



WEBKNOSSOS

Visualize, share, and annotate
your large 3D images

ABOUT SCALABLE MINDS



TEAM



Team of 15 people based in Potsdam, Germany.

10 years of experience in image analysis for life sciences.

COLLABORATORS



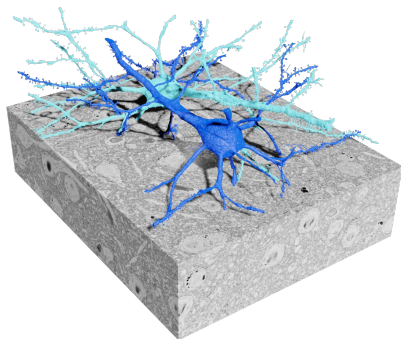
PREVIOUS WORKS



[Connectomic comparison of mouse and human cortex](#), Lomba et al., Science 2022

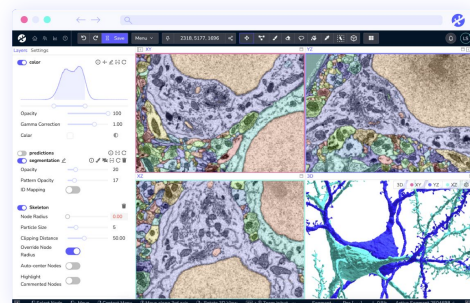
[Dense connectomic reconstruction in layer 4 of the somatosensory cortex](#), Motta et al., Science 2019

and many more...



OUR SERVICES

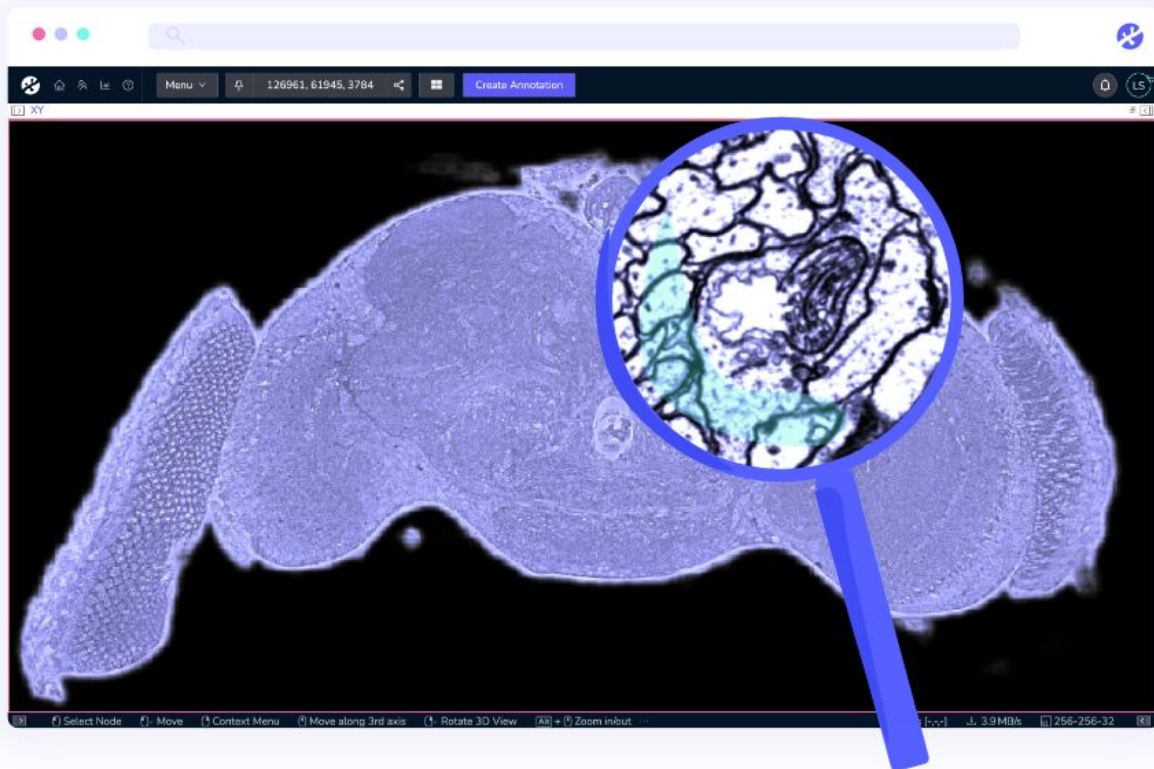
- Volume EM Alignment
- Automated Image Analysis
- Connectome Reconstruction
- Manual Annotations



