How to formulate an effective data plan for your grant

Content

Funding bodies increasingly recommend, or even require, a statistical design plan in grant applications. Statistics cannot rescue a poorly designed protocol after the study has begun. It is therefore never too early to start planning a study's data management and statistical analysis.

Moreover, the definition and disclosure of an *a-priori* plan can help researchers achieve sound and reproducible science and avoid practices that can systematically bias their research (such as p-hacking, publication bias, and HARKing).

The course will focus on practical work in which participants will work through their own ideas and research questions touching on study designs, power analysis, pre-registration and principles of scientific rigour and open science.

Learning Objectives

- You will refresh your understanding of different study designs and common statistical tests
- You will perform a power analysis and sample size calculation
- You will become familiar with systematic biases and how to avoid them
- You will learn the importance of pre-registration
- You will learn how to foster open science

Target Audience

You are a postdoc or PhD student and you want to learn how to write a data design plan for your next grant proposal submission.

Language   English

Participants   max. 15

Instructors   Dr. Marianna Rosso, Dr. Bernhard Voelkl

Date   September 04. & 05. 2023, 08:30 a.m.-4 p.m.

Location   University of Bern, Main Building, Hochschulstrasse 4, room 117

ECTS   recommended 1 ECTS
(16 lessons 45' each, approx. 10h preparation and homework)

Preparatory assignment

Describe your research project in a few sentences. Please locate your project within its statistical possibilities and submit a research question you would like to work on from the perspective of data analysis on. Please send this to marianna.rosso3@gmail.com until August 14, 2023; 09:00 a.m.

In case somebody does not submit a project, this person's participation is cancelled, and the place will be offered to participants on the waitlist.

Individual Feedback

Instructors will provide individual feedback in a plenary session on your preparatory and final assignment.