ReadMe Document and data spreadsheets finalized 2/15/23 by Sarah C. Fletcher and John Meitzen, for data presented in this publication:

Willett JA, Will T, Hauser CA, Dorris DM, Cao J, Meitzen J. No Evidence for Sex Differences in the Electrophysiological Properties and Excitatory Synaptic Input onto Nucleus Accumbens Shell Medium Spiny Neurons. eNeuro. 2016;3(1):ENEURO.0147-15.2016. Published 2016 Feb 27. doi:10.1523/ENEURO.0147-15.2016

The excel spreadsheet features whole-cell patch clamp electrophysiology data of medium spiny neuron properties of prepubertal male and female rats. Data were collected first in current clamp, and then in voltage clamp at -70 mV holding potential in the presence of tetrodotoxin (TTX) and picrotoxin (PTX). Please see Willett et al. for further methodological details.

Files:

1) Excel file sheet 1 – All Cells: Summary of all collected data for electrophysiological properties of medium spiny neurons obtained from male and female prepubertal rat nucleus accumbens shell. Data collected prior to exposure to TTX/PTX is underneath the blue heading. Data collected after the exposure to TTX/PTX is underneath the green heading. Some pieces of data are not available and are indicated in the spreadsheet with the annotation “N/A.” For N/A values in mEPSC of amplitude, frequency, and decay, values are not present because these neurons were not recorded in voltage clamp. For values not available in delay to first action potential, greater than two spikes were recorded and thus not included in the study. Please see Willet *et al.* 2016 methods for further information.

2) Excel file sheet 2 – Analysis Template: Blank template used to analyze data collected from individual medium spiny neurons.

3-28) Excel file sheets 3-28 – Individual Medium Spiny Neuron Tabs: Data collected for individual neurons before and after exposure to TTX/PTX. Resting membrane potentials (RMPs) are already calculated for liquid junction offset of -13.5. Images in individual sheets are an IR-DIC micrograph showing recording location.