Setting up jupyter notebook on the CBRG cluster

On deva

1. Load python

   ```
   $ module load python3-cbrg
   ```

2. Create a config file (best to do this in your home directory)

   ```
   $ jupyter notebook -generate-config
   ```

3. Use a text editor to uncomment (i.e. delete the "#" at the line start in this case) the following lines of the config file:

   ```
   c.NotebookApp.ip = 'localhost'
   c.NotebookApp.open_browser = False
   c.NotebookApp.port = 8888
   ```

   These are spread out through the file and take a bit of time to find. Change `8888` to a unique port number (everyone can't use `8888`) - most any number between 1024 and 65535 should work

4. Create a password

   ```
   $ jupyter notebook password
   ```

On local machine

This part is dependent on the computer you're using. The instructions here should work for most any Mac.

1. Create or edit the ssh config file (thoughtfully named "config") found in the folder ~/.ssh/ and include the following

   ```
   Host devaJupyter
       HostName deva.molbiol.ox.ac.uk
       User username
       LocalForward 8888 127.0.01:8888
   ```

   Replace "`username`" with your user name and the "`8888`"s with your unique port number

Running jupyter notebook

1. In a new terminal window on the local machine, ssh with the new host

   ```
   $ ssh devaJupyter
   ```

2. Load python and jupyter notebook on deva

   ```
   $ module load python3-cbrg
   $ jupyter notebook
   ```

3. Open browser on local machine to http://127.0.0.1:8888 (again replace "`8888`" with your unique port number) and enter your password

Future jupyter notebook sessions will only require these last 3 steps