

Two Days Workshop On Open Source Scientific Computing For Environmental Health Science

eLife Initiative | Reproducibility Research |
ICMR-NIREH

Date 27-28, June 2022
(Monday & Tuesday)



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INDIAN COUNCIL OF
MEDICAL RESEARCH

NIREH

NATIONAL INSTITUTE FOR RESEARCH
IN ENVIRONMENTAL HEALTH



ICMR-NATIONAL INSTITUTE FOR RESEARCH IN ENVIRONMENTAL HEALTH
Bhopal bypass road, Bhauri, Bhopal, Madhya Pradesh, 462030



WORKSHOP OBJECTIVES

The aim of this workshop is to provide hands on training in understanding the concepts in data science and statistical analysis of biological and environmental data using R programming, which is one of the most widely used open source software in the field of Data Science across the world. This workshop will help the participants in applying proper research methodology, improving their analysis and generate publication quality figures by applying various statistical techniques and visualization packages available in R programming.

Programme overview

RESOURCE PERSON

Dr. Rintu Kutum,

Faculty Fellow (Data Scientist), Mphasis Lab for Machine Learning & Computational Thinking,
Department of Computer Science, Ashoka University
Instructor & Member, Reproducibility for Everyone (R4E) Initiative

HANDS-ON SESSIONS

- a) Introduction to R and R-Studio
- b) Basic in data type in R programming
- c) Handling data in R
- d) Model building in R
- e) Some resampling methods in Biology (Model selection)
- f) Case studies

TEACHING AND LEARNING METHODS

- a) Lectures to introduce each topic
- b) Live demonstration by experts
- c) Hands on training on R programming
- d) Case studies

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Additional Information

Who can participate?

Faculties/Scientists, M.Sc. Students, Research scholars, PhD & Post doctoral scholars

Pre-requisite for the workshop: Basic knowledge of statistics. Knowledge about multivariate techniques such as factor analysis & multiple regressions would be an added advantage but not mandatory.

What you will gain from this workshop? (Outcomes)

By the end of the workshop participants will learn about open source scientific computing languages such as R, Python Julia etc., primarily how to R Statistical programming language for environmental health research. Scholars will learn about data harmonization, preprocessing, analysis and visualization more effectively. Conduct basic analysis of the relationships in your data. Create publication quality figures with reproducible codes to be shared with mentors, collaborators, and for ease of peer-reviewing the research outcomes.

Workshop Registration Fee

Includes workshop kit, high tea and lunch for 2 days

Research Scholars (M.Sc., PhD & Post Doc) INR 1,000/-
Faculty/Scientists INR 1,500/-

Last date for application 10th June 2022

Accommodation:

Accommodation can be provided on paid basis in ICMR-NIREH, guest house

Enrollment for the workshop is limited

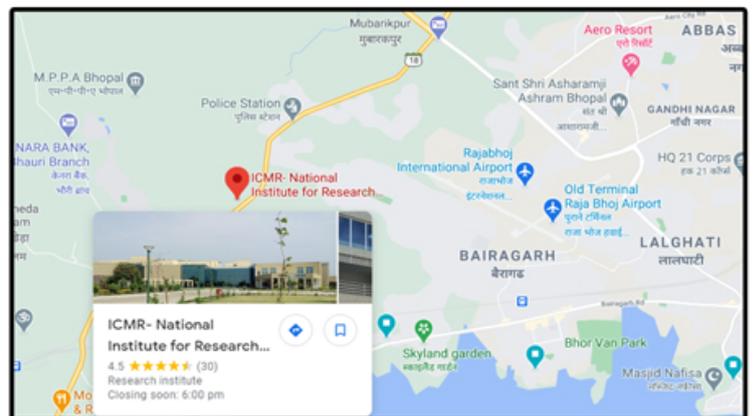
Shortlisted candidates will be communicated separately for submission of the workshop fees

For details please contact

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Dr. Manoj Kumar Sc-C ,
Mobile: 8121450098

E-mail:- nirehworkshop@gmail.com



For Registration please fillup this google form

<https://forms.gle/pTf9bFigMPLJDKAT8>

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