

VirtualFlyBrain.org

A Data Integration Hub for Drosophila Neurobiology

New Features Coming for 2017

Covering data for the complete adult CNS...

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EMBL-EBI

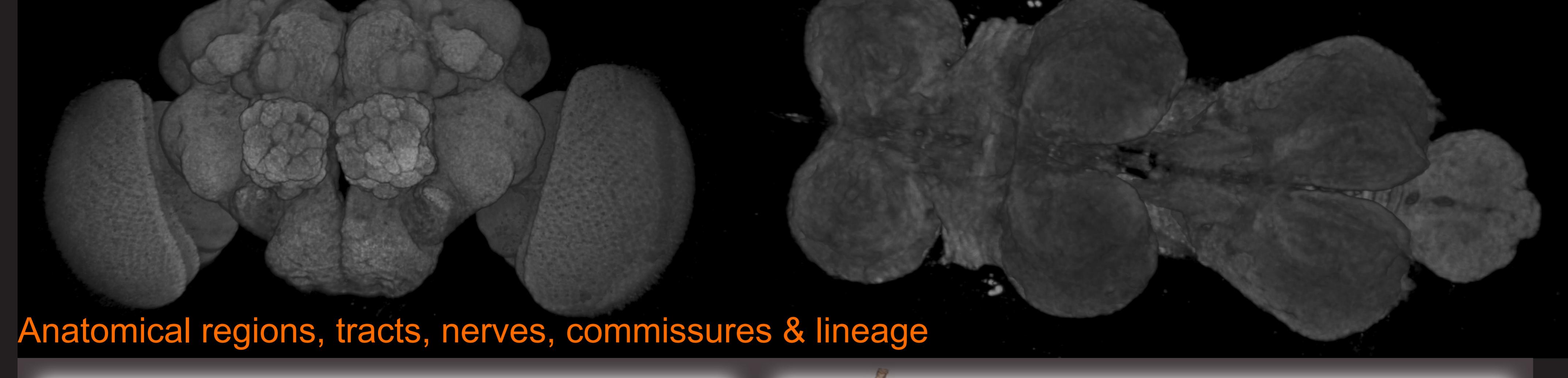
UNIVERSITY OF CAMBRIDGE

FlyBase

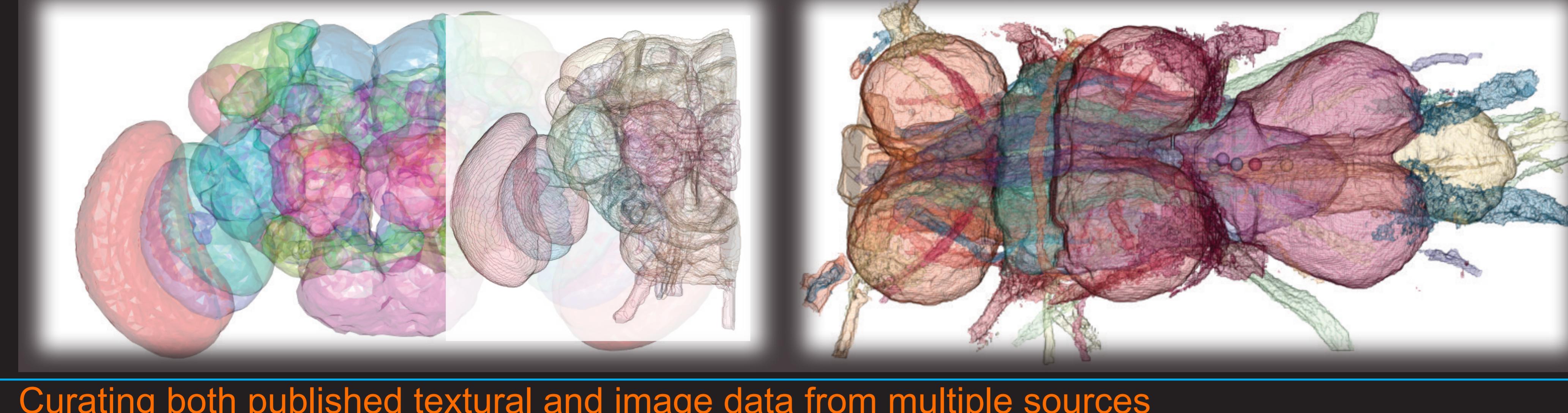
THE UNIVERSITY OF EDINBURGH

informatics

as well as the larval CNS



Anatomical regions, tracts, nerves, commissures & lineage

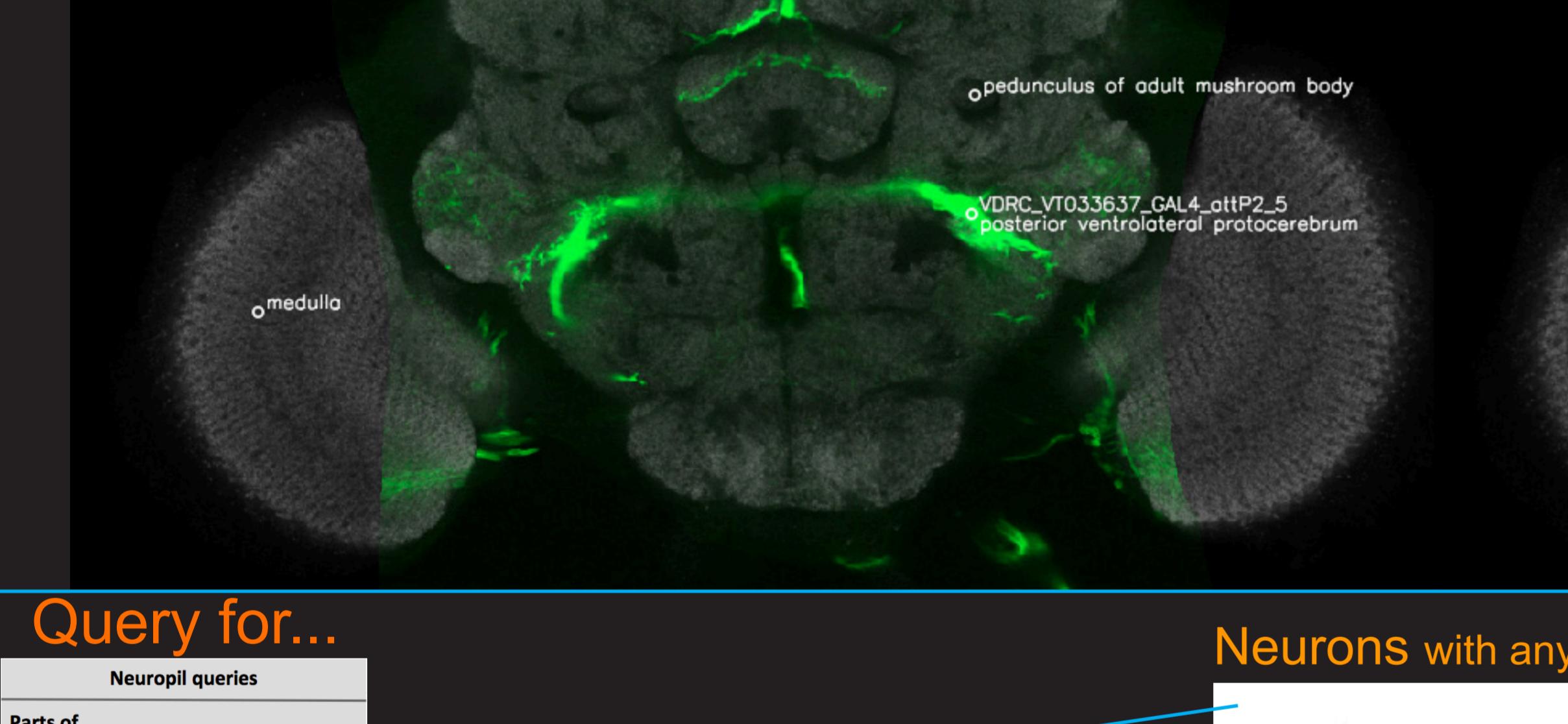


Curating both published textural and image data from multiple sources



Search by neuron, brain region, tract, genes, transgenes, phenotypes or publication...

...or simply click to select and label anatomy or expression



Query for...

Neurons with any part or pre/post/any synaptic terminals in a region

Query: Tracts/nerves innervating protocerebral bridge

Query: Images of neurons with some part in protocerebral bridge

Query: Neurons with some part in protocerebral bridge, clustered by shape

NBLAST search for similar neurons or for driver lines that label specific neurons

Find neurons that are part of a GAL4 pattern

Find similar neurons from whole neuron

Top 10 hits

View in Virtual Fly Brain stack browser

scores vfb cluster type

VGLut-F-000142

Definition: A neuron expressing P(Vglut-GAL4.D) that is part of an adult female brain

Comment: From analysis of a registered 3D image, this neuron is predicted to overlap the following neuropils: 5763 voxels overlap the adult antennal lobe.