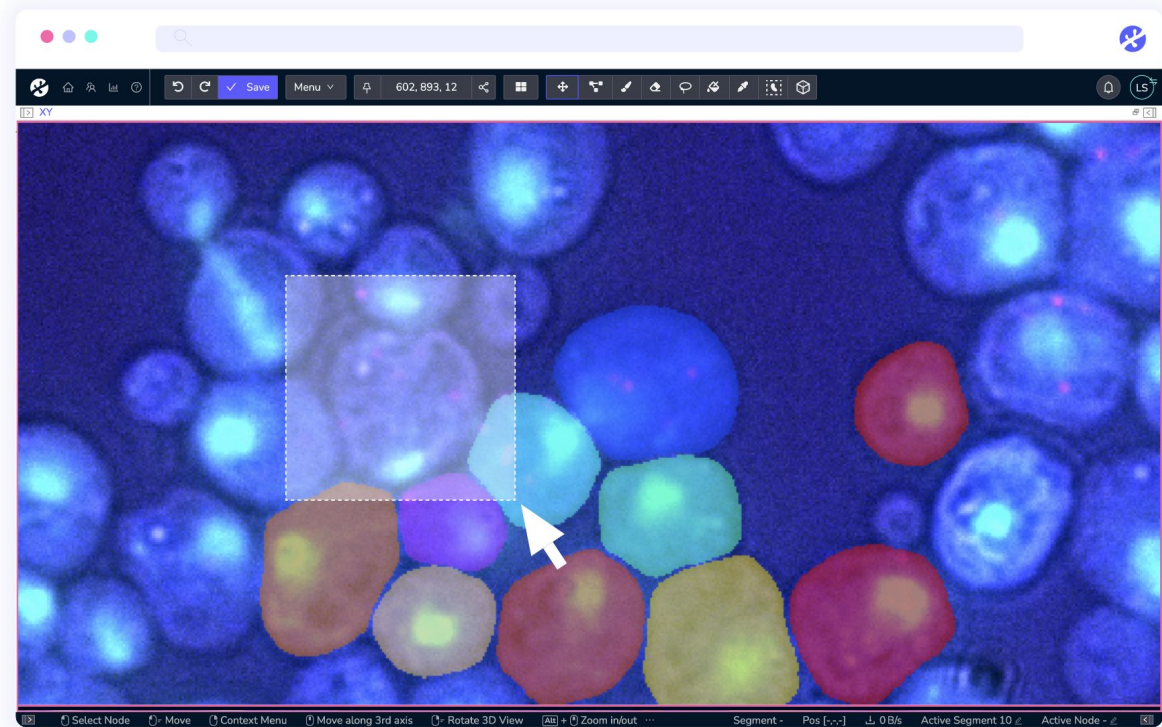
WEBKNOSSOS

- Visualization, Annotation and Sharing Tool
- Serves for the analysis process
- [Example Dataset](#)

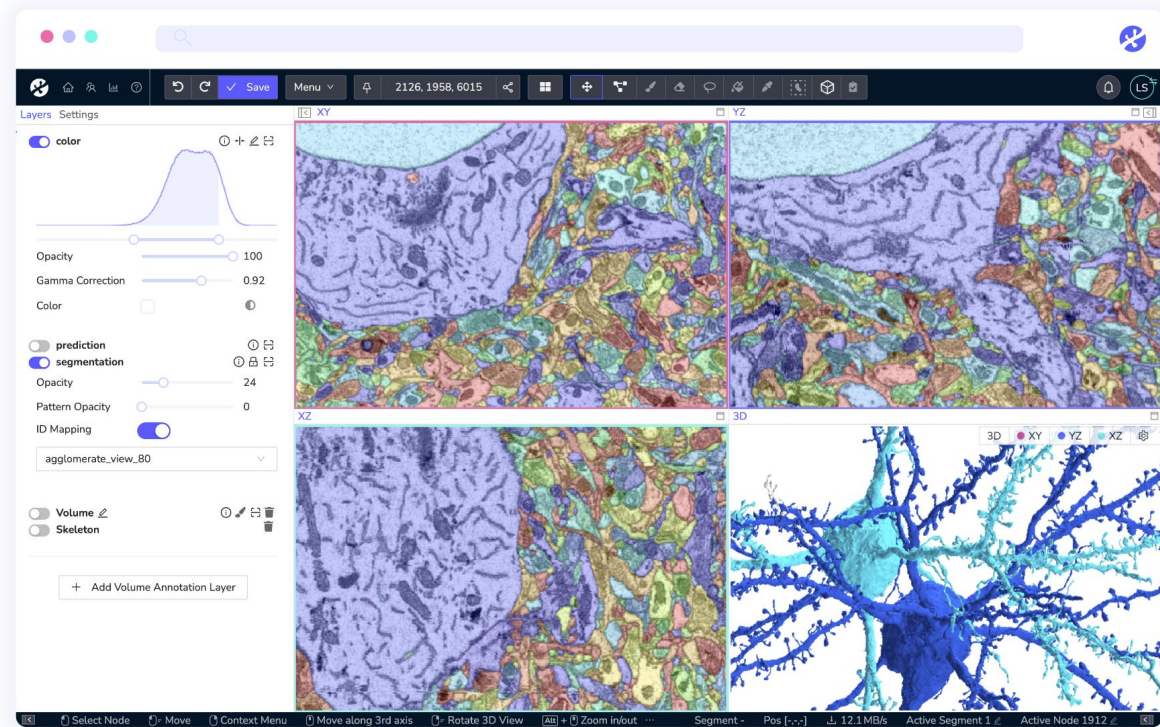
Easily browse
through terabytes
of data over the
web



Quickly annotate:
AI quick-select,
interpolation,
mesh rendering
etc.



