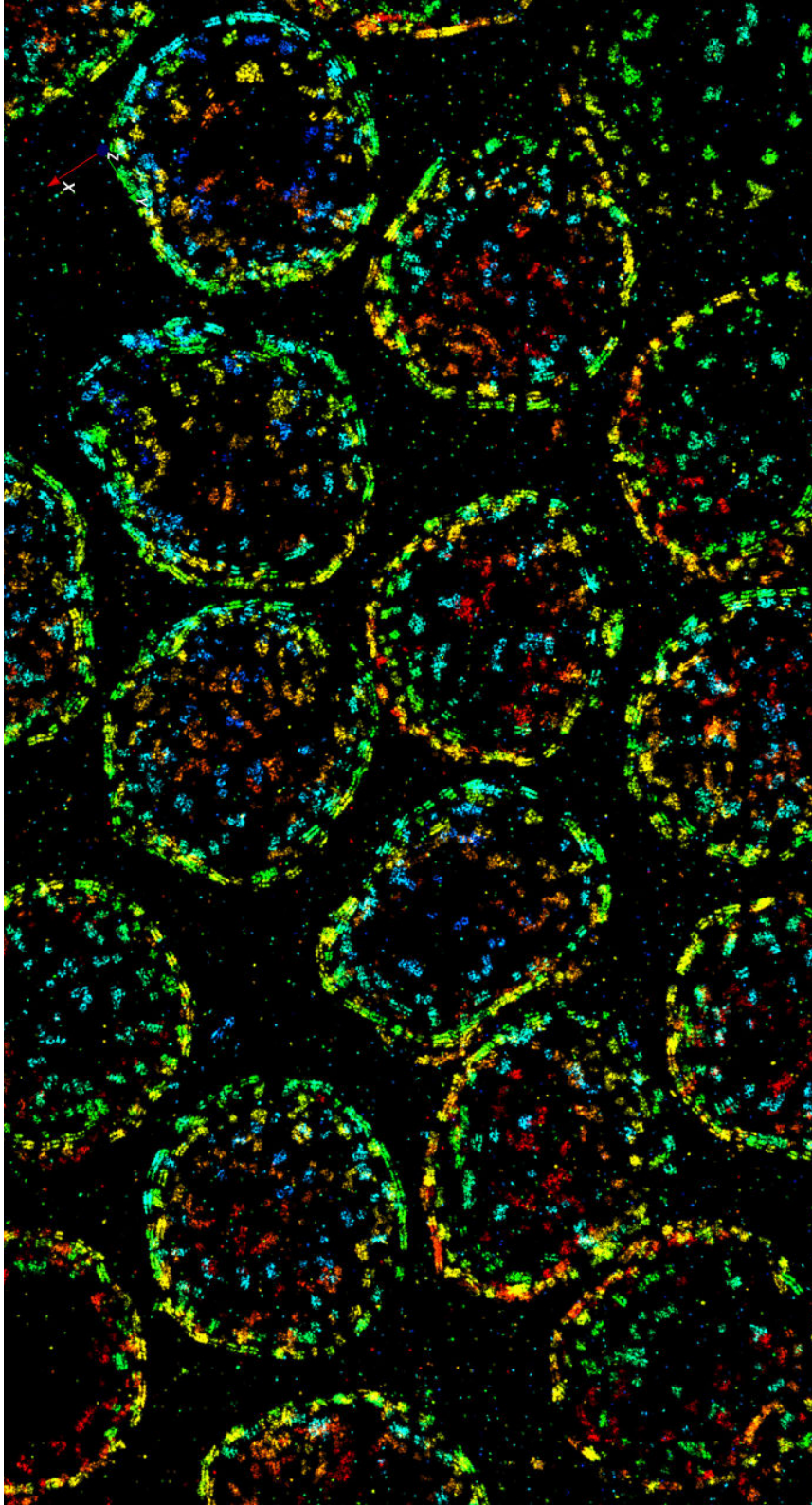
Obliq One

Cambridge Imaging

Transforming 3D Super-Resolution Imaging



Overview
Advantages
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3D Imaging, Simplified Across Every Scale

Step into a new era of imaging with Obliq One, the platform designed to make advanced 3D imaging effortless and accessible. With its combination of speed, precision, and intuitive workflow, Obliq One empowers you to explore biology like never before, accelerating discoveries and enabling insights that were previously out of reach. No complicated setups, no trade-offs, just high-quality imaging every time.



