

XNAT Workshop



Welcome to the Online XNAT Workshop. Completing this online training is an acceptable substitute for the in-person XNAT Workshop. By watching all the workshop videos below and completing the associated quiz you will have completed the mandatory training component for enabling your user account. XNAT administrators will automatically be notified when you have completed the quiz.

The workshop videos can be viewed at your own speed and the quiz can be taken after the completion of all videos.

By the end of this tutorial you should know how to navigate XNAT, the XNAT data model, how to upload and download data, the user permission roles, proper naming convention, how to set up pre-processing scripts.

If you would like to know more about XNAT beyond the scope of this tutorial, you can check out the official XNAT documentation [here](#).

Resources:

- Get the course slides: [Here](#)
- Start the Quiz: [Here](#)
- Need Help? Contact: xnat.neuro@camh.ca

⚠ IMPORTANT NOTE: the following videos reference [neurowiki.camh.ca](#) as a resource for information on naming convention and xnat procedures. The neurowiki is now deprecated. All information that was found on neurowiki can now be found here on confluence by searching in the left panel.

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Course Introduction

[Link to Course Introduction video](#)

What you'll learn:

- Workshop Requirements
- Course Rubric

Neuroinformatics Platform Overview

[Link to Neuroinformatics Platform Overview video](#)

What you'll learn:

- What is XNAT
- What is the Neuroinformatics Platform

Getting Started with the Neuroinformatics Platform

[Link to Neuroinformatics Platform Overview video](#)

What you'll learn:

- How to get started with the Neuroinformatics Platform
- How to create a New User Account
- How to create a New Project
- XNAT permission model
- How to share data between Projects
- The Neuroinformatics Platform [Naming Convention](#)

Resources:

- [New User Request Form](#)
- [New Project Request Form](#)

Introduction to XNAT

[Link to Introduction to XNAT video](#)

What you'll learn:

- The XNAT Data Model
- Navigating XNAT
- Archive vs. Prearchive
- Viewing data
- Modifying data

Working with MR/PET Data

[Link to Working with MR/PET Data video](#)

What you'll learn:

- Uploading data manually
- How to setup automated uploads
- Anonymization
- Downloading data

Working with EEG Data

[Link to Working with EEG Data video](#)

What you'll learn:

- Uploading data manually
- How to setup automated uploads
- Downloading data

Pipelines

Standard Pipelines

These pipelines will run on your data without any additional configuration steps. Raw data will not be altered and is still available.

[Link to Standard Pipelines video](#)

What you'll learn:

- Pipelines that will run automatically on your data:
 - Name Checker (All data)
 - fBIRN QC (Only fMRI)
 - Manual QC (Optional, only MR)

Optional Pipelines

The following pipelines must be configured before they will run. The Next 4 subsections are optional learning (not mandatory for the quiz) but are recommended. If you only want to learn the absolute minimum for the quiz, you can jump ahead to this section [Pipeline Next Steps](#)

MR Protocol QC

[Link to MR Protocol QC video](#)

What you'll learn:

- How to configure MR Protocol QC

Resources:

- [Download](#) example schematron
- [Link](#) to schematron standard

Dicom to Nifti Conversion

[Link to dcm2nii video](#)

What you'll learn:

- How to configure dicom to nifti conversion

Resources:

- [Link](#) to description of Rordenlab's dcm2nii script

EEG Pre-Process

[Link to EEG Pre-Process video](#)

What you'll learn:

- How to configure EEG pre-processing conversion

Resources:

- [Link](#) to Redcap Pipeline Configuration form
- [Link](#) to description of MNE python package used to pre-process the data

EEG Protocol QC

[Link to EEG Protocol QC video](#)

What you'll learn:

- How to configure EEG Protocol QC pipeline

Resources:

- [Link](#) to Redcap Pipeline Config form

Pipeline Next Steps

[Link to Pipeline Next Steps video](#)

What you'll learn:

- How to request new pipelines
- Additional upcoming XNAT pipelines and features

Spotfire Introduction

[Link to Spotfire Introduction video](#)

What you'll learn:

- What is Spotfire
- How can it be used for your project

Take the Quiz

Now that you've completed all the video tutorials take the quiz!

- [Take the Quizz](#)

Congratulations!

You've completed the XNAT online workshop. You can now create a Neuroinformatics Platform user account and project.

Contact:

- xnat.neuro@camh.ca