



Ulm University, Germany

*28th International Summer
School of Epidemiology
6th German Collaborative Summer
School in Epidemiology
at Ulm University*



Institute of Epidemiology
& Medical Biometry
July 24 – 28, 2017

The program is geared to persons with interest in the fields of epidemiology and public health. Professionals, scientists and students working in clinical medicine, epidemiology, public health, social insurance, health policy or health administration are welcome. All courses will be held in English.

Course Outline

Morning sessions (parallel):

1. Principles of Epidemiology

Wayne Rosamond

UNC Gillings School of Global Public Health at Chapel Hill, NC, USA

2. Advanced Epidemiologic Methods: Time-Dependent and Clustered Designs

Steve Marshall

UNC Gillings School of Global Public Health at Chapel Hill, NC, USA

Afternoon sessions (parallel):

3. New and Emerging Infectious Diseases: Focus on Public Health Preparedness and Response

David Weber

UNC Gillings School of Global Public Health at Chapel Hill, NC, USA

4. Pharmacoepidemiology

Til Stürmer

UNC Gillings School of Global Public Health at Chapel Hill, NC, USA

Participants may choose one course from the morning sessions and one course from the afternoon sessions. Participants will receive a certificate after successful completion of a course (compulsory attendance every course day).

Course Descriptions

1. Principles of Epidemiology

Instructor:

Wayne Rosamond

This course will provide students the opportunity to gain experience learning and applying fundamental epidemiologic principles to public health research questions. It is targeted to students seeking to engage in and interpret findings from a variety of epidemiologic studies. It will cover topics of study design, measurement of exposure and outcomes, evaluating and controlling for bias, measuring and interpreting biologic interaction and a framework for critically evaluating causal inference. Analytic approaches to observational cohort studies, clinical trials and cross-sectional surveys will be explored. There will be active learning activities to help students refine their skills in critical evaluation of epidemiologic literature and synthesis of study results. Examples will draw from a variety of topical areas including cardiovascular disease, cancer, infectious disease, injury prevention and others.

Textbook recommendation:

K. J. Rothman

Epidemiology: An Introduction, 2nd Edition

Oxford University Press, 2012 / ISBN: 978-0-19-975455-7

2. Advanced Epidemiologic Methods: Time-Dependent and Clustered Designs

Instructor:

Steve Marshall

This course is open to all, but is primarily intended for those who are already proficient with traditional epidemiologic methods and / or are interested in research that has strong public health relevance and impact. It will provide training on two advanced epidemiologic topics: designs that utilize time as a design element (longitudinal cohorts and case-crossover studies) and designs that evaluate collective exposures (cluster-randomized trials, cluster-crossover trials and quasi-experimental studies). Under certain conditions, study designs that follow people and / or communities as they transition into (and out of) exposed and unexposed conditions can provide a better approximation to a true (unobservable) causal effect than comparing exposed and unexposed subgroups within a population. Additionally, evaluations of collective exposures (such as a city law requiring helmets while riding a motorcycle or a company policy mandating safety equipment for workers) have greater public health significance than studies of individual-level risk factors. We will explore these methods in detail using worked examples.

3. New and Emerging Infectious Diseases: Focus on Public Health Preparedness and Response

Instructor:
David Weber

New (e. g. HIV, SARS) and emerging infectious diseases (e. g. avian influenza, Zika) represent an ongoing public health challenge. This course will provide a comprehensive review of public health preparedness and response to such infectious disease. The course will be subdivided into 5 modules: Module 1: Key Methods in Infectious Disease Response (basics of infectious disease epidemiology, surveillance methods, outbreak evaluation). Module 2: New and Emerging Infectious Diseases (reasons for infectious disease emergence, preparedness and response for highly communicable contact transmitted diseases (e. g. Ebola, Lassa), preparedness and response for highly communicable droplet / airborne transmitted diseases (e. g. MERS, SARS) and protecting healthcare personnel from infection. Module 3: Biothreats (overview and reasons for concern, anthrax, smallpox, other agents). Module 4: Multidrug-Resistant Microbial Pathogens such as MRSA, VRE and CRE (defining the problem, antibiotic stewardship, infection control). Module 5: Preventive Methods for Containing / Preventing Emerging Infectious Diseases (vaccine development, drug development, assessing efficacy and safety).

