Resource Summary Report

Generated by NIF on May 21, 2025

Neurodata Without Borders

RRID:SCR_015242
Type: Tool

Proper Citation

Neurodata Without Borders (RRID:SCR_015242)

Resource Information

URL: http://nwb.org/nwb-neurophysiology/

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Description: Data standard for neurophysiology, providing common standard to share, archive, use, and build common analysis tools for neurophysiology data. NWB:N is designed to store variety of neurophysiology data, including data from intracellular and extracellular electrophysiology experiments, data from optical physiology experiments, and tracking and stimulus data. Project includes NWB format and broad range of software for data standardization and application programming interfaces (APIs) for reading and writing data as well as high value data sets that have been translated into NWB data standard. NWB format is implemented in Hierarchical Data Format (HDF5) and is designed to store data in self documenting way. Storage schema is described by specification language and it is extensible to support future scientific needs as well as lab specific requirements.

Abbreviations: NWB

Synonyms: NWB:N 2.0, Neurodata Without Borders - Neurophysiology, NWB:N

Resource Type: data or information resource, standard specification, model, information model, project portal, narrative resource, portal

Keywords: file format, data storage, neurodata storage, neurophysiology data standard, neurophysiology data

Funding: NIH BRAIN Initiative ;
Kavli Foundation ;
Simons Foundation ;
Howard Hughes Medical Institute ;

International Neuroinformatics Coordinating Facility

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Alternate URLs: https://neurodatawithoutborders.github.io/, https://github.com/NeurodataWithoutBorders, https://github.com/NeurodataWithoutBorders/nwb-schema, https://www.nwb.org/2019/02/26/nwbn-2-0-final-released/

Record Creation Time: 20220129T080324+0000

Record Last Update: 20250521T061553+0000

Ratings and Alerts

No rating or validation information has been found for Neurodata Without Borders.

No alerts have been found for Neurodata Without Borders.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 5 mentions in open access literature.

Listed below are recent publications. The full list is available at NIF.

Amsalem O, et al. (2024) Sub-threshold neuronal activity and the dynamical regime of cerebral cortex. Nature communications, 15(1), 7958.

Köhler CA, et al. (2024) Facilitating the Sharing of Electrophysiology Data Analysis Results Through In-Depth Provenance Capture. eNeuro, 11(6).

Pierré A, et al. (2024) A Perspective on Neuroscience Data Standardization with Neurodata Without Borders. The Journal of neuroscience : the official journal of the Society for Neuroscience, 44(38).

Ratsifandrihamanana MR, et al. (2023) Protocol to image and analyze hippocampal network dynamics in non-anesthetized mouse pups. STAR protocols, 4(4), 102760.

Howard D, et al. (2022) An in vitro whole-cell electrophysiology dataset of human cortical neurons. GigaScience, 11.