References:

• PubMed ref PMID:2129968

Parent classes:

• adult antennal lobe projection neuron DL2d adPN

Relationships:

• develops_from, from_neuroblast ALad1 (Fbbt_00067346)

• expresses P(Vglut-GAL4.D) (Fbtt_00029585)

• fasciculates, with medial antennal lobe tract (Fbtt_00003985)

• has_postsynaptic_terminal_in antennal lobe glomerulus DL2d (Fbtt_00103377)

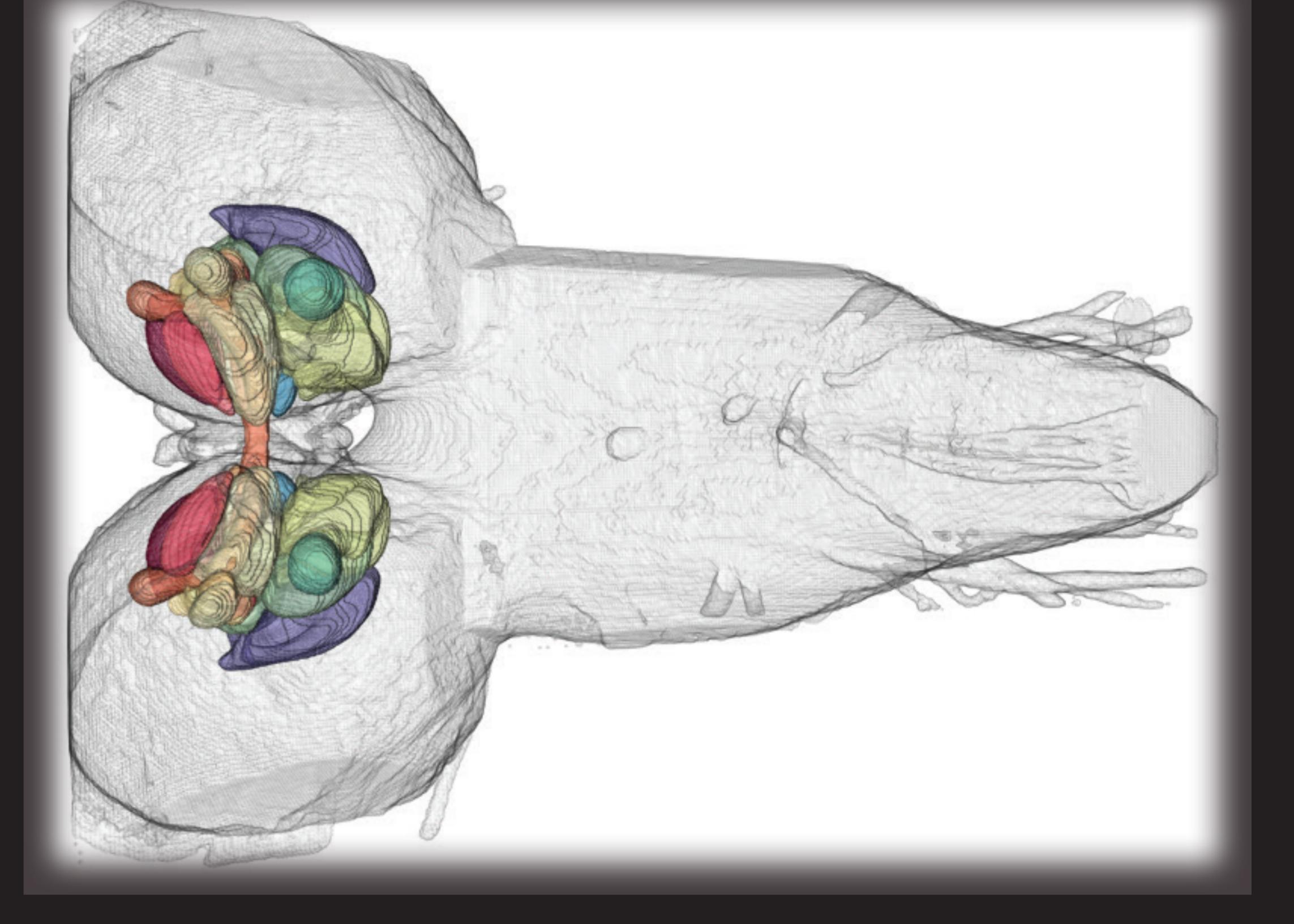
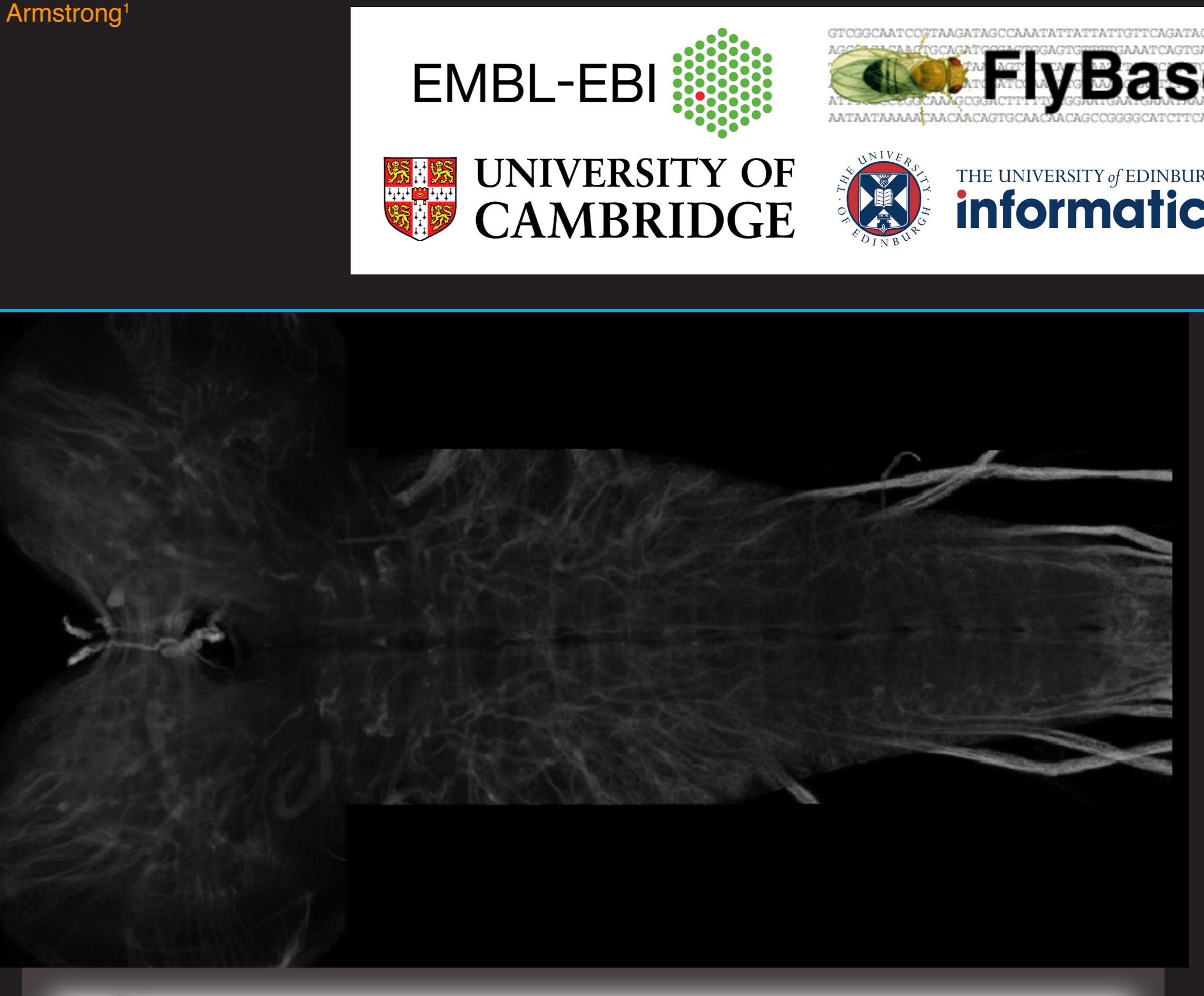
• member_of cluster 3.5 (Fbtt_0017679)

