

ANOVA and linear regression with R

Objective

The aim of this course is to introduce you to data modelling using R. We focus on linear regression and ANOVA in order to improve your generic statistics knowledge. We will pay particular attention to the “intuition” hidden behind the mathematics.

Please note that we cannot go into the specific data and analysis of your personal research project.

Description

- Fitting straight lines: single and multivariate linear regression, linearizing transformations
- Fitting proportions and count data: generalized linear models
- Comparing the means of several samples: all you ever need to know about one- and two-way ANOVA
- Comparing linear regressions: analysis of covariance (ANCOVA)

This is a “hands-on” training.

Following a short theoretical introduction, the participants will run short R scripts on an R Studio webserver to gain a deeper understanding of the methods discussed.

Conditions

- Participants should have a good understanding of basic statistics.
- Basic familiarity with R is advantageous, in particular:
 - Using the R Studio environment
 - How to invoke R functions, pass optional/named parameters
 - Some familiarity with simple plotting commands
- Participants will work on their own laptops. Information on what and how to download the necessary software will be provided in time.

Trainer



Dr. András Aszódi

VBCF BioComp

He has extensive computational biology experience - both in academia and industry. He is currently working at the Bioinformatics and Scientific Computing Core Facility at the Vienna Biocenter Campus.

His main tasks are the development of short courses on biostatistics and scientific programmings.

Organizational Information

Language	English
Target group	Doctoral Candidates at all stages and Postdocs from Natural and Life Sciences
Date	Thursday-Friday, 15-16 November 2018, 9:00 – 13:00
Registration	For registration click here