4. Pharmacoepidemiology

Instructor:
Til Stürmer

Pharmacoepidemiology is a public health discipline with a focus on non-experimental (epidemiologic) methods to assess intended and unintended drug effects to support decision-makers (health care providers, patients, payers) in the absence of specific evidence from experimental studies (randomized controlled trials). This course is for clinicians, pharmacists, epidemiologists and scientists from related fields in academia, industry and regulatory agencies. It will provide an introduction and overview of pharmacoepidemiologic methods, databases and review examples of current research. The course will look at specific aspects and potential pitfalls of epidemiologic study designs when applied to the study of drug effects, including the use of administrative databases and novel methods to increase validity such as the active comparator, new user study design, propensity scores, disease risk scores and instrumental variables.

Although the course will not adhere to a textbook, the following is recommended:

Brian L Strom, Stephen E Kimmel, Sean Hennessy
Textbook of Pharmacoepidemiology, 2nd Edition
Wiley-Blackwell, 2013 / ISBN: 978-1-118-34486-6

Dates: July 24 – 28, 2017
Monday – Thursday: 09.00 am – 12.15 pm
01.15 pm – 04.30 pm
Friday: 09.00 am – 11.00 am
11.15 am – 01.15 pm
Every day there are two coffee breaks, one in the morning and one in the afternoon (Friday: one break).

Location: Ulm University / Helmholtzstraße 22 / 89081 Ulm

Fees: €575.00 per course (€1,150.00 for two courses)

€ 400.00 per course for members of the German Epidemiological Association (DGepi) (€ 800.00 for two courses)

€275.00 per course for employees of Ulm University and students (€550.00 for two courses)

€ 10.00 per course material as hardcopy (course materials in electronic form included in course fees)

Fellowships: A limited number of fellowships is available for participants from low income countries.
Deadline for fellowship applications: April 10, 2017

Number of Participants: Limited to a maximum of 25 participants per course

Application: Please use the enclosed application form

Deadline: June 30, 2017

Program Director: Prof. Dr. med. Dietrich Rothenbacher, MPH

Coordinator at the School of Public Health,
University of North Carolina at Chapel Hill: Prof. Gerardo Heiss, PhD
Prof. Wayne Rosamond, PhD

For further information please contact: Nicole Kroll / Ulm University
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www.uni-ulm.de/med/epidemiologie-biometrie.html

In cooperation with
the UNC Gillings School of Global Public Health
at Chapel Hill, North Carolina, USA
and
the International Graduate School in Molecular Medicine
at Ulm University, Germany
and
the German Society for Epidemiology, Germany.

Application form

International Summer School of Epidemiology at Ulm University July 24 – 28, 2017

Male: ___ Female: ___ Nationality: _____

Family name, degree: _____

First name: _____

Present occupation: _____

Address: _____

Phone: _____

Fax: _____

Email: _____

How did you learn about our courses? _____

Your course material: Electronically: _____ Hard copy (€10,00): _____

Status:

Regular application

Employee of Ulm University

Member of the German

Student

Epidemiological Association (DGepi)

Fellowship Applicant

I would like to register for the following course(s):

Morning, 9:00 am – 12:15 pm
(select one course)

Course 1: Principles of Epidemiology

Course 2: Advanced Epidemiologic Methods:
Time-Dependent and Clustered Designs

Afternoon, 1:15 pm – 4:30 pm
(select one course)

Course 3: New and Emerging Infectious Diseases:
Focus on Public Health Preparedness and
Response

Course 4: Pharmacoepidemiology

Place and Date

Signature

Deadline for application:

June 30, 2017

Please return to:

Nicole Kroll, nicole.kroll@uni-ulm.de
Institute of Epidemiology & Medical Biometry
Ulm University, Helmholtzstraße 22, D – 89081 Ulm