Intelligence Meets Simplicity and Reliability.

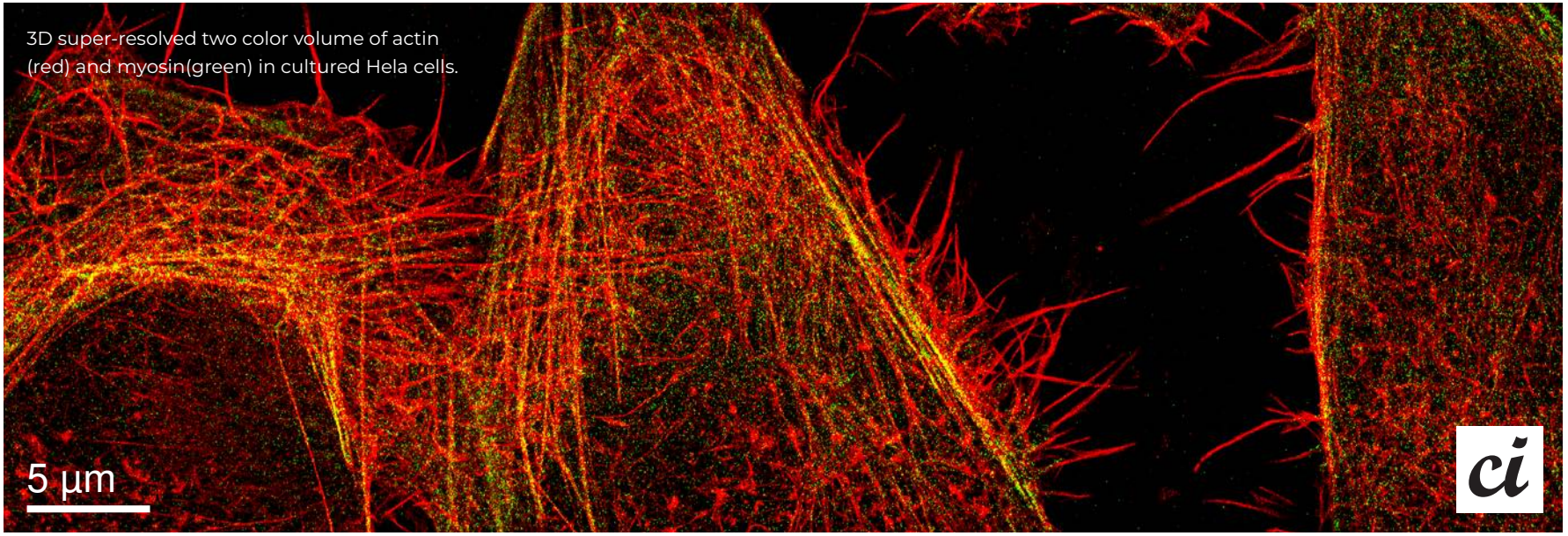
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See More. Do More. Achieve More

Robust, intuitive, and ready to deliver, Obliq One keeps you focused on discovery, not setup. From diffraction-limited imaging to single-molecule precision, 3D datasets ensure you're always at the right plane to capture rare events and elusive phenotypes, accelerating research and breakthrough discoveries.

Ultimate Flexibility for Imaging at Every Scale

The only 4D platform built to empower your most advance research. Whether you're tracking the fastest biological processes or imaging molecular details with nanometer precision, Obliq One delivers it all—instantly and seamlessly—no hardware changes required. Empower your research with speed, versatility, and unmatched precision.



Intelligence Meets Simplicity and Reliability.

