Introduction to Biological Statistics

Center for Computational Biology and Bioinformatics
Division of Statistics and Scientific Computation

Course Goals

- Broad overview of **topics** and **tools** for statistical analysis.
- Target audience is biology graduate students
- Sessions will involve a mix of lecture and hands-on work

Week 1: R Installation and Basics

Objectives

- Install R and R Studio
- Learn terminology and anatomy of R:
    - interpreter, script editor
    - object, variable, value
    - function, argument
    - assignment, equivalence

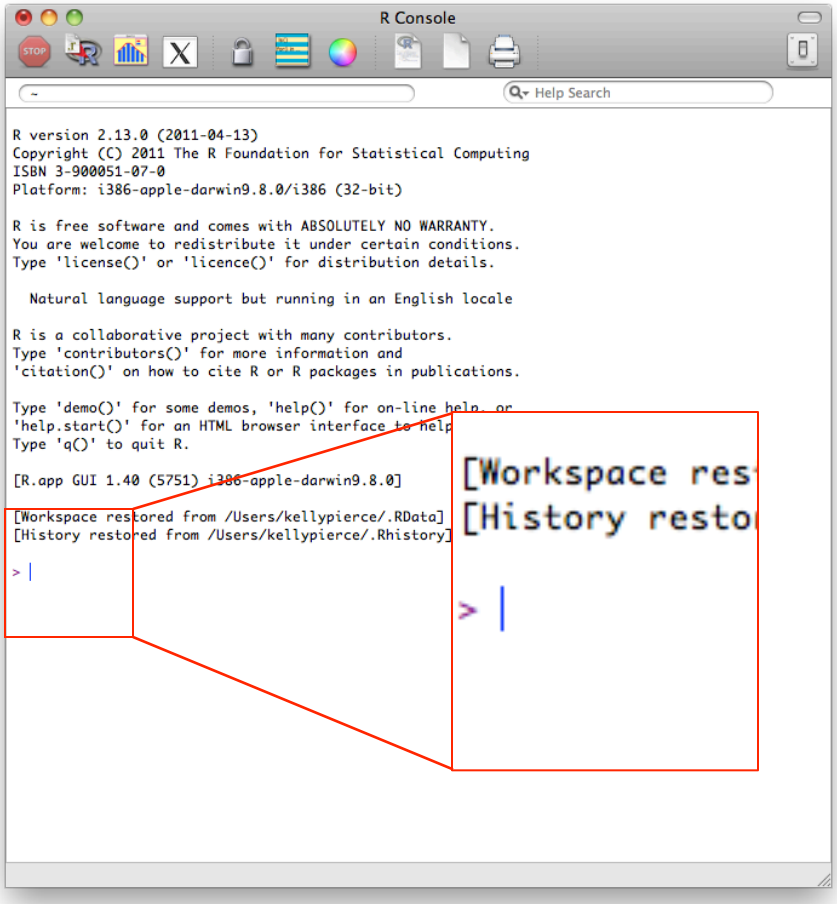
What is R?

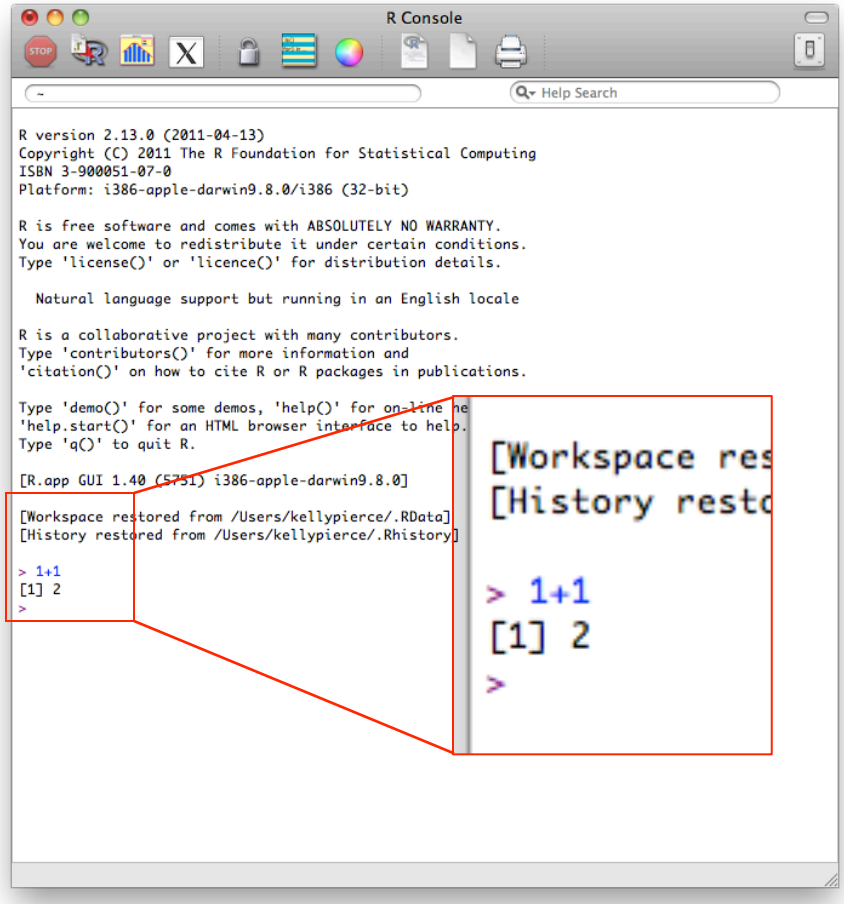
- **Object-oriented** scripting language
- Available for Windows, Mac and Linux

Why use R?

- More flexible than Excel
- Widely used in biological sciences
- Online help communities
- Can generate publication-quality figures
- **Free**, open source

What do I even do with this?!





How do I get R?

http://cran.us.r-project.org/

(select a geographically near mirror)

also download R studio, a GUI for R with some useful features:

http://www.rstudio.com/ide/download/

(select the desktop version)