• overlaps adult antennal lobe (Fbtt_00007401)

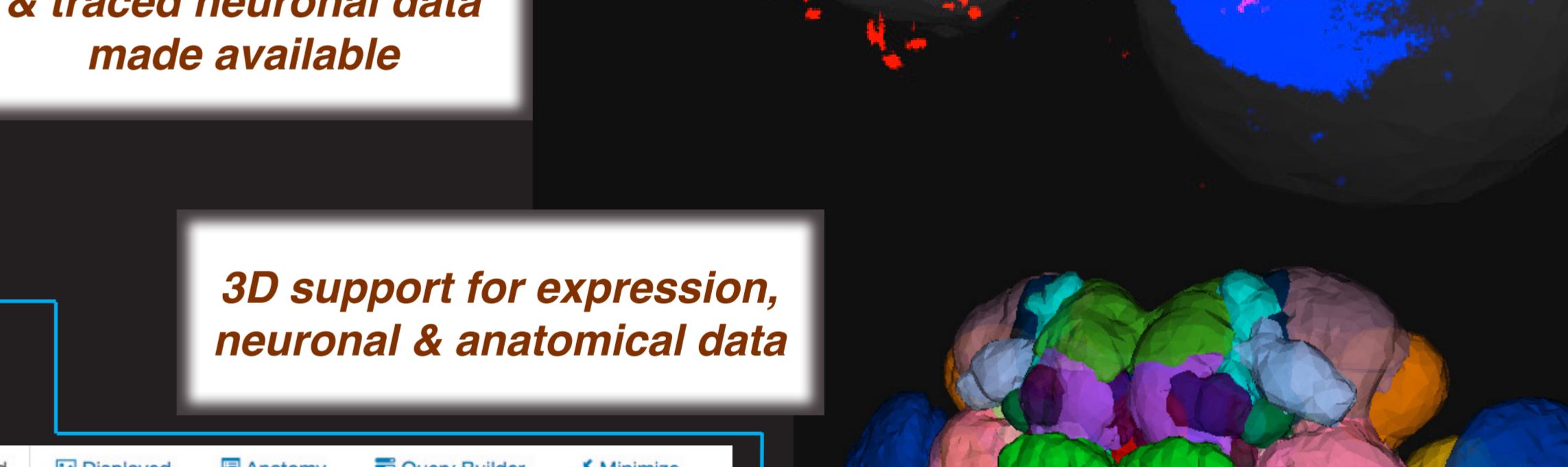
