# Resource Summary Report

Generated by FDI Lab - SciCrunch.org on Apr 13, 2025

## webKnossos

RRID:SCR_020979
Type: Tool

### Proper Citation

webKnossos (RRID:SCR_020979)

### Resource Information

**URL:** https://webknossos.org

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**Description:** Web tool for 3D data annotation for connectomics.Open source tool for annotating and exploring large 3D image datasets. Web based data sharing, annotation and visualization software for large scale 3D images. Provides flight mode, single view egocentric reconstruction method enabling to reconstruct for axons and for dendrites in 3D electron microscopic data from mammalian cortex. Supports skeleton and volumetric annotations as well as data management functionality.

**Resource Type:** image reconstruction software, data processing software, image analysis software, software resource, data visualization software, software application, web service, 3d visualization software, data access protocol, data management software

**Defining Citation:** PMID:28604722

**Keywords:** Annotation tool, 3D electron microscopic data, 3D data, connectomics, large scale 3D images, volumetric annotations, skeleton annotations, data management, axon reconstruction, dendrites reconstruction, mammalian cortex data

**Funding:**

**Availability:** Restricted

**Resource Name:** webKnossos

**Resource ID:** SCR_020979

**Alternate URLs:** https://github.com/scalableminds/webknossos

**License:** AGPLv3

**Record Creation Time:** 20220129T080353+0000

**Record Last Update:** 20250412T060307+0000

## Ratings and Alerts

No rating or validation information has been found for webKnossos.

No alerts have been found for webKnossos.

## Data and Source Information

**Source:** SciCrunch Registry

## Usage and Citation Metrics

We found 15 mentions in open access literature.

**Listed below are recent publications.** The full list is available at FDI Lab - SciCrunch.org.

Liu G, et al. (2024) Protocol to analyze 3D neurodegenerative vacuoles in Drosophila melanogaster. STAR protocols, 5(2), 103017.

Grimes WN, et al. (2024) The retina's neurovascular unit: Müller glial sheaths and neuronal contacts. bioRxiv : the preprint server for biology.

Song K, et al. (2023) High-contrast en bloc staining of mouse whole-brain and human brain samples for EM-based connectomics. Nature methods, 20(6), 836.

Moore J, et al. (2023) OME-Zarr: a cloud-optimized bioimaging file format with international community support. Histochemistry and cell biology, 160(3), 223.

Moore J, et al. (2023) OME-Zarr: a cloud-optimized bioimaging file format with international community support. bioRxiv : the preprint server for biology.

Rigby M, et al. (2023) Multi-synaptic boutons are a feature of CA1 hippocampal connections in the stratum oriens. Cell reports, 42(5), 112397.

Collinson LM, et al. (2023) Volume EM: a quiet revolution takes shape. Nature methods, 20(6), 777.

Mani A, et al. (2023) A circuit suppressing retinal drive to the optokinetic system during fast

image motion. Nature communications, 14(1), 5142.

Velicky P, et al. (2023) Dense 4D nanoscale reconstruction of living brain tissue. Nature methods, 20(8), 1256.

Yu WQ, et al. (2023) Distinctive synaptic structural motifs link excitatory retinal interneurons to diverse postsynaptic partner types. Cell reports, 42(1), 112006.

Peddie CJ, et al. (2022) Volume electron microscopy. Nature reviews. Methods primers, 2, 51.

Mougeot G, et al. (2022) Deep learning -- promises for 3D nuclear imaging: a guide for biologists. Journal of cell science, 135(7).

Hua Y, et al. (2021) Electron Microscopic Reconstruction of Neural Circuitry in the Cochlea. Cell reports, 34(1), 108551.

Matsumoto A, et al. (2021) Direction selectivity in retinal bipolar cell axon terminals. Neuron, 109(18), 2928.

Kuan AT, et al. (2020) Dense neuronal reconstruction through X-ray holographic nano-tomography. Nature neuroscience, 23(12), 1637.