# Introduction to R for statistics: Level 2

## Session 1: Descriptive statistics

Objective: Student can classify, visualize and explore variables

* What is tidy data?
* The tidy workflow
* Describing, visualizing and manipulating categorical variables
* Describing, visualizing and manipulating quantitative variables
* Describing and visualizing correlations

## Session 2: Hypothesis testing

Objective: Student can perform various statistical hypothesis tests

* Independent samples t-test
* ANOVA
* Paired samples t-test
* Chi-square test of independence
* Bivariate linear regression

## Session 3: Statistical modeling

Objective: Student can build and evaluate statistical models

* Multiple regression
* Sampling
* Bootstrapping and confidence intervals

## Session 4: Communicating results

Objective: Student can share and communicate their work effectively

* Building custom ggplot2 plots
* Defining functions
* Creating documents with Quarto
* GitHub and workflow basics