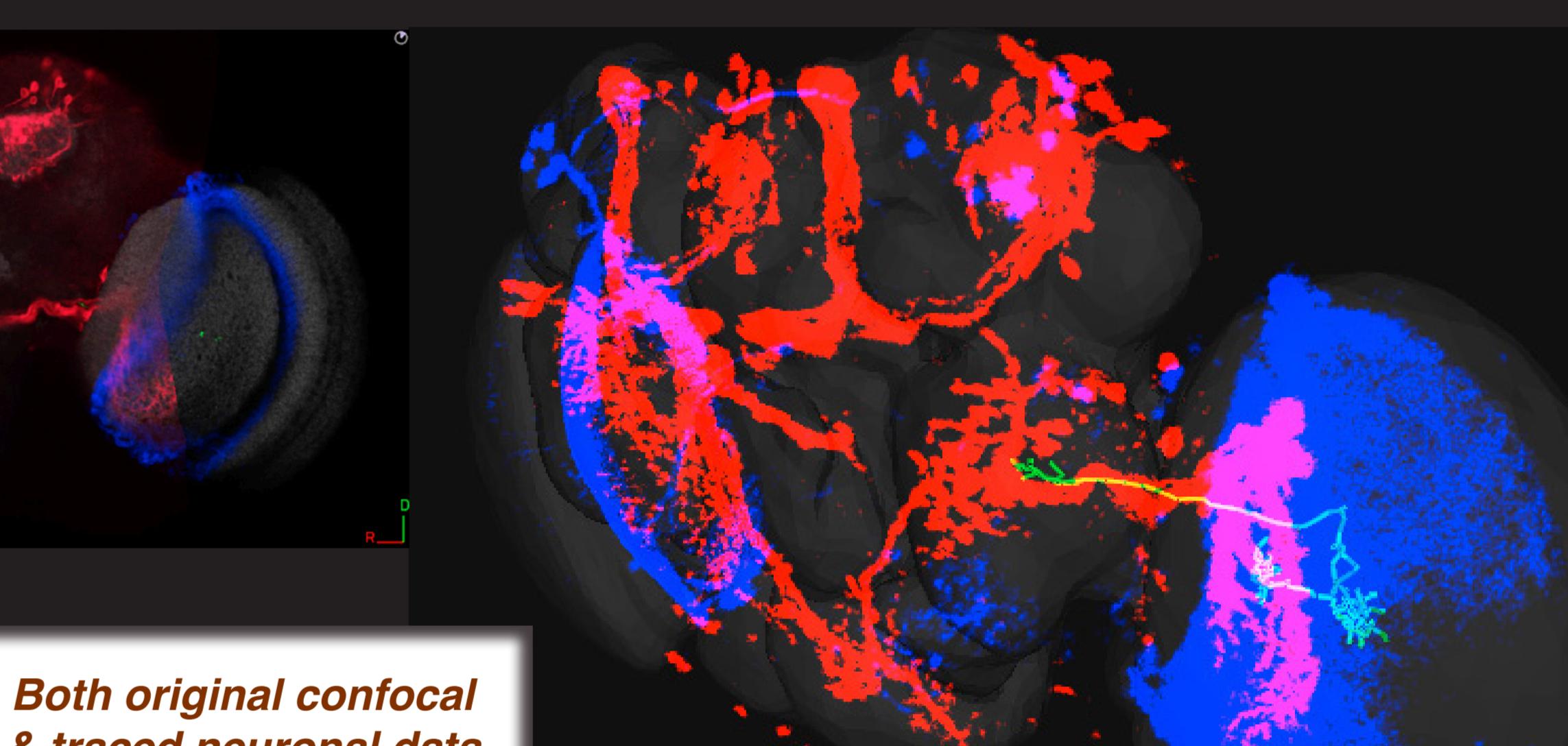
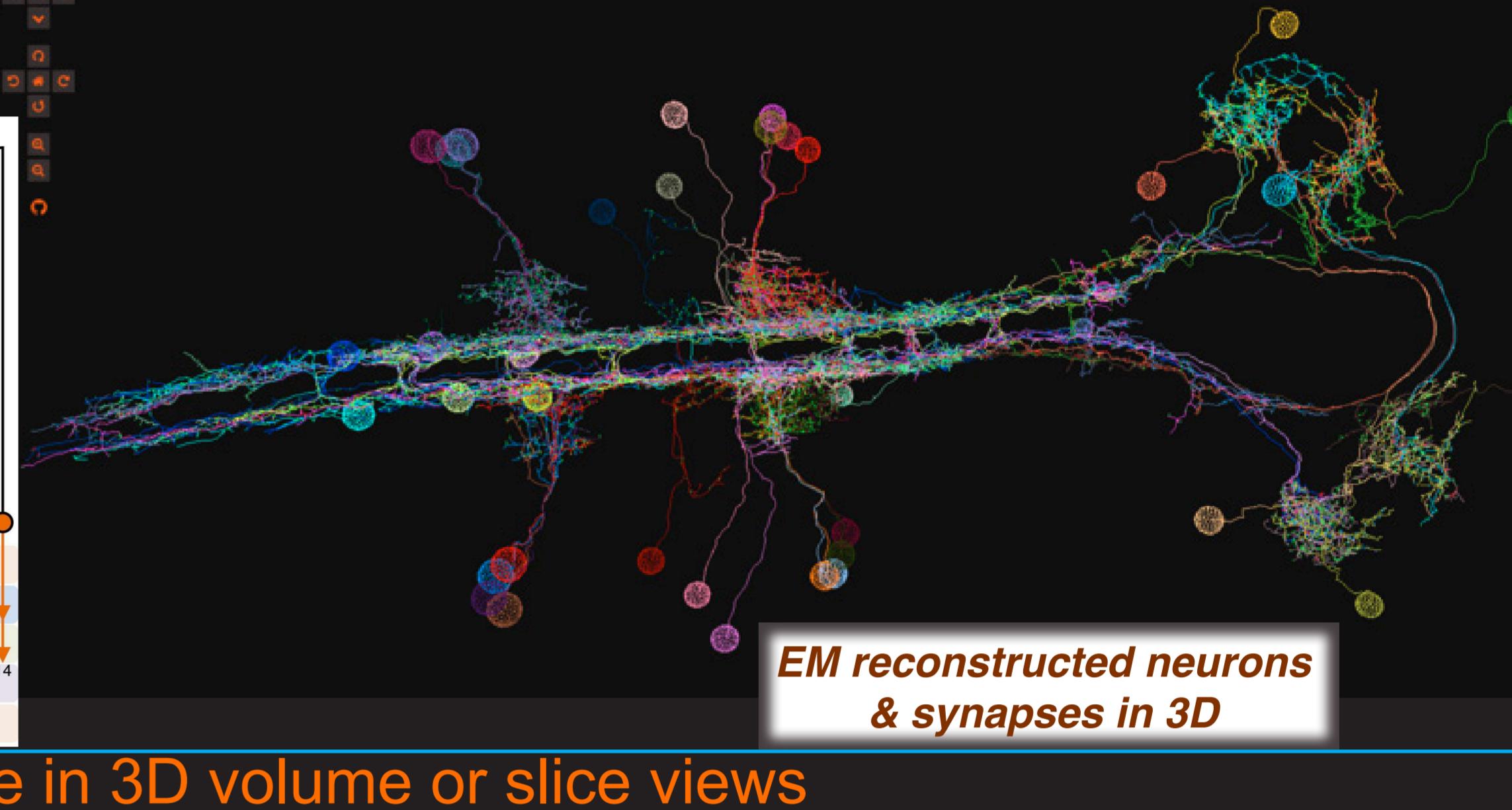
• part_of, adult brain (Fbtt_00003624)

