

Biolmaging Facility

- The facility has reopened. Masks are no longer required
- Reserving equipment at <http://bookit.hunter.cuny.edu> prior to use is **mandatory**



Managing Director

Dr. Lloyd Williams

Email: williams@genectr.hunter.cuny.edu

Office: 826B in the Hunter North Building
Phone: (212) 650 3872
Fax: (212) 650 3565

Scientific Director □

Prof. Diana Bratu, Associate Professor

Email: bratu@genectr.hunter.cuny.edu
Office: 914D in the Hunter North Building
Phone: (212) 772 5235
Fax: (212) 772 5227



National Institute
on Minority Health
and Health Disparities

Description of the Facility

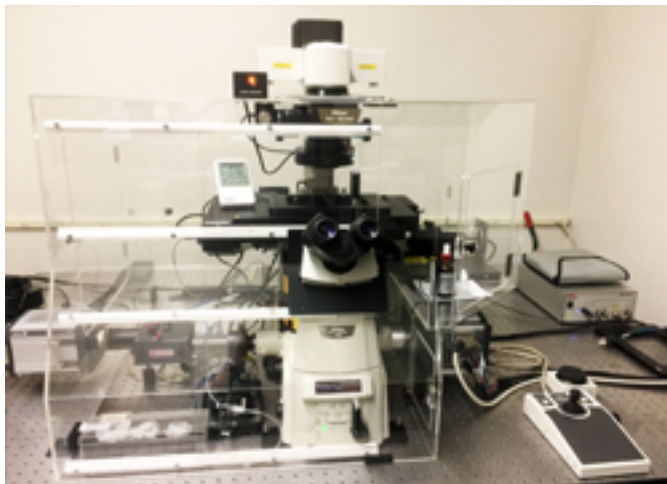
Background Overview

The BioImaging Facility at Hunter College is centered in a multi-room facility of 1024 sq. ft. located in the Biological Sciences Department on the 8th Floor of Hunter North building. A satellite facility also includes a number of instruments on the 4th Floor of the Belfer Research building (at 69th Street and York Ave). Faculty and students have access to a broad spectrum of instruments, ranging from simple white light wide-field microscopes to fluorescent multidimensional super-resolution and confocal imaging systems. The Faculty supervisor and Scientific Director is Dr. Diana P. Bratu. Dr. Lloyd Williams is the Managing Director of the facility. The facility staff has expertise in many areas of microscopy including the laser scanning confocal microscopy, super-resolution microscopy, two-photon microscopy. They are also

familiar with many image analysis software packages, including, Imaris, Volocity, Autoquant, MetaMorph, and NIS-Elements. Detailed descriptions of the equipment in the facility is given below. All equipment is located at Rm 826 HN or at the 4th floor of the Belfer Research Building where designated

To book time on any of the instruments go to <http://bookit.hunter.cuny.edu>

Instruments

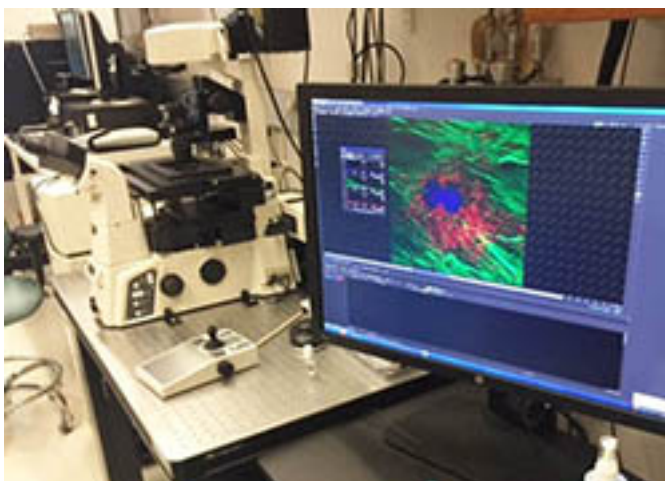


Nikon Eclipse Ti, TIRF/SIM

The Nikon TIRF SIM microscope allows the users to do both Total Internal Reflection Microscopy and

