Event Time Analysis in Epidemiology

How do specific risk factors affect survival of patients? How can we identify and characterize relevant risk factors using event time analysis? The seminar will provide an introduction to event time analysis with focus on illustrative applications.

In many sub-disciplines of medicine and epidemiology, event times are observed over time. For example, risk factors can be analyzed in large cohort studies. The seminar will go beyond standard methods such as Kaplan-Meier-plots and Cox regression and cover for example parametric and semiparametric models, AFT models, stratified Cox models, methods for interval-censored data and recurrent events, time-dependent covariates, frailty models etc.

The seminar with five lectures and three embedded practical tutorials (using R) will enable epidemiologists and other interested researchers to perform event time analysis. Epidemiological interpretations of the results in highly relevant current research foci will also be addressed.

Program

Thursday, June 4, 2020

10:00 Welcome and coffee
10:30 Andreas Wienke (Halle): Introduction to event time analysis
11:00 Oliver Kuß (Düsseldorf): Parametric models as an alternative to the Cox model
11:45 Lunch break
13:00 Steffen Unkel (Göttingen): Refinements of the Cox model
14:00 Andreas Wienke (Halle): Frailty models
14:30 Coffee break
14:45 Tutorial 1 (Steffen Unkel): Introduction to the analysis of time-to-event data with R
16:15 Coffee break
16:30 Tutorial 2 (Steffen Unkel): Advanced methods for the analysis of time-to-event data with R
18:00 Break
19:00 Dinner (self-payer)
Friday, June 5, 2020
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9:00 Gerrit Toenges (Mainz): Analysis of recurrent event data
10:30 Coffee break
10:45 Tutorial 3 (Gerrit Toenges): Analysis of recurrent event data in R
12:15 Closing

Händel Seminars in Epidemiology

The seminar series continue the tradition of the Händel School of Modern Epidemiology initiated by Prof. Stang in Halle (Saale). We address research questions of modern epidemiology from a methodological perspective.

Our target audiences are doctoral students and junior postdocs, but also experienced researchers will find specific topics of interest. We embrace interdisciplinary cooperation and hope to provide input for a broad spectrum of research areas. Attendees can vote on the topics to be covered in future Händel Seminars.

Costs: Seminar fee is 150€ (reduced fee of 75€ is applicable to PhD students and members of the MLU), fee includes coffee breaks, lunch on Thursday and snack on Friday.

apl. Prof. Dr. Andreas Wienke
Prof. Dr. Rafael Mikolajczyk

Venue:
Institute of Medical Epidemiology, Biometry and Informatics
Martin-Luther-University Halle-Wittenberg
Magdeburger Str. 8, 06112 Halle (Saale)

Website: www.medizin.uni-halle.de/imebi

Registration (the number of places is limited, so please register early):
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