

Oligodendrocyte

648518346349508279

A gorgeous specimen from the Layer 2/3 EM volume

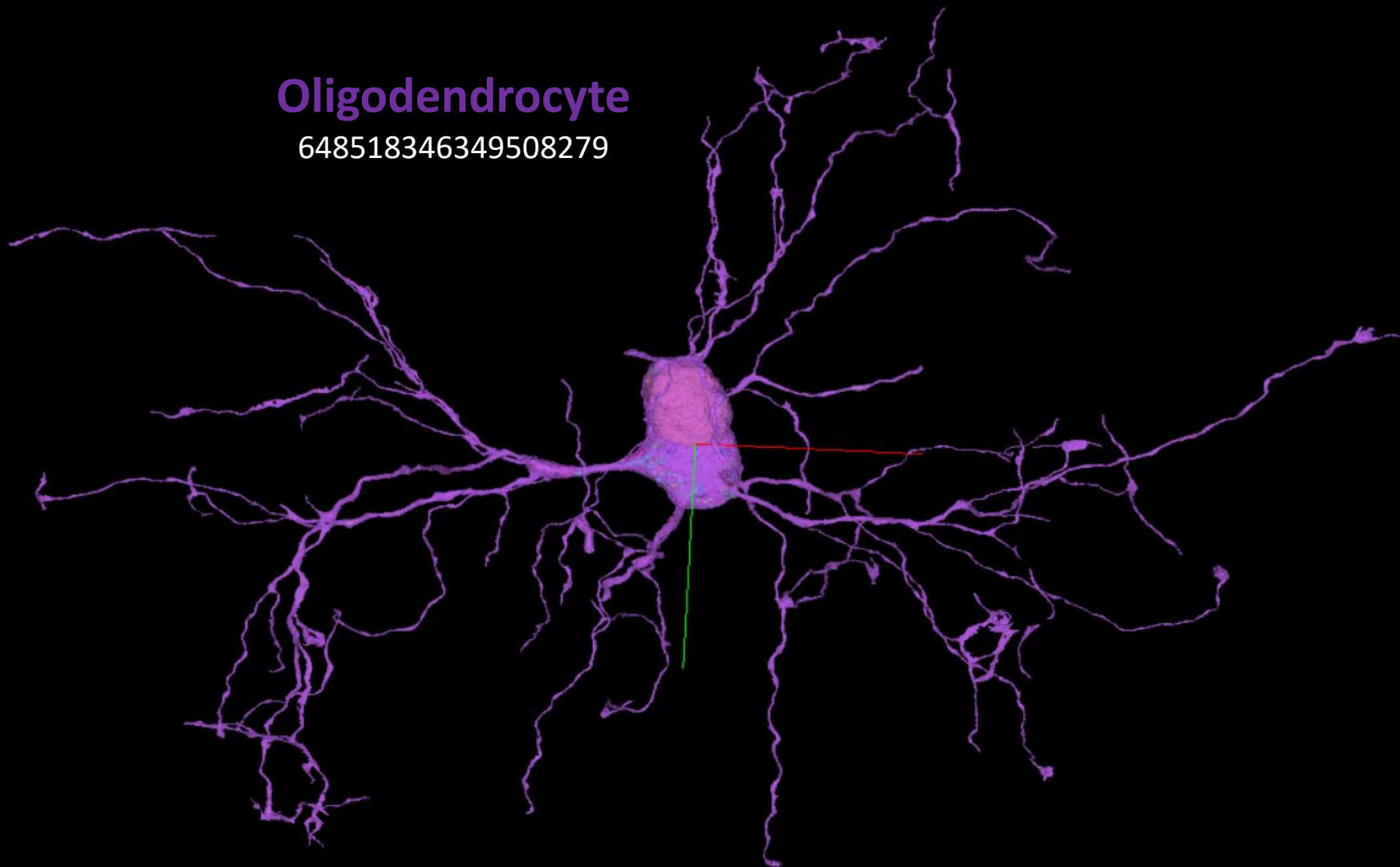
4×4×40 nm³ x 78172, y 61857, z 2065

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1EM 2cell_segmentation_v185 3synapses 4mitochondria 5nuclei +

