

Gulbenkian Training Programme in Bioinformatics

PSLS22

Practical Statistics
for the Life Sciences

Mar. 28th – April 1st
2022

Instructors

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Sponsorship



Course description

This intermediate level course is one of our Foundations courses. It covers essential statistical concepts and methods for extracting insights from empirical data in the life sciences. The course positions applied statistics, starting from important aspects of experimental design and data exploration. We then move into statistical modeling and data analysis. We will focus on the link between linear regression and analysis of variance. Together, these methods contribute to the study of General Linear Models. The course also introduces the basics of non-parametric testing, and addresses categorical data analysis and logistic regression.

The concepts and methods are exclusively introduced via case-studies in the life sciences. For every study we elaborate on a concrete research question and then provide a study design, which is followed by data exploration. Next, we will focus on how to model the data and elaborate on the link between model parameters and the subject matter research question.

Course website

<http://gtpb.igc.gulbenkian.pt/bicourses/2022/PSLS22>