**Files info**

**Folders**

**Adrienne recordings data**

Contains Merkel cell potential and neuron current recordings from Adrienne Dubin.

**Original data**: raw data

**Organized data**: data organized to put in codes

**Figure files**

Contains all codes and data needed to plot figures in the thesis.

**data**: figure data

**folders with F + number in names**: contains figures corresponding with thesis figure numbers, as well as their visio files and .tif files after visio.

**Unused figures**: figures not used in thesis, but might be useful in the future

**Python files**: run each file to plot

**Shawn model data**

Contains displacement-controlled and force-controlled data: displacement, force, stress, time.

Contains 1 Matlab file: **lindsayfiber**, which is the source of other files in this folder.

**Yoshi recordings data**

Contains recording data used in Shawn’s FEM model, and compared in Lindsay’s thesis: displacement, force, spikes, time.

**Python files**

**adrienne\_current\_fit.py**

**adrienne\_potential\_fit.py**

Fits Adrienne recording data with exponentials.

**calculate\_recording\_fr.py**

Calculates the firing rates and generates files to use in figures for Yoshi’s recordings. Also fits Yoshi’s recording traces (commented in codes, uncomment them when using this feature).

**gen\_function.py**

**lif\_model.py**

**model\_constants.py**

**stress\_to\_spike.py**

Main functions of the generator function and end-organ model. See **Instruction on running the model.txt** for more information.

**rename\_file.py**

A useful small tool for renaming file names in a folder.