Quantitative Resources

Learning Statistics

Classes exist in Biostatistics, Psychology, Brown School, Political Science, and others

Textbooks

- Learning Statistics with R
- Statistics with R *
- Regression and Other Stories *
- Statistical Rethinking (Bayesian)
- An Introduction to Statistical Learning (ML)

Visualizations

- Excellent visualizations of <u>effect sizes</u>, <u>statistical</u> <u>power</u>, <u>p-values</u>, <u>confidence intervals</u> and more
- ► Building up <u>sampling distributions</u>
- Guess the correlation

Open Science Tools

These may vary based on which field you are in and which programming language you use. Talk to more senior members in your lab.

- ▶ Git and GitHub
- ► RMarkdown
- Open Science Framework
 - Including preregistration
- PsyArXiv & bioRxiv
- See if your journal accepts registered reports
- Error Tight by Julia Strand
- Citation manager (any of them)
- ► Bonus: password manager

Learning to code in R

Occasionally Becker Library hosts programming workshops. Grad student Brown Bags.

- Code Academy
- ► Coursera
- Code School/ Pluralsight
- #rstats
- ▶ <u>@icymi_r</u>
- ► RLadies STL
- <u>`swirl</u>` package
- ► R for Data Science

- ► YaRrr, the Pirate's
 Guide to R
- ▶ R Cookbook
- ▶ Cheat Sheets
- ▶ Quick-R
- ► Shelly's Skill Lab^
- Stack Overflow
- Check out tidyverse and easystats ecosystems

Non-academic Reading

- Calling Bullshit by Carl T. Bergstrom & Jevin West
- Weapons of Math Destruction by Cathy O'Neil

Wash U Resources

You can find lots of resources for graduate students <u>here</u>. Staying happy and motivated is necessary for producing good science!