## **Server Connection Instructions**

2020 Bioinformatics Research Experience

## Mac

- 1. Software needed:
  - a. XQuartz <a href="https://www.xquartz.org/">https://www.xquartz.org/</a>
  - b. Cyberduck <a href="https://cyberduck.io/">https://cyberduck.io/</a>
  - c. Cisco AnyConnect VPN
- 2. Connecting to the server
  - a. Sign into Cisco AnyConnect VPN
    - i. Under VPN, in the box next to the Connect button, put in the vpn address, vpn.coriell.org
    - ii. Click Connect
    - iii. In the popup, enter your username and password. For the **Group** dropdown menu, you should select **Default**
    - iv. Click OK and you should be connected to the VPN. The VPN client also should have a green check mark over the lock and say "Connected to vpn.coriell.org"
  - b. Open terminal and type the command to connect to the server ssh -Y yourusername@10.1.105.13
    - i. Your username is your first initial, then last name, ex: Jane Doe's username would be jdoe
    - ii. Your password is "password"
  - c. Enter your password when prompted
- 3. Transferring files to and from the server
  - a. If you're not already, sign into Cisco AnyConnect VPN
  - b. Set up an SSH key in terminal
    - i. Type the command ssh-keygen -t rsa -b 4096-C "your\_email@domain.com" to generate an SSH key
    - ii. When you're prompted to "Enter a file in which to save the key," press Enter. This accepts the default file location.
    - iii. When you're asked to Enter passphrase either type a password you'll remember, or you can hit Enter to skip using a password. (On a secure personal machine I'd just hit Enter to make your life easier.)

- iv. Start the SSH agent in the background with the command
  eval "\$(ssh-agent -s)"
- v. Check to see if the file ~/.ssh/config exists by entering the command open ~/.ssh/config If it doesn't exist create it with the command touch ~/.ssh/config
- vi. Last step, add your SSH private key to the ssh-agent with the command ssh-add -K ~/.ssh/id rsa
- c. Launch Cyberduck
- d. Click on the + button in the lower left corner
  - i. On the drop down menu, select "SFTP (SSH File Transfer Protocol)"
  - ii. For the **Server** box enter 10.1.105.13
  - iii. The **Port** box should say 22
  - iv. In the **Username** and **Password** boxes, put your username and password for the server
  - v. Click Connect
  - vi. When it asks about an **Unknown fingerprint** click the box next to **Always**, then click **Allow**

## Windows

- 1. Software needed:
  - a. PuTTy <a href="https://www.chiark.greenend.org.uk/~sgtatham/putty/">https://www.chiark.greenend.org.uk/~sgtatham/putty/</a>
  - b. Xming <a href="https://sourceforge.net/projects/xming/">https://sourceforge.net/projects/xming/</a>
  - c. WinSCP <a href="https://winscp.net/eng/index.php">https://winscp.net/eng/index.php</a>
  - d. Cisco AnyConnect VPN
- 2. Connecting to the server
  - a. Sign into Cisco AnyConnect VPN
  - b. Sign into the server using PuTTy
    - i. In the main screen under **HostName** type 10.1.105.13
    - ii. Still on the main screen make sure the connection type is SSH
    - iii. On the left side panel expand the "SSH section then click on X11. Make sure the box saying Enable X11 forwarding is checked.
    - iv. On the left side panel, click **Session** to go back to the main screen. Under **Saved Sessions**, type a name you want to save the settings under, then press **Save**.
    - v. Click **Open**.
    - vi. Enter your username and password when prompted.
      - 1. Your username is your first initial, then last name, ex: Jane Doe's username would be idoe
      - 2. Your password is "password"
- 3. Transferring files to and from the server
  - a. If you're not already, sign into Cisco AnyConnect VPN
  - b. Launch WinSCP and on the **Login** screen that pops up when you launch it enter:
    - i. Under **HostName** put cbix
    - ii. Under **User name:** put your username for the server
    - iii. Under **Password:** put your password for the server
  - c. Click Login