

Instructions and tips to compile Mod files on Macs

(thanks to Alexa Aucoin and Sarah Seger)

- XCode should work on your computer and may require some upgrading
- You will need to have “command line tools” and open-mpi installed on your Mac. You may need an Apple Developer ID to install “command line tools” from online (free to make). Open-mpi can be installed in a terminal using the ‘brew install open-mpi’ (or similar command)

Command line tools: <https://developer.apple.com/download/more/>

- **Compiling:** Drag the modfiles folder onto the mknrndll GUI. If successful, this will create a folder called x86_64 within the modfiles folder. Within the x86_64 folder, there is a .exe file called special. This is a special instance of nrniv that has all of the .mod files from the modfiles folder compiled internally. We will want to run our simpleneuron.hoc file from this “special” instance of nrniv. You need to do this only once, unless you change/edit the .mod files in the modfiles folder.
- **Run the Simulation:** use the following command lines in a new terminal window:

First you want to cd into the unzipped SimpleNeuron folder (or the directory where simpleneuron.hoc lives):

```
cd <pathname>/SimpleNeuron
```

To run simpleneuron.hoc, type the following command:

```
modfiles/x86_64/special simpleneuron.hoc -
```

NOTE: the “ - “ at the end is important. Without this it will exit immediately upon running the .hoc file.

- You may also need to uninstall and reinstall XQuartz if the nrngui windows don't pop up as expected.