Resource Summary Report

Generated by kravitz2 on Jul 31, 2026

Virtual Fly Brain

RRID:SCR_004229
Type: Tool

Proper Citation

Virtual Fly Brain (RRID:SCR_004229)

Resource Information

URL: http://www.virtualflybrain.org

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Description: An interactive tool for neurobiologists to explore the detailed neuroanatomy, neuron connectivity and gene expression of the adult Drosophila melanogaster brain.

Abbreviations: VFB

Synonyms: VirtualFlyBrain.org, VFB, Virtual Fly Brain

Resource Type: data or information resource, atlas, neurons, expression

Defining Citation: PMID:22180411

Keywords: Drosophila, brain, neurons, innervation patterns, gene expression, transgene expression, phenotypes, neuroanatomy, neurobiology

Funding: Wellcome Trust

Resource Name: Virtual Fly Brain

Resource ID: SCR_004229

Alternate IDs: nlx_143644

Alternate URLs: http://www.virtualflybrain.org/site/vfb_site/home.htm

Record Creation Time: 20220129T080223+0000

Record Last Update: 20260731T042657+0000

Ratings and Alerts

No rating or validation information has been found for Virtual Fly Brain.

No alerts have been found for Virtual Fly Brain.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 45 mentions in open access literature.

Listed below are recent publications. The full list is available at kravitz2 .

Deutsch D, et al. (2025) Sexually-dimorphic neurons in the Drosophila whole-brain connectome. Research square.

Jiang H, et al. (2025) A parallelly distributed microscope and software system for scalable high-throughput multispectral 3D imaging. bioRxiv : the preprint server for biology.

Deutsch D, et al. (2025) Sexually-dimorphic neurons in the Drosophila whole-brain connectome. bioRxiv : the preprint server for biology.

Yamakoshi H, et al. (2025) Mating status-dependent dopaminergic modulation of auditory sensory neurons in Drosophila. iScience, 28(9), 113232.

Schlegel P, et al. (2024) Whole-brain annotation and multi-connectome cell typing of Drosophila. Nature, 634(8032), 139.

Fiala A, et al. (2024) What do the mushroom bodies do for the insect brain? Twenty-five years of progress. Learning & memory (Cold Spring Harbor, N.Y.), 31(5).

Meschi E, et al. (2024) Compensatory enhancement of input maintains aversive dopaminergic reinforcement in hungry Drosophila. Neuron, 112(14), 2315.

Eichler K, et al. (2024) Somatotopic organization among parallel sensory pathways that promote a grooming sequence in Drosophila. eLife, 12.

Imoto K, et al. (2024) Neural-circuit basis of song preference learning in fruit flies. iScience, 27(7), 110266.

Eichler K, et al. (2023) Somatotopic organization among parallel sensory pathways that promote a grooming sequence in Drosophila. bioRxiv : the preprint server for biology.

Taisz I, et al. (2023) Generating parallel representations of position and identity in the olfactory system. Cell, 186(12), 2556.

Galili DS, et al. (2022) Connectomics and the neural basis of behaviour. Current opinion in insect science, 54, 100968.

Bates AS, et al. (2020) The natverse, a versatile toolbox for combining and analysing neuroanatomical data. eLife, 9.

Marin EC, et al. (2020) Connectomics Analysis Reveals First-, Second-, and Third-Order Thermosensory and Hygrosensory Neurons in the Adult Drosophila Brain. Current biology : CB, 30(16), 3167.

Otto N, et al. (2020) Input Connectivity Reveals Additional Heterogeneity of Dopaminergic Reinforcement in Drosophila. Current biology : CB, 30(16), 3200.

Scheffer LK, et al. (2020) A connectome and analysis of the adult Drosophila central brain. eLife, 9.

Palazzo O, et al. (2020) Identification of FoxP circuits involved in locomotion and object fixation in Drosophila. Open biology, 10(12), 200295.

Hampel S, et al. (2020) Distinct subpopulations of mechanosensory chordotonal organ neurons elicit grooming of the fruit fly antennae. eLife, 9.

Court R, et al. (2020) A Systematic Nomenclature for the Drosophila Ventral Nerve Cord. Neuron, 107(6), 1071.

Suver MP, et al. (2019) Encoding of Wind Direction by Central Neurons in Drosophila. Neuron, 102(4), 828.