Società Italiana di Genetica Agraria

CORSO TEORICO-PRATICO 2023

Do you speak R? Basics for data management

12-14 April 2023

PROGRAMME

Wednesday 12 April 2023

Theory

9-13 Dr. Riccardo Aiese Cigliano

- Search and installation of specific software packages
- Bioconductor
- Introduction to variable types and their characteristics
- Syntax for creating and managing variables and executing functions
- Graph creation with ggplot2 (scatter plots, bar graphs, histograms, boxplots)

Homeworks

Thursday 13 April 2023

Theory

9-13 Dr. Riccardo Aiese Cigliano

- Using R for statistical analysis using examples of morphometric data
- Using the ggpubr package for generating "paper-grade" graphs for representing data and their statistical analysis

Homeworks

Friday 14 April 2023

Theory

9-13 Dr. Riccardo Aiese Cigliano

- A brief introduction to RNA-seq data analysis
- Using the edgeR package to perform statistical analysis of RNA-seq data
- Graphical representation of results (MA plot, Volcano plot, heatmaps)
- General Discussion

Final test (if requested)

Homeworks