HYBRID ADVANCED COURSE

INTRODUCTION TO MENDELIAN RANDOMIZATION

January 12th-14th 2023

With the support of the Latin American Genetics Society and the Instituto de Alta Investigación (IAI) at the Universidad de Tarapacá, the course will start each day at

08:00 Peru
09:00 Bolivia
10:00 Argentina and Chile
15:00 Germany

Aims

This is an introductory course for anyone who wants to be able to undertake basic Mendelian randomization analyses. A background in epidemiology, genetic epidemiology, genetic association studies, biostatistics (multiple regression analysis) and R is beneficial, but not a prerequisite.

The course is designed as a mixture of lectures and practical exercises. Please bring your laptop with you! Course materials (articles, R packages, datasets,…) will be shared with accepted participants prior to the course.

Lecturers

● Justo Lorenzo Bermejo, Carol Barahona Ponce and Dominique Scherer, Statistical Genetics Research Group, Heidelberg University, Germany

Programme

Day 1
● Introduction to the course and to causal inference
● One-sample MR and power calculations

Day 2
● Two-sample MR and data harmonization
● Introduction to MR-Base

Day 3
● MR limitations and testing MR-assumptions
● Potential of MR for omics studies
● Reporting of MR studies
● Critical review of the course

Registration until December 15th: Please send your name, email address, position, institution and field of research to
EULAT_Eradicate_GBC@imbi.uni-heidelberg.de