Getting Started with R, RStudio, and R Markdown

by Meike Niederhausen, Ph.D., Jessica Minnier, Ph.D.

Biostatistics, Epidemiology, Research and Design (BERD) Seminar

Tuesday
Sep. 24, 2019
1:30 - 4:30 p.m.

Rood Family Pavilion
Conference Center
Room C
3410 SW Bond Ave.
Portland, Oregon 97239

In Part 1 of this two-part workshop, we will introduce R and RStudio to people with no prior experience of R. We will start with how to use RStudio to write and execute code and then show basic commands for working with data: loading, viewing, summarizing, simple plotting, manipulating, and saving of data. We will discuss types of data structures as well as the use of R packages to expand R's capabilities. A brief introduction of data wrangling will be taught if time allows.

In Part 2, we will introduce R Markdown, a powerful method for creating high-quality reproducible documents to present your work. R Markdown is a literate programming method that can incorporate code, plots, and text into seamless reports in html, Word, and pdf formats. When the data is updated, entire reports and results text can be regenerated easily. We will teach the basics of markdown syntax, R Markdown, and knitr. We will cover the fundamentals of using R Markdown in analysis workflows, including how to customize code and plot output.

Students must bring a laptop with R and RStudio installed (instructions: bit.ly/berd_rstudio). For help with installation, please arrive 30 minutes early to Part 1.

Register through Compass only if you plan to attend in person:

Part 1, Tuesday 9/24: "Getting Started with R and RStudio"

Part 2, Thursday 9/26: "Reproducible Reports with R Markdown"

Questions? Please contact Amy Laird: laird@ohsu.edu

Part 2 occurs Thursday, September 26, 1:30-4:30, in the same room (Rood Family Pavilion Conference Center, Room C).

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