Pre-work for the University of South Dakota Genomics Data Carpentry
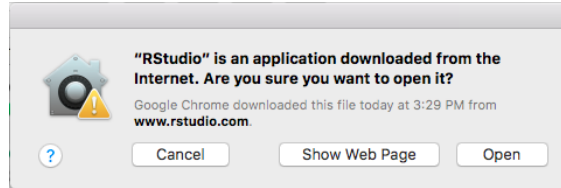
June 28-29, 2018

R

<mark>Note: If you have R installed already, please upgrade to the most recent version of R.</mark>

- **Windows**
    - Follow links to download the **base** R installation for **Windows** from the main CRAN page.
        - Or click here to start the download immediately: https://cran.r-project.org/bin/windows/base/release.htm
    - Enter credentials to proceed with installation. If denied, you may need to request temporary admin privileges (see above).
    - Choose language and agree to the license.
    - Deselect 32-bit (or 64-bit) according to which type of operating system you are running.
        - To find out which version of the Windows OS you are running, navigate to the Control Panel. In the upper right corner search for "System".
        - Click "Show which operating system your computer is running."
        - The next screen will display the "System type" as 64-bit or 32-bit. Most users should be running 64-bit.
    - Select default setup. Keep clicking "Next" until the installation begins.
    - Continue below to install RStudio.

- **Mac**
    - Naviagte to https://cran.r-project.org/
    - Follow links to download the newest R installation for Mac from the main CRAN page:
        - "Download R for (Mac) OSX
        - Click R-x.x.x.pkg
    - Open R-x.x.x.pkg from your Downloads folder.
    - Click "Continue" and "Agree" to accept the license.
    - Finally click "Install" to begin installation. You may need to enter your Monsanto credentials before the installation will begin.
    - When finished, click "Close" to exit the installer.
    - Continue below to install RStudio.

RStudio

- **Mac**
    - Navigate to https://www.rstudio.com/products/rstudio/download/ and download the Rstudio-x.x.xxx for Mac OS X 10.6+ (64-bit).
    - Open the dmg file and drag to the Applications folder to begin the installation.
    - Open RStudio.
    - You may see the below pop-up window. If so, click "Open" to continue.

"RStudio" is an application downloaded from the Internet. Are you sure you want to open it?

Google Chrome downloaded this file today at 3:29 PM from www.rstudio.com.

?   Cancel   Show Web Page   Open

- **Windows**
  - Navigate to https://www.rstudio.com/products/rstudio/download/ and download the Rstudio-x.x.xxx for Windows Vista 7/8/10.
  - Launch the executable.
  - Click "Next" to move through the installation instructions until the installation begins. The default install directory is fine.

- Confirm everything installed properly by opening RStudio. Find the Console pane and at the line starting with ">" type `sessionInfo()` and hit <Enter>. You should see a response similar to the screenshot below that states the R version and your platform.


```
Console  Terminal ×
~/

R version 3.4.4 (2018-03-15) -- "Someone to Lean On"
Copyright (C) 2018 The R Foundation for Statistical Computing
Platform: x86_64-w64-mingw32/x64 (64-bit)

R is free software and comes with ABSOLUTELY NO WARRANTY.
You are welcome to redistribute it under certain conditions.
Type 'license()' or 'licence()' for distribution details.

R is a collaborative project with many contributors.
Type 'contributors()' for more information and
'citation()' on how to cite R or R packages in publications.

Type 'demo()' for some demos, 'help()' for on-line help, or
'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.

> sessionInfo()
R version 3.4.4 (2018-03-15)
Platform: x86_64-w64-mingw32/x64 (64-bit)
Running under: Windows 7 x64 (build 7601) Service Pack 1

Matrix products: default

locale:
[1] LC_COLLATE=English_United States.1252  LC_CTYPE=English_United States.1252
[3] LC_MONETARY=English_United States.1252 LC_NUMERIC=C
[5] LC_TIME=English_United States.1252

attached base packages:
[1] stats     graphics  grDevices utils     datasets  methods   base

loaded via a namespace (and not attached):
[1] compiler_3.4.4 tools_3.4.4
>
>
>
```