I wish to participate in the 4-day course (please fill in legibly or send an e-mail with the required information)

Registration Form 5<sup>th</sup> RUHR- School of Modern Epidemiology

First name

Last name

Title

Institution

Address

Invoice address

E-mail

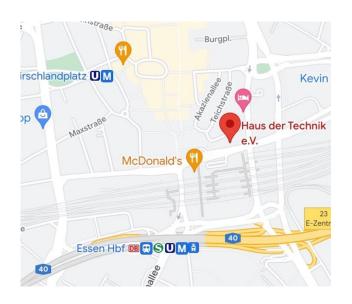
Phone

If applicable, please enclose proof of your student status.

## Cancellation of registration:

In the event of a cancellation of the registration, we charge a cancellation fee of 100€. In case of cancellation from 10 days before the event, we charge the full amount.

Please fax to: +49-201-723-77333 or send to E-mail: IMIBE-summerschool@uk-essen.de



Venue Haus der Technik e.V. Hollestraße 1 45127 Essen

By public transport

Arriving at Essen central station, leave the building towards Innenstadt/

Kettwiger Straße (through the main entrance). The venue is located opposite the central station on the right hand side.

# **Invitation**

5<sup>th</sup> RUHR-School of Modern Epidemiology 01.08.2023-04.08.2023









# **Quantitative Bias Analysis**

# **August 1 - August 4, 2023**

## Introduction



Matthew Fox, DSc, MPH, is a Professor in the Departments of Epidemiology and Global Health at Boston University. Dr. Fox joined Boston University in 2001. His research interests include treatment outcomes in HIV-

treatment programs, infectious disease epidemiology (with specific interests in HIV and pneumonia), and epidemiologic methods. Dr. Fox works on ways to improve retention in HIV-care programs in South Africa from the time of testing HIV-positive through long-term treatment. As part of this work, he is involved in analyses to assess the impact of changes in South Africa's National Treatment Guidelines for HIV. Dr. Fox also does research on quantitative bias analysis and coauthored a book on these methods, Applying Quantitative Bias Analysis to Epidemiologic Data (http://www.springer.com/public+health/book/978-0-387-87960-4). He is also the host of a public health journal club podcast called Free Associations designed to help people stay current in the public health literature and think critically about the quality of research studies (https://bit.ly/30fPApj) and a podcast on Epidemiologic Methods called SERious Epi (https://seriousepi.blubrry.net/). He currently teaches a third-level epidemiologic methods class, Advanced Epidemiology as well as two other doctoral level epidemiologic methods courses. Dr. Fox is a graduate of the Boston University School of Public Health with a master's degree in epidemiology and biostatistics and a doctorate in epidemiology.

### **Course Outline**

# **Learning Objectives**

- Recognize the types of bias in epidemiologic studies that are amenable to quantitative bias analysis.
- Conduct simple, multidimensional and probabilistic bias analyses using summary data in Microsoft Excel™ and interpret the output.
- Conduct basic probabilistic bias analysis in Microsoft Excel™ using a record level dataset and interpret the results.
- Demonstrate a critical understanding of the assumptions underlying each approach to quantitative bias analysis.
- Distinguish between probability distributions for use in quantitative bias analysis and implement each.
- Discuss the strengths and limitations of each approach as applied to real datasets.

#### Course fees:

Applicants not from Universities: 750 €
Applicants from Universities: 500 €
Students\*: 300 €

\* first-degree students in bachelor's and master's degree programmes or in state examination programme

#### **Application deadline:**

Sunday July 9, 2023, 12:00 pm

#### Time Course:

Tuesday	Aug 1, 2023	09:00 am - 05:30 pm
Wednesday	Aug 2, 2023	09:00 am - 05:30 pm
Thursday	Aug 3, 2023	09:00 am - 05:30 pm
Friday	Aug 4, 2023	09:00 am - 05:30 pm

#### **Program Director:**

Prof. Dr. med. Andreas Stang, MPH, Director Institute for Medical Informatics, Biometry and Epidemiology (IMIBE) - University Hospital Essen

#### Administrative staff & contact address:

Mr. Fabian Standl, MPH, BA
Tel: +49-201-723-77201
Fax: +49-201-723-77333

E-Mail: <a href="mailto:IMIBE-summerschool@uk-essen.de">IMIBE-summerschool@uk-essen.de</a>

Online: <a href="https://imibe.uk-essen.de/lehre/ruhr-school/">https://imibe.uk-essen.de/lehre/ruhr-school/</a>

Course language: English

#### Venue:

Haus der Technik e.V. Hollestraße 1 45127 Essen

Tel.: + 49 (0)201/18031

The possibility to participate online is limited. For detailed information, please contact us by e-mail.