Oligodendrocyte

648518346349508279



10 μm

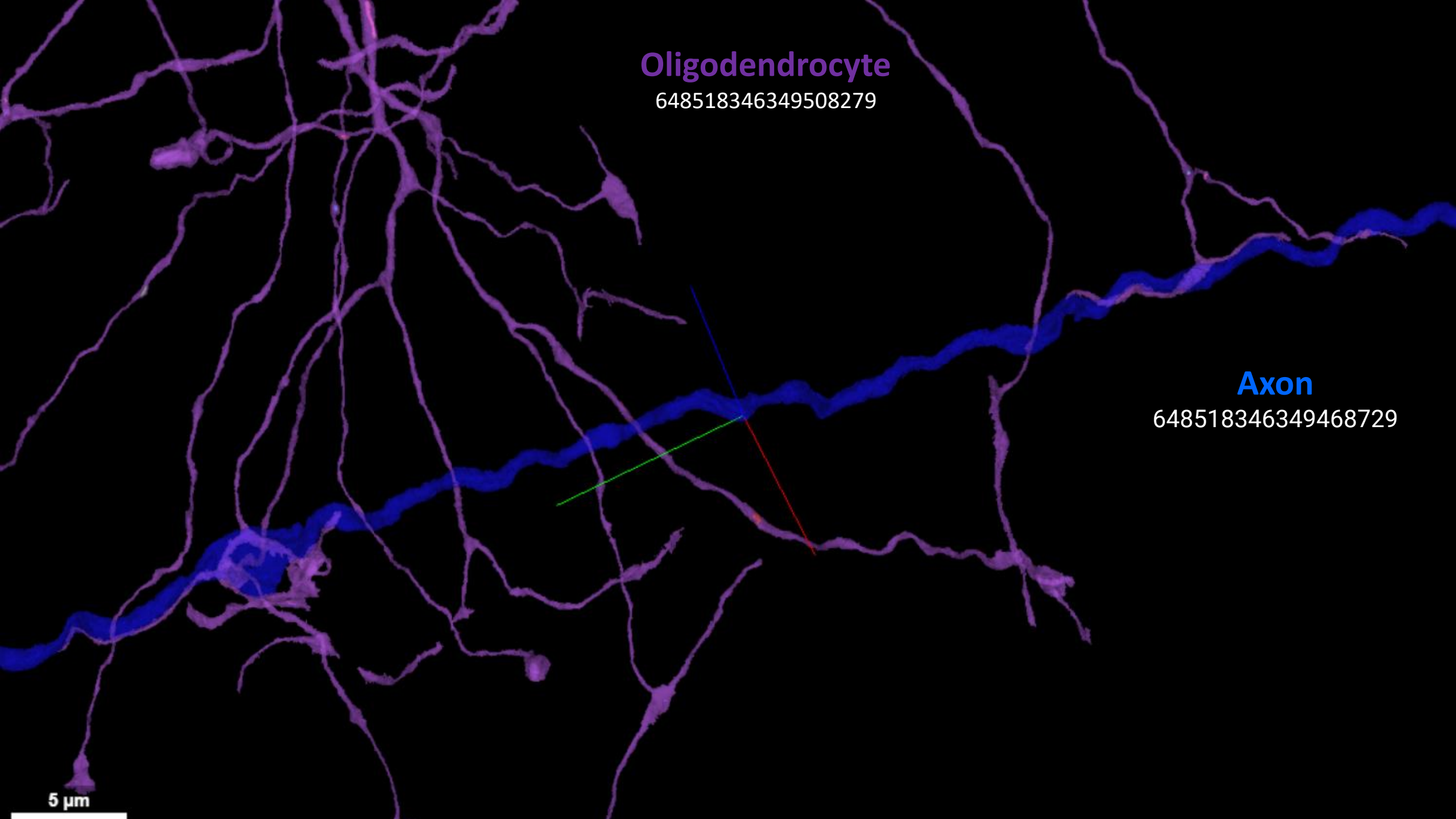
Oligodendrocyte

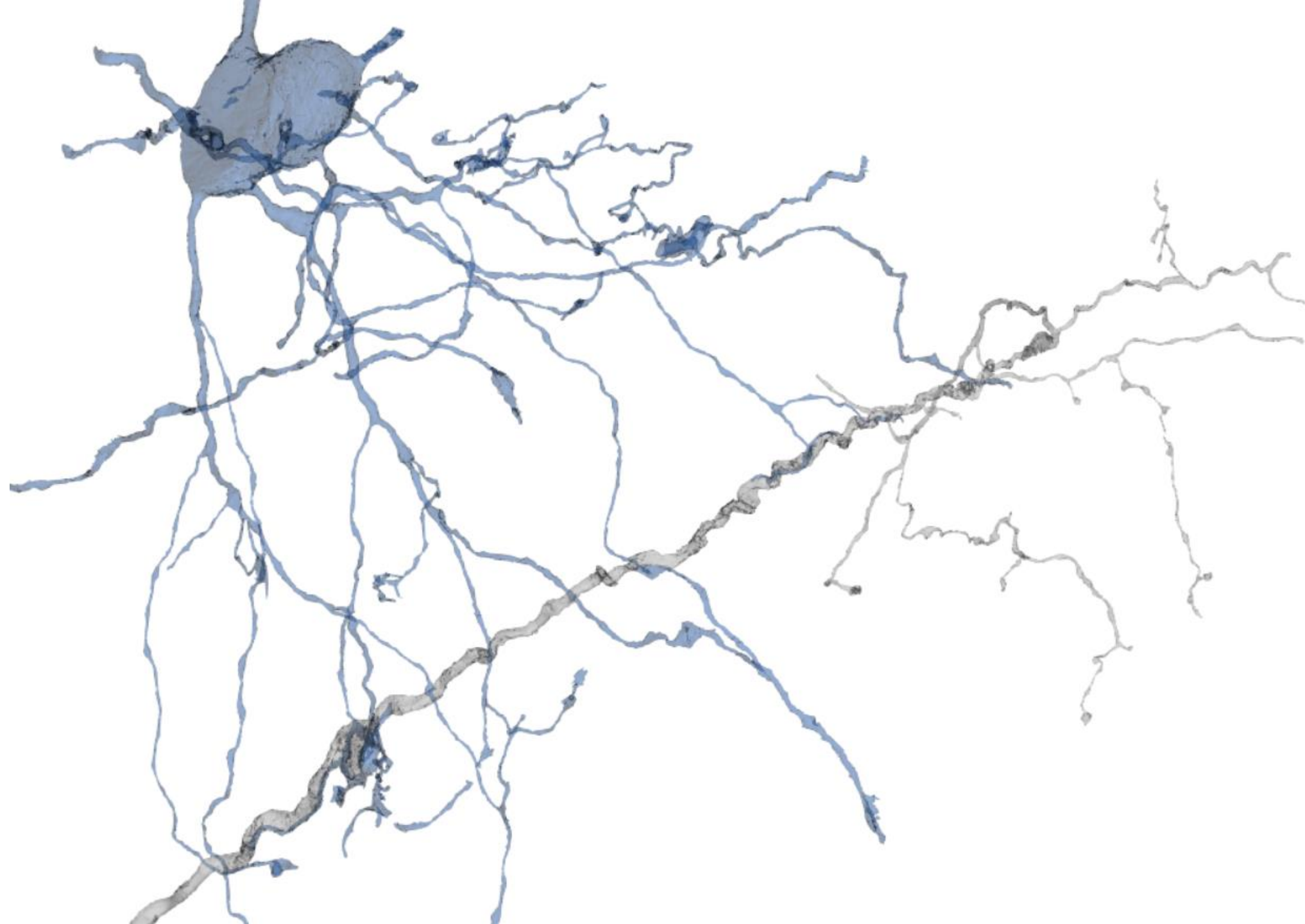
648518346349508279

Axon

