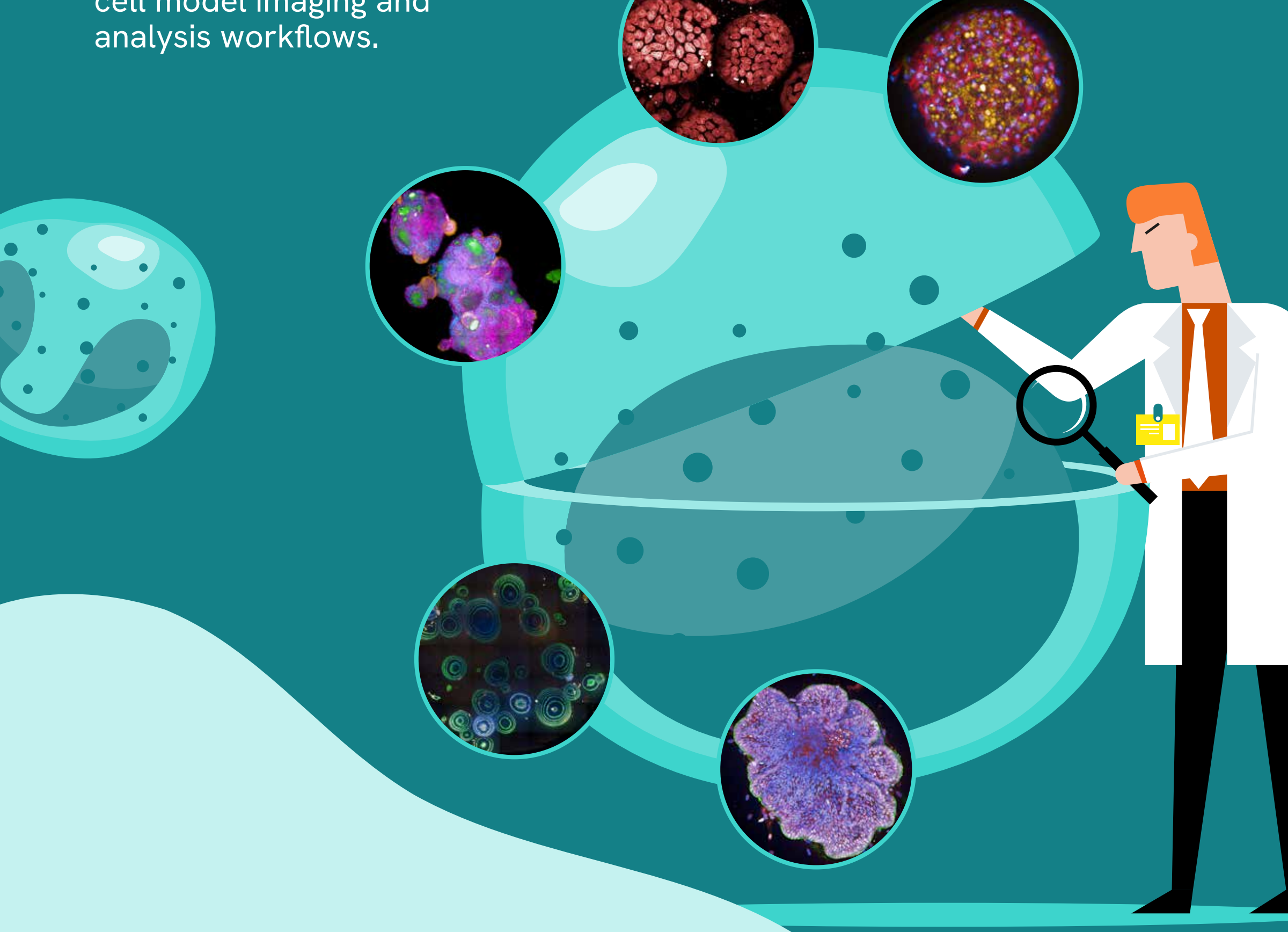


# Deeper insights from your 3D cell model imaging.

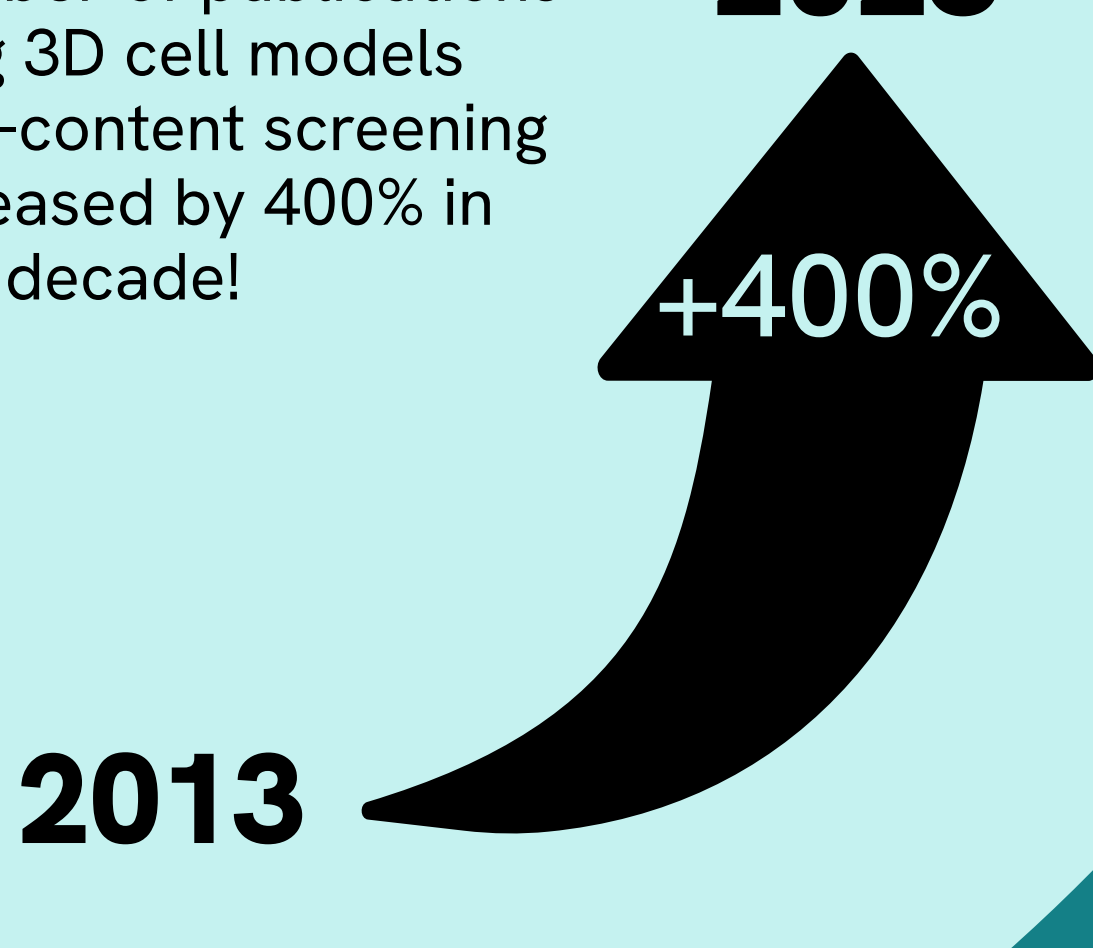
## High-content imaging is a key technology for analysis of 3D cell models.

Researchers are increasingly looking to 3D cell models to bridge the translational gap between 2D cell cultures and in vivo conditions. These cell models more closely represent the microenvironments, cell-to-cell interactions, and biological processes that occur in vivo.

Discover the tools and strategies to get the most out of your 3D cell model imaging and analysis workflows.



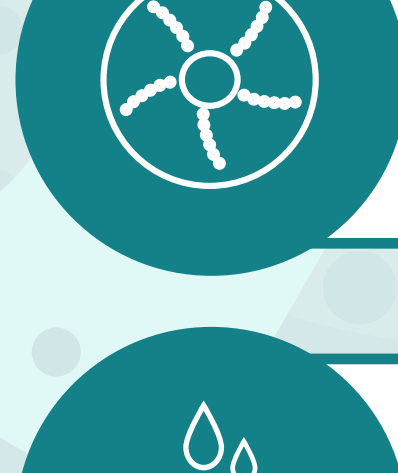
The number of publications involving 3D cell models and high-content screening has increased by 400% in the past decade!



\*Source: cell model search terms plus high-content screening/imaging in Google Scholar.