Overview

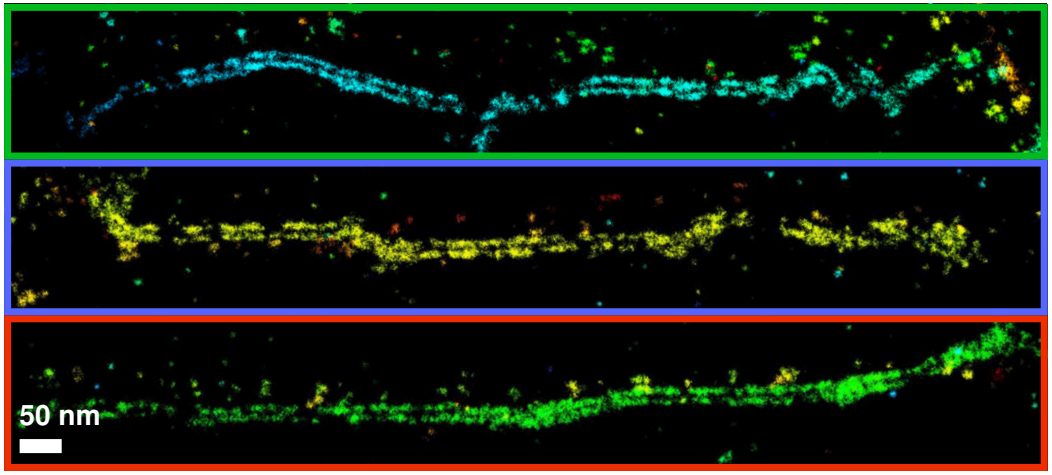
Advantages

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Transform Single-Molecule Imaging Forever

Take your SMLM imaging to another level and experience unmatched volumetric speed with our patented Direct3D technology, capturing extended multi-cellular volumes in the same time it takes to collect a single super-resolved image. Achieve nanometer-level resolution in all three dimensions while our intuitive data analysis eliminates complex, time-consuming processing like stitching. Combine it with CI's microfluidics unit for even higher plex, and your fully-automated Obliq One becomes the ultimate platform for spatial proteomics.



3D super-resolved volume of E-cadherin, a key component of adherens junctions in a Drosophila egg chamber.

Technology That Redefines What You Can See

Overview

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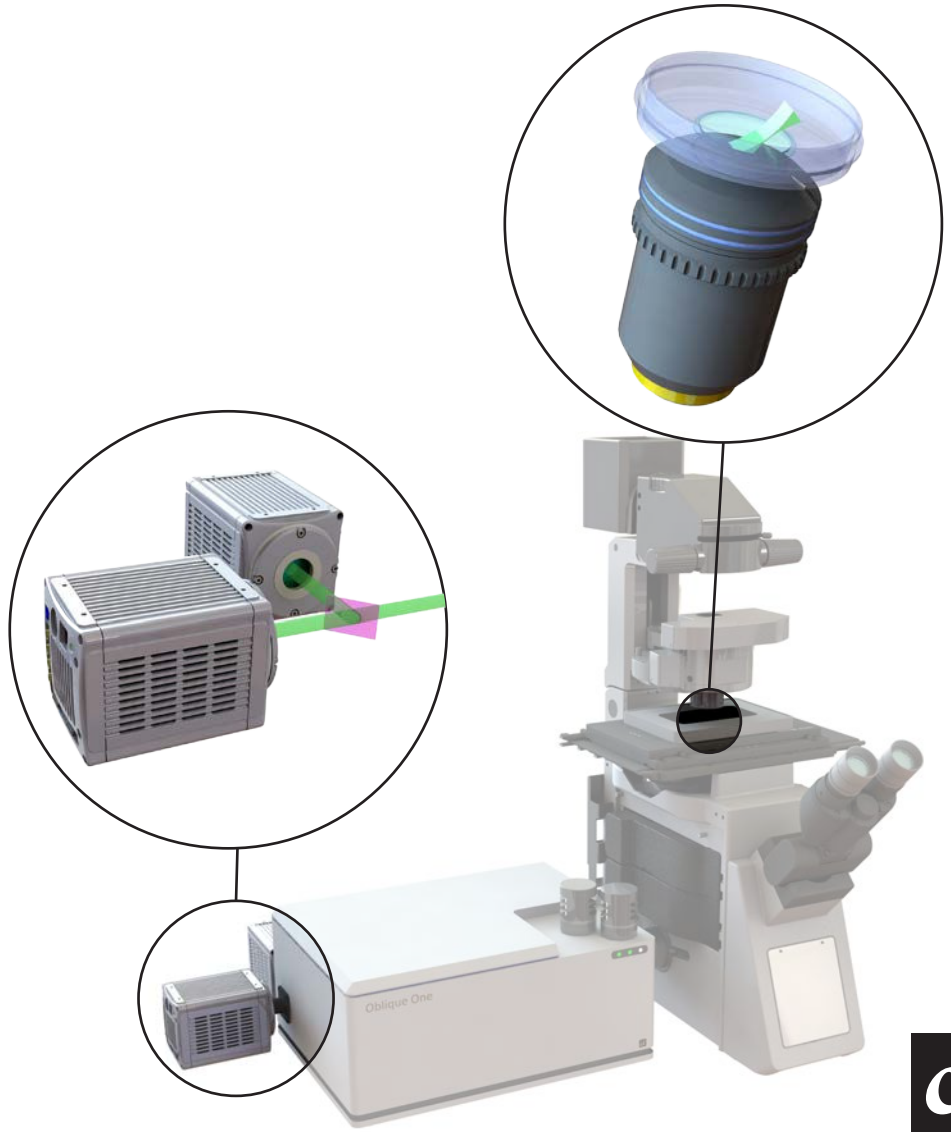
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Simple. Reliable. Engineered for you

