



# Getting help

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# Asking questions

- In a standard class
  - There are 30-100 people
  - You raise your hand and ask a question
  - The instructor responds
- In a MOOC
  - There are almost 100,000 people
  - You post a question to the message board
  - Others vote on your questions
  - Your instructor responds (as often as possible)
  - Your peers respond (as often as possible)

# Often the fastest answer is the one you find yourself

- It's important to try to answer your own questions first
- If the answer to your question is in the help file or the top hit on Google, the answer to your question will be, "Read the documentation" or "Google it" (<http://imgtfy.com/>)
- If you figure out the answer and see the same questions on the forum, post the solution you found

# Some important R functions

Access help file

```
?rnorm
```

Search help files

```
help.search("rnorm")
```

Get arguments

```
args("rnorm")
```

```
function (n, mean = 0, sd = 1)  
NULL
```

# Some important R functions

See code

```
rnorm
```

```
function (n, mean = 0, sd = 1)
  .External(C_rnorm, n, mean, sd)
<bytecode: 0x7f9173a9f630>
<environment: namespace:stats>
```

R reference card

<http://cran.r-project.org/doc/contrib/Short-refcard.pdf>

# How to ask an R question

- What steps will reproduce the problem?
- What is the expected output?
- What do you see instead?
- What version of the product (e.g. R, packages, etc.) are you using?
- What operating system?

# How to ask a data analysis question

- What is the question you are trying to answer?
- What steps/tools did you use to answer it?
- What did you expect to see?
- What do you see instead?
- What other solutions have you thought about?

# Be specific in the title of your questions

- Bad:
  - HELP! Can't fit linear model!
  - HELP! Don't understand PCA!
- Better
  - R 2.15.0 lm() function produces seg fault with large data frame, Mac OS X 10.6.3
  - Applied principal component analysis to a matrix - what are U, D, and  $V^T$ ?
- Even better
  - R 2.15.0 lm() function on Mac OS X 10.6.3 -- seg fault on large data frame
  - Using principal components to discover common variation in rows of a matrix, should I use U, D or  $V^T$ ?



# Etiquette for forums/help sites: DOs

- Describe the goal
- Be explicit
- Provide the minimum information
- Be courteous (never hurts)
- Follow up and post solutions
- Use the forums rather than email

# Etiquette for forums/help sites: DON'Ts

- Immediately assume you found a bug
- Grovel as a substitute for doing your work
- Post homework questions on mailing lists (people don't like doing your homework)
- Email multiple mailing lists at once/the wrong mailing list
- Ask others to fix your code without explaining the problem
- Ask about general data analysis questions on R forums.

# Credits

- Roger's [Getting Help Video](#)
- Inspired by Eric Raymond's "How to ask questions the smart way"