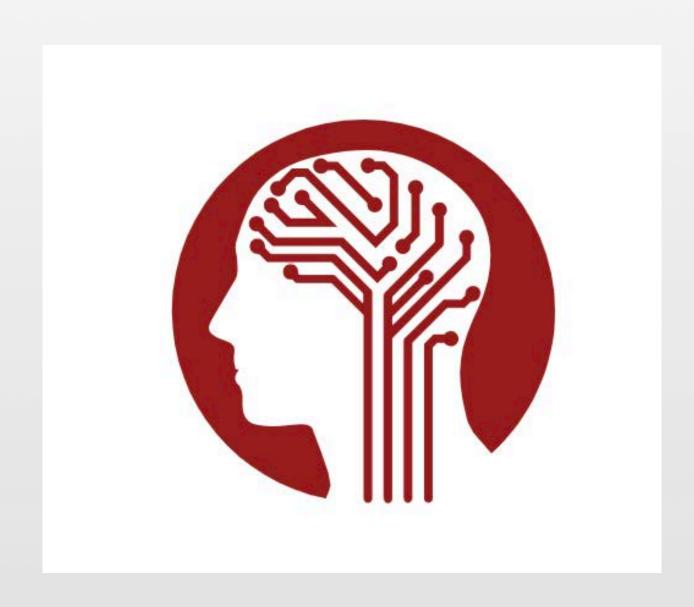


NYSPI MRI support for NDA submissions





GOAL

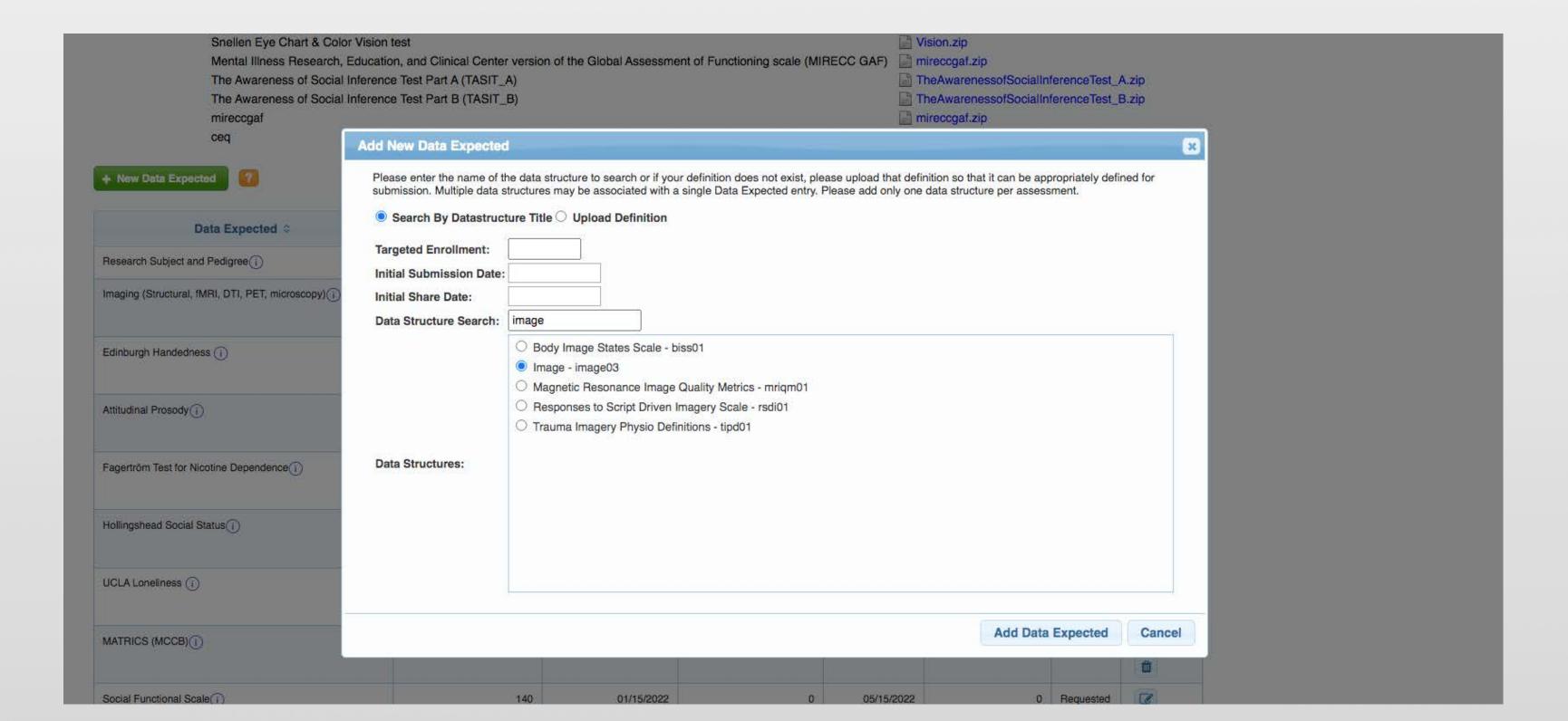
To provide instructions and support on sharing MR data on the NIMH Data Archive





Data Expected

- By now you should already have an NDA account and a collection associated with your grant.
- Each collection is made up of several different "Data Structures".
- The different Data Structures make up all of the data you will be sharing. The structure associated with uploading all MR data is called Image and its short name is Image03
- To add the structure to your Data Expected, click the Data Expected tab, click "+ New Data Expected" and search for the image structure.

