An introduction to modern methods for causal inference

The Stockholm Stress Center (SSC) Graduate School will be organizing a 5-day course (3 days lectures and 2 days take-home assignment) on modern methods for causal inferences in November 2017. This course gives an applied introduction and the overall aim of the course is for students at the doctoral level to develop their theoretical knowledge and practical skills on how to phrase causal questions, critically evaluate the underlying assumptions, and use different tools to address causality.

The first part of the course will introduce counterfactual thinking, which is central to modern methods for causal inference, and how the method of directed acyclic graphs [DAGs], which is a rigorous and accessible tool for understanding and solving complicated causal problems, and can help in assessing problems with confounding, selection bias and information bias in empirical work. This part will partly be centered on the students' own research. The second part of the course will focus on analytical methods such as gformula and Inverse Probability of Treatments Weighting. The analytical methods will be illustrated using the R software.

PLEASE NOTE: For the second part of the course, students bring their own computers with R installed.

Course days: November 6-8, 2017 (0900-1630 all three days), November 9-10

(take home assignment) **Course language**: English

Where? The Stress Research Institute

Instructors: Naja Hulvej Rod and Per Kragh Andersen

Course credits: 1.5hp

Examination: Individual take-home assignments that will be conducted

November 9-10 and handed in on November 10 at 5:00 pm.

Questions about the course content? Please email the course leader Linda Magnusson Hanson, e-mail: linda.hanson@su.se

Sign up: by emailing the SSC graduate school coordinator Claudia Bernhard-Oettel (cbl@psychology.su.se). Note that the number of participants will be limited and registration is on a first-come, first-served basis. Subject to

availability, senior researchers within the Stockholm Stress Center are also welcome to participate.