\_\_ /**sucrose** \_\_\_\_\_\_\_\_\_ /**matlab sucrose** \_\_\_\_\_\_\_/**common functions**

| |\_\_ /**data zip** (e.g. unzip to /CSDS directory below)

| |\_\_ /**sucrose behavior**

| |\_\_ /**sucrose exp lists**

| |\_\_ /**sucrose fluo**

| |\_\_ …

| |\_\_ start\_beh.m

| |\_\_ start\_dff\_compute.m

| |\_\_ sucrose\_setPathList.m

| |\_\_ …

|

|\_ /**CSDS** \_\_\_\_\_\_\_\_\_\_\_\_\_ /**analysis** (will be created when running the Matlab scripts)

| |\_\_ /**summary** (will be created when running the Matlab scripts)

| |\_\_ /**data** \_\_\_\_\_\_/**Stress** \_\_\_\_\_ / -1 Baseline\_\_\_\_\_\_ 1\_4-xxx.log

| | |\_\_ 1\_5-xxx.log

| | |\_\_ …

| |

| |

| |\_\_/**Control**

| |\_\_/ …

|\_\_ /**CSDS\_water** (e.g., another set of experiments)

**Bold**: folders

Code exclusively stored in the /**matlab…** folder. Sync your Github branch or fork to this folder.

Data exclusively stored in the /**data** folder. No analysis will be added to the /**data** folder.

If you want the analysis to start from a clean slate, simply remove the /**analysis** and /**summary** folder.

**To run the analysis…**

Below are the folder locations for the data for the experiments, and the sequence of .m files to run to generate the plots.

For behavior across defeat sessions (Figs. 2 – 4)

* /CSDS/data/Stress (social defeat – defeated mice)
  + start\_beh.m (set variable m = 1)
* CSDS/data/Control (social defeat – control mice)
  + start\_beh.m (set variable m = 2)
  + start\_beh\_CSDS\_summary.m

For baseline behavior (Figs. 1 F-I)

* /CSDS/data/Baseline
  + start\_beh.m (set variable m = 4)
  + start\_beh\_summary.m (set variable m = 4)

For behavior with sucralose (Fig. 1 K-M)

* /Sucralose
  + start\_beh.m (set variable m = 11)
  + start\_beh\_summary.m (set variable m = 11)

For behavior across defeat sessions, reward type is water only (see Methods)

* /CSDS\_water
  + start\_beh.m (set variable m = 5)
  + start\_beh\_CSDS\_water.m

For behavior with randomized trials (Fig. 1J)

* /Randomized
  + start\_beh\_randomized.m
  + start\_beh\_randomized\_summary.m

For spontaneous activity imaging (Figs 5 – 7)

* M2spon\_CSDS/data/Stress (social defeat – defeated mice)
  + start\_beh.m (set variable m = 21)
* M2spon\_CSDS/data/Control (social defeat – control mice)
  + start\_beh.m (set variable m = 22)
  + start\_dffspon\_compute.m (set variable m = 21)
  + start\_dffspon\_compute.m (set variable m = 22)
  + start\_dffspon\_analyze.m (set variable m = 21)
  + start\_dffspon\_analyze.m (set variable m = 22)
  + start\_dffspon\_summary.m

**A table of the imaging experiments**

Mouse ID Virus Social defeat?

82 GCaMP6f stressed

83 GCaMP6f stressed

84 GCaMP6f stressed

85 GCaMP6f stressed

88 GCaMP6f control

9 Bicistronic control

10 Bicistronic control

11 Bicistronic control

1 Bicistronic stressed

4 Bicistronic stressed

5 Bicistronic stressed