
- Geospatial analysis (PHW272C)
- Designing surveys (PHW219)
- Hands-on epidemiological analysis (PH252)
- Critical analysis of the scientific literature (all courses)
- Understanding how social, environmental, and biological factors can increase the risk of disease (PHW250, PHW250B)
Epidemiology & Biostatistics Curriculum

**Goal:** Train future epidemiologists in **data-driven, evidence-based approaches** to study the factors that underlie health and disease in human populations in order to **develop and evaluate** strategies for disease prevention and control.

**Curriculum:** Students will complete MPH Core and Breadth requirements (6 courses), Epidemiology/Biostatistics requirements (5 courses), and electives (2-3 courses).

**Required Courses for the Epidemiology & Biostatistics Concentration:**

- PHW241R: Categorical Analysis
- PHW250B: Epidemiologic Methods II
- Data Management Competency: PH251: R or PH290: SAS for Public Health
- At least 2 epi/biostat “additional courses” (6-7 units)
- At least 2-3 additional general elective courses to complete 42 units

*Given our growing program, course offerings are subject to change; the course catalog has the most up to date offerings.*
Coming Attractions

Fall 2021
- PH252: Epidemiological Analysis
  - Residential Epi course now open to OOMPH students
  - One of the options to complete the “Additional Courses” requirement

Spring 2022
- PH252C: Intervention Trial Design (will move to Fall in 2022)
  - Residential Epi course now open to OOMPH students
  - One of the options to complete the “Additional Courses” requirement
- PH290: Implementation Science
  - New Course
  - One of the options to complete the “Additional Courses” requirement

Summer & Fall 2022
- Developing new Epi/Biostats Elective course in Summer 2
- Developing 2-unit companion course for PH252
Program Resources & Course Planning

1) Student Gateway site, Student Hub, Student Newsletter
2) Explore Sample Schedules on the Student Gateway site
3) Create and customize a copy of the OOMPH Epi/Biostat Course Planning Google Sheet
4) Book 1:1 course planning meetings with Lucas or Sandi
Important Fall Dates and Info

- **SHIP Waiver** Deadline
  - **August 15** - final deadline
- Fall Enrollment
  - Phase I for Fall admits - July 16
- **Program Calendar**
Thank you for joining us!