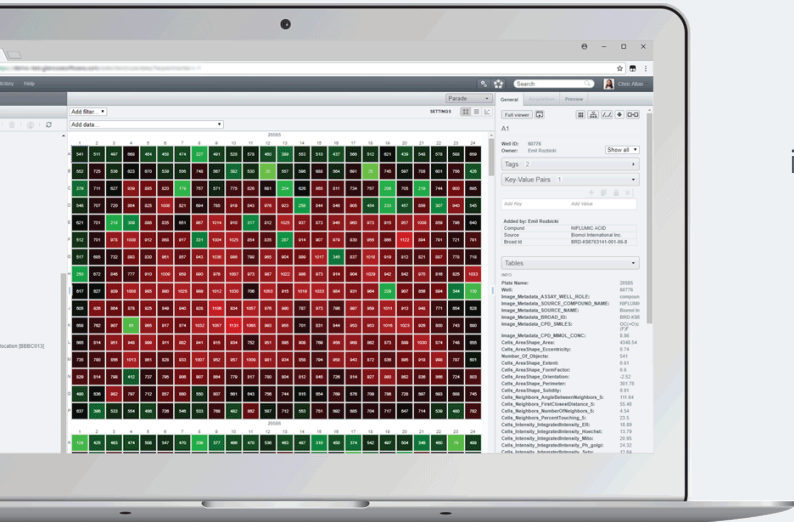# Glencoe SOFTWARE

OMERO Plus

The Enterprise Standard for Image Data Management

OMERO Plus is the global standard for enterprise image data management, offering unparalleled interoperability, flexibility and performance across imaging domains.

As a central hub for your organization's data, OMERO Plus ensures secure, high-performance data access for browsing, searching, viewing, and analyzing TByte and PByte datasets.

The most interoperable and scalable solution for your image data

Tried and True

Based on the world-leading open source image data management software platform developed and released by the Open Microscopy Environment. Validated by labs all over the world.
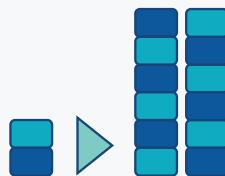
Bio-Formats Built In

OMERO Plus uses Bio-Formats, the world's most popular scientific image translation software, to access and integrate image data from any modern imaging modality in a single system.

Cloud Optimized

With built-in support for OME-Zarr, the cloud-friendly multi-dimensional bioimaging data format, OMERO Plus makes cloud deployments a viable solution for academic and industrial life sciences and biomedical R&D labs.

Scalability

Dedicated data services to scale your OMERO Plus installation in the ways that matter to you: ramp up your image viewing, image analysis, and more as needed and over time.
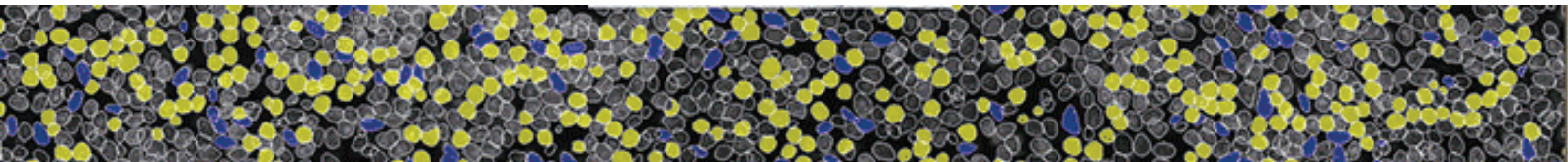
Analyze Your Way

Access, analyze and mine your data from anywhere, always through a secure connection, with your favorite analysis tools in one simple framework.

Data Security

OMERO Plus supports two SSO standards: SAML 2 and OpenID Connect (OIDC) as well as LDAP. With an advanced permissions model, control data access and user roles as needed across your organization for secure collaboration.

Add traceability to data analysis

Managing and exploring analytical results alongside images enables essential contextual review and maximizes the value extracted from this primary data.

PathViewer GRID for advanced review

PathViewer GRID enables viewing and annotating multiple images at the same time: synchronize your views and copy/paste annotations between images with ease.

