Newton Module System

It is best to do this lesson while logged into the Newton head node or to a compute node (via qrsh). To log in:

```
ssh username@newlogin.newton.utk.edu
qrsh xterm
hostname
```

The last command should return the name of a newton computer (a latin name like chi or psi followed by a number).

Newton uses modules to manage software installations (see slides from lesson 4 and readings for lesson 4). Let's investigate this system.

**Module avail**

First, we can list all available modules

```
$ module avail
```

Lots of bioinformatic software! If you ever need to ask for a piece of software to be installed on Newton, check this list first and make sure it's not already installed.

Let's reduce the list to examine the python modules.

```
$ module avail python
```

**Module load**

Once you have identified the specific module and (optionally) version that you want to use, load the module:

```
$ module load python/3.2.1
```

If you do not specify the version, module load will automatically load the newest version.

We can check the python version with

```
$ python -V
```
**Module list**

To see the modules that are currently loaded into your environment, use list:

```
$ module list
```