



# 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

```
freqData <- as.data.frame(table(galton$child, galton$parent))
names(freqData) <- c("child", "parent", "freq")
plot(as.numeric(as.vector(freqData$parent)),
     as.numeric(as.vector(freqData$child)),
     pch = 21, col = "black", bg = "lightblue",
     cex = .05 * freqData$freq,
     xlab = "parent", ylab = "child")
lm1 <- lm(galton$child ~ galton$parent)
lines(galton$parent, lm1$fitted, col = "red", lwd = 3)
```