## 3 key factors for successful high-content imaging

### Achieve high quality images



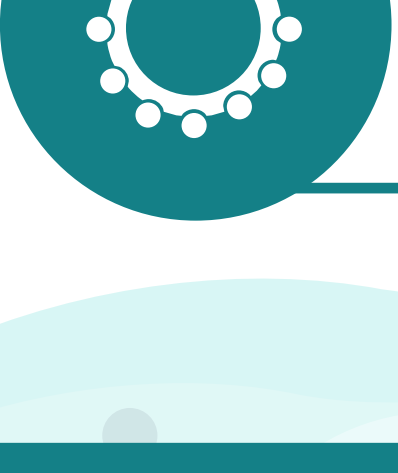
#### Confocal imaging

Removes out-of-focus light, enabling optical sectioning of samples, with a better signal-to-noise ratio, and higher XYZ resolution than widefield imaging.



#### Water immersion objectives

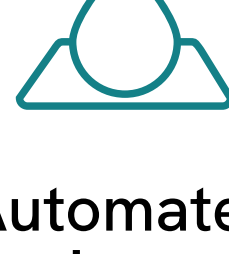
Improve image and data quality by enhancing the signal and improving the z resolution.



#### Optical clearing strategies

Increase the amount of light getting inside 3D models to excite fluorochromes and remove biomaterial that blocks the fluorescent signal reaching the cameras.

### Decrease imaging time



#### Automated water-immersion objectives

Capture up to 4 times more light than air objectives.



#### Multi-camera acquisition

Improve speed with simultaneous multi-camera image acquisition.



#### Intelligent image acquisition

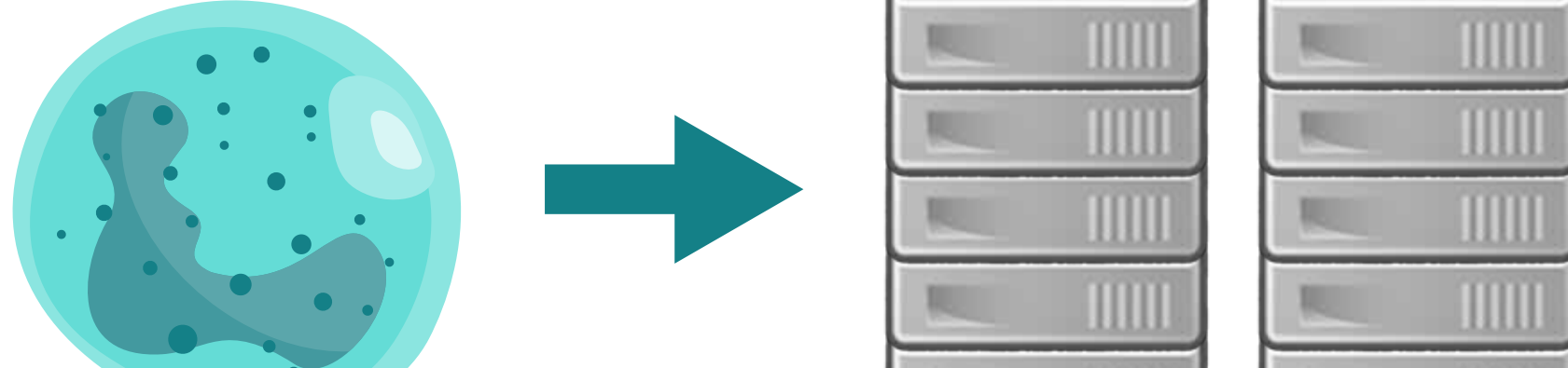
Image only the objects of interest at high magnification.

### Efficiently manage data

#### 2D imaging data



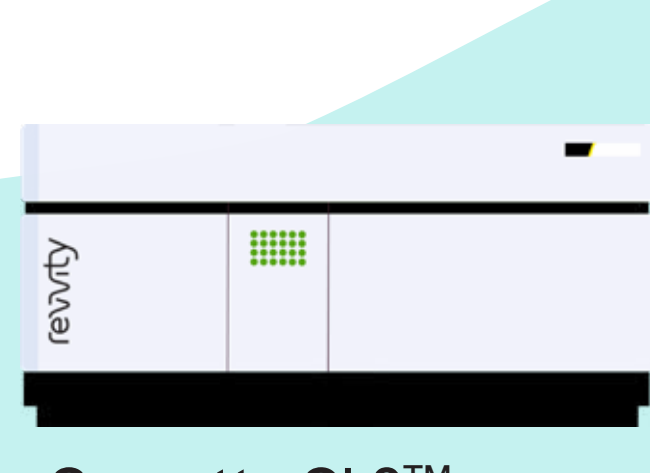
#### 3D imaging data



Automatic data transfer between image acquisition and analysis is essential when working with large 3D datasets.