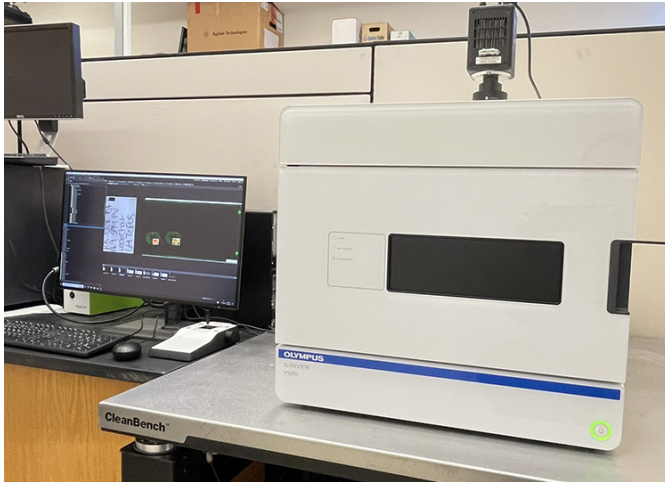
This machine is in 826HN

The charge for this instrument is \$20/hr.



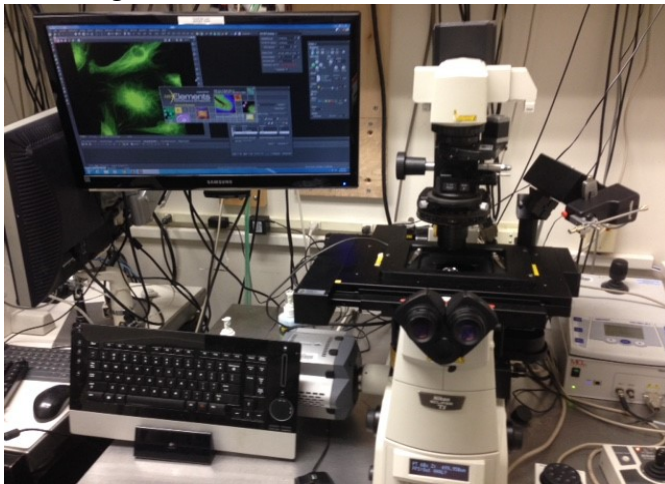
Belfer Nikon A1 Confocal Microscope

The Nikon A1 Confocal microscope is Nikon's powerful fully-automated confocal imaging system, capable of high-resolution 3D imaging. The charge for this instrument is \$20/hr.



Olympus VS200 Slide Scanner

The SLIDEVIEW™ VS200 research slide scanner enables you to capture high-resolution images of research slides. The charge for this instrument is \$20/hr.

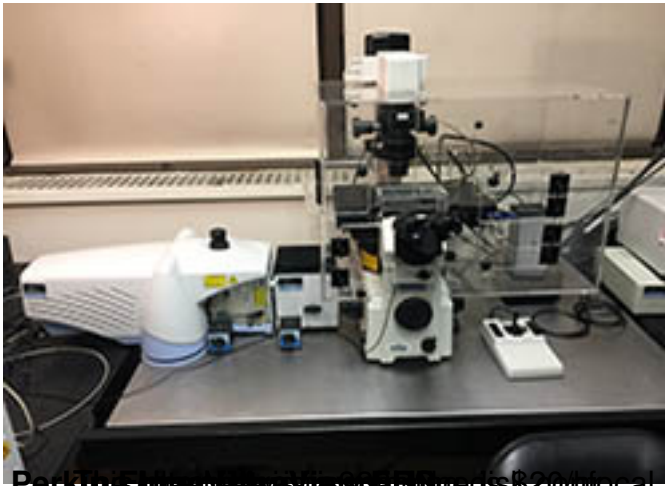


Nikon Eclipse Ti Mosaic System

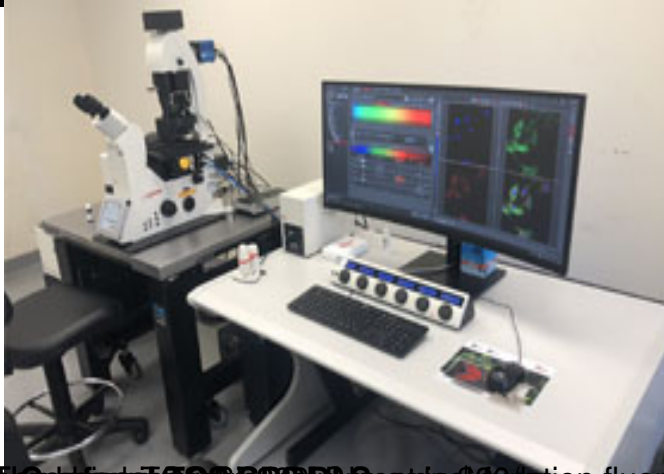
The Nikon Eclipse Ti scope is a wide-field fluorescent microscope. It is equipped with Andor iXon EMCCD camera. The charge for this instrument is \$15/hr.