The single-objective light-sheet design enables standard sample mounting, sharp optical sectioning with minimal photo-bleaching in live samples. From slides to well plates, your workflow stays simple and flexible.

Add up to 4 laser lines for fast, multi-colour 3D views of cells, organoids, and more. Our data processing pipline enables simultaneous multi-colour imaging with automatic image registration at the nanometer scale.



Technology That Redefines What You Can See

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Proprietary Dual Mirror Scanner

Single-objective light-sheet microscopy offers fast, high-quality 3D imaging by sweeping an oblique light sheet across your sample. But traditional scanning units limit focusing performance to avoid field-dependent light-sheet tilt—often causing uneven illumination and limiting image quality.

Our patented Dual-Mirror Scanner transforms this experience. By precisely coordinating the rotation of two synchronized mirrors, it delivers perfectly uniform illumination across the entire sample volume—eliminating artifacts and ensuring consistently clear results. Even better, it boosts light-collection efficiency while maintaining a compact, streamlined footprint.

Experience brighter, cleaner, more reliable imaging—without compromise.



Technology That Redefines What You Can See

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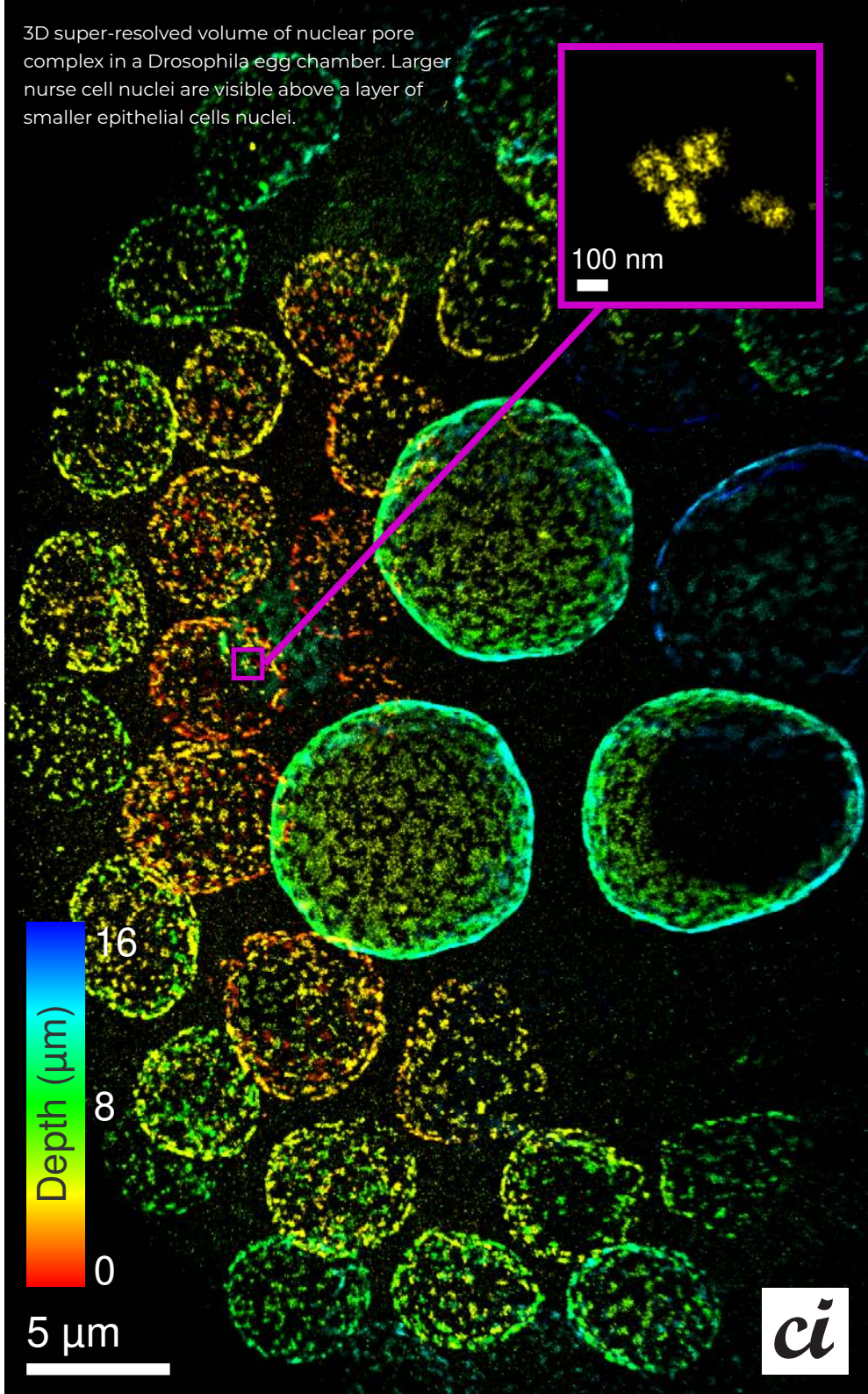
Applications

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Direct3D: Effortless 3D Imaging

The exceptional speed and light-collection efficiency of the Obliq One lets you localize molecules in 3D throughout the entire sample volume—using just a single scan. Say goodbye to complex calibration routines and experience biology at the nanoscale in large volumes, with no stiching or stacking, that were previously out of reach.

All of this comes with a streamlined workflow that eliminates slow post-processing and removes the need for complicated focus-tracking hardware. Pure performance. Minimal hassle. Maximum insight.



