

Resource Summary Report

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Viking Viewer for Connectomics

RRID:SCR_005986

Type: Tool

Proper Citation

Viking Viewer for Connectomics (RRID:SCR_005986)

Resource Information

URL: <http://connectomes.utah.edu/>

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Description: A web-compliant application that allows connectomics visualization by converting datasets to web-optimized tiles, delivering volume transforms to client devices, and providing groups of users with connectome annotation tools and data simultaneously via conventional internet connections. Viking is an extensible tool for connectomics analysis and is generalizable to histomics applications.

Synonyms: Viking, Viking Connectome Annotation System, Viking Annotation System

Resource Type: collaboration tool, data management software, data processing software, software application, software resource

Defining Citation: [PMID:21118201](#)

Keywords: annotation, 2d image, microscopy image, volume, serial section, 3d reconstruction, segmentation, microscopy, visualization, optical imaging, connectomics, synapse, retina, brain

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NSF 0941717;
NIDCD T32DC008553;
NIBIB EB005832

Availability: Open source

Resource Name: Viking Viewer for Connectomics

Resource ID: SCR_005986

Alternate IDs: nlx_151360

Alternate URLs: http://www.nitrc.org/projects/viking_viewer

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Ratings and Alerts

No rating or validation information has been found for Viking Viewer for Connectomics.

No alerts have been found for Viking Viewer for Connectomics.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 16 mentions in open access literature.

Listed below are recent publications. The full list is available at [SPARC SAWG](#) .

Tolman N, et al. (2026) Single-cell profiling of trabecular meshwork identifies mitochondrial dysfunction in a glaucoma model that is protected by vitamin B3 treatment. eLife, 14.

Marshak DW, et al. (2025) Amacrine cell inputs to OFF midget ganglion cells in macaque retina. The Journal of physiology.

Patterson SS, et al. (2024) Synaptic Origins of the Complex Receptive Field Structure in Primate Smooth Monostratified Retinal Ganglion Cells. eNeuro, 11(1).

Goyal M, et al. (2023) Trophocytosis of neurons and glial cells by microglia in a healthy adult macaque retina. Scientific reports, 13(1), 633.

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

Patterson SS, et al. (2022) Conserved circuits for direction selectivity in the primate retina. Current biology : CB, 32(11), 2529.

Bordt AS, et al. (2022) Synaptic inputs to displaced intrinsically-photosensitive ganglion cells in macaque retina. Scientific reports, 12(1), 15160.

Bordt AS, et al. (2021) Synaptic inputs to broad thorny ganglion cells in macaque retina. The Journal of comparative neurology, 529(11), 3098.

Patterson SS, et al. (2020) A Color Vision Circuit for Non-Image-Forming Vision in the Primate Retina. Current biology : CB, 30(7), 1269.

Pfeiffer RL, et al. (2020) A pathoconnectome of early neurodegeneration: Network changes in retinal degeneration. Experimental eye research, 199, 108196.

Patterson SS, et al. (2020) Wide-field amacrine cell inputs to ON parasol ganglion cells in macaque retina. The Journal of comparative neurology, 528(9), 1588.

Sigulinsky CL, et al. (2020) Network Architecture of Gap Junctional Coupling among Parallel Processing Channels in the Mammalian Retina. The Journal of neuroscience : the official journal of the Society for Neuroscience, 40(23), 4483.

Patterson SS, et al. (2019) An S-cone circuit for edge detection in the primate retina. Scientific reports, 9(1), 11913.

Lauritzen JS, et al. (2019) Rod-cone crossover connectome of mammalian bipolar cells. The Journal of comparative neurology, 527(1), 87.

Marc RE, et al. (2018) Heterocellular Coupling Between Amacrine Cells and Ganglion Cells. Frontiers in neural circuits, 12, 90.

Lauritzen JS, et al. (2013) ON cone bipolar cell axonal synapses in the OFF inner plexiform layer of the rabbit retina. The Journal of comparative neurology, 521(5), 977.