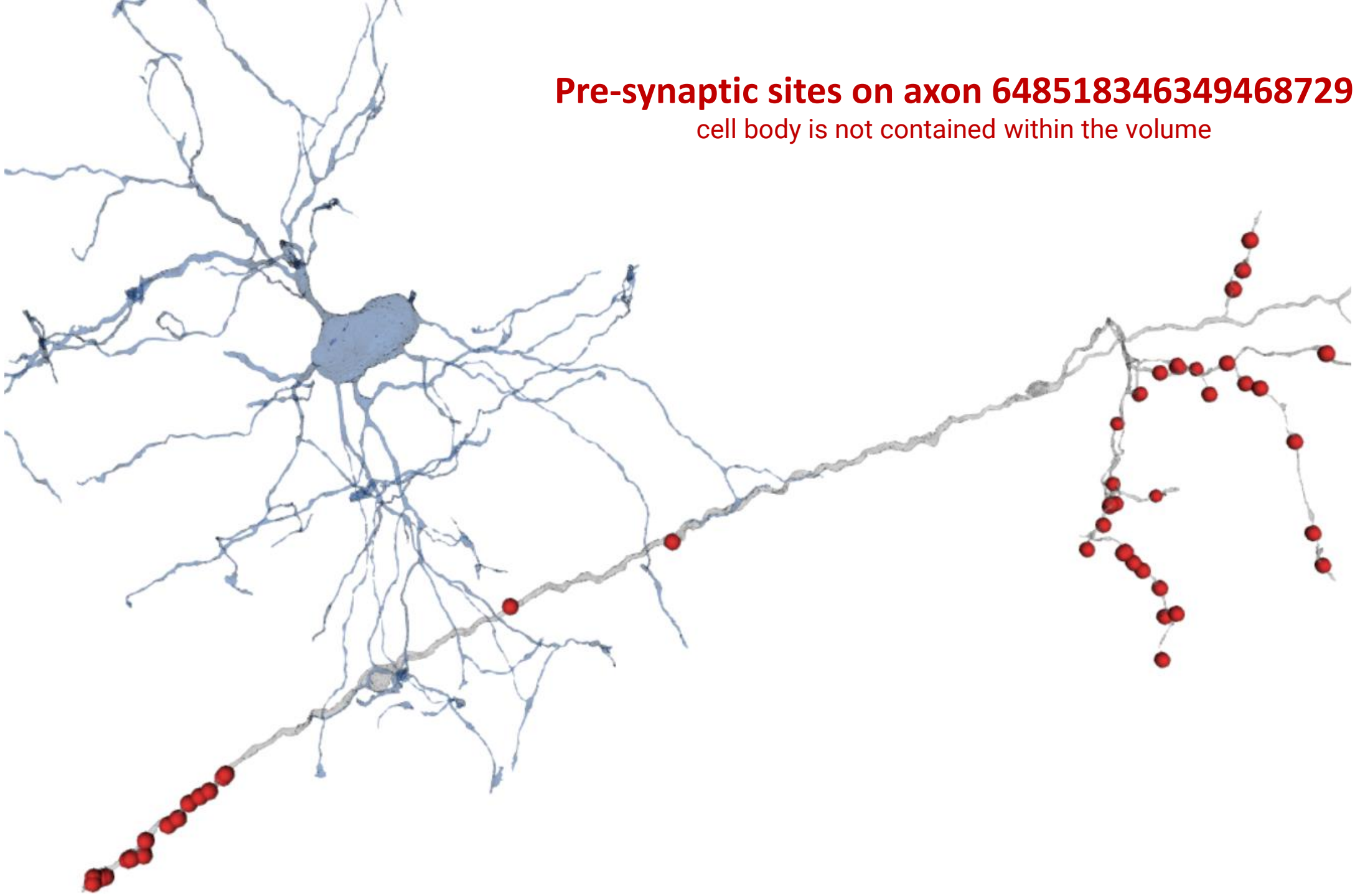
648518346349468729

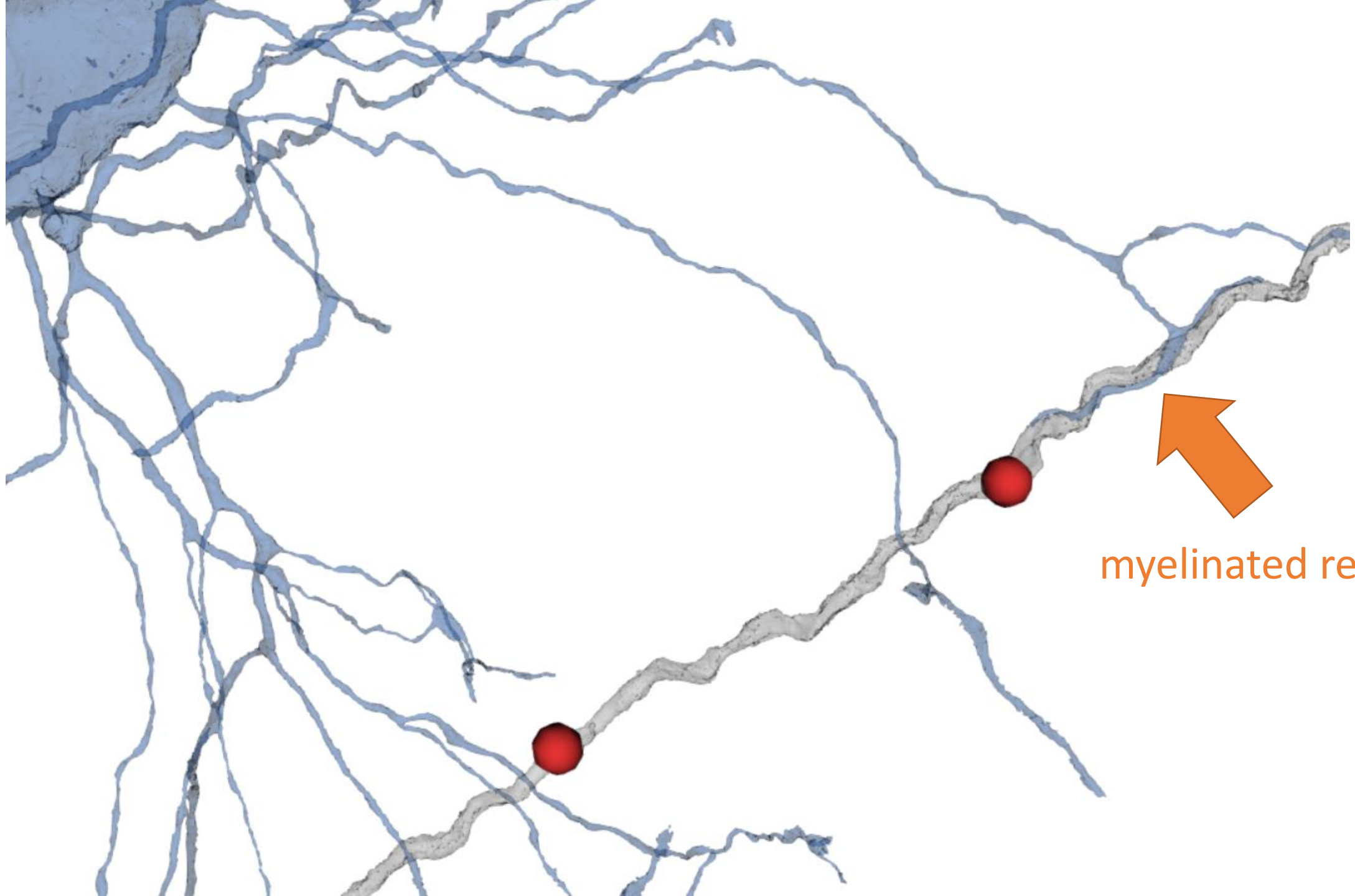
5 μ m





Pre-synaptic sites on axon 648518346349468729
cell body is not contained within the volume






