



Ulm University, Germany

*30th International Summer
School of Epidemiology
8th German Collaborative Summer
School in Epidemiology
at Ulm University*



Institute of Epidemiology
& Medical Biometry
July 29 – August 02, 2019

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. Modelling Variation of Effect in Epidemiology: Beyond the “PA Assumption”

Steve Marshall

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

Afternoon sessions (parallel):

3. Clinical Epidemiology

Sonia Napravnik

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

4. Reproductive Epidemiology

Julie Daniels

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).

Application form

International Summer School of Epidemiology at Ulm University July 29 – August 02, 2019

Male: ___ Female: ___ Nationality: _____

Family name, degree: _____

First name: _____

Present occupation: _____

Address: _____

Phone: _____

E-Mail: _____

How did you learn about our courses? _____

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

Status:

- | | |
|--|---|
| <input type="checkbox"/> Regular application | <input type="checkbox"/> Employee of Ulm University |
| <input type="checkbox"/> Member of the German
Epidemiological Association (DGEpi) | <input type="checkbox"/> Student |
| | <input type="checkbox"/> 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: Modelling Variation of Effect in
in Epidemiology: Beyond the
“PA Assumption”

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

Course 3: Clinical Epidemiology
 Course 4: Reproductive Epidemiology

Place and Date

Signature

Deadline for application:

June 30, 2019

Please return to:

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

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 observation 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. Modelling Variation of Effect in Epidemiology: Beyond the “PA Assumption”

Instructor:
Steve Marshall

Standard approaches to the analysis of epidemiologic data often implicitly assume a consistent exposure effect for all members of a population. I refer to this concept of a consistent (uniform) effect as the “population average (PA) assumption”. However, this “PA assumption” runs counter-intuitive to the pragmatic experience of many clinicians and public health program professionals, namely that there are frequently substantial variations in treatment, intervention or exposure effects between individuals. Analogously, treatment or intervention effects may also vary over time, within an individual. This course focusses on statistical methods that allow epidemiologists to model effects without requiring the “PA assumption”. We will examine time-dependent survival analysis, models for longitudinal analysis of time-dependent effect, and mixed models that allow epidemiologists to quantify heterogeneity in exposure or intervention effects between subjects. Material will be taught using a mix of lecture and worked examples in the classroom. Optionally, students may find it helpful to bring their laptop computer to class for the worked examples. However, much of the course material does not involve a computer and a personal laptop is not required for participation in this class.

3. Clinical Epidemiology

Instructor:
Sonia Napravnik

This course will provide an overview of principles and methods in clinical epidemiology. Topics to be covered include study design, diagnostic testing, bias, clinical trials, introduction to survival analysis, and communication of clinical epidemiologic findings. The course will be offered in a modular format and sessions will include didactic interactive lectures and problem-based discussions.

4. Reproductive Epidemiology

Instructor:
Julie Daniels

This course will provide a broad introduction to reproductive and pediatric epidemiology through didactic lectures, discussions of course readings, and in-class exercises. We will cover the basic epidemiology of women's reproductive health, preterm birth, birth weight, birth defects, fetal programming, infant growth, and neurodevelopment. As we cover these topics, we will address the methodological aspects of conducting research in this area, including (1) terminology, (2) measurement and classification of common reproductive and pediatric outcomes, (3) strengths and challenges of epidemiologic designs used to study reproductive and pediatric health, and (4) biases and their potential impact on the interpretation of study results.

Anniversary Symposium 30 Years of Summer School

This year we are also organizing a 30th Anniversary Symposium entitled „Value of observational research for clinical practice and Public Health“, celebrating the 30th appearance of our International Summer School of Epidemiology at Ulm University in cooperation with the UNC Gillings School of Global Public Health at Chapel Hill, North Carolina, USA. The symposium will take place on **31 July 2019 (Wednesday)** here at Ulm University and starts at **5:00 pm**. Participation in this symposium is free (program see next page).

Invitation to the 30th Anniversary Symposium
„Value of observational research for clinical practice and Public Health“
 30 years of International Summer School of Epidemiology at Ulm University in
 cooperation with UNC Gillings School of Global Public Health at Chapel Hill, North
 Carolina, USA

DATE: Wednesday, 31 July 2019, 5:00 pm

LOCATION: Ulm University, Senatssaal, Helmholtzstraße 16

5:00 pm	Welcome	NN
	Introduction	Prof. Dietrich Rothenbacher , Institute of Epidemiology and Medical Biometry, Ulm University
5:15 pm	Halving the toll of colorectal cancer: contributions from clinical epidemiology	Prof. Hermann Brenner , Division of Clinical Epidemiology and Aging Research, German Cancer Research Center, Heidelberg
5:45 pm	Preventing cognitive impairment and dementia: contributions from observational research	Prof. Gerardo Heiss , Department of Epidemiology, Gillings School of Global Public Health at Chapel Hill, NC, USA
6:15 pm	Inflammation and atherosclerosis: from hypothesis to clinical proof of concept	Prof. Wolfgang Koenig , Deutsches Herz-Zentrum München & German Centre for Cardiovascular Research, Partner Site Munich Heart Alliance, Technische Universität München, Munich
6:45 pm	Get together Buffet and Music	Public domain

Looking forward to seeing you!

Prof. Dr. med. Dietrich Rothenbacher, MPH
 Institute of Epidemiology and Medical Biometry
 Ulm University
 Helmholtzstraße 22
 D-89081 Ulm

No fee, but please register: nicole.kroll@uni-ulm.de

Dates:	July 29 – August 02, 2019 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 / D – 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 26, 2019
Number of Participants:	Limited to a maximum of 25 participants per course
Application:	Please use the enclosed application form
Deadline:	June 30, 2019
Program Director:	Prof. Dr. med. Dietrich Rothenbacher, MPH
Coordinators at the School of Public Health, University of North Carolina at Chapel Hill:	Prof. Gerardo Heiss, MD, PhD Prof. Wayne Rosamond, PhD
For further information please contact:	Nicole Kroll / Ulm University Institute of Epidemiology & Medical Biometry Helmholtzstraße 22 / D – 89081 Ulm Phone: +49 731 50 31076 / Fax: +49 731 50 31069 Email: nicole.kroll@uni-ulm.de 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.