

FACULTY



Matthew Fox, DSc, MPH,

is a Professor in the Departments of Global Health and Epidemiology at Boston University. He currently teaches a third-level epidemiologic methods class, Advanced Epidemiology, as well as two other doctoral-level epidemiologic methods courses. Fox also does research on quantitative bias analysis and co-authored a book on these methods, Applying Quantitative Bias Analysis to Epidemiologic Data. He co-chairs the Society for Epidemiologic Research's Committee for Podcasts in epidemiology, and is the Host for SERious EPI. [Click here](#) to know more.

Prerequisites: A good understanding of Medical statistics and Introduction to Epidemiology. Each participant must carry a laptop with Stata® (version 14 or higher) or R (with R studio) installed.

Course Content

Throughout the course we will focus on the core concepts of validity (lack of systematic error) and statistical precision (lack of random error).

- Use the sufficient-component cause model, counterfactual susceptibility type model, and a causal graph
- Calculate adjusted measures of effect and select those that, when collapsible, correspond to the no-confounding condition.
- Distinguish effect measure modification, interdependence, and statistical interaction
- Identify the likely magnitude and direction of bias due to misclassification of exposure, outcomes, confounders, and modifiers.
- Weigh the advantages and disadvantages of significance testing.
- Compare the advantages and disadvantages of frequentist and Bayesian approaches to analysis of a single study, to evidence, and to changing your mind.

Note:

Lunch: Provided

Accommodation: For Indian participants only

Travel support: None

Course fee: None



ADVANCED EPIDEMIOLOGY *Workshop*

This workshop is arranged by the ICMR - National Institute of Epidemiology in India in collaboration with the EpiCap initiative of the Centre for Intervention Science in maternal and Child Health at the University of Bergen, Norway

This workshop marries an established course in Advance epidemiology by Professor Matthew Fox with hands-on analysis exercises developed by and implemented by EpiCap co-facilitators.



**Chennai,
India**



**16-24 January
2025**

Number of seats available: 35

Application deadline: 15 Nov 2024

Application link: [Click here](#)