BioMarin R Training Roadmap

Intro to R Programming

Introduction to data types, syntax, and grammar.

Resources

pdf slides

**Other topics & packages covered:**

Tibbles vs. data frames

R Workflow Best Practices

Introduction to RStudio, file naming, and projects.

Resources

pdf slides

Other topics & packages covered:

Reproducible examples with reprex and datapasta

Sent as PDFs (not delivered as training)

R Markdown

Introduction to reproducible reports (YAML, markdown, knitr, and pandoc).

Resources

pdf slides

html slides

exercises

RStudio.Cloud project

Other topics & packages covered:

Create multiple file outputs with .Rmd and knitr

Introduction to Data Manipulation

Common data manipulation tasks, dplyr's verbs, the pipe (%>%).

Resources

pdf slides

html slides

exercises

RStudio.Cloud project

Other topics & packages covered:

Write clearer code with pipelines, logical string detection with **filter()**
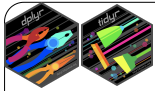
Data Transformation & Joins

Pivoting data, multiple table joins, manipulating columns and rows.

Other topics & packages covered:

Rename columns, reproducible file management

Advanced Data Manipulations

Conditional mutations, create multiple columns at once, and missing data.

Other topics & packages covered:

Dealing with date/times, standardizing column names, etc.

Data Visualization

Introduction to the grammar of graphics, aesthetics, and themes.

Other topics & packages covered:

Repel text labels, ggthemes, etc.

Data Dashboards

Introduction to shiny and flexdashboards.

Other topics & packages covered:

Create interactive dashboards with R Markdown, shiny, and plotly.