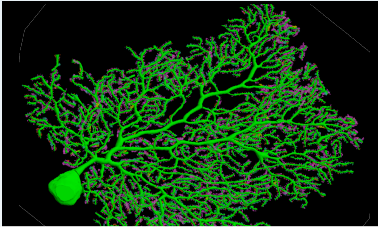


Neurolucida® 360

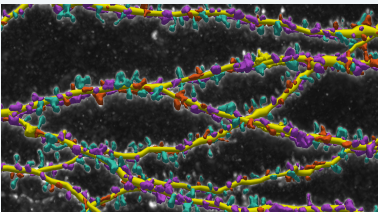
Precision Redefined: The Gold Standard in Neuron Reconstruction and Analysis

Empowering Neuroscientists with Unparalleled Accuracy and Efficiency

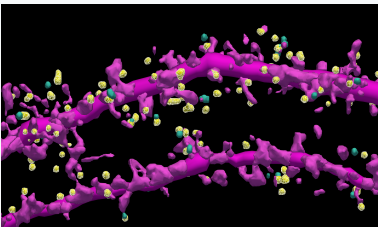
Neurolucida 360 stands at the forefront of neuroscience research tools, offering unmatched capabilities in neuron reconstruction and quantification. Trusted by leading neuroscientists worldwide, it's your key to unlocking new insights in neural morphology and function.



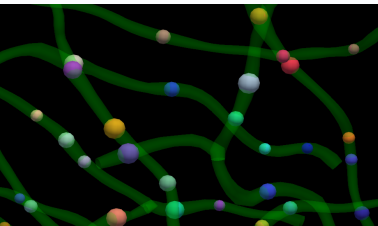
Neurons and Glia



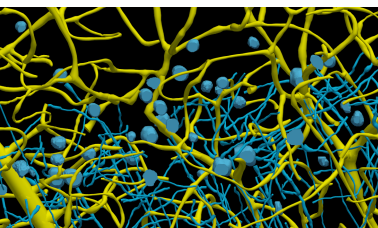
Dendritic Spines



Puncta



Varicosities



Vessels

Versatility Meets Cutting-Edge Technology

- Wide Applicability: Analyze neurons from any species, using any labeling technique
- Multi-Scale Precision: From complex neural networks to subcellular structures
- Advanced Algorithms: Powered by state-of-the-art 3D image detection and machine learning

Key Features Tailored for Neuroscientists

Rapid Automated Reconstruction

- Intuitive automatic tracing and detection tools
- Intelligent machine-learning algorithms for enhanced accuracy
- Fast analysis of complex neuronal structures

Dendritic Spine Analysis

- Automatic detection and classification by morphological type
- Crucial for studies on synaptic plasticity and neurodevelopment

Colocalized Puncta Detection

- Identify pre-synaptic and post-synaptic markers with precision
- Analyze their proximity to cells, neurons, glia, and vascular structures
- Detect sub-cellular structures within axons, dendrites and somas

Efficient Batch Processing

- Streamline your workflow with our intuitive batch pipeline tool
- Process and trace multiple microscopy images automatically

Dynamic Visualization Tools

- Navigate large image datasets with ease
- Utilize sub-volumes, cut planes, and partial projections for optimal viewing

Comprehensive Cellular Analysis

- Extend your research beyond neurons
- Includes specialized tools for microglia and astrocyte analysis

The Widest Image Compatibility

Seamlessly work with images from all major microscopy techniques:

- Brightfield
- Light sheet microscopy
- Two-Photon
- Multichannel fluorescence
- Confocal

Accelerate Your Research, Enhance Your Insights

With Neurolucida 360, you're not just reconstructing neurons – you're opening new frontiers in neuroscience research. From rapid data processing to intricate analysis of neuronal substructures, our software empowers you to push the boundaries of what's possible in your field.

Neurolucida 360: Where Precision Meets Discovery in Neuroscience

Neurolucida® Explorer

Transform Your Data Into Groundbreaking Insights

The Ultimate Companion for Quantitative Neuromorphological Analysis

Elevate your research with Neurolucida Explorer, the powerful analytical software included with Neurolucida 360. Designed to turn complex neuronal reconstructions into meaningful scientific results, Explorer is your gateway to in-depth morphometric analysis.

Comprehensive Analysis at Your Fingertips

Extensive Morphometric Capabilities

- Perform dozens of sophisticated analyses neuron analyses
- Calculate and graph hundreds of metrics
- Also ideal for serial sections, and brain maps

Visual Analysis Tools Include

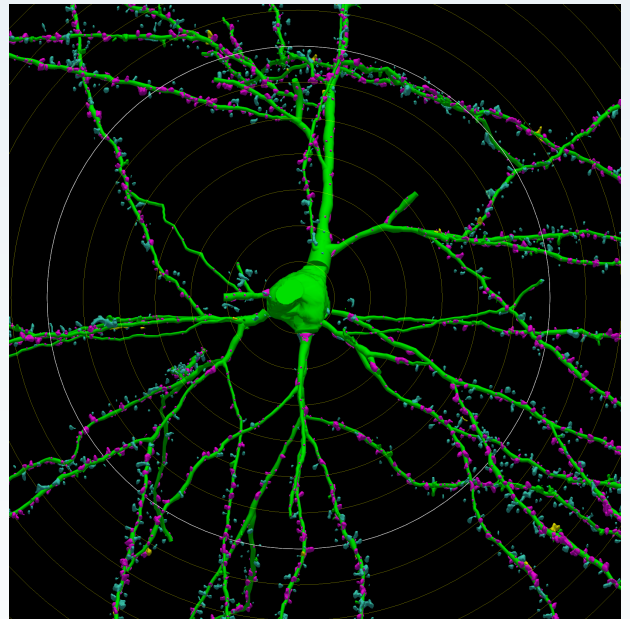
- Enhanced Sholl analysis: for dendritic complexity
- Convex hull: Assess neuronal field size
- Polar histogram: Examine directional preferences of neurites

Multi-Scale Measurements

- Granular and global quantification of: • Length • Diameter • Volume
- Applicable to complex arbors, dendritic spines, and synapses

Advanced Spatial Investigations

- Colocalization studies
- Nearest neighbor analyses
- Uncover relationships between subcellular structures



From Data to Publication with Ease

Intuitive Data Visualization

- Automatically generate graphical displays
- Visualize complex results in clear, intuitive formats

Publication-Ready Outputs

- Create high-quality figures for papers and presentations
- Comprehensive quantitative data tables

Seamless Data Export

- Compatible with popular statistical and spreadsheet software
- Facilitates further analysis and collaboration

Empower Your Neuroscience Discoveries

With Neurolucida Explorer, you're not just analyzing data – you're uncovering the intricate details of neuronal morphology that drive breakthrough discoveries. From rapid quantification to insightful visualization, Explorer provides the tools you need to push the boundaries of neuroscience research.

Neurolucida Explorer: Where Data Meets Discovery

Accelerate Your Research Workflow

- Batch Processing Capabilities
- Dramatically increase data throughput
- Designed for scientists, not programmers
- Run multiple analyses simultaneously
- User-Friendly Interface
- Quickly master advanced analytical techniques

