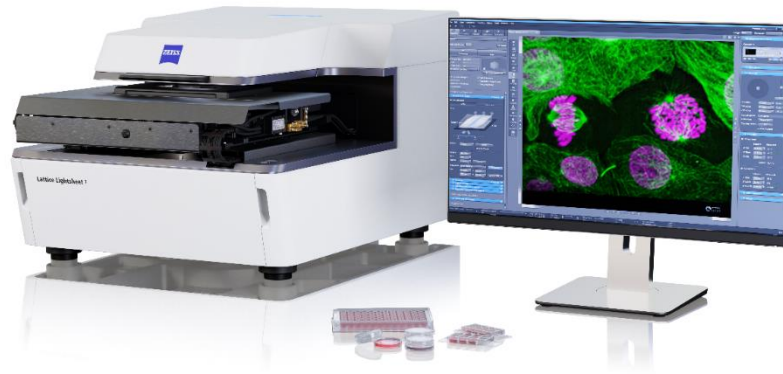


Techno Bite:

ZEISS Lattice Lightsheet – New Frontiers in Live Cell Imaging

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Lightsheet microscopy is a well-established technique, which offers fast and gentle imaging of live and fixed samples. However, the limitation of achievable resolution led Nobel Laureate, Eric Betzig to develop Lattice Lightsheet microscopy. Lattice Lightsheet offers all the benefits of a Lightsheet microscopy, fast acquisition and extremely gentle imaging, while providing subcellular resolution – making it the perfect tool for observing fast processes in live cells.

The ZEISS Lattice Lightsheet redefines speed when it comes to live cell imaging, measuring in volumes per second, instead of frames per second. The system can run at 3 vol/second while offering resolution of $290 \times 290 \times 450$ nm in xy and z respectively. Depending on your needs, you decide whether to use this to monitor fast processes continuously or monitor cell for multiple days, all at high resolution and without photobleaching or affecting the physiology of your cells.

The ZEISS Lattice Lightsheet builds on the achievements of Eric Betzig and brings with it a flexible and easy to use system. The ZEISS Lattice lightsheet has been carefully engineered with the end users in mind, providing an inverted microscope that can utilise a wide variety of sample carriers used for high resolution microscopy without needing to adapt your sample preparation. Helping new users to bring samples and start collecting data quickly and easily.

The technology underpinning the ZEISS Lattice Lightsheet is cutting edge but with all the necessary components being motorised, calibrations for the system are all automated. Making running and operation of the system simple and easy.

The ZEISS Lattice Lightsheet brings the cutting-edge speed and gentleness of Lattice Lightsheet, with the flexibility and ease of use that allows all your users to benefit from it.