Support for new domains

OMERO Plus and its extensions are constantly evolving to support the latest methods in the life sciences, including **Spatial Transcriptomics** and **Cell Painting**

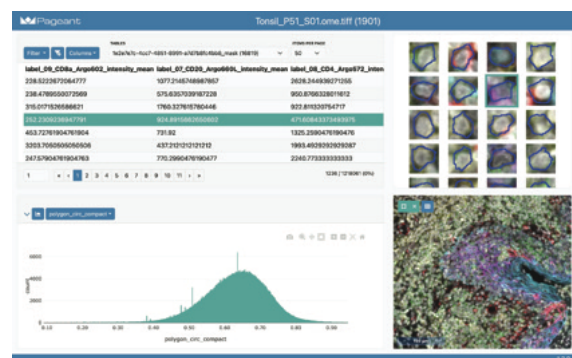## OMERO Plus Extensions for Key Domains: Digital Pathology and High Content Screening

PathViewer is an interactive visualization, analysis, and annotation tool specifically tailored for the Digital Pathology workflow. With support for multi-channel fluorescence and brightfield images in addition to image analysis overlays, PathViewer is a truly interoperable solution for scientists and pathologists alike.

OMERO Plus enables the generation of image analysis results at scale and their management alongside the original images. Now with Pageant, these analytical results can be visually mined in an interface built for computational pathologists and data scientists alike.

Explore synchronized views of objects, data, and their source image for a uniquely unified perspective of your results. Visualize data distribution to inform your selections. With the object-centered view, even rare populations can be easily identified and reviewed. All within the web browser, these data views can be accessed from anywhere, anytime.
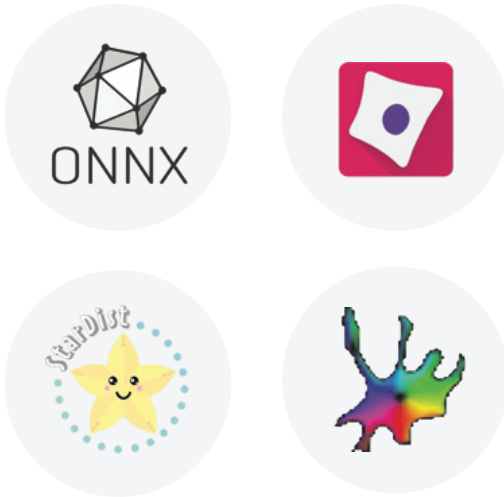

Managing and exploring analytical results alongside images enables essential contextual review and maximizes the value extracted from this primary data.

OMERO Segmentation Connector

Execute your preferred image analysis routines from the web browser and manage their results alongside the images with the new Segmentation Connector for OMERO Plus. With modular support for the most popular tools in Digital Pathology and High Content Screening, you decide how your images are analyzed.

Glencoe Software has worked with our customers to understand the open source and proprietary third party platforms that are most popular in the bioimaging community. Rather than reinventing image analysis, we provide the interface to execute image analysis at scale from the web browser.

With analysis results managed in OMERO Plus, your analysis is traceable and reproducible. Glencoe Software provides the interfaces to visualize and mine object-level results. See more in PathViewer and Pageant.

omero2pandas

Tabular data stored in OMERO Plus can be integrated into custom AI routines using tools like omero2pandas. This package allows users to download and upload OMERO.tables data as pandas dataframes, with additional integration aimed towards Jupyter Notebooks. This provides access to the full suite of Python data science and machine learning packages when working with OMERO data.

Omero2pandas is another step towards making OMERO Plus the data engine of choice for data analytics and AI in bioimaging. Use omero2pandas to classify cells or spots in a custom way and write this data back to OMERO Plus for further exploration and sharing in PathViewer and Pageant.

Data In, Data Out...
Remotely Accessible for Your Own Use

OMERO Plus supports TBytes of data, but you are never locked in. Your data is always accessible, from wherever you are. Remote and arbitrary data access is essential for the largest datasets - no more time-consuming downloading of the data to wherever you happen to be working.

Now access image data, metadata, and large derived analytical data via the same flexible and open interfaces.

Setting Standards for Data Strategy

Glencoe Software builds and delivers innovative, scalable, easy-to-use scientific imaging solutions for its clients and partners. Our proven image database technology makes the viewing, sharing, analysis and management of large sets of images and metadata easy and accessible to everyone in a group, team, project or organization.

Glencoe's products are installed and used in several world-leading academic labs, biotechs, pharmas and publishers, solving mission-critical problems in high-content screening, digital pathology, and many other modalities. Through our OEM licensing program, our software tools are embedded in some of the world's most powerful and market-leading software data products. We combine world-beating technology and expertise with dedicated, reliable customer support.

Get in touch! For more information, contact us at info@glencoesoftware.com