# Systematic Review and Meta-Analysis

July 11 - July 13, 2018

## Introduction

Charles Poole, MPH, ScD, has been with the Department of Epidemiology at the University of North Carolina (UNC) for the past 20 years.

Immediately before that, he was with the Department of Epidemiology and Biostatistics at Boston University. With roots in environmental and occupational epidemiology, he now



focuses on the application and dissemination of epidemiologic concepts and methods in a wide variety of subject matter areas. The systematic reviewing of epidemiologic literatures is a special interest for him. He has taught a popular course on it for many years at UNC and given many workshops and lectures elsewhere.

As a member of the Cochrane Collaboration
Statistical Methods Group, he has published
several methodologic papers on the topic and coauthored several dozen published substantive
reviews. For his work he received numerous
awards and honors. Furthermore, his teaching
activities were honored several times for instance
1992 and 1995: Excellence in Teaching Award,
Boston University School of Public Health.

#### Course Outline

# Course Objectives

- Systematic review of epidemiologic literatures (observational studies, trials or both)
- Major meta-analytic methods
- Determining the extent, if any, to which each of these methods is indicated in the literature at hand

# Main Topics and Methods

- Defining the problem
- Defining and searching the literature
- Extracting results and study characteristics
- Preparing meta-analytic data sets
- Forest and funnel plots
- Conducting analyses of funnel plot asymmetry, overall heterogeneity and characteristics of studies
- Study populations by stratified and metaregression analysis
- Vote counting

## Statistical experience and Software

 Stata statistical package will be used to illustrate the data set preparation and computations

Each student is encouraged to forward a published review for discussion purposes.

#### Course fees:

Applicants not from Universities: 600 €
Applicants from Universities: 400 €
Students: 250 €

Application deadline:

Wednesday May 31, 2018, 12:00 am

Registration: Wednesday July 11, 2018 9:00 am

Time Course:

Wednesday July 11, 2018 10:00 am - 05:15 pm Thursday July 12, 2018 10:00 am - 05:15 pm Friday July 13 2018 10:00 am - 03:15 pm

## Program Director:

Prof. Dr. med. Andreas Stang, MPH, Head of the Center of Clinical Epidemiology c/o IMIBE, University Hospital Essen

### Administrative staff & contact address:

Mrs Eva Bock

Tel: +49-201-92239-253 Fax: +49-201-92239-333

E-Mail: zke-summerschool@uk-essen.de

Information online: https://www.uk-essen.de/zke/

Course language: English

Hotel:

Novum Select Hotel Handelshof Am Hauptbahnhof 2 45127 Essen

Tel.: +49-201-24685-300

Special condition:

(89,- € perroom and night, including breakfast, keyword "UKE")