



# H3ABioNet

Pan African Bioinformatics Network for H3Africa

## 16SrRNA Intermediate Bioinformatics Online Course: Int\_BT\_2019

# Introduction to R: importing data, data frames



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# Intro to R: what is a data frame?

1	"S"	TRUE
7	"A"	FALSE
3	"U"	TRUE
numeric	character	logical

- A list of vectors of equal length
- Clinical data: sample = rows and variables of interest = columns
- Functions to examine data frames
  - `str()`
  - `head()`
  - `dim()`
  - `rownames()` `colnames()`



# Working with data frames

- Load external data from a .csv file into a data frame
  - `read.csv()` `read.table()`
- Subsetting
  - `[rows , columns]` **'comma-first-for-columns'** `[,1]`
  - Select a range: `[,1:10]`
  - Exclusion: `[,-1]`
  - Many ways to select a column: e.g. `surveys[,2] == surveys[, "month"] == surveys$month`

# R factors, data types, data frames

- [course material](#)

# R data types useful links

- [R data types and structures: additional hands on](#)