Intro to R – Day 3

• Bioconductor's edgeR for differential gene expression in RNAseq
• Bioconductor annotations to link gene names to gene IDs
• Plotting results as Volcano plots
• Hierarchical clustering and heat maps
Workshop logistics

Target: beginners
• most of you indicated zero/little programming experience
• a few have stronger background – please be patient

Questions
• ask anytime
• don't be shy, if you miss some steps you soon won't be able to follow anything else

Time
• 2-3 hrs/day; 1 break if we go past 2 hrs
• 6-9 hrs overall: reasonable goal is to get you started, overcoming fear of programming
Selected Resources

• Quick-R [www.statmethods.net](http://www.statmethods.net)  
  • Beginner/Intermediate

• UCR manuals [manuals.bioinformatics.ucr.edu](http://manuals.bioinformatics.ucr.edu)  
  • Beginner/Intermediate

• RStudio blog [blog.rstudio.org](http://blog.rstudio.org)  
  • Intermediate/Advanced
  • Cheatsheets [www.rstudio.com/resources/cheatsheets/](http://www.rstudio.com/resources/cheatsheets/)

• Questions & Forums:
  • Stack Overflow [stackoverflow.com](http://stackoverflow.com)
  • Cross Validated [stats.stackexchange.com](http://stats.stackexchange.com)
  • Bioconductor [www.bioconductor.org](http://www.bioconductor.org)
Please take 5 min for a brief survey

Your feedback is important to us:

https://www.surveymonkey.com/r/workshop_r

Thank you for coming!
We hope you enjoyed it!