# Getting Help

Roger D. Peng, Associate Professor of Biostatistics

May 17, 2016

## Asking Questions

- Asking questions via email is different from asking questions in person
- People on the other side do not have the background information you have
- they also don't know you personally (usually)
- Other people are busy; their time is limited
- ► The instructor (me) is here to help in all circumstances but may not be able to answer all questions!

## Finding Answers

- ► Try to find an answer by searching the archives of the forum you plan to post to.
- ▶ Try to find an answer by searching the Web.
- Try to find an answer by reading the manual.
- Try to find an answer by reading a FAQ.
- Try to find an answer by inspection or experimentation.
- ▶ Try to find an answer by asking a skilled friend.
- If you're a programmer, try to find an answer by reading the source code.

# **Asking Questions**

- It's important to let other people know that you've done all of the previous things already
- ▶ If the answer is in the documentation, the answer will be "Read the documentation"
- one email round wasted

## Example: Error Messages

```
> library(datasets)
> data(airquality)
> cor(airquality)
Error in cor(airquality) : missing observations in cov/cor
```

# Google

# **Asking Questions**

- 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?
- Additional information

#### Subject Headers

- Stupid: "Help! Can't fit linear model!"
- ➤ Smart: "R 3.0.2 lm() function produces seg fault with large data frame, Mac OS X 10.9.1"
- ► Smarter: "R 3.0.2 lm() function on Mac OS X 10.9.1 seg fault on large data frame"

#### Do

- ▶ Describe the goal, not the step
- Be explicit about your question
- ► Do provide the minimum amount of information necessary (volume is not precision)
- Be courteous (it never hurts)
- Follow up with the solution (if found)

#### Don't

- Claim that you've found a bug
- Grovel as a substitute for doing your homework
- ▶ Post homework questions on mailing lists (we've seen them all)
- Email multiple mailing lists at once
- ► Ask others to debug your broken code without giving a hint as to what sort of problem they should be searching for

# Case Study: A Recent Post to the R-devel Mailing List

Subject: large dataset - confused Message:

I'm trying to load a dataset into R, but I'm completely lost. This is probably due mostly to the fact that I'm a complete R newb, but it's got me stuck in a research project.

#### Response

```
Yes, you are lost. The R posting guide is at http://www.r-project.org/posting-guide.html and will point you to the right list and also the manuals (at e.g. http://cran.r-project.org/manuals.html, and one of them seems exactly what you need).
```

## Analysis: What Went Wrong?

- Question was sent to the wrong mailing list (R-devel instead of R-help)
- Email subject was very vague
- Question was very vague
- Problem was not reproducible
- No evidence of any effort made to solve the problem
- RESULT: Recipe for disaster!

#### Places to Turn

- Class discussion board; your fellow students
- r-help@r-project.org
- Other project-specific mailing lists (This talk inspired by Eric Raymond's "How to ask questions the smart way")