Day 1: Introduction to Linux

Date: October 5th, 2018, 9 am – 12:30 pm
Instructors: Jessica Holmes, Gloria Rendon (HPCBio)
Location: 607 IGB

Class Materials:

- Presentation: PowerPoint (updated)
- Linux cheat sheet: LinuxCheatSheet-v2.xlsx
- Appendix: Linux_appendix.docx
- Exercise 3: exercise3-blank.pptx
- Exercise 3 answers: exercise3-answers.pptx
- Class Video: HERE

Additional Linux/Biocluster Resources:

- Self-guided tutorials for Linux beginners
  - Tutorial from the book UNIX and Perl to the RESCUE!
  - Parts 1 and 2 cover UNIX
  - http://korflab.ucdavis.edu/Unix_and_Perl/current.html#part2
  - SIB tutorial
  - If it asks you to log in, just log in as a "guest user"
  - Click on "UNIX elearning module" at the bottom to get started
- Linux Terminal Software
  - Windows users:
    - MobaXterm: http://mobaxterm.mobatek.net/
    - PuTTY: http://www.putty.org/
  - Macintosh users:
    - You can use the pre-installed program "Terminal" by going to Applications -> Utilities -> Terminal.
- Biocluster Resources
  - Biocluster help page
  - Campus cluster help page
  - How to obtain a Biocluster2 account
  - SLURM job script generator

Day 2: Preprocessing & Upstream Analyses

Date: October 12th, 2018, 9 am – 12:30 pm
Instructors: Jessica Holmes (HPCBio), Chris Wright (CBC), Jenny Drnevich (HPCBio)
Class Materials:

- Presentations:
  - Fluidigm introduction: QIIME2_ws_HPCBio_Oct2018FINAL.pptx
  - QIIME2 Preprocessing: QIIME_Workshop_2018_Intro-preprocessing.pptx
- Sequencing reports:
  - Example dataset's sequencing report (old style of reports)
  - Modern sequencing report example
- Mapping file examples:
  - good_arch_map_file.xlsx
  - bad_arch_map_file.xlsx
- FASTQC report for forward reads of archaea dataset
- Class video
  - HERE
- Homework
  - TotalAnalysisHW.docx

Day 3: Downstream Analyses

Date: October 19th, 2018, 9 am – 12:30 pm
Instructors: Jessica Holmes, Jenny Drnevich (HPCBio)
Location: 607 IGB

Class Materials:

- Presentation: QIIME_Workshop_2018_dada2-to-diversity.pptx
- Class video:
  - HERE
- Homework
  - TotalAnalysisHW.docx
  - TotalAnalysisHW-Answers.docx

Day 4: Statistical Analyses
Date: October 26th, 2018, 9 am – 12:30 pm

Instructors: Jenny Drnevich, Jessica Holmes (HPCBio)

Location: 607 IGB

Class Materials:

- Presentation: QIIME_Workshop_2018_StatisticalAnalyses.pptx
- Metadata table tutorial: https://docs.qiime2.org/2018.8/tutorials/metadata/
- Class video:
  - HERE