This machine is in 826HN

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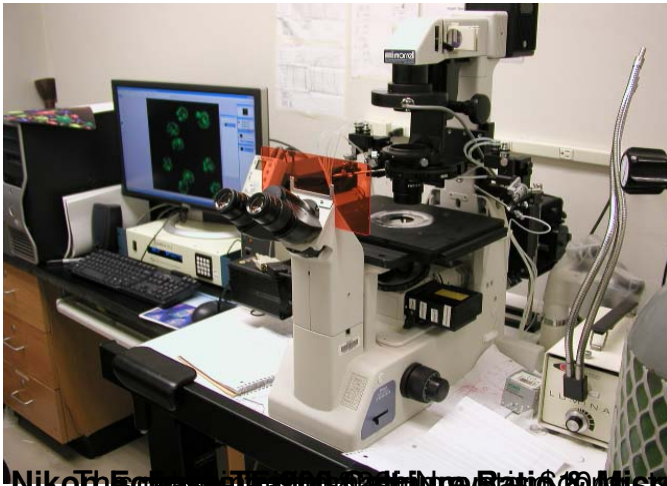
PerkinElmer Lambda 1000 Raman is a Raman microscope equipped with five laser lines, which allow vis



Leica TCS SP5 DRC is a confocal microscope that can be used as a convent



Leica SP5-AOBS is a confocal microscope that can do measurements of transmitted l



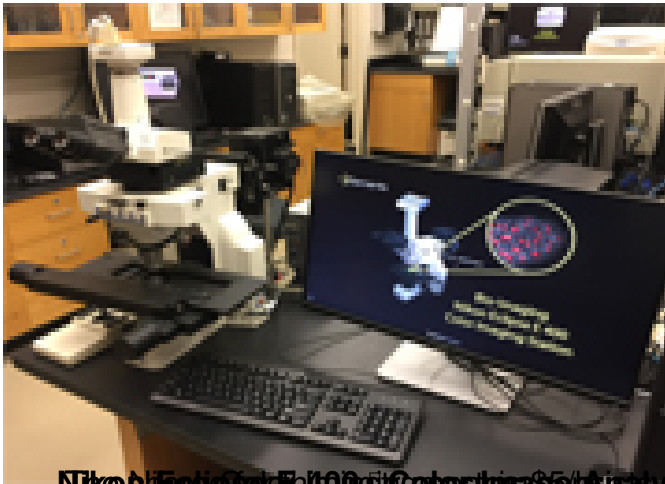
Nikon Eclipse TE 200 inverted epifluorescence microscope