Cloud deployment options give you high-volume image data storage that's scalable and can support your entire lab.

## Revvity's high-content imaging systems and software for 3D cell models



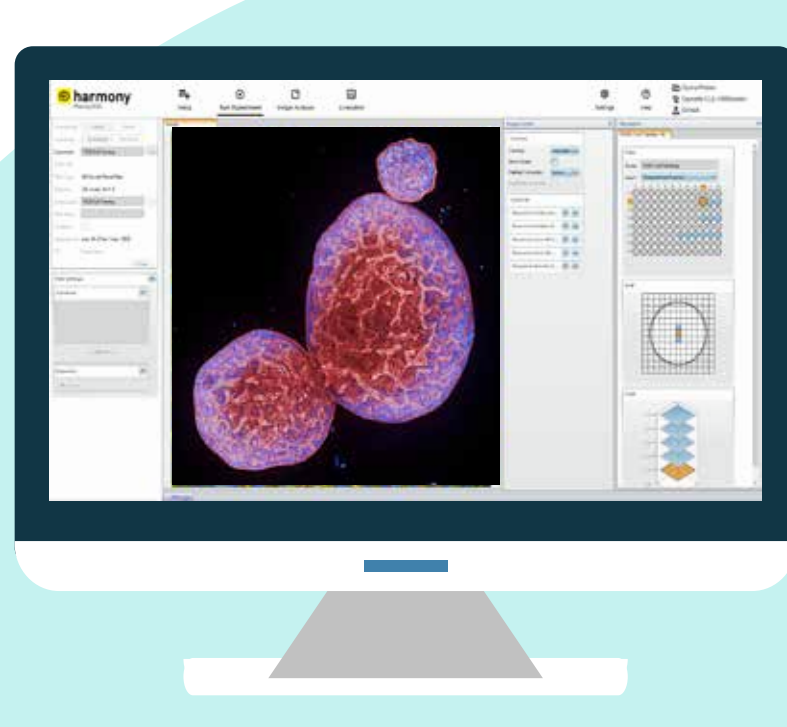
Operetta CLS™



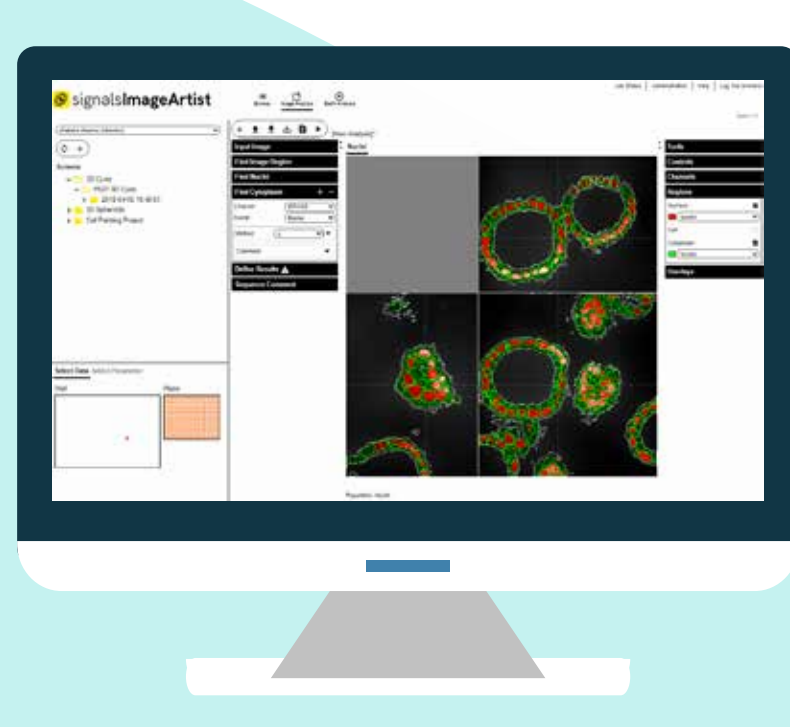
Opera Phenix™ Plus

- Automated water-immersion objectives
- Confocal spinning-disk technology
- PreciScan™ intelligent image acquisition
- Simultaneous imaging with multiple cameras\*

\*Options available on Opera Phenix Plus.



harmony



signalsImageArtist

- Efficiently image, visualize, and analyze complex cellular models in 3D
- Acquire images at the same time data is being transferred
- Manage your data to achieve faster insights
- Expand your cloud-based storage, as needed

For more information, visit: [www.revvity.com](http://www.revvity.com)

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