

Manipulate

Data Products

Brian Caffo, Jeff Leek, Roger Peng Johns Hopkins Bloomberg School of Public Health

Manipulate

- · Suppose that you want to create a quick interactive graphic
 - You have to do it now
 - The intended users also use Rstudio
- · manipulate is a really cool solution that is often all you need to quickly make interactive graphics

Documentation

- · Manipulate is well documented at the Rstudio web site here
 - http://www.rstudio.com/ide/docs/advanced/manipulate
- From there, try this library(manipulate) manipulate(plot(1:x), x = slider(1, 100))
- · You can create a slider, checkbox, or picker (drop down) and have more than one

Example from the regression class

```
library(manipulate)
myHist <- function(mu){
  hist(galton$child,col="blue",breaks=100)
  lines(c(mu, mu), c(0, 150),col="red",lwd=5)
  mse <- mean((galton$child - mu)^2)
  text(63, 150, paste("mu = ", mu))
  text(63, 140, paste("MSE = ", round(mse, 2)))
}
manipulate(myHist(mu), mu = slider(62, 74, step = 0.5))</pre>
```