• part_of, female organism (Fbtt_00007011)

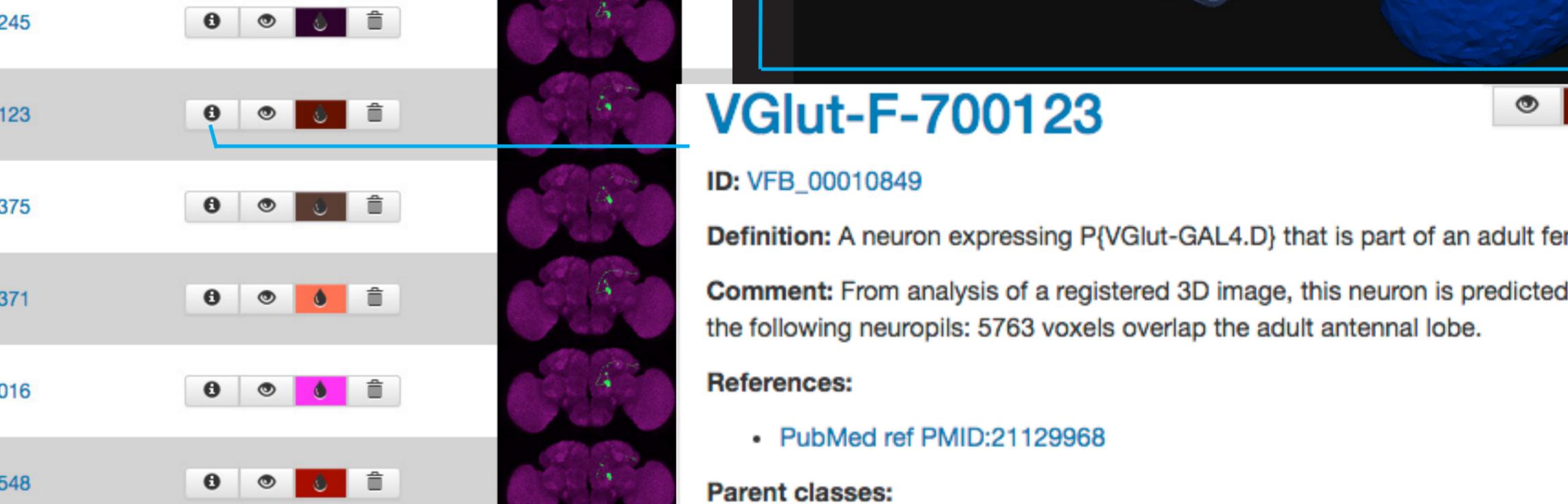
Image data explorable in 3D volume or slice views



