

CHESTER ISMAY

GETTING USED TO R, RSTUDIO, AND RMARKDOWN

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Introduction

This book was written using the **bookdown** R package from Yihui Xie. You can find different formats for the book by clicking on the save icon in the top pane of this book. HTML is the preferred format but PDF and ePub formats are also available.

This resource is designed to provide new users to R, RStudio, and RMarkdown with the introductory steps needed to begin their own reproducible research. Many screenshots and GIFs will be included, but if further clarification is needed, please create a GitHub issue or email `chester.ismay@gmail.com`.

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R and RStudio Basics

- What is R? What is RStudio?
- Installing R and RStudio directions with screenshots
- Screenshots of RStudio frames?

Last updated:

```
## [1] "Saturday, August 13, 2016 14:54:44 PDT"
```


3

R Markdown

- Walk through the components of an R Markdown file
- Resource for Markdown: <https://github.com/adam-p/markdown-here/wiki/Markdown-Cheatsheet>
- RMarkdown chunk options
- Help -> Cheatsheets

4

Introductory R analysis using R Markdown

- “File organization and naming are powerful weapons against chaos.” - Jenny Bryan
- Give an introduction into using R with periodic table dataset
- Mean, median, standard deviation, five-number summary, distribution
- Some content to cover:
 - data structures (vectors, lists, data frames, matrices)
 - indexing/subsetting
 - functions (default arguments)
 - Case matters in R!
 - Why do some arguments require quotations and others don't?

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Bibliography