Study design and comparative measures: causes and predictors

If you do a research study, what design should you use? Are you looking for causes or predictors, and what is exactly the difference? How should I compare groups, and how do I express and quantify the difference? What if one group is older, or the other has more men? How do I know if there is bias?

These are all pertinent questions that you must ask before you design a study. In this week we will teach you asking the correct questions, and answering them. In the morning we will present the topics and give you the tools for the afternoon program, where we will discuss articles, and do our own calculations. Ever drawn your own Kaplan-Meier survival curve, without a computer program? Here you will learn how it works.

In the evening eminent epidemiologists will give insights in how they addressed important research questions.

Faculty

Prof. dr Frits R. Rosendaal	Department of Clinical Epidemiology
Dr Astrid van Hylckama Vlieg	Department of Clinical Epidemiology
Dr Dennis O. Mook-Kanamori	Department of Clinical Epidemiology, Department of Endocrinology
Prof. dr E.W. Steyerberg	Department of Biomedical Data Sciences

Provisionally PROGRAMM Population Health Management Epidemiology and Methods

Monday 15 October 2018
Study design

08.30 – 10.30 Study design
F.R. Rosendaal
10.30 – 11.00 Coffee break
11.00 – 13.00 Frequency measures
D.O. Mook-Kanamori
13.00 – 14.00 Lunch
14.00 – 15.30 practicum Study design
F.R. Rosendaal
15.30 – 16.00 Tea
16.00 – 17.30 practicum Effect measures
A. van Hylckama Vlieg
17.30 – 18.30 Dinner
18.30 – 19.30 keynote lecture:
Solving a question with several designs
S.C. Cannegieter

Tuesday 16 October 2018
Analysis

08.30 – 10.30 Effect measures
A. van Hylckama Vlieg
11.00 – 12.00 Standardisation
F.R. Rosendaal
12.00 – 13.00 Survival analysis: Kaplan Meier method
F.R. Rosendaal
13.00 – 14.00 Lunch
14.00 – 15.30 Practicum standardization
D.O. Mook-Kanamori
15.30 – 16.00 Tea
16.00 – 17.30 Practicum survival analysis
D.O. Mook-Kanamori
17.30 – 18.30 Dinner
18.30 – 19.30 keynote lecture:
Epicinema: ‘Waarom ik?’

Wednesday 17 October 2018
Bias and confounding

08.30 – 09.30 Confounding: what is it
F.R. Rosendaal
09.30 – 10.30 Confounding: what to do
F.R. Rosendaal
10.30 – 11.00 Coffee break
11.00 – 12.00 Regression
A. van Hylckama Vlieg
12.00 – 13.00 Bias
A. van Hylckama Vlieg
13.00 – 14.00 Lunch
14.00 – 15.30 Practicum: bias
D.O. Mook-Kanamori
15.30 – 16.00 Tea break
16.00 – 17.30 working on group assignment
17.30 – 18.30 Dinner
18.30 – 19.30 keynote lecture:
'Trump: het problem van een scheve verdeling'
Dr W.M. Lijfering

Thursday 18 October 2018
Prediction

08.30 – 09.30 Diagnosis and prognosis
E.W. Steyerberg
09.30 – 10.30 Predictors and predictions
E.W. Steyerberg
10.30 – 11.00 Coffee break
11.00 – 12.00 Predictor analysis
E.W. Steyerberg
12.00-13.00 Prediction modeling
E.W. Steyerberg
13.00 – 14.00 Lunch
14.00 – 15.30 Practical predictor modeling
E.W. Steyerberg
15.30 – 16.00 Tea break
16.00 – 17.30 Practical risk modeling
E.W. Steyerberg
17.30 – 18.30 Dinner
18.30 – 19.30 keynote lecture:
Personalized Medicine: Still wishful thinking?
D.O. Mook-Kanamori

Friday 19 October 2018
Advanced methods

08.30 – 09.30	DAGs A. van Hylckama Vlieg
09.30 – 10.30	Multivariable models F.R. Rosendaal
10.30 – 11.00	Coffee break
11.00 – 13.00	Statistics F.R. Rosendaal
13.00 – 14.00	Lunch
14.00 – 15.30	Presentation groups
15.30 – 16.00	Closing