Compute and export 3D meshes



Collaborate seamlessly
online

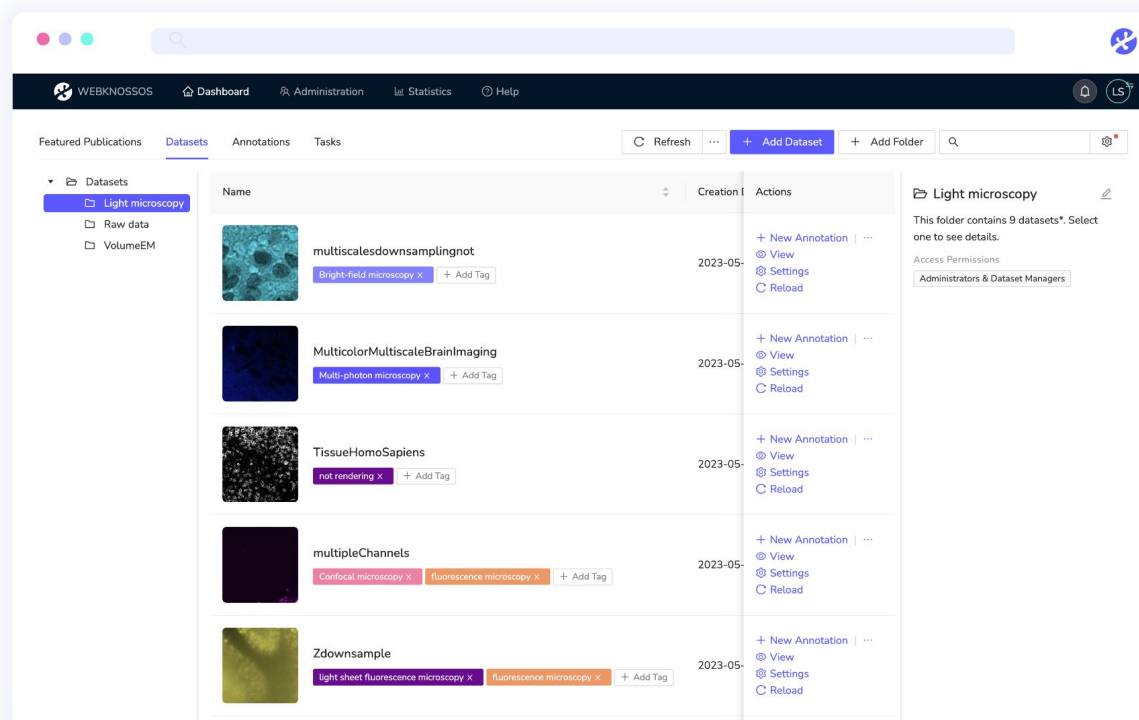
③ Analyzes data

① Acquires data






② Annotates data

④ Explores data after publication

Manage large lists of datasets

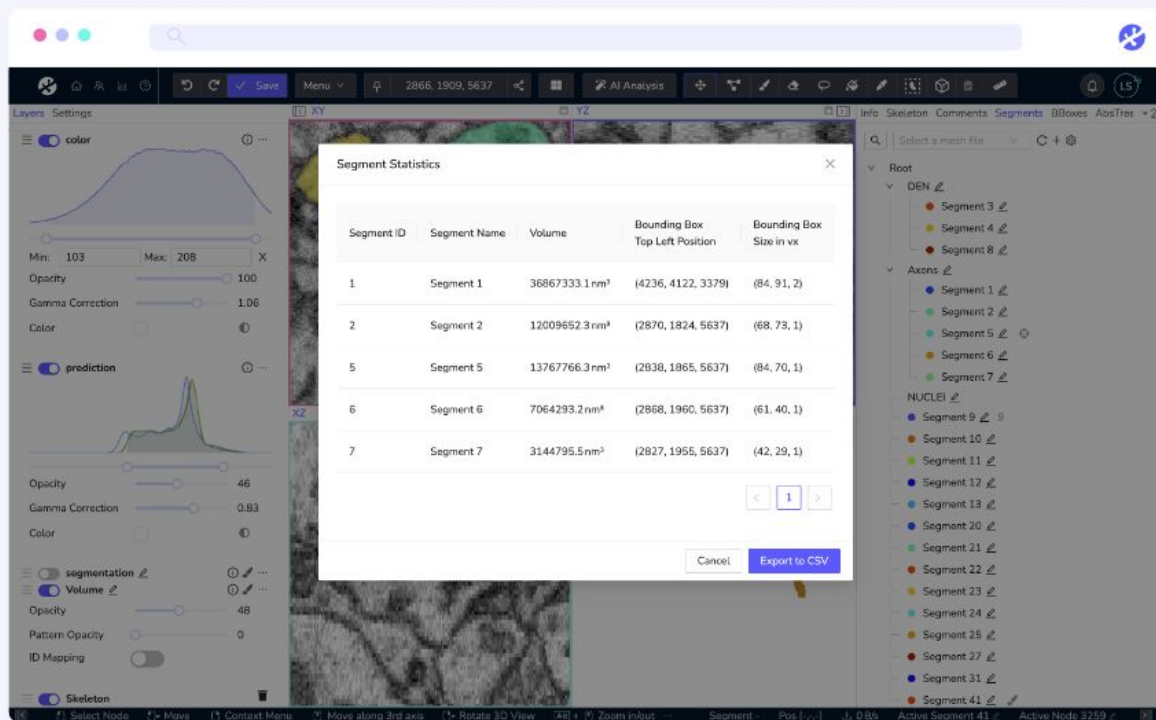


The screenshot shows the WEBKNOSSOS web application interface. The top navigation bar includes 'Dashboard', 'Administration', 'Statistics', and 'Help'. The main content area is titled 'Datasets' and displays a list of datasets under the 'Light microscopy' folder. Each dataset entry includes a thumbnail image, a name, a creation date, and a set of actions (New Annotation, View, Settings, Reload). The 'Light microscopy' folder summary on the right indicates it contains 9 datasets.

Name	Creation	Actions
 multiscalesdownsamplingnot Bright-field microscopy x + Add Tag	2023-05-	+ New Annotation ... View Settings Reload
 MulticolorMultiscaleBrainImaging Multi-photon microscopy x + Add Tag	2023-05-	+ New Annotation ... View Settings Reload
 TissueHomoSapiens not rendering x + Add Tag	2023-05-	+ New Annotation ... View Settings Reload
