Resource Summary Report

Generated by T1D on Sep 5, 2026

NeuroMorpho.Org

RRID:SCR_002145
Type: Tool

Proper Citation

NeuroMorpho.Org (RRID:SCR_002145)

Resource Information

URL: http://neuromorpho.org/index.jsp

Proper Citation: NeuroMorpho.Org (RRID:SCR_002145)

Description: Centrally curated inventory of digitally reconstructed neurons associated with peer-reviewed publications that contains some of the most complete axonal arborizations digitally available in the community. Each neuron is represented by a unique identifier, general information (metadata), the original and standardized ASCII files of the digital morphological reconstruction, and a set of morphometric features. It contains contributions from over 100 laboratories worldwide and is continuously updated as new morphological reconstructions are collected, published, and shared. Users may browse by species, brain region, cell type or lab name. Users can also download morphological reconstructions for research and analysis. Deposition and distribution of reconstruction files ultimately prevents data loss. Centralized curation and annotation aims at minimizing the effort required by data owners while ensuring a unified format. It also provides a one-stop entry point for all available reconstructions, thus maximizing data visibility and impact.

Synonyms: Neuro Morpho, NeuroMorpho.org, NeuroMorpho

Resource Type: data or information resource, data repository, database, service resource, storage service resource

Defining Citation: PMID:17728438, PMID:16552417, PMID:18949582

Keywords: neuron, morphological reconstruction, morphometry, axonal arborization, digital neuronal reconstruction, neuronal reconstruction, neuronal morphology, data sharing, annotation, brain region, neocortex, digital reconstruction, neurogenetics, neurochemistry, neuroscience, neurology, FASEB list

Funding: MURI ONR N000141010198;
NINDS R01 NS39600

Availability: Free, Available for download, Freely available

Resource Name: NeuroMorpho.Org

Resource ID: SCR_002145

Alternate IDs: nif-0000-00006, r3d100010107

Alternate URLs: http://www.nitrc.org/projects/neuromorpho_org, http://neuromorpho.org/, https://doi.org/10.17616/R3WW2K

Record Creation Time: 20220129T080211+0000

Record Last Update: 20260903T234517+0000

Ratings and Alerts

No rating or validation information has been found for NeuroMorpho.Org.

No alerts have been found for NeuroMorpho.Org.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 123 mentions in open access literature.

Listed below are recent publications. The full list is available at T1D .

Meyer J, et al. (2026) Cellular and subcellular heterogeneity of astrocytic Na??? homeostasis tuning astrocytes into functionally distinct subgroups in the mouse brain. Nature communications, 17(1).

Desai-Chowdhry P, et al. (2026) Information flow drives localized morphological differences across neuronal and glial cell types. Frontiers in computational neuroscience, 20, 1771227.

Bohlen MO, et al. (2026) Projection targeting with phototagging to study the structure and function of retinal ganglion cells. Cell reports methods, 6(3), 101308.

Lewitus VJ, et al. (2026) Sex-specific effects of exercise on motor coordination and extended basal ganglia physiology. bioRxiv : the preprint server for biology.

Carriba P, et al. (2026) Regulation of dendrite and axon growth and arborization by CD40L-reverse signaling: Interrelationships among JNK, PKC, and ERK1/2 signaling pathways. Neural regeneration research, 21(3), 1116.

Egashira R, et al. (2026) Dendritic compartment-specific spine formation in layer 5 neurons underlies cortical circuit maturation during adolescence. Science advances, 12(3), eadw8458.

Wu X, et al. (2026) Dendritic nonlinearities mitigate communication costs. Patterns (New York, N.Y.), 7(6), 101520.

Liu L, et al. (2025) Connectivity of single neurons classifies cell subtypes in mouse brains. Nature methods, 22(4), 861.

Makarov R, et al. (2025) DendroTweaks, an interactive approach for unraveling dendritic dynamics. eLife, 13.

Doherty DW, et al. (2025) Enhanced beta power emerges from simulated parkinsonian primary motor cortex. NPJ Parkinson's disease, 11(1), 230.

Ouyang X, et al. (2025) Neurons exploit stochastic growth to rapidly and economically build dense dendritic arbors. Nature communications, 16(1), 5903.

Doherty DW, et al. (2025) Self-organized and self-sustained ensemble activity patterns in simulation of mouse primary motor cortex. bioRxiv : the preprint server for biology.

Doherty DW, et al. (2025) Enhanced beta power emerges from simulated parkinsonian primary motor cortex. bioRxiv : the preprint server for biology.

Talapka P, et al. (2025) Dendritic synaptome of calcium-binding protein containing GABAergic interneurons in the mouse primary visual cortex. Frontiers in neural circuits, 19, 1644572.

Rathour RK, et al. (2025) Intrinsic calcium resonance and its modulation: insights from computational modeling. Frontiers in computational neuroscience, 19, 1669841.

Deistler M, et al. (2025) JAXLEY: differentiable simulation enables large-scale training of detailed biophysical models of neural dynamics. Nature methods, 22(12), 2649.

Ouyang X, et al. (2025) Neurons exploit stochastic growth to rapidly and economically build dense radially oriented dendritic arbors. bioRxiv : the preprint server for biology.

Tecuatl C, et al. (2025) Hippocampome.org, a resource for subicular neuron types and beyond. bioRxiv : the preprint server for biology.

McSweeney-Davis A, et al. (2025) Alpha_Mesh_Swc: automatic and robust surface mesh generation from the skeleton description of brain cells. Briefings in bioinformatics, 26(3).

Mut F, et al. (2025) Computational Framework for Modeling Effects of Brain Collateral Circulation. International journal for numerical methods in biomedical engineering, 41(12), e70121.