## **Lesson 2 Gettting Started #**

## **Goals for Today**

- Getting R and RStudio installed and functioning for everybody
- Discussing why we're using R vs. other programming languages (like Python)
- Some example analyses

## **Readings for Today**

#### Required

- Peng, R Programming for Data Science Chapter 2, History and Overview of R
- OpenIntro to Statistics, Sections 1.1 and 1.2
- Ziemann et al., Gene name errors are widespread in the scientific literature, *Genome Biology* (2016) 17:177 DOI 10.1186/s13059-016-1044-7
- Alex Hern, Covid: how Excel may have caused loss of 16,000 test results in England,
  Guardian, Oct. 2020

#### **Optional**

- Hugo Bowne-Anderson, What Data Scientists Really Do, According to 35 Data Scientists,
  Harvard Business Review. 15 Aug. 2018
- Knuth, Donald E., Computer programming as an art, ACM Turing award lectures. 2007.
- Thomas Herndon, Michael Ash and Robert Pollin, Does high public debt consistently stifle economic growth? A critique of Reinhart and Rogoff, Cambridge Journal of Economics 2013, 1 of 23 (Sections 1 and 3)
- Cassidy, John, The Reinhart and Rogoff Controversy: A Summing Up, New Yorker, 2013
  (Note: this may be useful background reading for the paper above)

# **Important Links and Files**

- R: The R Project for Statistical Computing
- The Comprehensive R Archive Network (CRAN)
- R Studio
- Install R on Windows YouTube Instructions
- Install R on Mac YouTube Instructions