 multipleChannels Confocal microscopy x fluorescence microscopy x + Add Tag	2023-05-	+ New Annotation ... View Settings Reload
 Zdownsample light sheet fluorescence microscopy x fluorescence microscopy x + Add Tag	2023-05-	+ New Annotation ... View Settings Reload

Light microscopy
 This folder contains 9 datasets*. Select one to see details.
 Access Permissions: Administrators & Dataset Managers

Access segments statistics and import them to any CSV program



Segment ID	Segment Name	Volume	Bounding Box Top Left Position	Bounding Box Size in vx
1	Segment 1	36867333.1 nm ³	(4236, 4122, 3379)	(84, 91, 2)
2	Segment 2	12009652.3 nm ³	(2870, 1824, 5637)	(68, 73, 1)
5	Segment 5	13767766.3 nm ³	(2838, 1865, 5637)	(84, 70, 1)
6	Segment 6	7064293.2 nm ³	(2868, 1960, 5637)	(61, 40, 1)
7	Segment 7	3144795.5 nm ³	(2827, 1955, 5637)	(42, 29, 1)

... and much more!



Cloud storage
(GCS, S3, HPC...)



Pre-processing



Microscopes



Visualization,
annotations



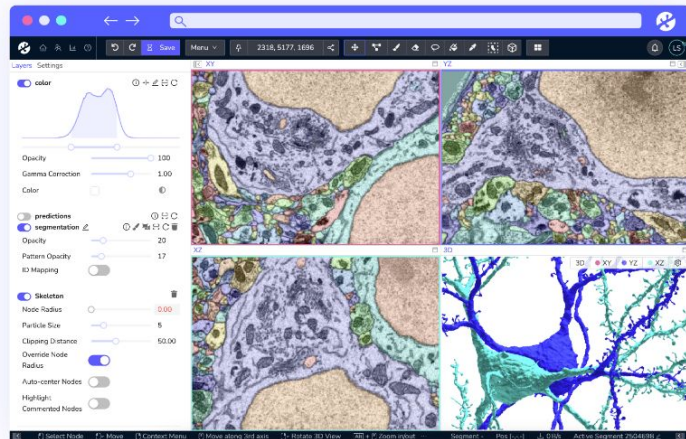
Multi-modal



Data
management



Users,
collaboration



Insights



Interoperability
(Fiji, napari, Neuroglancer...)



AI analysis

Thank you!

Get started for free at webknossos.org

Contact at: hello@webknossos.org