

Important Links for the Use of dcm2bids + fmriprep

Installation Links:

1. Docker Engine: <https://docs.docker.com/engine/install/>
2. Dcm2bids: <https://pypi.org/project/dcm2bids/>
3. Fmriprep: <https://fmriprep.org/en/0.6.4/installation.html>
4. Fmriprep Wrapper: Simply type in the command: `python -m pip install --user --upgrade fmriprep-docker`

Descriptive Papers:

1. Paper introducing the Brain Imaging Data Structure (BIDS):
<https://www.nature.com/articles/sdata201644>
2. fMRI prep Nature Methods and Nature Protocols papers (Must Read):
 - a. fMRIPrep: a robust preprocessing pipeline for functional MRI:
<https://www.nature.com/articles/s41592-018-0235-4>
 - b. Analysis of task-based functional MRI data preprocessed with fMRIPrep:
<https://www.nature.com/articles/s41596-020-0327-3>

Background readings:

1. fMRI preprocessing tutorial (describes each steps - ignore the FSL commands):
https://andysbrainbook.readthedocs.io/en/latest/fMRI_Short_Course/fMRI_04_Preprocessing.html
2. fMRI preprocessing steps (first half of slides):
<https://ftp.nmr.mgh.harvard.edu/pub/docs/SavoyfMRI2014/fmri.april2011.pdf>
3. Field map distortion correction:
 - a. Effects of Field-Map Distortion Correction on Resting State Functional Connectivity MRI: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5717028/>
 - b. Image Distortion Correction in fMRI: A Quantitative Evaluation:
<https://www.sciencedirect.com/science/article/pii/S1053811901910547>

Official Documentation:

1. Official fmriprep documentation: <https://fmriprep.org/en/stable/>
2. Analyzing fmriprep outputs: <https://fmriprep.org/en/stable/outputs.html>
3. Stanford BIDS Tutorial: <http://reproducibility.stanford.edu/bids-tutorial-series-part-1a/>
4. Rules for Naming Files in the BIDS format (BIDS Syntax Documentation):
<https://bids-specification.readthedocs.io/en/stable/>
5. Dcm2bids: <https://cbedetti.github.io/Dcm2Bids/tutorial/>
6. The DICOM format: <https://www.dicomlibrary.com/dicom/>

Forum for Raising Questions:

1. Neurostars: <https://neurostars.org/>
2. Questions I raised previously, that have been addressed:
https://neurostars.org/u/shreya_13/activity