<u>Updated course schedule</u>

Windows users should download <u>Mobaxterm</u> - we'll use this to ssh to Amazon. Mac and Linux users will use the built-in ssh client (there is nothing extra to download).

Everyone should download <u>Cyberduck</u>. We'll use this to sftp files to and from Amazon.

Logging into the AWS instances:

```
ssh -i path/to/key.pem ubuntu@ip-address
```

Where path/to/key.pem is the path to the key file that you downloaded above, and ip-address is replaced with one of the following:

- 1. 54.167.124.62
- 2. 54.91.90.4
- 3. 54.205.65.67
- 4. 54.82.150.238 (instructor's instance, please don't use)

Workshop commands (for hands-on portions of the workshop):

Day 1: Microbial Community Diversity (Illumina Tutorial)
Day 2:

- Working with OTU tables
- Working with alternative marker genes (e.g., <u>ITS</u>, <u>shotgun read processing</u>; file formats)
- Predicting metagenomes with PICRUSt (<u>tutorial</u>; <u>paper</u>; <u>method summary</u>; <u>method performance</u>)

Getting help with QIIME scripts:

http://qiime.org/scripts/index.html

Other useful QIIME links:

http://www.qiime.org

http://qiime.org/tutorials/unix_commands.html http://qiime.org/tutorials/working with aws.html

Interested in using QIIME with StarCluster and IPython? See here:

http://qiime.org/home_static/nih-cloud-apr2012/

The IPython and StarCluster tutorials are invaluable for this:

http://ipython.org/ipython-doc/rel-0.13/index.html

http://web.mit.edu/star/cluster/

Interested in using AWS for research or education? AWS grants are available: http://aws.amazon.com/education/

Getting started with the unix shell (command line): http://software-carpentry.org/v5/novice/shell/index.html

Important links:

http://www.qiime.org
http://qiime.org/tutorials/working_with_aws.html
http://qiime.org/tutorials/tutorial.html

Alternatives to rarefaction: Waste Not, Want Not paper