



NWB Workshop_KavliNDI

Date and Location: June 20th -21st, 2024, Johns Hopkins University

NWB Team: Benjamin Dichter, Ryan Ly, Stephanie Prince

Thursday, June 20th: Open to everyone. Registration required (details in the flier).

10:30am – 11:30am: Intro to NWB + DANDI – Shaffer 3

Topics include:

- *Intro to Neurodata Without Borders (NWB)*
- *Intro to DANDI Archive*
- *NWB Extensions*
- *Analysis and visualization tools*
- *OpenScope DataBook*

11:30am – 12:15pm: NWB GUIDE tutorial - Shaffer 3

Follow a self-paced walk-through of converting data to NWB and uploading to DANDI using the new NWB GUIDE application.

12:30pm – 1:15pm: Break

1:30pm – 2:30pm: Walkthrough of NeuroConv, PyNWB and MatNWB - Shaffer 3

These software libraries provide more flexibility than the GUIDE application. This session will walk through their usage and tutorials.

2:30pm – 3:00pm: Interactive DANDI Demo - Shaffer 3

Explore the features of DANDI, including how to find and analyze datasets.

Topics include:

- *Navigating DANDI*
- *Neurosift*
- *Search*
- *DANDI Hub*

3:00pm – 3:15pm: Break



3:15pm – 4:00pm: Interactive demos for analyzing data on DANDI Hub.

Topics include:

- *Analysis of open data from the Moser Lab in Python on DANDI Hub*
- *Analysis of Dandiset 000011 in MATLAB on DANDI Hub.*

4:00 - 4:30: Interactive demo of Dendro - Shaffer 3

Follow this self-paced tutorial to learn how to automatically run data processing apps in Dendro, a cloud-based data analysis application.

4:30 - 5:00: Plan for Day2 Breakout sessions - Shaffer 3

6 - 6:45: Intro to Open Neurophysiology with NWB and DANDI - Clark Hall 110

Early-year graduate students, research assistants, and advanced undergraduates are specially invited to an evening workshop to learn about the Neurodata Without Borders (NWB) data standard and DANDI Archive for neurophysiology. The session will be focused on how to get started with using the NWB data standard and re-using public NWB data in your research projects. Pizza will be served.

Others are welcome to join but note that the session will repeat much of the same material presented during the morning/afternoon lectures and tutorials.

Friday, June 21st Limit 30 seats. Registration required (details in the flier).

10 AM - 4 PM: BYOD (Bring Your Own Data) Hacking - Clark Hall, 316

NWB Developers will be available for 1:1 support and lead tutorials in small groups on topics of participant interest, such as writing data for specific data modalities, building and using NWB extensions, and optimizing data storage.

Break out rooms: Clark 311 and Clark 314