ASMS 2019
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SOCALBIOINFORMATICS.COM

WRAP-UP & RESOURCES

HIGH-LEVEL TAKE AWAYS

- **RStudio** helps you work with R, eases learning
- **Save your R code** in script files by working in the Editor
- **Data frames** are an essential part of doing data analysis with R – spend time learning how to work with them
- Using the **tidyverse** is a great way for beginners to start doing interesting things with R
- **Ggplot2** is an amazing R package and worth mastering
- **Bioconductor** is a great resource for mass spec related R packages

LEARNING R IS CHALLENGING — BUT WORTH IT!

- R has a steep learning curve & has lots of quirks that can trip up beginners; it can get frustrating!

- Try to use R, at least a little bit, every day

- It will eventually stick, and you'll feel like a super hero when it does!

- With the amazing R community and TONS of resources available, there's been no better time to learn R

THERE'S A LOT MORE TO THE R ECOSYSTEM

- Modeling and machine learning
- Interactive data applications & dashboards with Shiny
- RMarkdown for reports, books, websites, …
- Amazing, active R community with continuous new developments

RESOURCES

- **Books**
  - R for Data Science
    http://r4ds.had.co.nz

  - ggplot2: Elegant Graphics for Data Analysis, 2nd Ed.

  - Applied Predictive Modeling
    http://appliedpredictivemodeling.com

  - Advanced R
    https://adv-r.hadley.nz

- **Websites**
  - RStudio's Online Learning Guide
    https://www.rstudio.com/online-learning

  - RStudio Community
    https://community.rstudio.com

  - Kaggle
    https://www.kaggle.com

  - R Bloggers
    https://www.r-bloggers.com

OTHER TIPS

- If you're a student (or even if you're not), take data science classes; might need to seek them out
- Consider any of the many online courses in data science e.g. Coursera (JHU is the famous one)
- Practice working with data, play and experiment with data sets you're interested in
- Check out local R users groups, network and learn from others

Question Time