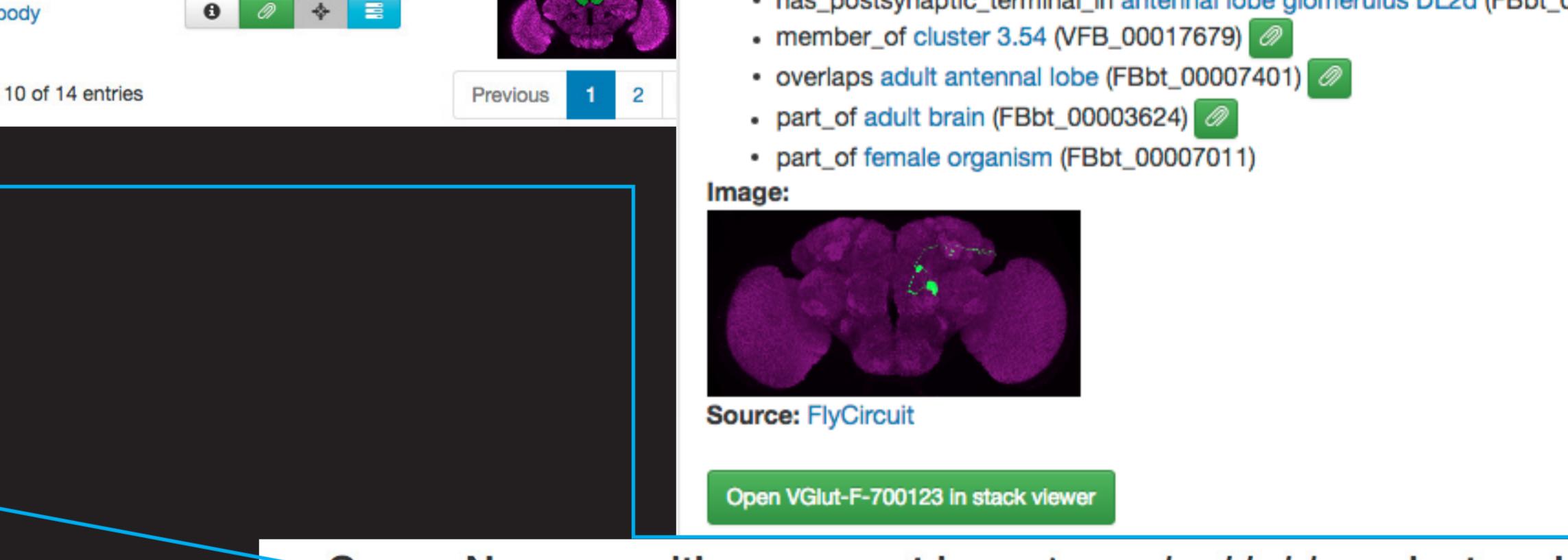
Inclusion of Electron Microscopy data & system diagrams



Both original confocal & traced neuronal data made available



3D support for expression, neuronal & anatomical data



VGluT-F-700123

ID: VFB_00010849

Definition: A neuron expressing P(Vglut-GAL4.D) that is part of an adult female brain

Comment: From analysis of a registered 3D image, this neuron is predicted to overlap the following neuropils: 5763 voxels overlap the adult antennal lobe.

