

Agenda for 05/03/19 CRF Ephys Paper Analysis Matlab Tutorial

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Author: James M. Irving, Ph.D.

LINKS / RESOURCES

- **GitHub Repository with all analysis scripts**
 - <https://github.com/jirvingphd/Sparta-Lab-CRF-Ephys-Paper-Scripts-and-Data>
 - ~~DROPBOX FOLDER FOR ALL RESUBMISSION FILES~~
 - ~~[CeA CRF NPP EPHYS PAPER to Submit - Personal Dropbox Public Folder](#) [Referred to as "CRF Ephys Folder" in this document.]~~
 - ~~Links from my prior email do not work for me since my dropbox was disconnected.~~
 - WORKFLOW GUIDE OF ANALYSIS SCRIPTS IS IN
 - Follow
 - In CRF Ephys Folder >
 - <https://raw.githubusercontent.com/jirvingphd/Sparta-Lab-CRF-Ephys-Paper-Scripts-and-Data/master/Sparta%20Lab%20CRF%20Paper%20Simplified%20Workflow%20-%20%20Final.pdf>
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WALK-THROUGH TOPICS/AGENDA

1. INSTALLATION OF SCRIPTS AND TEMPLATES

1. Installation of NeuroExplorer Templates and Scripts

1. Copy Scripts and Templates from:
 - CRF Ephys Folder > Matlab & Neuroexplorer Scripts > Required NeuroExplorer Scripts & Templates
2. Contents of Scripts folder copied to Nex's folder.
Default directory is My Documents > Nex 5> Scripts
3. Contents of Templates folder copied to Nex's folder:
Default directory is My Documents > Nex 5> Templates

2. Installation of Matlab Scripts and Functions

1. Scripts and Functions are in:
 - CRF Ephys Folder > Matlab & Neuroexplorer Scripts > Required Matlab Scripts
2. Copy folder to somewhere on computer.
 - Recommend Create a "Matlab Files" Folder in My Documents > Matlab Files
 - This folder must be added to Matlab's Path via the Set Path menu. Otherwise Matlab will not be able to find the functions.
3. To Add Matlab Files to Path:
 1. Open Matlab. On Home tab of Menu bar select Set Path
Its in the Environment Section on the right half of the menu bar.
 2. Click `Add With Subfolders` and navigate to and select the folder with the copied Matlab Files.
 3. Click Save then click Close.
4. Test to verify that it worked
 1. In the Command Window type "open calcWFcorrelationMLTrigd"
 2. If it worked, Matlab will open the file inside of the Matlab Editor.
 3. If there's an error, you may not have hit "Save" in step #3 above or you may not have clicked `Add With Subolders`

2. PREPARING FILES FOR ANALYSIS

1. Files must have been cleaned in OfflineSorter and have DIDSessionInts .csv

1. Must then open in Nex, import DIDSessionInts.csv as an Interval Variable
2. Files are then saved as .nex5 files

2. **All .nex5 files must have their drink 'ethanol','sucrose',or'water', in their name, plus 'day##';**

3. **OPEN MATLAB AND FOLLOW SPARTA LAB CRF Simplified Workflow**

1. For First File (import_nex_files_spikes_and_bursts), when file select window opens navigate to folder with data files and select all files and click OK.
 2. Matlab will open neuroexplorer and run a series of analyses and export the data back to Matlab
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