

Epidemiology Methods Series, IMM

## Randomized trials and their observational emulations: benchmarking and joint analysis

Issa Dahabreh

Harvard T.H. Chan School of Public Health

Welcome to the **Epidemiology Methods Series** at the Institute of Environmental Medicine, Karolinska Institutet. We're pleased to be joined by **Issa Dahabreh** from Harvard T.H. Chan School of Public Health to give a talk titled: "**Randomized trials and their observational emulations: benchmarking and joint analysis**".

We consider a randomized trial and an observational analysis designed to emulate the trial as closely as possible, to benchmark the observational analysis estimates against those from the trial. We show that benchmarking relies on an exchangeability condition between the populations underlying the trial and its emulation. When this exchangeability condition holds, and the usual conditions needed for estimates from the trial and the emulation to have a causal interpretation also hold, we show that joint analysis of the trial and the emulation is possible.



**Register:** [https://survey.ki.se/epimethodsseries\\_nov21](https://survey.ki.se/epimethodsseries_nov21)

**Date:** Thursday 25<sup>th</sup> November

**Time:** 15.00–16.00 (Stockholm)

**Place:** Online via Zoom

### Contact

Anthony Matthews: [anthony.matthews@ki.se](mailto:anthony.matthews@ki.se)

Alexandra Wennberg: [alexandra.wennberg@ki.se](mailto:alexandra.wennberg@ki.se)



**Karolinska  
Institutet**