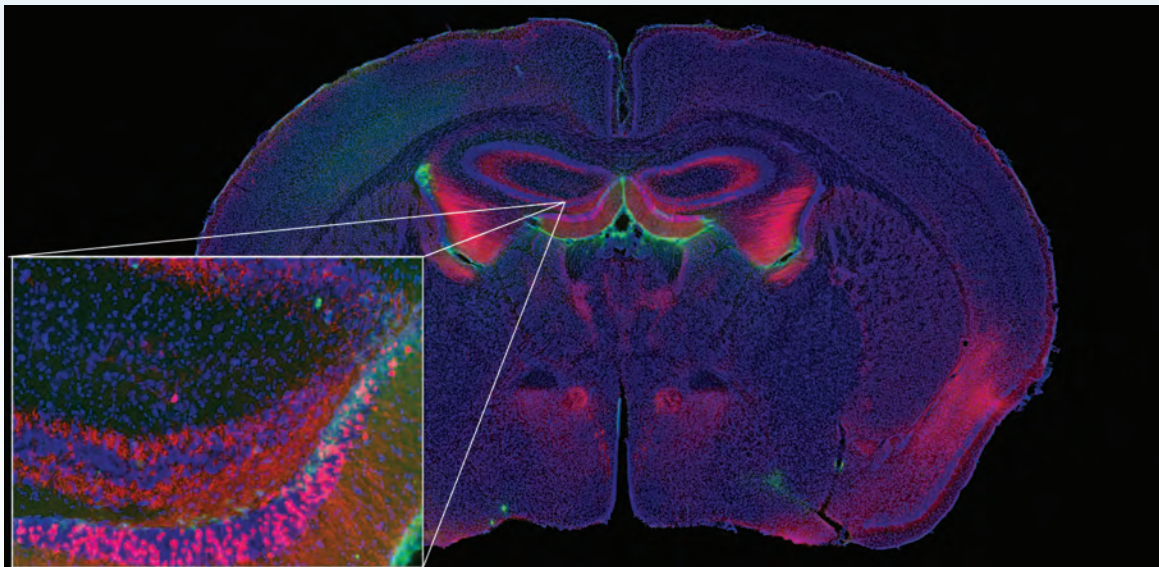


Biolucida solves the challenge of managing and viewing very large image files created by whole-slide scanners, and confocal and light sheet microscopes. The data sets produced by these imaging devices can reach tens of terabytes in size, and due to the diverse imaging systems used may be stored in a myriad of file formats, each with their unique file structures and metadata requiring specialized proprietary viewing software. When those files are left unmanaged, they can become vast collections of unknown digital debris. When they are well managed, they can be valuable sources of primary data that can be useful for other researchers for years to come. Biolucida solves the challenges inherent to viewing, collaborating with, and analyzing big image data.



With Biolucida, you can:

- Quickly view and manage very large images (each image can be terapixels in size) generated with microscopes or slide scanners
- Access images over the internet with PC, Mac, or tablet
- Annotate images and share them with just one person, a select group, or the public
- View and share neuron reconstructions and stereological data generated with Neurolucida and Stereo Investigator
- Publish large image data and metadata in journals



Biolucida®

Manage Big Image Data



FAQs

How does Biolucida work?

Biolucida consists of 3 interoperating components: a server computer, Biolucida server software, and the Biolucida viewer. Together, the server computer and Biolucida server software constitute a virtual central library where your images are maintained and served. Biolucida can integrate into existing IT infrastructure, or it can be hosted in the cloud with Amazon Web Services.

The Biolucida server software enables scientists, educators, and students to navigate large images quickly — there is no waiting for images to download. The software runs behind the scenes and is not visible to users.

The viewer is the software application used to view, access, and share microscopy images. The viewer can run on any computer (PC or Mac) or tablet connected to the internet.

Can I set permissions?

Yes, administrators can set permissions for other users. For example, they can give users access to only a subset of images or they can restrict users from adding annotations. Administrators can even lock navigational tools so that users cannot pan or zoom through images. This feature is useful for guiding viewers to very specific content in images.

How large can the files be?

Biolucida efficiently serves very large image files. A typical single image size is 10-50 gigabytes, but Biolucida can easily handle images that exceed terabyte size.

Can I use images acquired with my slide scanner or my confocal microscope?

Yes, Biolucida supports images acquired with slide scanners from Huron, Aperio, Leica, Olympus, Zeiss, Hamamatsu, and other companies. It also supports images and image stacks acquired with confocal and light sheet microscopes from companies such as Zeiss, Olympus, and Leica.

Can I easily compare images?

Yes, it's easy to compare multiple images simultaneously using Biolucida.

Can I view 3D images?

Yes, Biolucida supports display of 3D images created from multiple focal plane scans, or from serial sections. It enables users to focus through image planes as if they are focusing with a microscope. It also contains a dynamic 3D viewer.

What viewing capabilities do I have?

Easily change magnifications (zoom in and out), pan, and focus. The macro view window displays a low-magnification overview of your specimen to aid in navigation. The intensity adjustment window alters brightness, contrast, gamma, and colors of served images to optimize display.

Which computer platforms do you support?

The Biolucida viewer runs on Mac and PC, and the Biolucida server software runs on Windows and Linux. The Biolucida web browser viewer enables viewing slide images on mobile platforms such as iPads.

Download the free Biolucida viewer at biolucida.net/viewer



About MBF Bioscience

A rich history of creating the future of neuroscience.

MBF Bioscience develops advanced tools for collecting and analyzing accurate, reproducible data from histological specimens, 2D and 3D microscope images, and freely moving *C. elegans* so that scientists can better understand brain diseases and processes at a cellular level.

Our products have helped researchers publish over 17,000 peer reviewed papers.

What our customers say

“ Biolucida is an amazing platform for using virtual histology in medical education that I have been using to aid my teaching practices for years. The medical students have also shown great interest in your virtual slides and that has helped them achieve better results – findings that I have also published.

Marko Kostovski, Ph.D.
University Ss Cyril and Methodius in Skopje

“ We've been very happy for many years with MBF products and the course of upgrades and improvements. Your service department is outstanding.

William E. Armstrong, Ph.D.
University of Tennessee

