VisiView

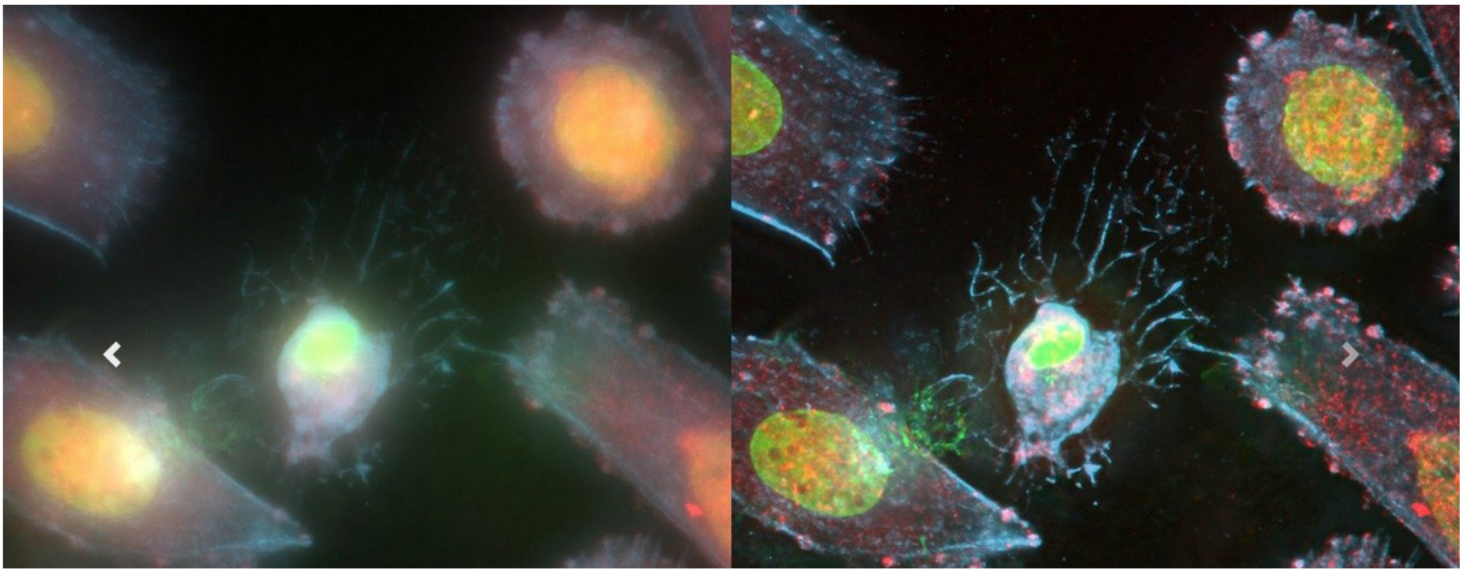
3D - Deconvolution

3D Deconvolution - up to 200 times faster.

The Microvolution® software delivers nearly instantaneous deconvolution by combining intelligent software programming with the power of a GPU.

Confocal microscopy is an oft-used technique in biology. Deconvolution of 3D images reduces blurring from out-of-focus light and enables quantitative analyses, but existing software for deconvolution is slow and expensive. We present a parallelized software method that runs about 200 times faster than conventional software by running on a low-cost graphics processor board (GPU).

Nearly instantaneous 3D deconvolution - up to 200 times faster



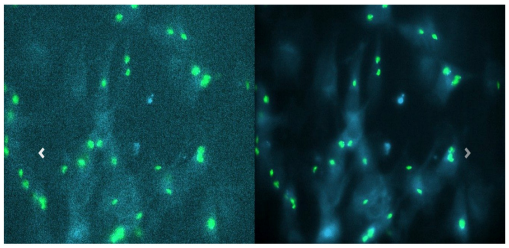
Microvolution example: Human osteosarcoma cell line SaOS2

3D Deconvolution powered by Microvolution

VisiView offers a fast post-processing 3D deconvolution based on Microvolution. The fully integration of deconvolution ensures easy configuration by preset parameters based on image metadata. VisiView Deconvolution offers blind and nonblind algorithm. You can use either measured or theoretical point-spread-functions (PSF).

Requirements

The VisiView 3D Deconvolution requires 64-bit Windows operating system (Windows 7 or later), NVIDIA graphics card (GeForce, Quadro, or Tesla) with CUDA capabilities 2.0 or greater, and up-to-date NVIDIA drivers (version 369, or later).



Microvolution example:
Dimly labeled mitrochondria