

Resource Summary Report

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Neurolucida 360

RRID:SCR_016788

Type: Tool

Proper Citation

Neurolucida 360 (RRID:SCR_016788)

Resource Information

URL: <https://www.mbfbioscience.com/neurolucida360>

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Description: Software for automatic neuron 3D reconstruction and analysis. Used by neuroscientists to reconstruct intricate neuronal structures that range in scale from complex, multicellular networks of neurons to sub-cellular dendritic spines and putative synapses.

Resource Type: data processing software, data analysis software, software application, software resource

Keywords: mbf Bioscience, automatic, image, 3D, reconstruction, analysis, neuron, synapse, data

Availability: Commercially available, Free trial available

Resource Name: Neurolucida 360

Resource ID: SCR_016788

Record Creation Time: 20220129T080332+0000

Record Last Update: 20260801T042802+0000

Ratings and Alerts

No rating or validation information has been found for Neurolucida 360.

No alerts have been found for Neurolucida 360.

Data and Source Information

Usage and Citation Metrics

We found 45 mentions in open access literature.

Listed below are recent publications. The full list is available at [PRECISE-TBI](#) .

Samokhina E, et al. (2025) Potassium homeostasis during disease progression of Alzheimer's disease. The Journal of physiology, 603(11), 3405.

Ho C, et al. (2025) CXCL12 Engages Cortical Inhibitory Neurons to Enhance Dendritic Spine Plasticity and Structured Network Activity. The Journal of neuroscience : the official journal of the Society for Neuroscience, 45(24).

Verpoort B, et al. (2025) A postsynaptic GPR158-PLCXD2 complex controls spine apparatus abundance and dendritic spine maturation. Developmental cell.

Fuller-Jackson JP, et al. (2025) A 3D Atlas of Visceral and Somatic Pelvic Motor Neurons in Whole Mounts of Female and Male Rat Spinal Cords. The Journal of comparative neurology, 533(11), e70109.

Sutley-Koury SN, et al. (2024) EphB2 Signaling Is Implicated in Astrocyte-Mediated Parvalbumin Inhibitory Synapse Development. The Journal of neuroscience : the official journal of the Society for Neuroscience, 44(45).

Shohayeb B, et al. (2024) BDNF-dependent nano-organization of Neogenin and the WAVE regulatory complex promotes actin remodeling in dendritic spines. iScience, 27(9), 110621.

Bhembre N, et al. (2024) Learning-induced remodelling of inhibitory synapses in the motor cortex. Open biology, 14(11), 240109.

Reimer ML, et al. (2024) A FAIR, open-source virtual reality platform for dendritic spine analysis. Patterns (New York, N.Y.), 5(9), 101041.

Foucault L, et al. (2024) Neonatal brain injury unravels transcriptional and signaling changes underlying the reactivation of cortical progenitors. Cell reports, 43(2), 113734.

Drake AW, et al. (2024) Somatostatin interneuron fate-mapping and structure in a Pten knockout model of epilepsy. Frontiers in cellular neuroscience, 18, 1474613.

Buchan MJ, et al. (2024) Higher-order thalamocortical circuits are specified by embryonic cortical progenitor types in the mouse brain. Cell reports, 43(5), 114157.

Zhou Y, et al. (2023) Mesenchymal-Derived Extracellular Vesicles Enhance Microglia-mediated Synapse Remodeling after Cortical Injury in Rhesus Monkeys. Research square.

Ma J, et al. (2023) Spinal afferent innervation in flat-mounts of the rat stomach: anterograde tracing. Scientific reports, 13(1), 17675.

Zhou Y, et al. (2023) Mesenchymal-derived extracellular vesicles enhance microglia-mediated synapse remodeling after cortical injury in aging Rhesus monkeys. *Journal of neuroinflammation*, 20(1), 201.

Parkins EV, et al. (2023) Mir324 knockout regulates the structure of dendritic spines and impairs hippocampal long-term potentiation. *Scientific reports*, 13(1), 21919.

Ma J, et al. (2023) Mapping the Organization and Morphology of Calcitonin Gene-Related Peptide (CGRP)-IR Axons in the Whole Mouse Stomach. *bioRxiv : the preprint server for biology*.

Balkaya M, et al. (2023) Conditional deletion of LRRC8A in the brain reduces stroke damage independently of swelling-activated glutamate release. *iScience*, 26(5), 106669.

Wu SJ, et al. (2023) Cortical somatostatin interneuron subtypes form cell-type-specific circuits. *Neuron*, 111(17), 2675.

Ma J, et al. (2023) Organization and morphology of calcitonin gene-related peptide-immunoreactive axons in the whole mouse stomach. *The Journal of comparative neurology*, 531(16), 1608.

Liu JH, et al. (2022) The mosaic of All amacrine cell bodies in rat retina is indistinguishable from a random distribution. *Visual neuroscience*, 39, E004.