myelinated region

4x4x40 nm³ x 83844, y 56821, z 1314

1EM

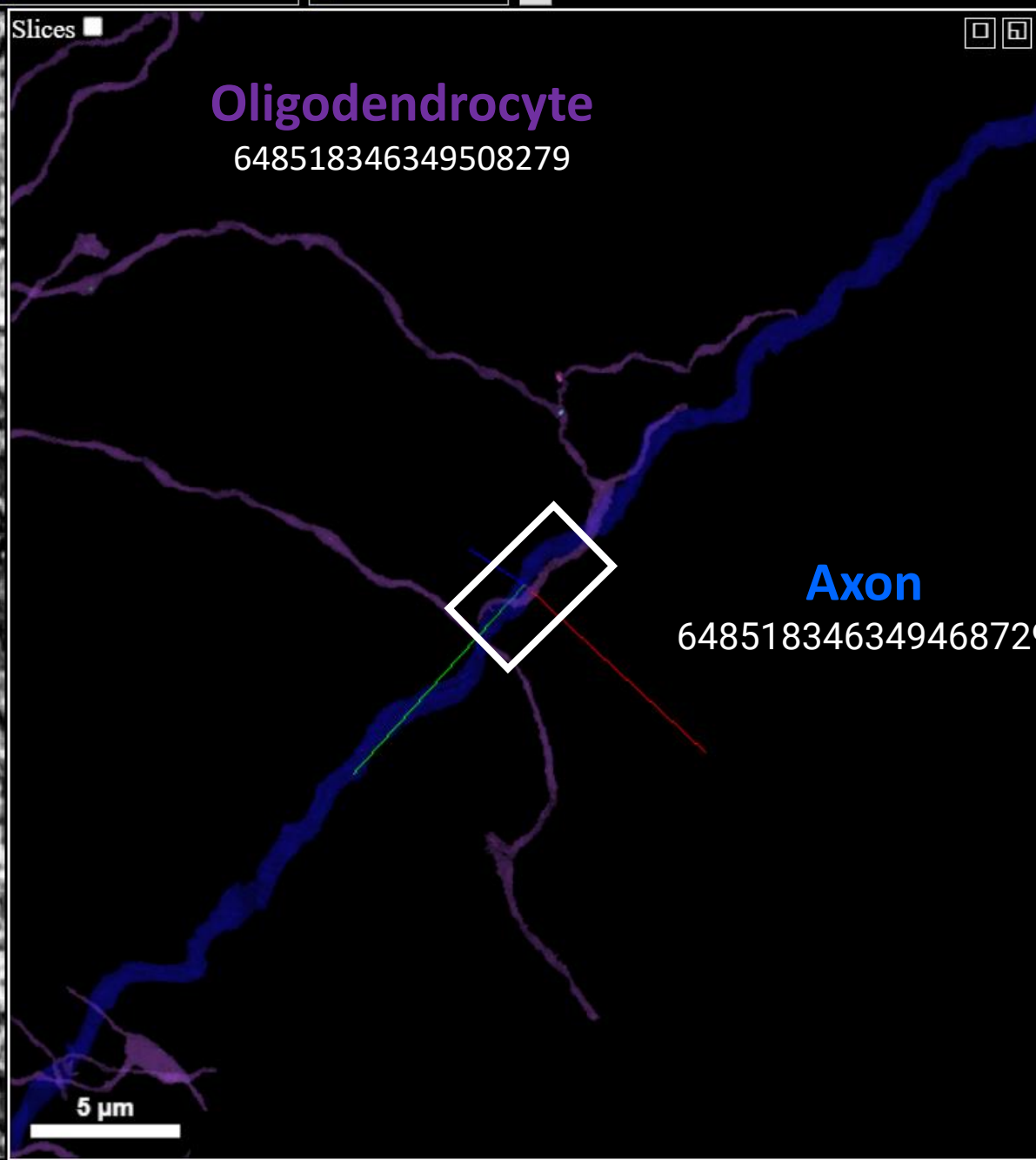
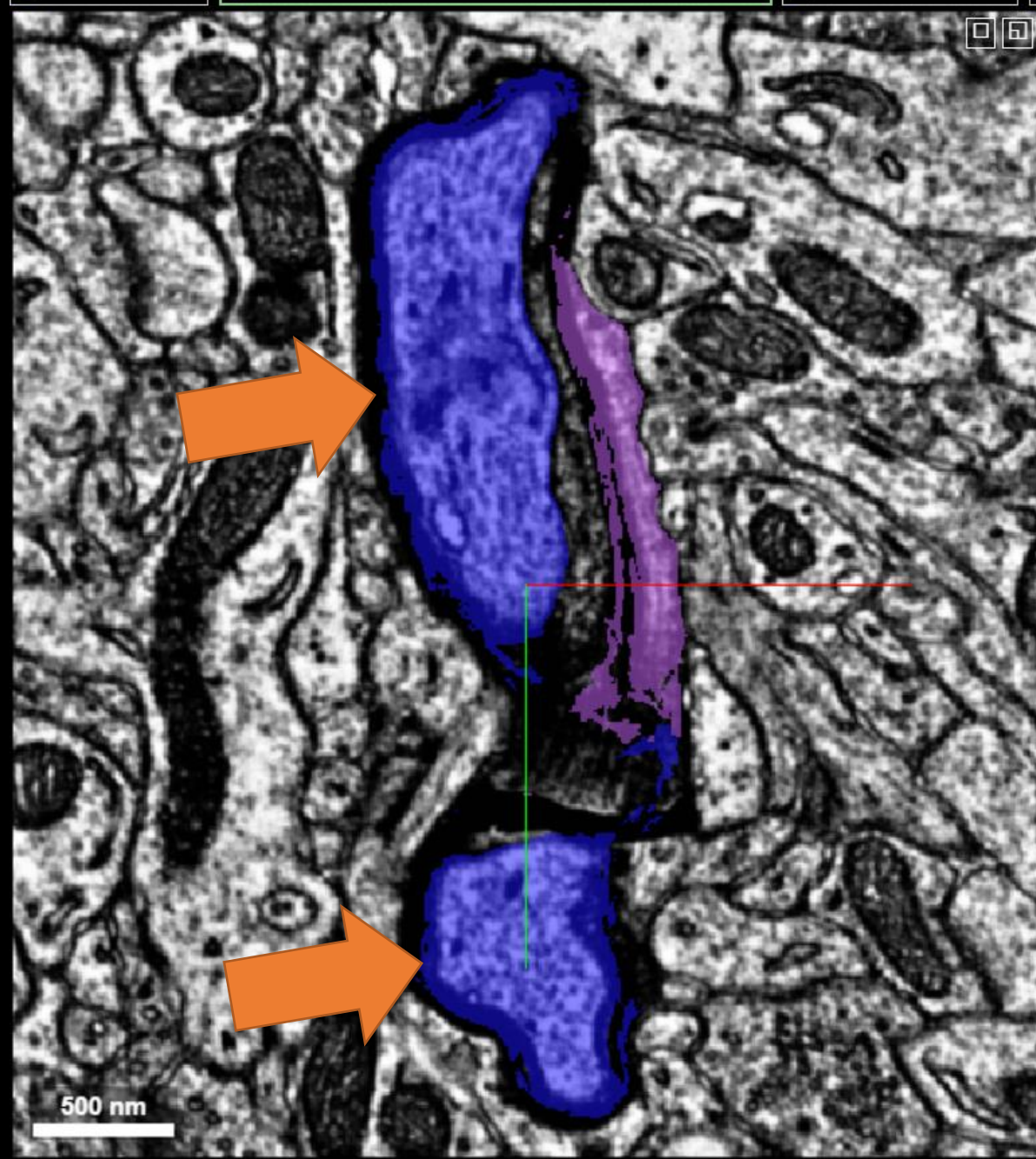
2cell_segmentation_v185

