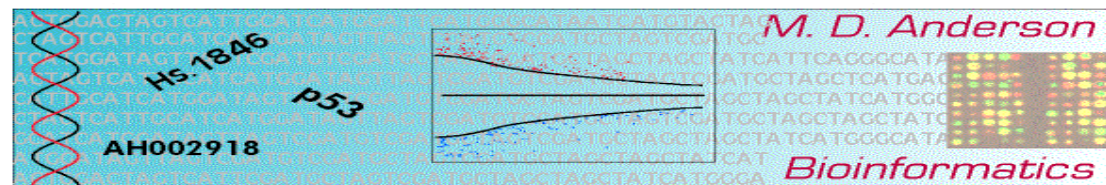


SISBID RR Module Wrapup

Keith A. Baggerly and Roger D. Peng
Bioinformatics and Computational Biology
UT M. D. Anderson Cancer Center
kabagg@mdanderson.org

SISBID, July 20, 2016



Miscellaneous Links

More On Git Branches from Nicercode (Nice R Code)

git tag

git remote (see Leek Packages)

Hadley on Git and GitHub

```
install.packages("devtools")  
devtools::install_github("username/packageName")
```

Getting things ready for CRAN (discusses version numbering)

The Leek Group Guide to R Packages (numbering again!)

The Leek Group Guide to Data Sharing

When to Trust an R Package

More Contributed Links! (Added 7/21)

Writing reports

Book on writing

Science of writing

Turning tables into graphs

Using c++ code in Rpackages

Rcpp book

Better graphics

ggplot2 book, website

How to display data badly

Git

Git subtrees

Miscellaneous Things

(Include Paul Goldberg 60 Min Clip Here)

Stuff We Wish We Could've Done

packrat

Managing a Team

Warning Signs to Look For

Makefiles

Why are they cool?

- They let us script project flow and file dependencies

Why didn't we cover them?

- Arcane syntax, installation issues

Where would we point you to?

Karl Broman's Make Tutorial

See also the R package remake

R CMD BATCH –args

some discussion

Why is it cool?

- Scripting lets you run everything in background
- Increases the odds you've got *everything* reproducible from the outset

Why didn't we cover it?

- a bit geek-heavy

Where would we point you to?

Some Discussion of RScript

Directory Structures

Why are they cool?

- They help you organize files and project flow from the outset

Why didn't we cover them?

- Not sure, really
- We did a bit, in discussing R Packages

Where would we point you to?

- Jeff Leek's Data Science Course (and SISBID Module 1)
 - Karl Broman's RR Course and initial steps
 - Christopher Gandrud's Description in Chapter 4 of his book
-

Coding Conventions

Why are they cool?

- They help you keep things consistent between team members
- They make code easier to read, and more likely to be used

Why didn't we cover them?

- Not sure, really

Where would we point you to?

- Hadley's recommendations
 - Google's recommendations
-

Knitr Bootstrap

Why is it cool?

- Allows for generation of slicker reports
- Toggling of code display friendlier to target audience

Why didn't we cover them?

- Too geek specific at present

Where would we point you to?

- CRAN, vignettes
 - The package GitHub page
-

Knitr Citations

Why is it cool?

- Allows for generation of slicker reports, automates reference assembly from the web

Why didn't we cover it?

- Too geek specific

Where would we point you to?

- CRAN, vignettes
 - the GitHub page
-

Shiny!

Why is it cool?

- Interactive pictures have pizzazz

Why didn't we cover it?

- Tangential to RR per se?

Where would we point you to?

The main Shiny page

- Rstudio's intro page
 - SISBID Module 2
-

GitHub Pages

Why are they cool?

- They provide nicer interfaces to your content

Why didn't we cover them?

- Tangential to RR per se?

Where would we point you to?

- The GitHub Pages help files
-

Report Templates

Why are they cool?

- They can systematize the use of “good practices” early in analyses

Why didn't we cover them?

- Well, we sort of did - in Roger's “Prevention” presentation

Where would we point you to?

- We'll have to get back to you, unfortunately
 - Report Before/After Rogues Gallery
-

Feedback We'd Like From You (1)

(you may want to write this down)

What motivated us to teach this course?

What would we see as a positive outcome?

Given this motivation, are we doing things right?

Brief intro, redux

What motivated you to take this course?

Were There Specific Sessions You Found Really Useful/Really Useless?

Points You'd Like Us to Expand On?

Were there points you were hoping we'd cover that we didn't?

Feedback We'd Like From You (2)

Do you have examples/anecdotes you think we might be able to use that you'd be willing to share?

Were there ways we could've used time more effectively?

Were there ways we could've used our TAs more effectively?

Can you see things you learned in this course changing how you do things day to day?

- Why or why not?
- Can we ask you again in 6 months?
- Can we ask you again in a year?

Could you write this down now? (anonymous is fine)
