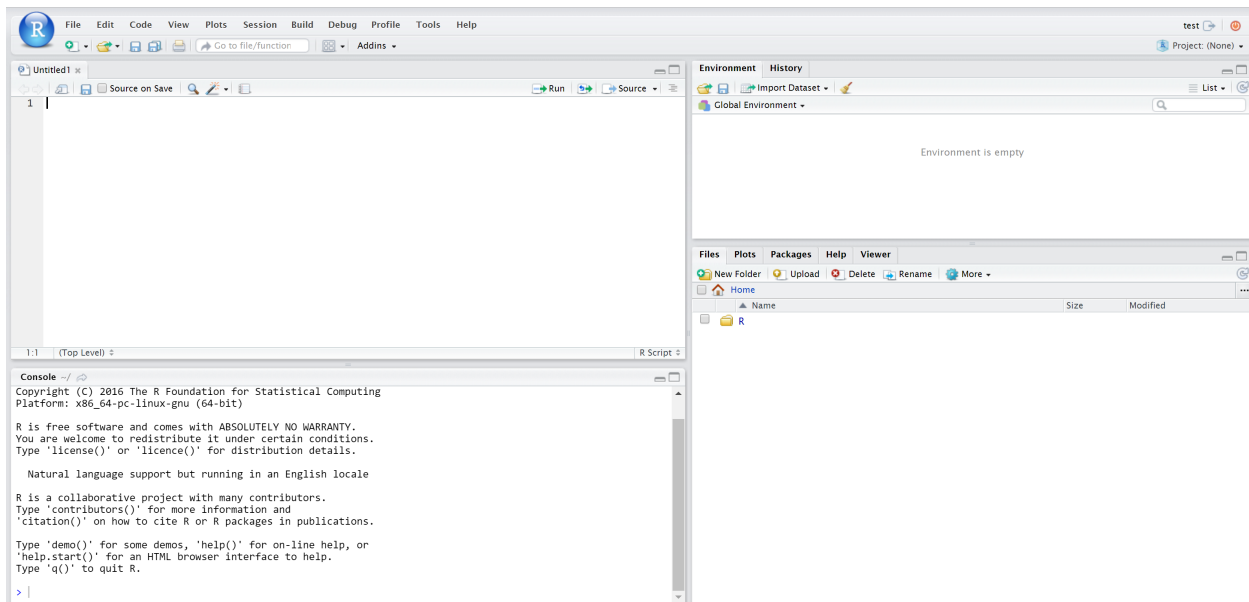# Getting Started with R and RStudio

R is an open-source statistical language that is widely used in biostatistics and computational biology, among other fields of research. *RStudio* is a "front end" to R that simplifies important aspects of using R, making it much easier to work within the R environment. Both R and *RStudio* run identically under the Mac OSX, Microsoft Windows, and Linux.

Installing R and *RStudio*

First, download R from http://cran.us.r-project.org/. Versions are available for Windows, Mac OS X, and Linux. Follow the instructions when running the installation program, selecting the default options when prompted.

RStudio can be downloaded from https://www.rstudio.com/products/rstudio/download/. Scroll down to "Installers for Supported Platforms" and select the appropriate version for your system. Leave all default settings in the installation options.

The RStudio Console

R Tutorial

1. The *RStudio* environment is organized by panes, with the default layout shown above; the script editor and console are on the top and bottom left, and there are additional panes on the right.

    a) The script editor is used to create and edit files, such as R script files. Multiple files can be open at once, and will appear as separate tabs. If the script editor is not visible, a new file can be created via *File > New File > R Script*.

b) When commands are run in the script editor, the commands and the corresponding output appear in the console.

2.