Nikon DigiSight camera and Nikon Eclipse TE 200 microscope



JEOL JEM-100C/CX transmission electron microscope



□ Nikon Eclipse E400 upright microscope, and Nikon D5100 camera system



□ Nikon D5100 camera system, Bitplane's Imaris Imaging software installed



□ Nikon NIS-Elements imaging software installed



AutoQuant 128 Plus 2D Image Analysis Station



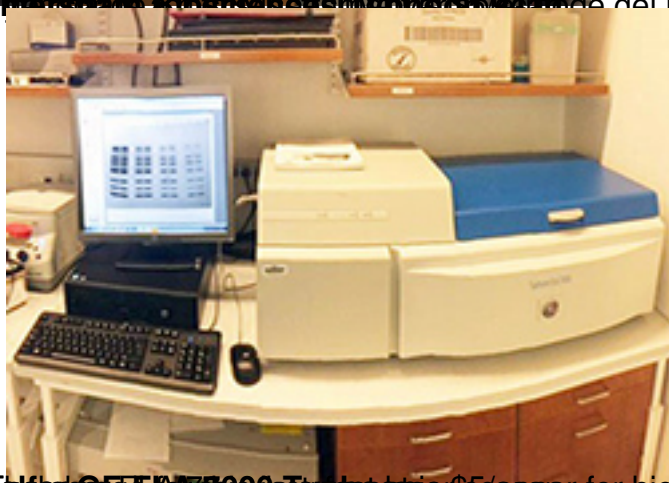
EM Microplate Spectrofluorometer



EM Microplate Spectrofluorometer



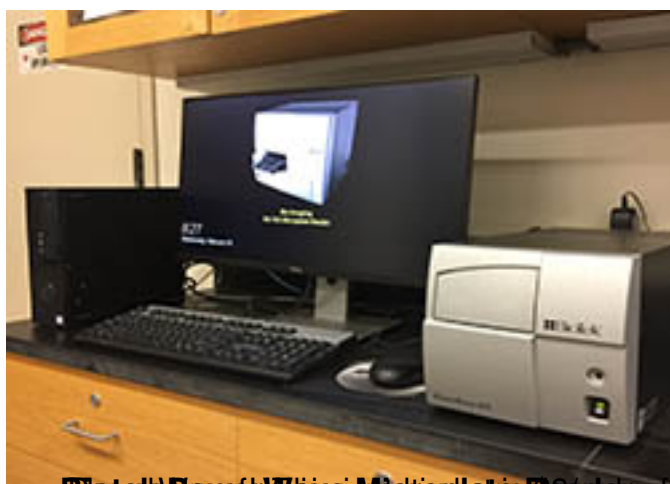
Amersham Biosciences Typhoon 9410 multi-channel gel imager. The Typhoon 9410 unites the ability to detect



Beckman Coulter DTX 800 Fluorescence Reader for biomolecular imaging applications including sensitive a



Olysys Infinite M1000 multi-channel plate reader. Methods of analyzing western blots, chemiluminescence, and flu



Biopac MPX-100 Microplate Reader for maximum speed in both 96- and 384-well plate formats



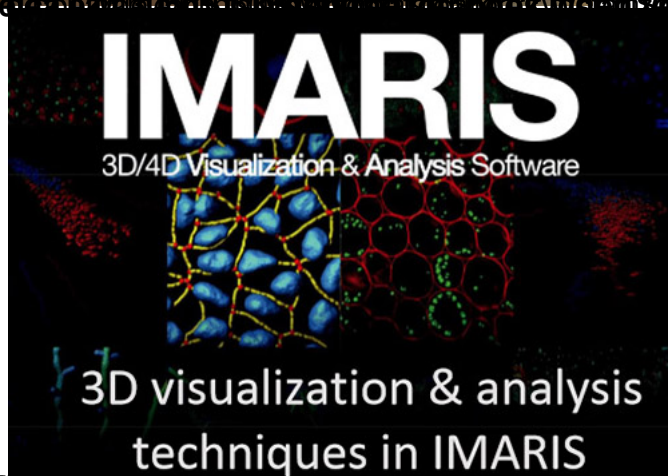
Beltek B-1000 Microplate Reader for making: absorbance, fluorescence, luminescence



GloMax 96 Microplate Luminometer is a state-of-the-art Microplate Luminometer



Fig. 1. Confocal microscope (Leica TCS SP5) used for 3D visualization and analysis of cells. The Bio-Imaging Facility is located in 826 HN (Room Beller BB 479).



Fluorescence microscopy is a technique used to study the structure and function of cells and tissues. It involves the use of fluorescent dyes or proteins that emit light when excited by a specific wavelength of light. The emitted light is then collected and analyzed to produce a 3D visualization of the sample. The Bio-Imaging Facility is equipped with a confocal microscope (Leica TCS SP5) that allows for high-resolution 3D imaging of cells and tissues. The facility is located in 826 HN (Room Beller BB 479). The Bio-Imaging Facility is a shared resource for the Biology Department and is available for use by faculty and students. The facility is equipped with a variety of instruments, including a confocal microscope, a laser scanning microscope, and a fluorescence microscope. The facility is also equipped with a computer system that allows for the acquisition and analysis of 3D images. The Bio-Imaging Facility is a valuable resource for the study of cell biology and tissue structure. The facility is located in 826 HN (Room Beller BB 479). The Bio-Imaging Facility is a shared resource for the Biology Department and is available for use by faculty and students. The facility is equipped with a variety of instruments, including a confocal microscope, a laser scanning microscope, and a fluorescence microscope. The facility is also equipped with a computer system that allows for the acquisition and analysis of 3D images. The Bio-Imaging Facility is a valuable resource for the study of cell biology and tissue structure.