3synapses

4mitochondria

5nuclei

+



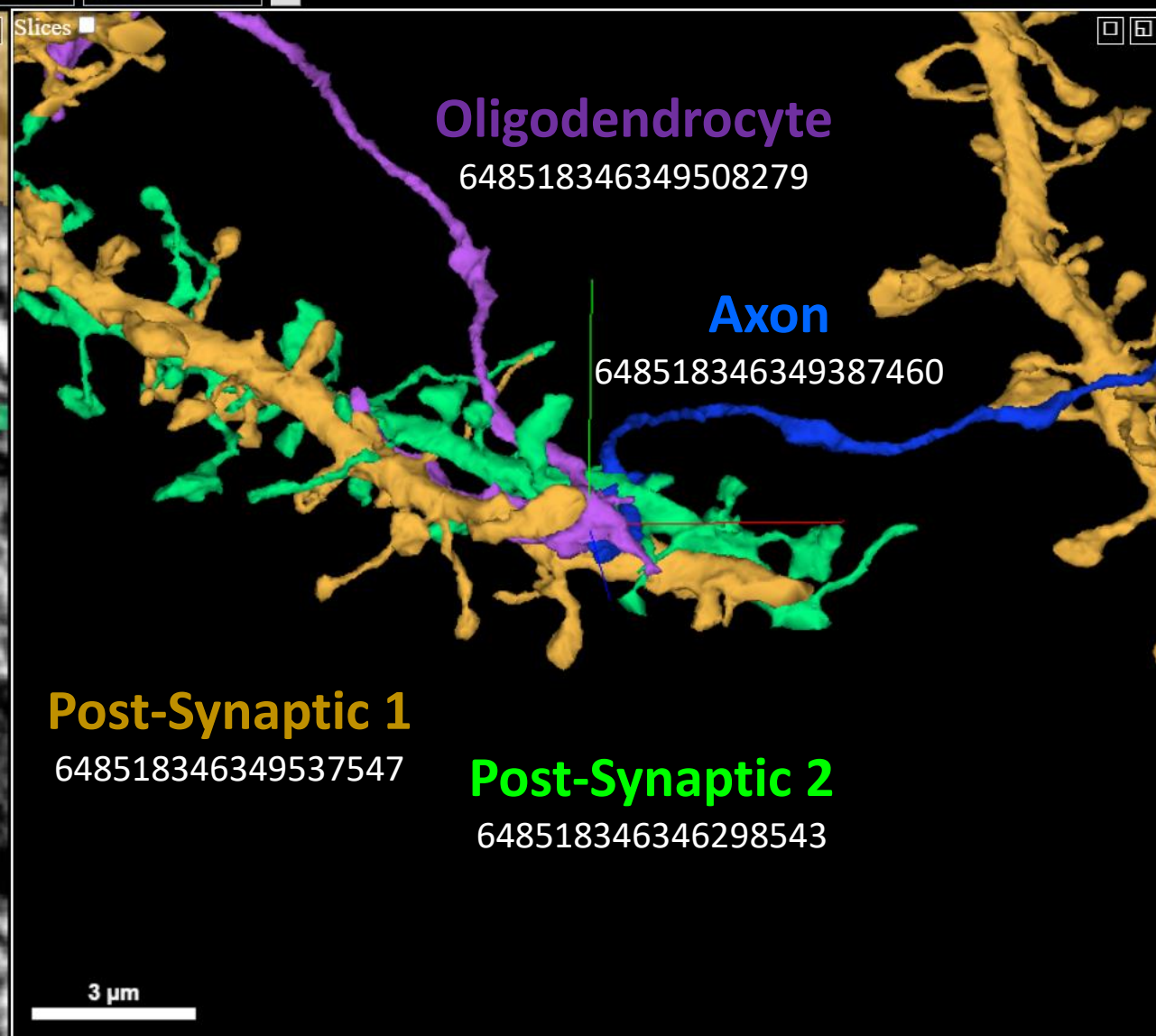
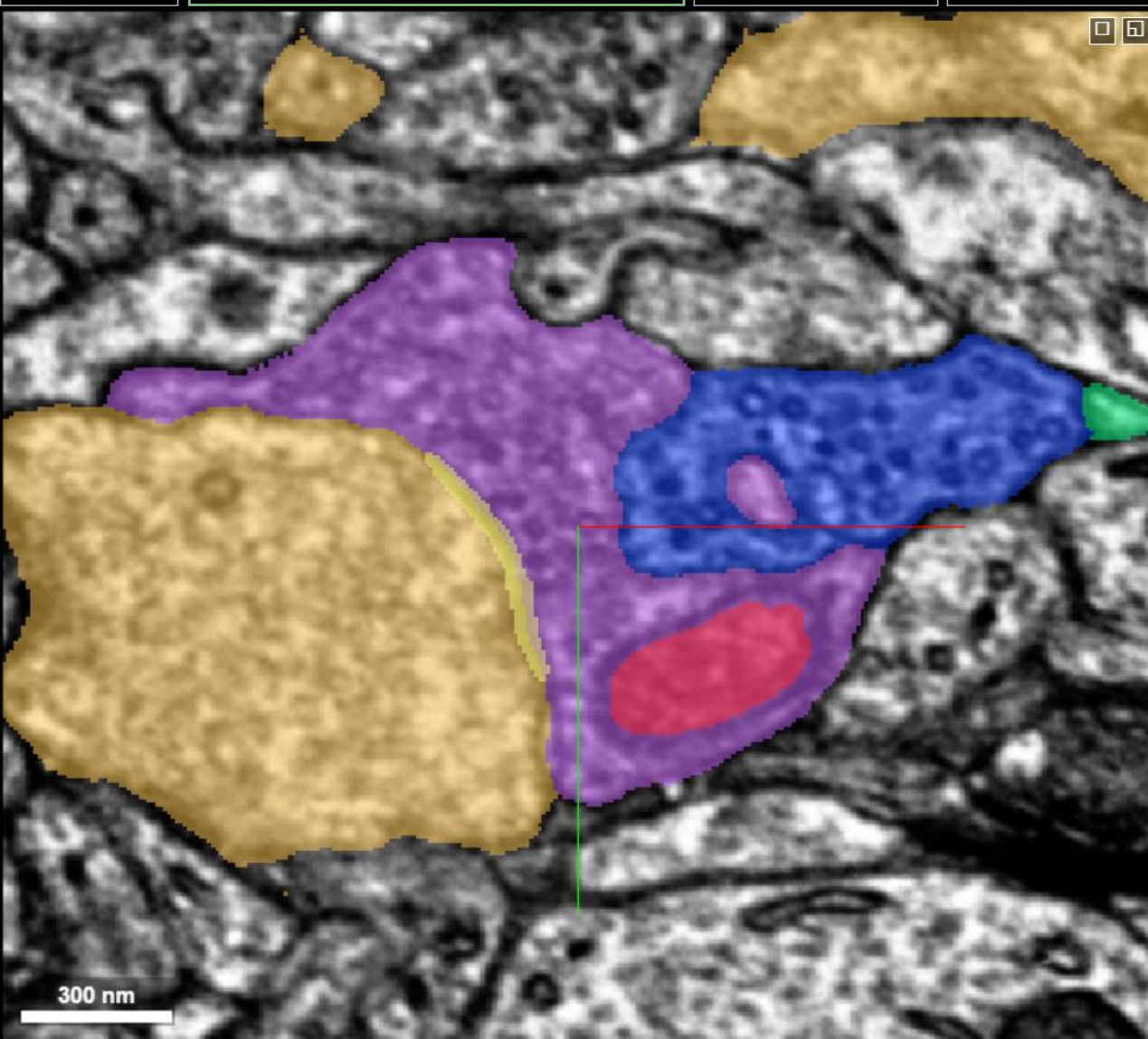
Pre-Synaptic Bouton Mis-Segmented to Oligodendrocyte

