

Introduction



Vincent Guillemot

- Biostatisticien
- · Intégration de données

Welcome Quiz



Got to www.kahoot.it or use the Kahoot! app

Program

- Nov. 25: ggplot2 and pheatmap
- · Dec. 2: PCA, clustering and maybe more

Proposition

To make it more interactive:

- Quizzes (Kahoot, cf. programme)
- Exercises
- · Students will be asked directly for the solution
- Tutorials

Simple data... for me



Composition de produits alimentaires (https://ciqual.anses.fr/)

But also...

- Courses web-page: https://vguillemot.github.io/remuse/
- Slides in PDF (and HTML) format
- Exercises and solutions
- Tutorials

Ressources

- · Rstudio's cheasheets (EN) de
 - dplyr (EN)
 - ggplot2 (EN)
- STDHA's page on colors (FR)
- R pour les débutants d'Emmanuel Paradis (FR)
- · L'aide-mémoire de Julien Chiquet

moRe!

- R for Data Science: https://r4ds.had.co.nz/
- R Cookbook : https://rc2e.com/
- Modern Data Science with R: https://mdsr-book.github.io/mdsr2e/
- Computational Genomics with R: https://compgenomr.github.io/book/
- ggplot2: elegant graphics for data analysis: https://ggplot2-book.org/index.html
- Reference for ggplot2: https://ggplot2.tidyverse.org/reference/
- Extensions of ggplot2: https://exts.ggplot2.tidyverse.org/gallery/

- A ggplot2 Tutorial for Beautiful Plotting in R: https://www.cedricscherer.com/2019/08/05/aggplot2-tutorial-for-beautiful-plotting-in-r/
- Package R patchwork : https://github.com/thomasp85/patchwork
- Circular Visualization in R: https://jokergoo.github.io/circlize_book/book/
- ComplexHeatmap: https://jokergoo.github.io/ComplexHeatmapreference/book/
- Color palettes: https://github.com/EmilHvitfeldt/r-colorpalettes

RNA-Seq

- YouTube Channel StatQuest
- DoltYourself Transcriptomics : https://diytranscriptomics.com/
- RNA-Seqlopedia: https://rnaseq.uoregon.edu/

• Selecting between-sample RNA-Seq normalization methods from the perspective of their assumptions (Evans 2017):