Mahidol University QIIME Workshop

December 14-15 2015

Workshop Instructors:

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This schedule is tentative.

December 14: Introduction to QIIME ([workshop slides](#))

08:00 - 08:30 Intro to microbial community analysis, examples of microbiome projects
08:30 - 09:00 Intro to QIIME: installation and usage
09:00 - 09:30 Preprocessing: metadata and demultiplexing
09:30 - 09:45 Break
09:45 - 11:15 Preprocessing: OTU picking methods, taxonomy, phylogenetic trees
11:15 - 12:00 Diversity and statistical analysis Part I
12:00 - 13:30 Lunch break
13:30 - 15:30 Diversity and statistical analysis Part II (live demo)
15:30 - 17:00 Advanced topics (e.g. supervised learning, PICRUSt, alternative
                 databases for fungi or eukaryotes, etc.)

December 15: Hands-on analysis with QIIME ([workshop slides](#))

08:00 - 08:45 Getting set up for QIIME analyses
08:45 - 09:45 Command Line Interface
09:45 - 10:15 QIIME's Illumina overview tutorial
10:15 - 10:30 Break
10:30 - 11:00 QIIME's Illumina overview tutorial (continued)
11:00 - 12:00 Working with OTU tables (sorting, filtering, splitting, etc.)
12:00 - 13:30 Lunch break
13:30 - 15:00 QIIME's 454 overview tutorial
15:00 - 15:15 Break
15:15 - 17:00 Microbial forensics

Day 2: Getting connected

Logging into QIIME's IPython Notebook:

1. http://52.70.205.208:8888
2. http://52.70.233.134:8888
3. http://52.70.237.161:8888
4. http://52.70.237.190:8888

Password: qiime

Getting help with QIIME scripts: http://scripts.qiime.org

Other useful links:
- http://www.qiime.org
- http://help.qiime.org
- http://qiime.org/tutorials/working_with_aws.html (shows how to set up an EC2 instance with QIIME image)
- Earth Microbiome Project (EMP) protocols (includes links to primer construct design papers, and spreadsheets of primer construct designs)
- Qiita (QIIME database)
- QIIME Resource Page (includes links to the AMI image for installing QIIME on the AWS instances as well as gene reference databases such as Greengenes, SILVA, and UNITE)

Interested in using AWS for research or education? AWS grants are available.