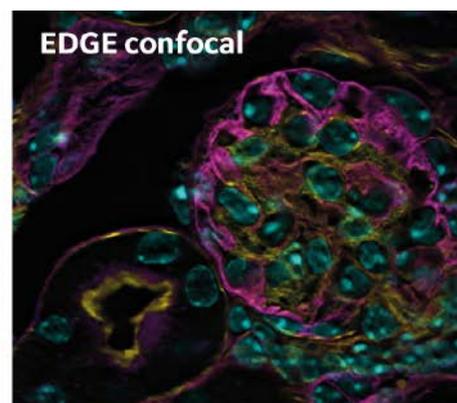
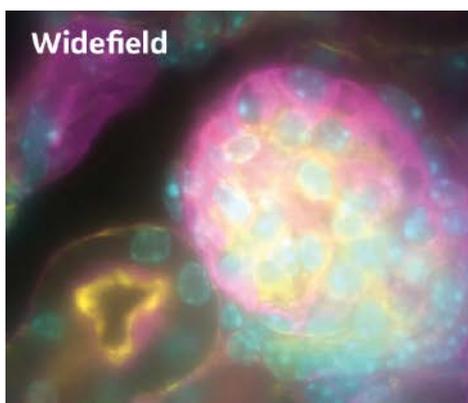


# Discover hidden details with the next-generation super-resolution microscope

Introducing the new DeltaVision OMX Flex microscope



The extensive imaging capabilities offered by DeltaVision OMX Flex make it an excellent choice to support a wide range of research projects. Confocal and super-resolution functionality is combined into one instrument giving you the flexibility to image any biology at any level of resolution, contrast, depth, or speed. See beyond the diffraction limit using the microscopy application of your choice.

The microscope has been specifically optimized to provide a highly stable, multichannel imaging platform for structured illumination microscopy (SIM). The redesign focused on reducing background noise, enhancing contrast, and ensuring quantifiable signal to deliver high-quality images. These improvements are answering the need of our customers—more speed, more resolution, more depth but use as little light as possible.

## Gain comprehensive insights by using multiple imaging modes

- One microscope platform with multiple imaging modes. Increases instrument utilization, reduces training needs, and minimizes purchase risk.
- Easily switch between modes with just a click of a button:
- No changing or moving biological sample needed.
- No hardware alignment needed.

## Acquire high-quality images

- Experience two-fold resolution improvement in all three dimensions for an eight-fold volumetric improvement in resolution (3D structured illumination microscopy, SIM).
- Each imaging mode maximizes image contrast:
- Extremely efficient delivery and detection of light.
- Gather more data and image longer with minimal photobleaching.

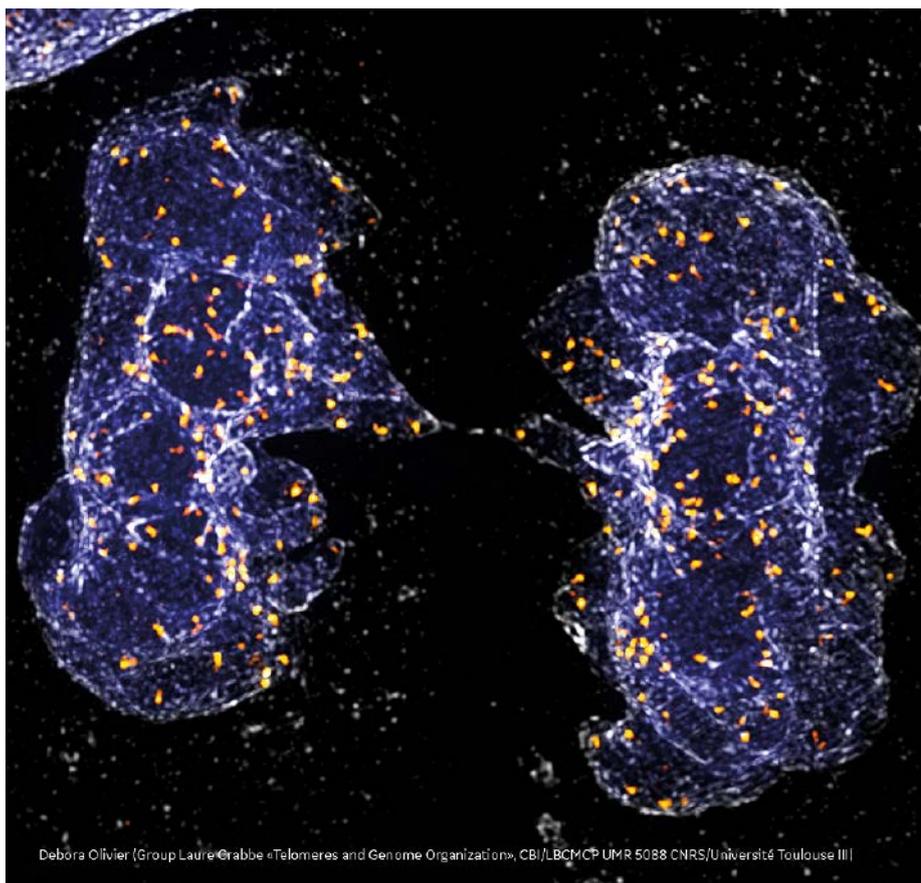


## Capture dynamic processes quickly and efficiently

- Image as fast as your biology requires without having to sacrifice image quality or speed and with minimal photobleaching.
- Total internal reflections fluorescence (TIRF)-SIM allows observation of some of the most challenging biological processes in super-resolution microscopy at 20 reconstructed frames per second (fps).
- Simultaneously acquire up to four wavelengths at a time with ultrafast widefield imaging (> 375 fps at 512 × 512).

## New EDGE Confocal Line Scanning

EDGE enhanced confocal technique is newly integrated into DeltaVision OMX Flex microscope along with our IRIS line scanning confocal technology. IRIS confocal imaging mode leverages a virtual confocal aperture by synchronizing the laser illumination line as it is swept over the sample with the active readout rows of the sCMOS camera in rolling shutter mode. EDGE enhanced confocal imaging technique uses an innovative approach to measure and remove the out-of-focus light contribution that can otherwise remain in traditional line-scanning confocal images. This image quality enhancement is especially prominent for cells grown in 3D culture such as spheroids and organoids, where out-of-focus light dramatically affects image contrast.



### Benefits

- IRIS line scanning confocal adjustable aperture enables optimized imaging of any magnification level, wavelength, assay or experiment.
- EDGE confocal mode delivers an order of magnitude improvement to image contrast and up to a two-fold resolution improvement axially (Z dimension).
- EDGE delivers improved signal-to-noise ratio than conventional confocal approaches.
- Easily add a photokinetic event within your confocal experiments

Get all this in one powerful system—DeltaVision OMX Flex microscope.

