EpiCap-India Initiative

Workshop on Design and Analysis of Epidemiologic Studies for Causal Inference

11-14 November 2024

Background

This workshop to be held between 11th and 14th November 2024 aims to provide participants with a coherent foundation for the design, analysis, and interpretation of epidemiologic studies. Topics include a discussion of component and sufficient causes, causal inference, measurement of disease frequency and exposure effects, the principles of epidemiologic study design, epidemiologic data analysis, precision and validity, assessment and control of confounding, stratified analysis, multivariable analysis, and the evaluation of effect measure modification.

Eligibility criteria

- Early to mid-career scientists who have demonstrated basic familiarity with designing, conducting, or aiding epidemiological studies.
- Published at least 5 papers in the last 5 years with major contributions to design and execution demonstrating basic proficiency in epidemiological studies
- Formal training in epidemiology (MSc, MD, MPH or Statistics or equivalent)

Scientists can apply thru the link given below and provide relevant details as well as upload their CV: <u>https://forms.gle/KfDaAZYyvKQMuUbS8</u>

All applications should be submitted on or before <u>**15 September, 2024**</u>. Selected participants will be intimated via email by <u>**30 September 2024**</u>.

Course topics

- Causation
- Disease occurrence, Measures of association, including
- Attributable fraction and Population Attributable Fraction
- Causal effects, including implications for Effect measure modification (EMM)
- Selection/Confounding bias, Bias due to misclassification
- Random error and p-value function, (not) significance testing
- Analysis of simple epidemiological data
- Stratified analysis & Regression models
- Directed acyclic graphs (DAGs)
- Introduction to Propensity Scores (PS), Target Trial Emulation (TTE), Instrumental Variable Analysis, Quantitative Bias Analysis
- CAUSIT lectures

Compulsory requirements

Before coming to the course, participants need to carefully study the course textbook (Epidemiology: An Introduction by Kenneth J. Rothman). Further, they must have installed Stata[®] (version 14 or higher) in their laptops, which they should bring along to the course.

Reading material

Course textbook: Epidemiology: An Introduction by Kenneth J. Rothman

Passing criteria

To obtain the course certificate, at least 80% attendance and passing the course test (organised at the end of the course) are required.

Venue of Workshop

Conference Hall, ICMR- National Institute of Epidemiology, Chennai.

Travel and Accommodation

Participants are responsible for managing their own travel and accommodation, with costs covered by their respective institutions. However, participants may reach out to the organizers for accommodation recommendations.

Important dates

Deadline for application	: 15 September 2024
Announcement of selected list	: 30 September 2024
Pre-course work	: 1 – 31 October 2024
Course duration	: 11 – 14 November 2024

For any queries kindly mail us at epicapindia@gmail.com
