

Intended Use of the Instrument: It is used for intracellular particle and localization imaging.

Instrument Brand/Model: ZEISS LSM 900 Confocal Laser Scanning Microscope

AGU CRF Thematic Laboratory: Confocal Microscope Center

Location of the Instrument: AGU-CRF LAB8

Academic Director(s) of the Instrument:

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Responsible Specialists of the Instrument:

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The AGU Confocal Microscopy center supports scientists with the opportunity to image a range of different samples, such as *C. elegans* embryos (worm), 3D cell culture, spheroids, and organoids.

AGU Confocal Microscope Center is equipped with a range of microscopes including the ZEISS LSM 900 Confocal Laser Scanning Microscope, which is an ideal microscope for three-dimensional (Z-stack) and fast imaging. This microscope includes Airyscan 2, which provides an advantage in fast imaging. The resolution of the pictures taken by scanning the images on the X-Y axis is 120 nm.

We have experience of imaging subcellular structures and time lapse movies for mammalian cells and *C. elegans*, and we can perform FRAP and photoconversion. The microscopy center can help scientists with the opportunity of quantitative imaging methods (FRAP etc). We assist scientists in the processing of images and send them both the raw and processed images.