## **Epidemiology Methods Series, IMM**

## What is systematic and what is random error when it comes to bias analysis? Matthew Fox Boston University

Welcome to the **Epidemiology Methods Series** at the Institute of Environmental Medicine, Karolinska Institutet. We're pleased to be joined by **Matthew Fox** from Boston University to give a talk titled: "**What is systematic and what is random error when it comes to bias analysis?**".

Quantitative bias analysis deals with making assumptions (preferably informed by data) about sources of bias in epidemiologic research and using those assumptions to adjust observed estimates to account for the bias. When we do this using Monte Carlo simulations, we can account for both systematic and random error in our adjustments. But what exactly is systematic and what is random is not always clear. This talk will seek to explain the basics of Monte Carlo bias analysis methods and tease out the differences between different sources of error.



## Register: <a href="https://survey.ki.se/epimethodsseries\_oct21">https://survey.ki.se/epimethodsseries\_oct21</a>

Date: Thursday 7<sup>th</sup> October

**Time:** 14.30–15.30 (Stockholm)

Place: Online via Zoom (link sent out day before event)

## **Contact**

Anthony Matthews: <a href="mailto:anthony.matthews@ki.se">anthony.matthews@ki.se</a>

Katalin Gémes: katalin.gemes@ki.se

