

A beginner's guide to solving biological problems in R

Day 2 Morning

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Course materials:

<http://logic.sysbiol.cam.ac.uk/teaching/Rcourse/>
Slides by Ian Roberts and Robert Stojnić

Day 1 Review

- ① Understanding the R environment
 - Installing, option setting & customization
- ② Creating and manipulating R objects
- ③ Essential built-in R functions for working with vectors and matrices
 - Reading in and writing data frames
- ④ Basic statistical analysis
 - Two sample tests & linear regression

Day 2 Schedule

- Writing scripts
 - Building scripts for routine analysis
 - Script automation using R batch mode

Morning coffee

- Extending R with customized functions
 - Learn how to write your own R functions

Lunch

- Advanced data analysis and basic R graphics
 - Integrate data from different sources and analyze

Afternoon coffee

- More on R graphics
 - Produce publication quality charts