



Flow Cytometry and Confocal Microscopy Facility

University of Connecticut; Biotechnology•Bioservices Center
91 N. Eagleville Rd., Unit 3149; CT 06269-3149

Services & Instrumentation

2009

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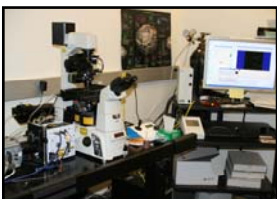
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“The mission of the Flow Cytometry and Confocal Microscopy Facility is to train and assist research personnel in the use of sophisticated instruments designed to detect, image, and/or quantify fluorescent and visible light in a wide variety of samples.”

The Flow Cytometry and Confocal Microscopy (FCCM) Facility is pleased to provide you with a list of accessible instrumentation to aid you in your research. The FCCM Facility is located in the Biology/Physics Building, Rooms 302/303.

INSTRUMENTATION

BD Biosciences FACSria II Fluorescence-activated Cell Sorter

- Three lasers provide excitation at 407, 488, and 633 nm for analysis of up to 13 fluorescence channels plus forward and side scatter
- Sort up to four populations simultaneously
- Option for temperature control of sample and collection tubes

BD FACSCalibur Flow Cytometer

- Two lasers provide excitation at 488 and 633nm for analysis in four fluorescence channels plus forward and side scatter
- Straightforward operation allows independent use by researchers
- Offline computer with FlowJo analysis software

Andor Spinning Disk Confocal & TIRF Microscope

- High speed 4D confocal imaging or TIRF microscopy with EMCCD camera
- Incubation chamber maintains live cells at 37°C and 5-10% CO₂
- Four lasers for excitation at 405, 488, 561, and 633 nm
- Nikon Perfect Focus system

Leica TCS SP2 Laser Scanning Confocal Microscope

- Three lasers for excitation at 458, 476, 488, 543, and 633 nm
- Spectral imaging of emission in three fluorescence channels
- Transmitted light imaging (DIC and phase)
- Reflection mode, xzy imaging, wavelength scanning, time lapse, FRET, 3D reconstructions

Zeiss Axiovert Epifluorescence Microscope

- Filter sets include: DAPI, FITC, Rhodamine, GFP, Cy5, CFP-YFP FRET, and Texas Red
- Computer-controlled operation for complex time lapse imaging using OpenLab software
- High sensitivity Hamamatsu CCD camera and Qimaging color camera
- Stage-top incubator for long-term imaging of mammalian cells at 37°C

Zeiss LSM 5 Multiphoton Confocal Microscope

(Contact Facility Co-head Joseph LoTurco)

- System configured for intravital imaging of fluorescently labeled cells
- Zeiss Axoskop 2 FS upright scope with Sutter mechanical stage to accommodate most small animal preparations
- Chameleon Ultra II pulsed laser for multiphoton excitation of eGFP or mRFP labeled cells

REAGENTS

The FCCM Facility has a small supply of reagents available at cost for pilot experiments. Contact Facility Scientist Carol Norris for details.

TRAINING AND EDUCATION

FCCM Facility staff provide training and consultation in the use of facility instruments. Consultations are free but prospective users must schedule an appointment.

COST FOR SERVICES

Costs for services can be found on the FCCM Facility webpage of the Biotechnology•Bioservices website:

<http://www.biotech.uconn.edu/fccmf/pdf/FCCM-feeschedule.pdf>. All current rates are subject to periodic review and change.