Looking at the raw EM image shows continuity with the pre-synaptic axon

4x4x40 nm³ x 81406, y 53000, z 2134

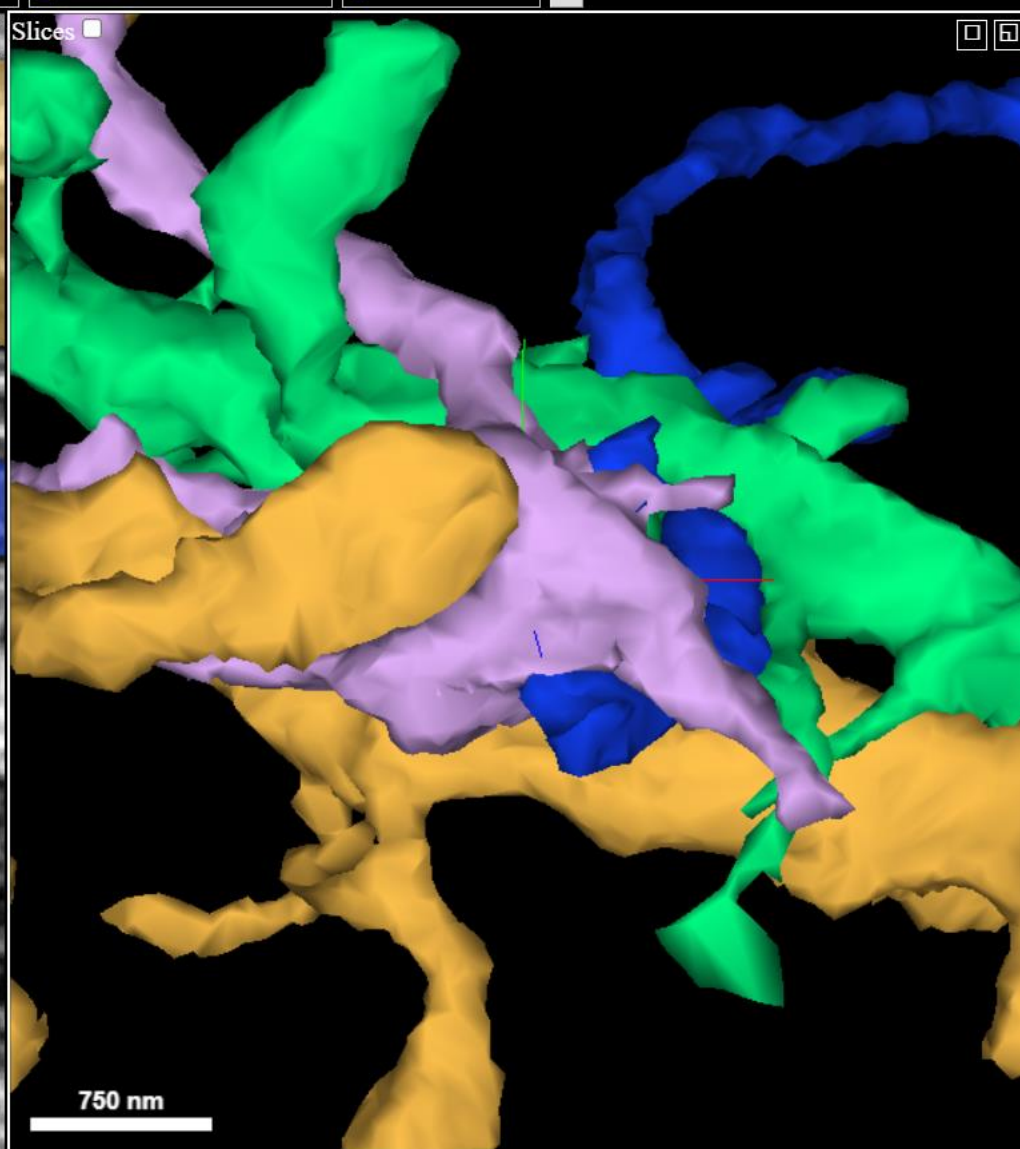
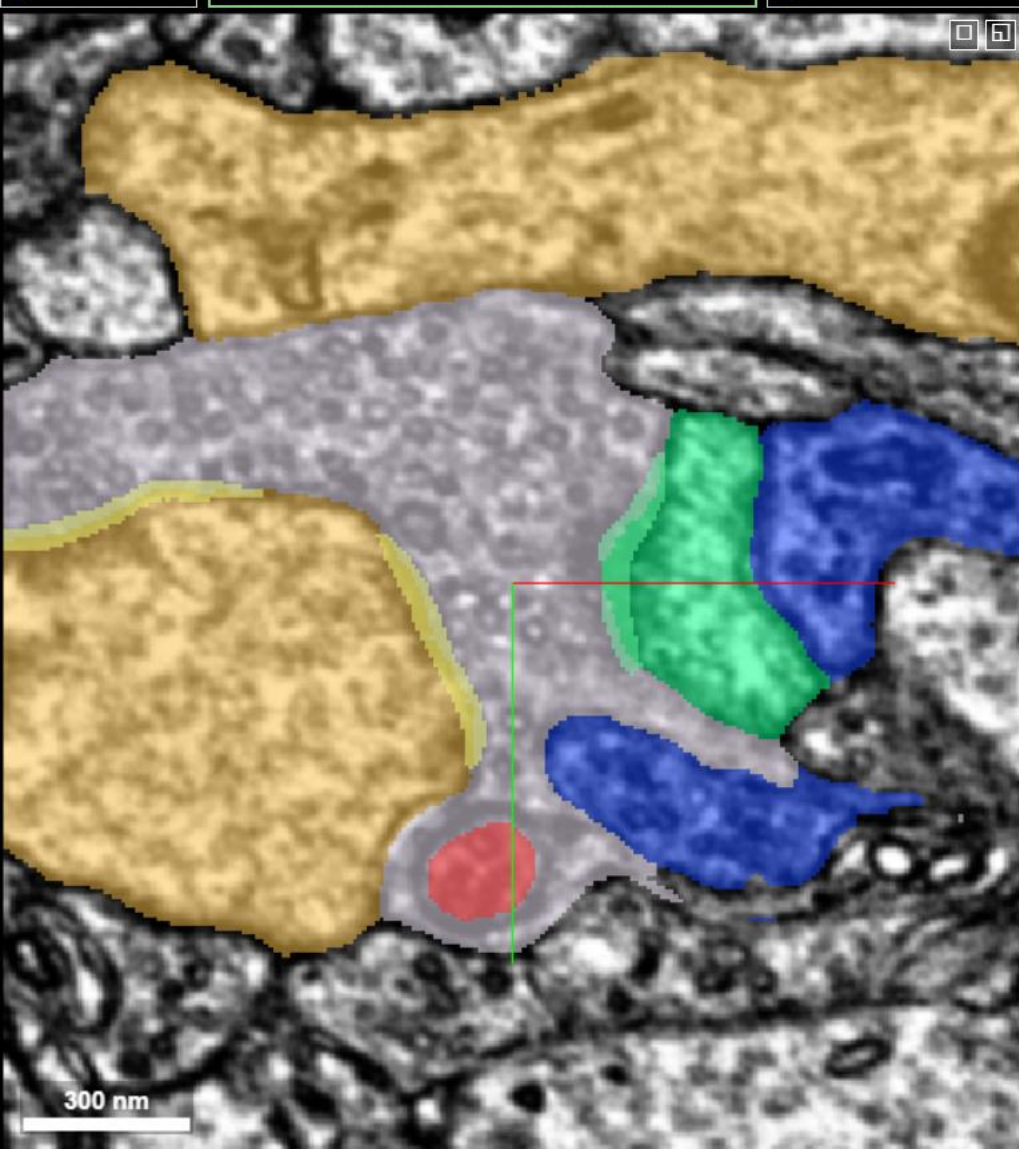
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1EM 2cell_segmentation_v185 3synapses 4mitochondria 5nuclei +



4x4x40 nm³ x 81406, y 53000, z 2127 x 81392, y 52988, z 2144

1EM 1 x 2cell_segmentation_v185 648518346349508279 x 3synapses 0 x 4mitochondria 0 x 5nuclei 0 x +