References:

• PubMed ref PMID:2129968

Parent classes:

• adult antennal lobe projection neuron DL2d adPN

Relationships:

• develops_from, from_neuroblast ALad1 (Fbbt_00067346)

• expresses P(Vglut-GAL4.D) (Fbtt_00029585)

• fasciculates, with medial antennal lobe tract (Fbtt_00003985)

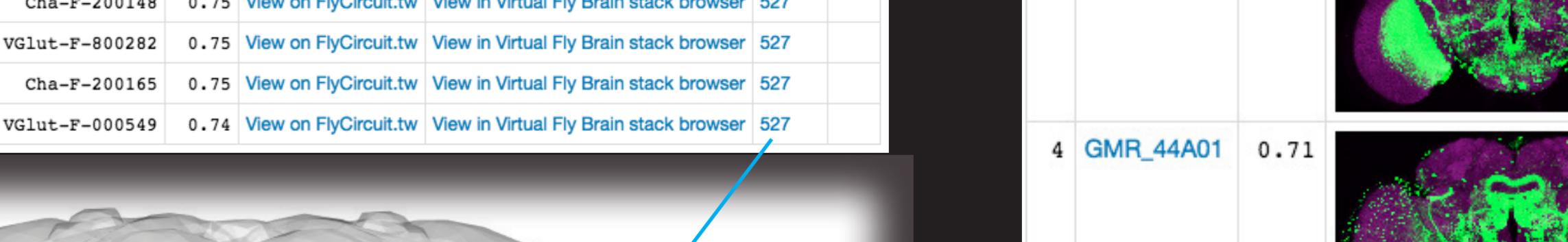
• has_postsynaptic_terminal_in antennal lobe glomerulus DL2d (Fbtt_00103377)

• member_of cluster 3.5 (Fbtt_0017679)

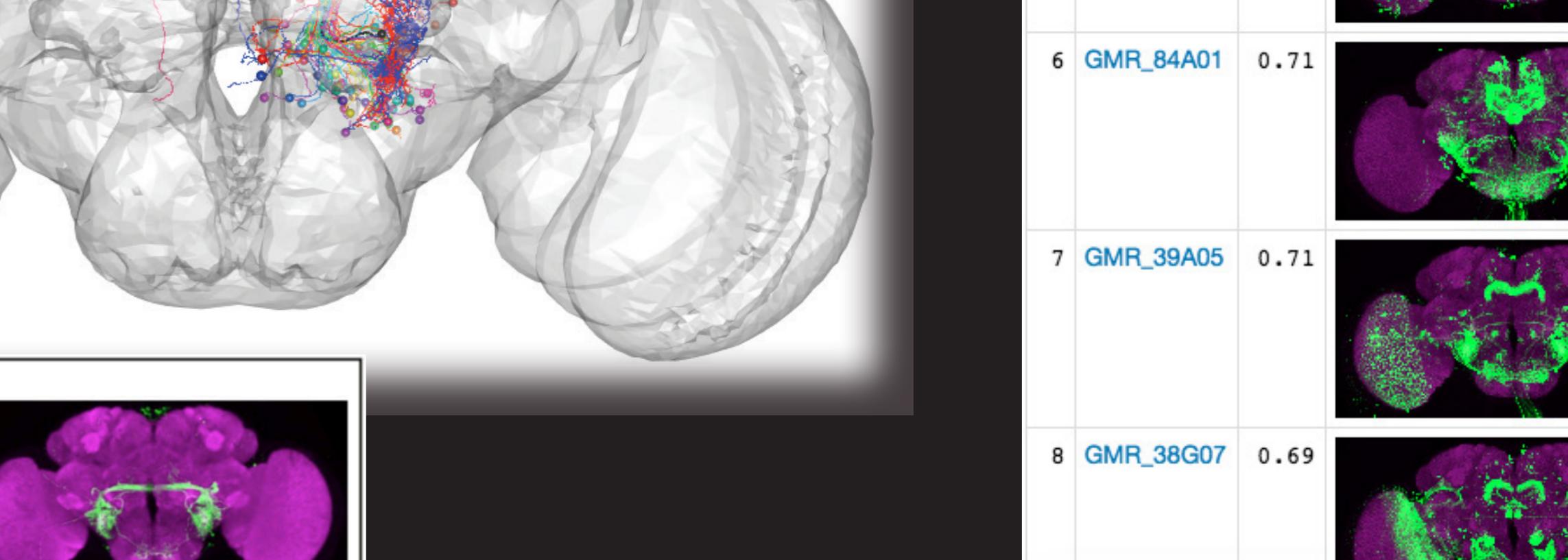
• overlaps adult antennal lobe (Fbtt_00007401)

• part_of, adult brain (Fbtt_00003624)

• part_of, female organism (Fbtt_00007011)



NBLAST search for similar neurons or for driver lines that label specific neurons



Find neurons that are part of a GAL4 pattern

Target: whole neuron

Score: 16,129 neurons

Top 10 hits

View in Virtual Fly Brain stack browser

scores vfb cluster type

VGLut-F-300421

0.77 View in FlyCircuit.tw

View in Virtual Fly Brain stack browser

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