# Welcome to the - We R: Penn State R Users' Group - Meet-ups!

### What is R and why is it awesome (most of the time)

One of the exciting things about using R for data analysis and visualization is that it's an open initiative, meaning (a) it's FREE, (b) anyone can develop tools (known as packages) for it, (c) there are always new things to learn, (d) people from many disciplines use this platform and (e) there is consistent entertainment from the name of each new version release -- "Warm Puppy" and "Pumpkin Helmet".

# The goal of We R: Penn State R Users' Group

The goal of We R: Penn State R Users' Group is to provide an interdisciplinary work space, discussion and presentation forum for Penn State graduate students (undergraduates, postdocs, faculty, and staff also welcome) who use (or would like to learn) R for science. We hope to get a strong representation from a diverse range of departments including but not limited to HDFS, biology, nutrition, statistics, psychology, political science, demography, geography, and sociology. The general structure involves a reserved weekly space for members to come as they please (bring your laptop!) to work on their own projects, ask for help, provide help to others, and have the opportunity to present short tutorials to the group on how to do something cool. Those of all skill levels are encouraged to attend.

There are many options for activities that can be included in these sessions including: tutorials, independent work time with potential to ask for help (from peers and/or resident advisor), discussions, and group-work on selected topics (e.g. data mining; homework groups for a particular classes, etc).

Please note that there is no formal instruction for those who are just starting out. We are however happy to offer some introductory self-directed resources that may help for those of you who are just getting started. We also encourage you to come with friends/collaborators/classmates with whom you are working on research projects/homework/etc – the more the merrier.

#### Stav Tuned - New Ideas!

Ideas are currently being thrown around on how to improve these meet-ups in terms of member engagement and usefulness. We also want to hear from you – all ideas are encouraged. Current ideas include repository of materials (from introductory to advanced), website, google or other type of "dynamic" doc for individuals to connect based on shared interests, and workshops.

# How can I join?

Please contact our new email address (WeR.PSU.Rusers@gmail.com) to be added to the listserv and/or check us out/join us on Facebook by clicking or searching We R: Penn State R Users' Group.



# We R: Penn State R Users' Group

Who: interdisciplinary group of individuals who use or want to learn R for science What: designated space to come work on projects, ask, & answer questions Where: 401 Health and Human Development (HHD) Building When: Wednesdays, 3:30-5:30, drop-in as you please

**Thanks Thanks!** Special thanks to Revolution Analytics for providing the initial start-up funding (and hopefully subsequent funding in years to come), to QuantDev for providing additional funding, and to the Methodology Center for providing us with meeting space.

Executive board: Libby Benson (President), Allison Gray (Vice President), Julie Wood (Secretary), Roisin White (Treasurer), Xiao Yang (Web Coordinator), Brandon Henken (Outreach Coordinator)
Faculty advisors: Nilam Ram, Tim Brick, Zita Oravecz

#### Resources

- Downloads
  - $\circ$  R
- https://cran.r-project.org/
- o RStudio (get this!)
  - https://www.rstudio.com/
- Learn R
  - o Swirl (<a href="http://swirlstats.com/">http://swirlstats.com/</a>)
  - o Discovering Statistics Using R by Andy Field
    - http://studysites.sagepub.com/dsur/main.htm
  - Code School
    - http://tryr.codeschool.com/
  - o Cyclismo Kelly Black
    - http://www.cyclismo.org/tutorial/R/
- Plots
  - o http://www.cookbook-r.com/Graphs/
  - o http://zevross.com/blog/2014/08/04/beautiful-plotting-in-r-a-ggplot2-cheatsheet-3/
- R Markdown
  - o http://rmarkdown.rstudio.com/
- Getting help
  - o Type a question and then end with "in R"
    - Example: How do I subset variables in **R**?
  - o http://stackoverflow.com/questions/tagged/r
  - o www.statmethods.net
  - o http://www.ats.ucla.edu/stat/r/
- Blogs (a wealth of useful information contained in these)
  - Revolution analytics
    - http://blog.revolutionanalytics.com/
  - o R-Bloggers
    - http://www.r-bloggers.com/
  - Noam Ross' Davis R Users' Group
    - http://www.noamross.net/davis-r-users-group.html
  - R-statistics blog
    - http://www.r-statistics.com/
    - inside-R
      - http://www.inside-r.org/blogs
- Competitions
  - o Kaggle "the home of data science"
    - https://www.kaggle.com/

To be added to...