A HTS Pipeline using USEARCH, Qiime, and FAST

Zewei Song

# SECTION 0. SET UP WORKING ENVIRONMENT

## SET UP USER PATH

In general, you can put the USEARCH executable and all FAST script in a single folder, and set the path as a path environment variable. By doing these, we can call these program anywhere in our computer. But you can also copy all these program to your working folder and use them.

*Download Program:*

USEARCH: <http://www.drive5.com/usearch/download.html>

Submit your email address, and the website will send a link to your mailbox. Beware to choose the right platform for you. USEARCH will be a single file, with a version number. I always rename it to “usearch” for convinent.

FAST: <https://github.com/ZeweiSong/FAST>

This is a GitHub repository with several script I wrote to pre-process the sequencing files, dereplicate, and handling the Qiime style OTU map. You can download the entire repository using “Download ZIP” button on the right and unzip the content to the same folder as USEARCH executable.

*Path Variable:*

For Windows user, add the path of the tool folder to the Path Variable of under User Variable. Following this to find the Path variable: Control Panel\System and Security\System\Advanced system setting\Environmental variables\User variables for User\_name

For Linux user, modify you .bashrc to include the folder path. Usually you can find this file under your home directory (~). Use vi ~/.bashrc to make modification. Usually you would like to save the tool folder to /usr/local/bin.

Use echo $PATH to check you current path variable.