Resource Summary Report

Generated by dkNET on Apr 18, 2025

Microns Explorer

RRID:SCR_021678
Type: Tool

Proper Citation

Microns Explorer (RRID:SCR_021678)

Resource Information

URL: https://www.microns-explorer.org/

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Description: Portal to release connectivity and functional imaging data collected by consortium of laboratories led by groups at Allen Institute for Brain Science, Princeton University, and Baylor College of Medicine, with support from broad array of teams, coordinated and funded by IARPA MICrONS program. Data include large scale electron microscopy based reconstructions of cortical circuitry from mouse visual cortex, with corresponding functional imaging data from those same neurons.

Synonyms: MICrONS Explorer

Resource Type: portal, topical portal, data or information resource

Keywords: Connectome, mouse, cortex, electron microscopy, functional imaging data, cortical circuitry reconstruction, neuron

Funding: IARPA MICrONS

Availability: Free, Freely available

Resource Name: Microns Explorer

Resource ID: SCR_021678

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Record Creation Time: 20220129T080356+0000

Record Last Update: 20250417T065711+0000

Ratings and Alerts

No rating or validation information has been found for Microns Explorer.

No alerts have been found for Microns Explorer.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 10 mentions in open access literature.

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

Smets NG, et al. (2024) Perivascular spaces around arteries exceed perivenous spaces in the mouse brain. Scientific reports, 14(1), 17655.

Falahati H, et al. (2024) Ectopic Reconstitution of a Spine-Apparatus Like Structure Provides Insight into Mechanisms Underlying Its Formation. bioRxiv : the preprint server for biology.

Lu C, et al. (2024) Diffusion-based deep learning method for augmenting ultrastructural imaging and volume electron microscopy. Nature communications, 15(1), 4677.

Wildenberg G, et al. (2023) Isochronic development of cortical synapses in primates and mice. Nature communications, 14(1), 8018.

Abdellah M, et al. (2023) Ultraliser: a framework for creating multiscale, high-fidelity and geometrically realistic 3D models for in silico neuroscience. Briefings in bioinformatics, 24(1).

Buchanan J, et al. (2022) Oligodendrocyte precursor cells ingest axons in the mouse neocortex. Proceedings of the National Academy of Sciences of the United States of America, 119(48), e2202580119.

Turner NL, et al. (2022) Reconstruction of neocortex: Organelles, compartments, cells, circuits, and activity. Cell, 185(6), 1082.

Trepka EB, et al. (2022) Functional interactions among neurons within single columns of macaque V1. eLife, 11.

Mahalingam G, et al. (2022) A scalable and modular automated pipeline for stitching of large electron microscopy datasets. eLife, 11.

Zhuang J, et al. (2021) Laminar distribution and arbor density of two functional classes of

thalamic inputs to primary visual cortex. Cell reports, 37(2), 109826.