

## *Flow Cytometry/Confocal Microscopy Facility*

Updated 9/06

**Location:** Brody Medical Sciences Building, Room 4W-37

**Established:** 1985

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**Purpose:** To provide multiple data acquisition and analysis capabilities in flow cytometry, confocal microscopy, and laser scanning cytometry. To train faculty, staff and students in application and operation of these instruments and assist in computer data analysis and interpretation.

**Capabilities:** *Flow Cytometry:*

Immunophenotyping  
Cell cycle analysis  
Up to five-color fluorescence analysis  
Clonal sorting and deposition  
Calcium and magnesium intracellular flux  
Membrane potential studies

*Confocal Microscopy:*

Localization and co-localization of biomeolecules in tissues or cells  
3-D reconstruction of fluorescently labeled cells or tissues

*Laser Scanning Cytometer*

Similar capabilities as flow cytometry (except sorting) on a slide or multiwell plate format, with up to four-color fluorescence analysis

**Instrumentation:**

Three bench-top flow analyzers – Becton Dickinson FACScan  
Cell sorter – Becton Dickinson FACSVantage SE with high-speed sorting capability (Turbo-sort), and with spectrum laser (includes UV and far red),

and air-cooled argon laser.

Confocal Microscope- Zeiss LSM 510 with three lasers and three fluorescence detectors

Computer workstations with zip and CD-RW data storage