Workshop: Epidemiological Designs in a Statistical Framework: Optimal Use of Registry Data

Dates: 12-16 Sep 2022

Place: Karolinska Institutet, Dept Medical Epidemiology and Biostatistics (MEB), Stockholm, Sweden

Main teacher: Prof Esa Läärä, Research Unit of Mathematical Sciences, University of Oulu, Finland (<u>https://www.oulu.fi/university/researcher/esa-laara</u>)

Co-teachers/organisers: Assistant Prof Anna Johansson, Prof Keith Humphreys, Senior Lecturer Mark Clements

Contents: This workshop will introduce a methodological framework for a wide range of epidemiological study designs and their sampling strategies from a statistical perspective. Topics include study base, study design, which measures of associations can be estimated from each study design, concepts of bias and precision, cohort studies, case-control studies, case-cohort studies and matched cohort studies. A causal inference perspective on epidemiological study design will be discussed. Focus will be on conceptual understanding and implications for study design in a setting with a fully enumerated population, such as register-based epidemiology.

Target audience: Aimed at biostatisticians and epidemiologists with a methodological interest; for PhD students a minimum requirement is Biostatistics 3 (Survival analysis for epidemiologists) or equivalent. The workshop assumes participants have training in epidemiological study designs and survival analysis prior to the workshop. Pre-knowledge on basic concepts of causal diagrams is also recommended. Undergraduate training in statistics or similar is helpful, but not a formal requirement.

Format: The workshop includes face-to-face lectures, practicals, group work, article reading and discussions in groups.

Times: Scheduled time 09:00-15:00 with time for self-study 15:00-17:00.

Credit: As this is a workshop, credits will need to be claimed from the Study Director at the participant's department, after passing the exam (note: We cannot guarantee credits, this is up to your department to decide.)

Applications: Applications now open. Priority will be given to applicants with methodological background and training, as well as to PhD students and postdocs.

https://forms.gle/KUhnWAqbC55tkXHW8

Deadline for application: 15 June.

More information: Please contact Anna Johansson (<u>anna.johansson@ki.se</u>), Keith Humphreys (<u>keith.humphreys@ki.se</u>) or Mark Clements (<u>mark.clements@ki.se</u>), Department of Medical Epidemiology and Biostatistics (MEB), Karolinska Institutet, Sweden.

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