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cell_segmentation_v185 x

Rendering Annotations Transform

2D Visualization

Opacity (on) 0.51
Opacity (off) 0
Saturation 1

Resolution (slice) 1 px 7/7

3D Visualization

Resolution (mesh) 1 px 307/307
Opacity (3d) 1

Load layer meshes (requires refresh) ☒
Load layer skeletons (requires refresh) ☒

Segment Selection

Ignore segment interactions ☐
Hide segment ID 0 ☒

+

x ☒ ☒ ☒

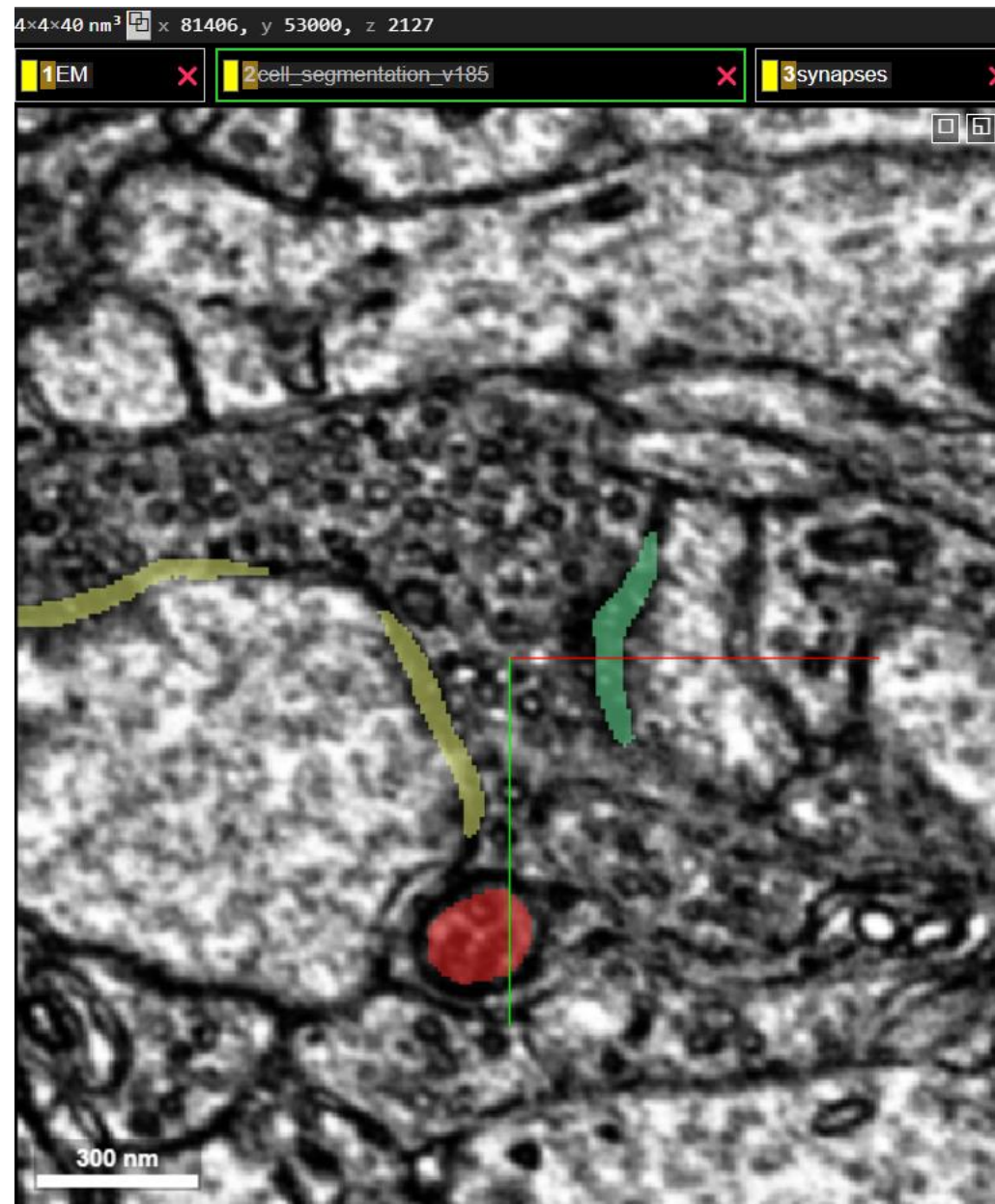
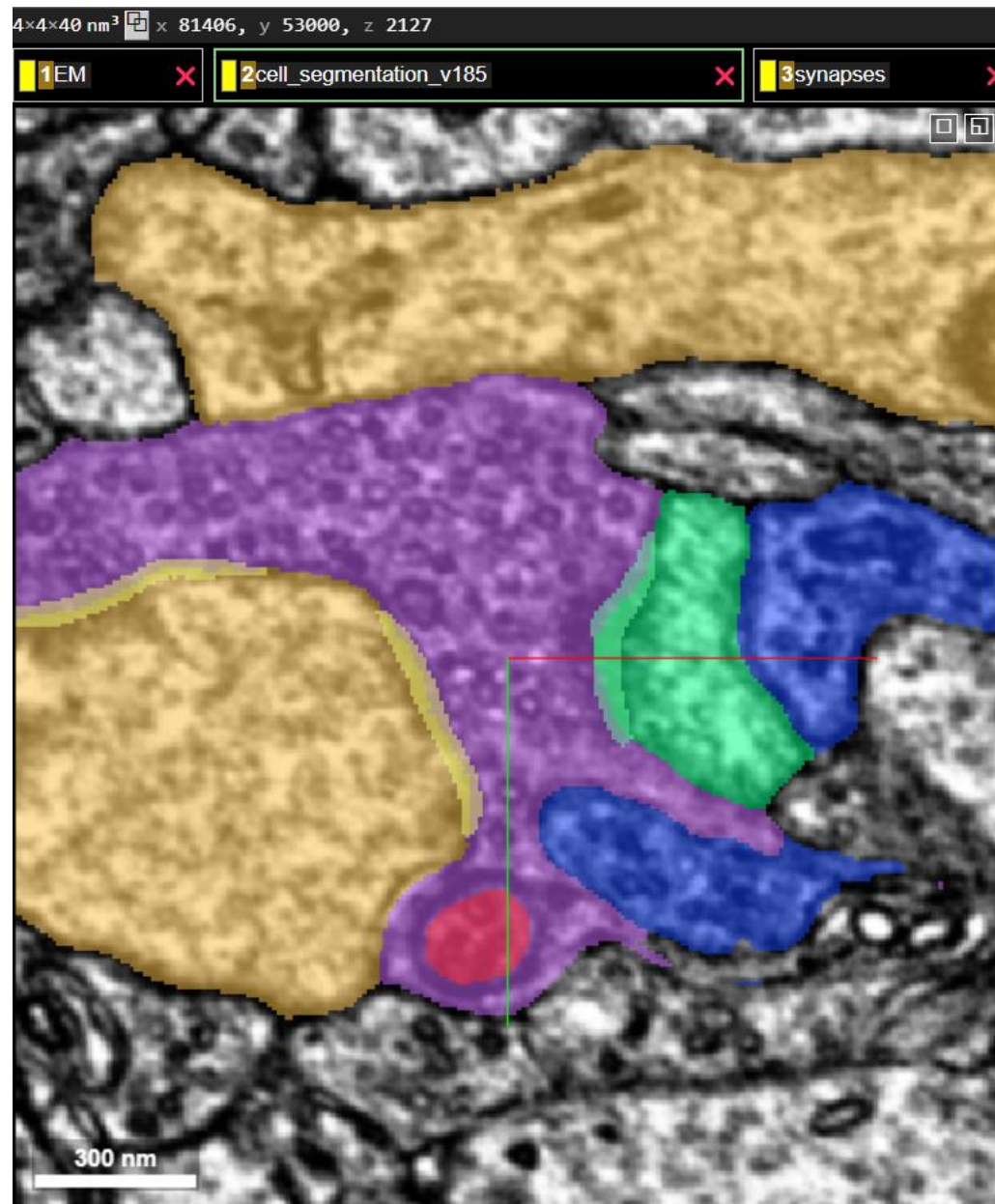
648518346349508279 ☒

