

Tips for working with R

a **statsTeachR** resource

These slides were adapted for [statsTeachR](#) by Nicholas Reich from the mosaic R package vignette [Start Teaching](#). and are released under a [Creative Commons Attribution-ShareAlike 3.0 Unported License](#).

Two key questions

- ▶ What do you want R to do?
e.g.

```
mean()
```

```
median()
```

- ▶ What must R know to do that?

R is case-sensitive

For example:

```
a <- 1:10  
mean(a)  
  
## [1] 5.5  
  
Mean(a)  
  
## Error: could not find function "Mean"
```

Also, many different syntax/capitalization schemes in different packages, functions, e.g. camelCase, separated.by.dots, nick_uses_underscores.

R function syntax

Most (not all!) R functions use the following syntax:

```
my_function(argument_1, argument_2, ...)
```

- ▶ Arguments surrounded by rounded parentheses
- ▶ If you type a function name without the parentheses, you will see the code for that function.

Use TAB completion and arrows!

- ▶ If you begin a command and hit the TAB key, R and RStudio will show you a list of possible ways to complete the command.
- ▶ If you hit TAB after the opening parenthesis of a function, RStudio will display the list of arguments it expects.
- ▶ The up and down arrows can be used to retrieve past commands when working in the console.

Recognize errors quickly

- ▶ If you see a `+` prompt, it means R is waiting for more input. Often this means that you have forgotten a closing parenthesis or made some other syntax error.
- ▶ If you have messed up and just want to get back to the normal prompt, press the escape key and start the command fresh.