

R: fundamental skills for biologists

1-22 June 2022

Archive of resources recommended during the workshop

What	Link
Cheatsheets	
RStudio cheat sheets	https://raw.githubusercontent.com/rstudio/cheatsheets/main/rstudio-ide.pdf https://www.rstudio.com/resources/cheatsheets/
dplyr cheatsheet	https://raw.githubusercontent.com/rstudio/cheatsheets/main/data-transformation.pdf
ggplot cheat sheet with examples of code for a variety of plots	https://github.com/rstudio/cheatsheets/blob/main/data-visualization-2.1.pdf
R graph gallery has some good example plots (nb, not all are made with ggplot!)	https://r-graph-gallery.com/
Additional info	
Version control workshop material	https://swcarpentry.github.io/git-novice/
Using Visual Studio to write R code	https://code.visualstudio.com/docs/languages/r
R Studio snippets	https://support.rstudio.com/hc/en-us/articles/204463668-Code-Snippets-in-the-RStudio-IDE
An animation of pivot_wider/pivot_longer	https://www.garrickadenbuie.com/project/tidyexplain/#pivot-wider-and-longer
color palScientific Journal and Sci-Fi Themed Color Palettes for ggplot2ettes	https://cran.r-project.org/web/packages/ggsci/vignettes/ggsci.html

Colour and aesthetics in ggplot	https://ggplot2.tidyverse.org/reference/aes_colour_fill_alpha.html#:~:text=Alpha%20refers%20to%20the%20opacity.corresponding%20to%20more%20transparent%20colors
To combine plots into one figure	http://www.sthda.com/english/articles/24-ggpubr-publication-ready-plots/81-ggplot2-easy-way-to-mix-multiple-graphs-on-the-same-page/
Using R and ggplot for data art	https://r-graph-gallery.com/137-spring-shapes-data-art.html
Tutorials, books and other R lessons	
R for data science	Online version: https://r4ds.had.co.nz/ And physical book: https://www.booktopia.com.au/r-for-data-science-hadley-wickham/book/9781491910399.html
Introduction to R - tidyverse	https://bookdown.org/ansellbr/WEHI_tidyR_course_book/
Modern Statistics for Modern Biology	https://web.stanford.edu/class/bios221/book/
RNAseq tutorials	- 1,2,3 limma voom - DESeq2
scRNAseq tutorials	- OSCA - Seurat
Metabolomics tutorials	- structtoolbox - Bioconductor
Survival analysis tutorials	- RStudio
Community help and support forums	
Stackoverflow - forum for bioinformatics support	https://stackoverflow.com/
BioStars bioinformatics forum	https://www.biostars.org/t/Forum/
Slack channels	- RLadies - Bioconductor
Forums	- ROpenScience - RStudio - Bioconductor

In person support	
RLadies meetup in your city	https://rladies.org/
R Hacky Hour at your university	Often advertised on Meetup.com or Twitter
Bioinformatics training in Australia	https://www.biocommons.org.au/other-training