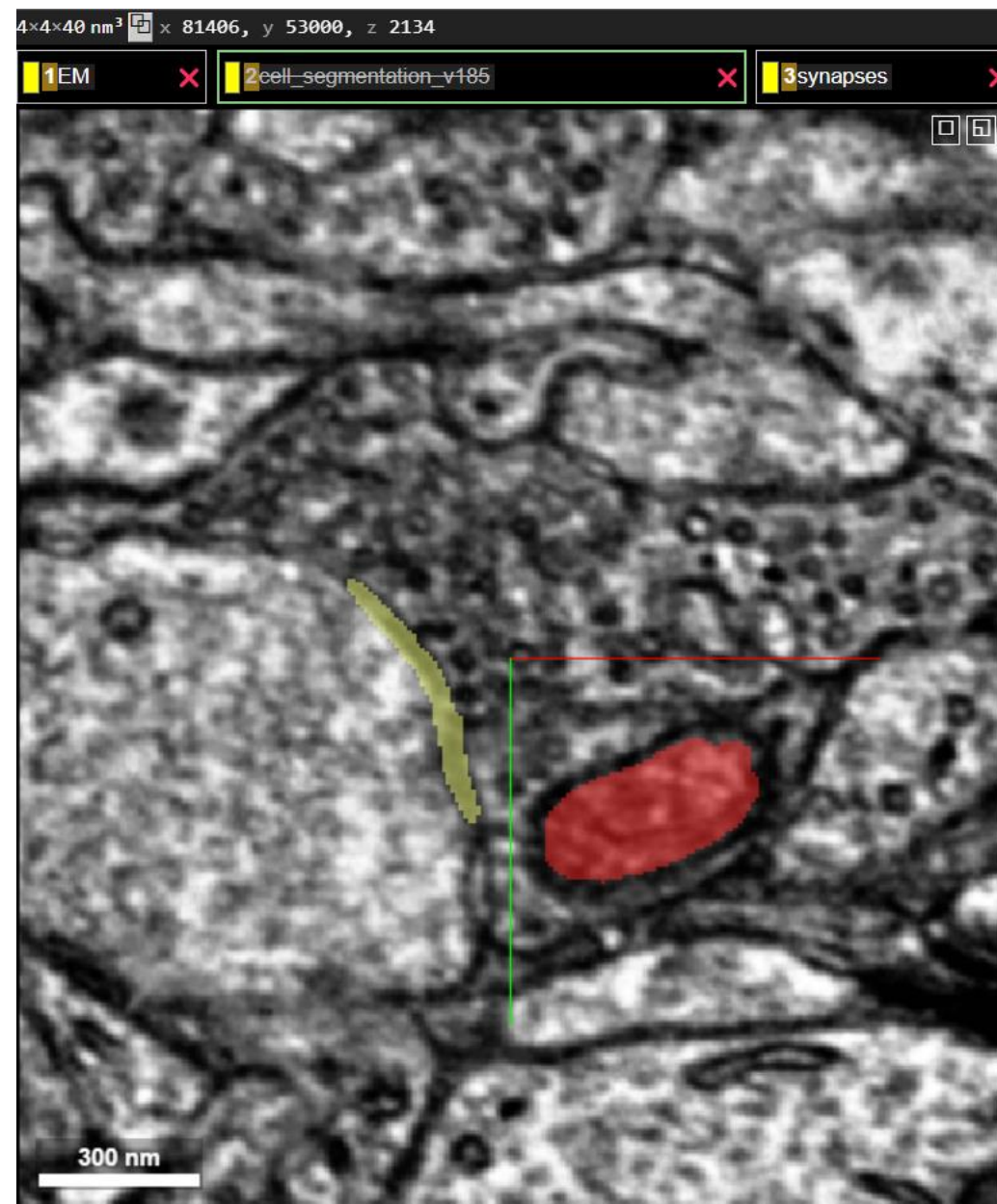
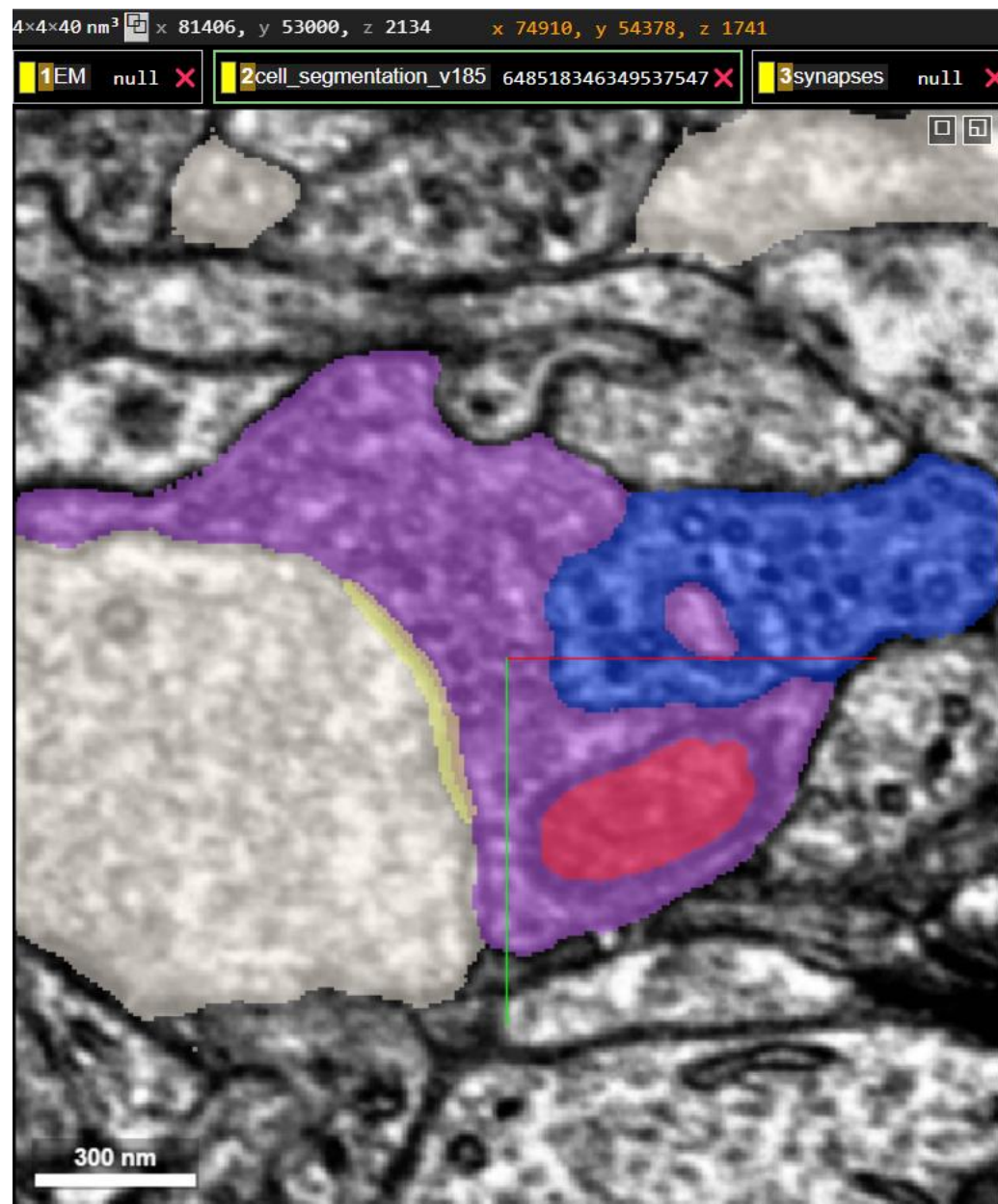
648518346349537547 ☒

648518346346298543 ☒

648518346349387460 ☒

Omni Segment Info





Manually searching for processes that are myelinated by this Oligodendrocyte

Each “branch” of the oligodendrocyte must be explored in Neuroglancer, and when myelinated processes are found, the cell is highlighted (the following slide does not mean to indicate that the entire process shown in the image is myelinated, just a portion of those processes; also, the manual exploration is not exhaustive)

Some of the processes in the volume
that are myelinated by
Oligodendrocyte 648518346349508279

Oligodendrocyte
648518346349508279

20 μ m