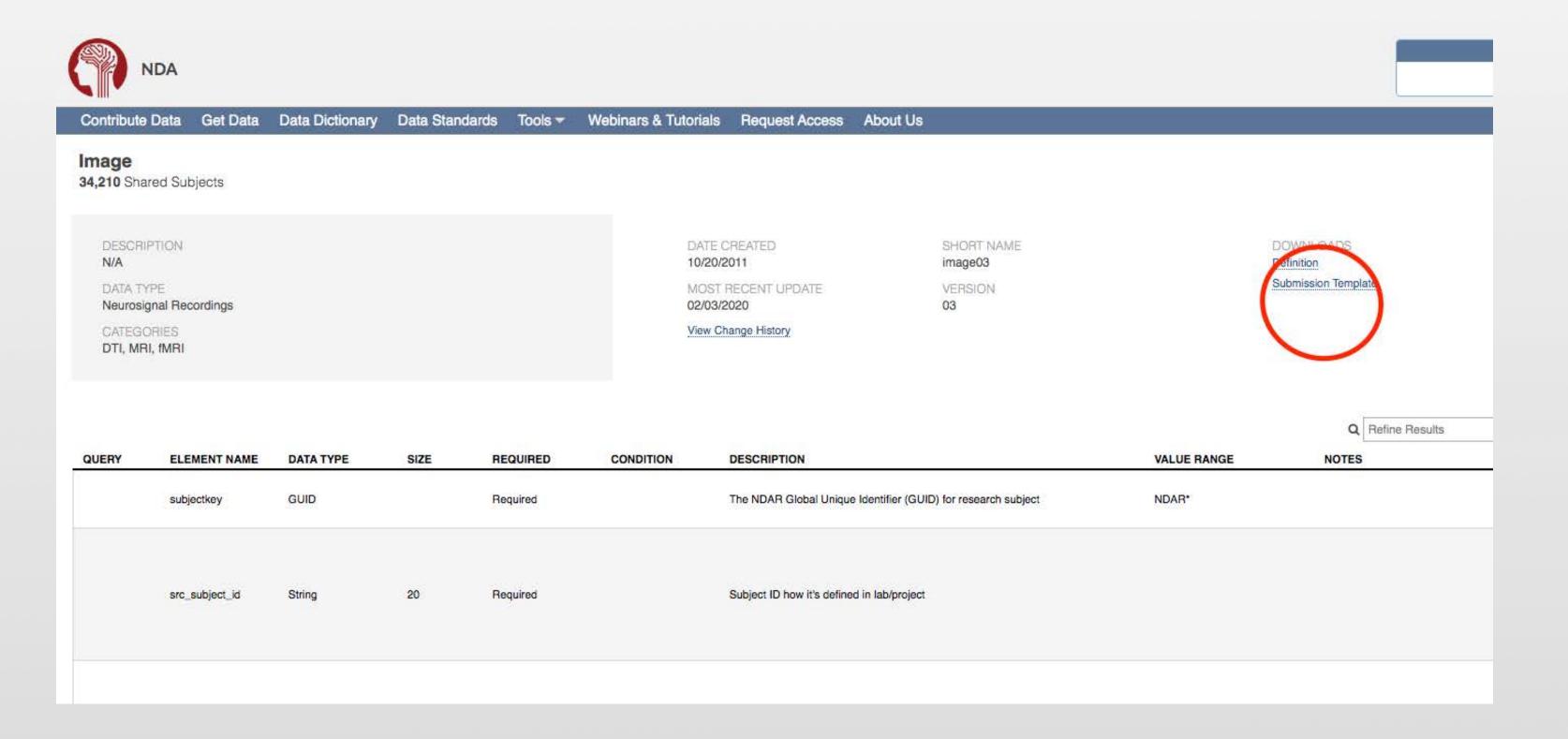


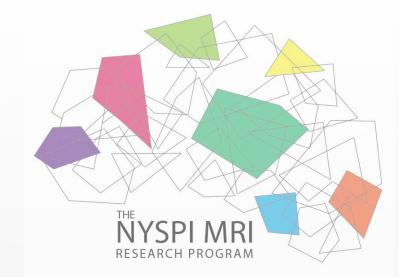


NYSPI MRI RESEARCH PROGRAM

Image03

• The Image03 data structure is now associated with your collection. This data structure needs to be downloaded and filled manually.