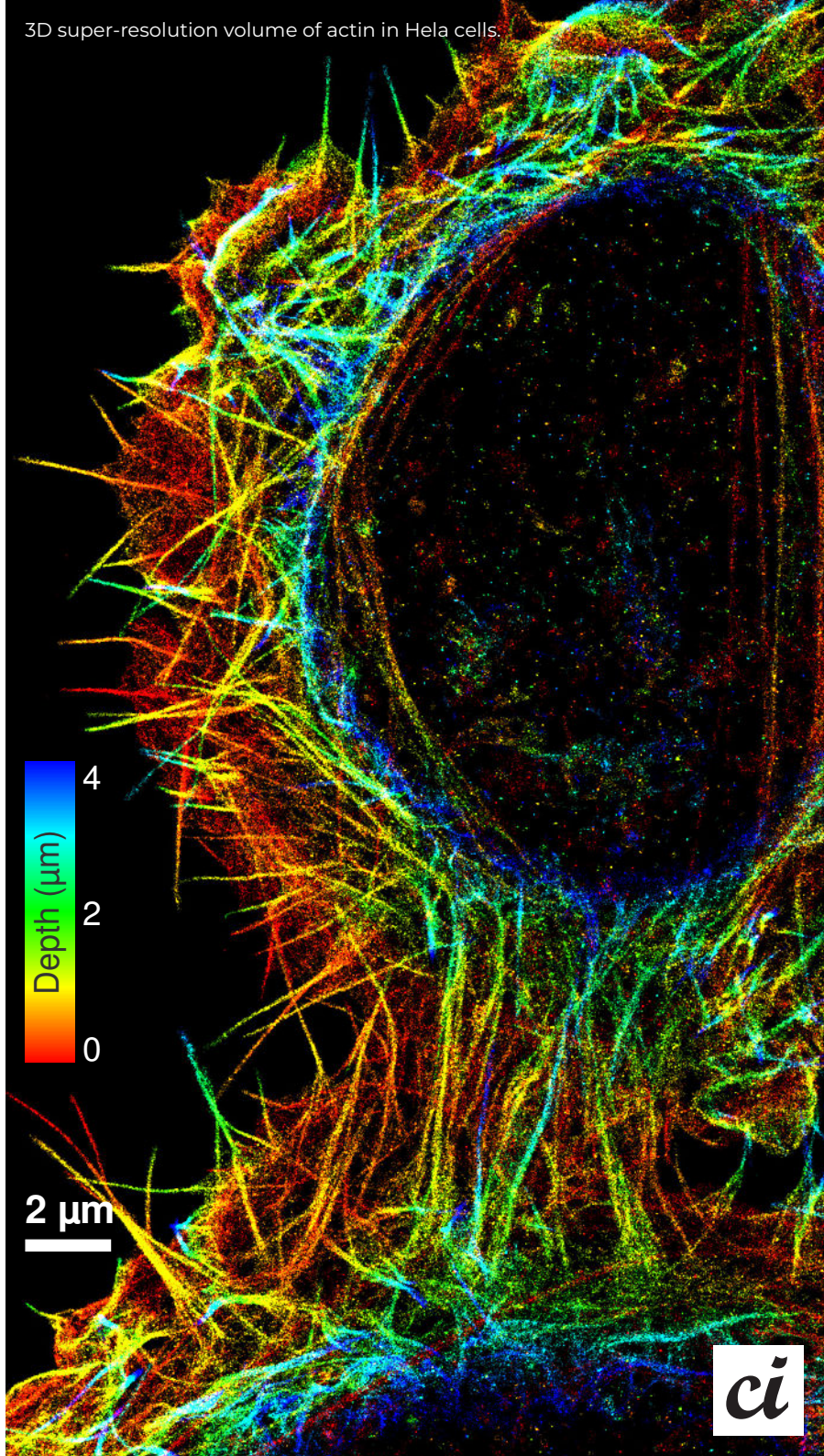
Redefine What is Possible

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Data Processing & Analysis

Obliq One is powered by CI's fully integrated software suite, uniting crisp visualization, advanced point-cloud analysis, and professional-grade reporting within a seamless, refined workflow. CI's intuitive interface elevates single-molecule studies by making powerful analytical capabilities accessible to researchers at every level — without the steep learning curve.

From acquisition to analysis to shareable, publication-ready images, every component is harmonized to deliver a fluid, elegant user experience. It's a software ecosystem crafted for discovery—and designed to meet the highest standards of scientific research.



Redefine What is Possible

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Large Data Storage and Handling

Don’t let data bottlenecks slow down your research. The Obliq One integrates a dedicated acquisition and analysis computer with robust on-site data storage. Our system ensures every dataset is written directly to secure, enterprise-grade storage (50-200 TB). This reliable ecosystem safeguards your data and provides the computational power for rapid acquisition and analysis, all in a compact design.



Specifications

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Transmission modes	Standard bright-field and/or DIC
Epi fluorescence	Yes
Sample mounting	Standard slides, dishes and plates
Incubation chamber	Options available
Software suite	Integrated acquisition, viewer and analysis modules
Camera	Hamamatsu Orca Flash (2048 x 2048)

	X	**Y**	**Z**
Oblique volume dimensions (µm)	5 - 100	5 - 100	5 - 50

	Localization Mode	**Live Imaging Mode**
Objective lens	100X 1.35NA Silicone immersion	40X, 60X, 100X
XY resolution	< 50 nm	250 - 450 nm
Z resolution	< 100 nm	~500 nm - 1 µm
Optical sectioning	~1 - 2 µm	~1 - 5 µm
Active drift correction	Optional	Optional
Post processing drift correction	Yes	Add-on package
Detection channels	Two, simultaneous + multiplex wtih optional microfluidics unit	Four, simultaneous
Microfluidics	Available	Available
Excitation laser lines	405, 488, 546, 560, 642 nm	405, 488, 546, 560, 642 nm
Max. oblique planes / sec	200	200