



The Research Triangle Cytometry Association,
The University of North Carolina Flow Cytometry Facility
and CompuCyte Corporation Present

LSC Technology Seminar and Technology Demonstration Program

**Quantitative Imaging Cytometry in Biomedical Research,
Drug Discovery and Biomarker Development**

November 19 and 20, 2008

Where: Bondurant Hall, Room G100
University of North Carolina
S. Columbia Street
Chapel Hill, NC
Directions: <http://www.med.unc.edu/pmbb/tibbs/dnaday/Bondurant.pdf>

November 19:

- 8.30 – 9.00 am** *Registration.* Pre-registration is appreciated. Register [here](#).
- 9.00 – 9.45 am** *"Laser Scanning Cytometry Technology for Life Sciences, Drug Discovery and Research Pathology"* – Scott Baldwin, CompuCyte Corporation
- 9.45 – 10.30 am** *"Utilization of Laser Scanning Cytometry to Assay Early Events Following Infection with Polyomaviruses: Cellular and Viral DNA Content Changes"*– John M. Lehman, Professor, Brody School of Medicine, East Carolina University, Greenville, NC
- 10.30 – 11.00 am** *Questions and General Discussion*
- 1:00 – 5:00 pm** *Technology Demonstration* – Ed Luther, CompuCyte Corporation
Mary Ellen Jones Building, Room 611
Manning Drive
Chapel Hill, NC
(Demonstrations will also be available on Thursday, November 20.)

Demo Instrumentation:



CompuCyte's iCys[®] Research Imaging Cytometer utilizes proprietary laser scanning technology to enable quantitative measurements of cellular biochemical constituents and simultaneous evaluation of cell morphologies. The technology allows automated analysis of solid-phase samples, including adherent cultured cells, tissue sections, tissue microarrays, tissue imprints, and cytology specimens stained with *fluorescent and chromatic* dyes. For more information please visit www.compucyte.com.

Lasers and commonly used dyes:

Violet (405 nm) - DAPI, Hoechst 33342, and Odot[™] excitation
Blue (488 nm) - FITC, GFP, Alexa Fluor[®] 488, PE, and PE-Cy5 excitation Propidium Iodide, DAB, BCIP absorption.
Red (633 nm) - Cy5 and Alexa Fluor[®] 647 excitation. Hematoxylin, Nova Red and Methyl Green absorption.

PMTs and Photodiodes:

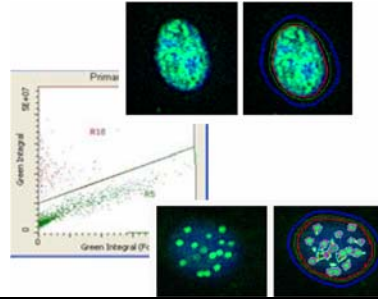
- Blue, green, orange and long red are standard for fluorescence analysis;
- Laser scatter imaging for bright field visualization
- Laser light loss for chromatic dye quantification

Imaging:

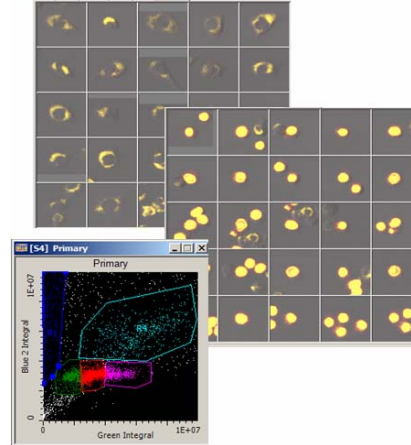
- Laser Scan imaging
- Bright field and fluorescence microscope viewing
- Nipkow Disk Confocal Imaging (will not be available on site)

Selected Application Examples:

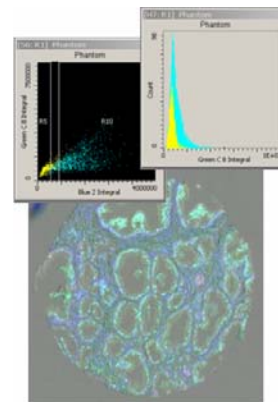
Quantification of total γ H2AX expression & foci count



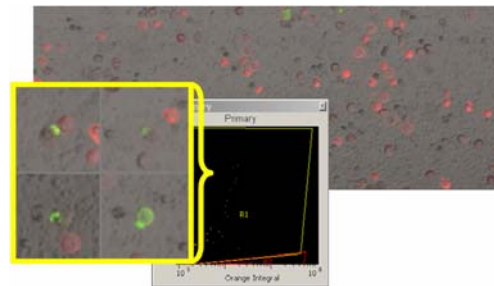
High-content analysis of drug-induced apoptosis



Tissue Microarray Analysis: subcellular localization of p27 and prostate cancer recurrence



Rare cell/ circulating tumor cell analysis



Registration:

The conference is free of charge but *pre-registration is appreciated*. Register [here](#).

For further information, contact:

Faculty seminar sponsor:

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