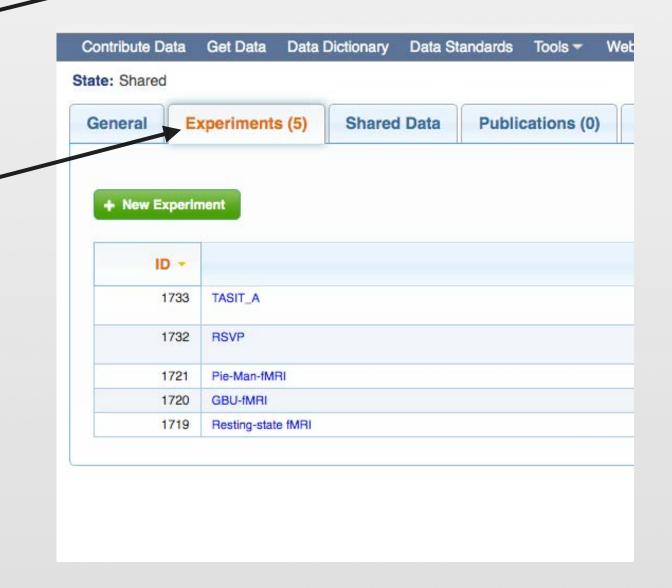




Image_03.csv

image	3									
subjectkey	src_subject_id	interview_date	interview_age gender image_file		image_thumbnail_file	image_description	experiment_id	scan_type	scan_object	image_file_format
NDAR_INVFN587EK1	2105	01/02/2020	84 F	/Volumes/Milo/2_fMRI_analyses/InhibitoryControl/spanint/derivatives/NDAR/2021January/spanint2105_2_STRUC_T1MPRAGE_noPROMO.zip		MR structural (T1)		MR structural (T1)	Live	DICOM
NDAR_INVFN587EK1	2105	01/02/2020	84 F	/Volumes/Milo/2_fMRI_analyses/InhibitoryControl/spanint/derivatives/NDAR/2021January/spanint2105_3_STRUC_T1MPRAGE_noPROMO.zip		MR structural (T1)		MR structural (T1)	Live	DICOM
NDAR_INVFN587EK1	2105	01/02/2020	84 F	/Volumes/Milo/2_fMRI_analyses/InhibitoryControl/spanint/derivatives/NDAR/2021January/spanint2105_4_STRUC_T2CUBE_PROMO.zip		MR structural (T2)		MR structural (T2)	Live	DICOM
NDAR_INVFN587EK1	2105	01/02/2020	84 F	/Volumes/Milo/2_fMRI_analyses/InhibitoryControl/spanint/derivatives/NDAR/2021January/spanint2105_6_FUNC_TOPUP_FM_SST.zip		Field Map		Field Map	Live	DICOM
NDAR_INVFN587EK1	2105	01/02/2020	84 F	/Volumes/Milo/2_fMRI_analyses/InhibitoryControl/spanint/derivatives/NDAR/2021January/spanint2105_7_FUNC_MUX6_SST.zip		fMRI	1467	fMRI	Live	DICOM

- The first 5 fields of ALL structures are the same required elements.
- The rest of the fields are with conditional or required predicated on MR data type.
- Image file contains the physical location of the zipped DICOM for each scan type.
 - In addition if the scan type is an experiment (i.e. task bold), it must be defined and id for that experiment must be created.
 - experiments are created and stored on the experiment tab
- The rest of the fields are specific to the scan type. The relevant information can be found in the DICOM headers or jsons.
- The NYSPI MR team is working on a script to be able to fill out the fields of each scan type directly from the DICOMS headers or jsons.







Validate + Upload Image03

- Once the Image structure is filled out, it must be validated and submitted according to the dates established in the data sharing agreement with the NDA
- The Validation and upload tool can then be launched on the NDA GUI.

anda.nih.gov/tools/nda-tools.html#vt

A Get Data Contribute Data Validation and Upload Tool Contributors harmonizing and uploading their data to the NIMH Data Archive must use the Validation and Upload Tool to send their data and complete this process. This tool connects to the Data Dictionary and then allows you to load data templates and validate them against their definitions. This helps ensure that data in NDA is harmonized to a standard and serves as a "pre-upload" QA check on your data. After data is successfully harmonized, the same tool is used to package and upload the data to your NDA Collection. In addition to working with CSV data templates, the tool also supports direct uploads from a hosted AWS-RDS database. There are currently three different versions of the tool. Please review them below to determine the most appropriate one for your situation. If in doubt, please use the first option: the HTML version. HTML Validation and Upload Tool This version of the tool allows you to use it a webpage, validating the quality of your data and upload it directly through your web browser. Chrome, Firefox, Safari, and recent versions of Internet Explorer are supported Launch the HTML Validation and Upload Tool Python Validation and Upload Tool The tool is also available as a Python package. Please contact us at NDAHelp@mail.nih.gov for more information about whether this version might be helpful to you.

- The validation GUI ensures that the limits of each field (defined in the image03 itself) are met and that the physical data is accessible for upload.
- NDA has recently released a Download Manager to facilitate the validation and upload



Future Support

- BIDS manifest structure
- Provide storage for image_file field of image03
- •Provide access to matlab script to "auto fill" the image03 template before upload
- •Provide an experiment id for all "common" experimental series at nyspi
- Provide download manager/validation/upload python access on cluster
- Provide user support for cluster tools