



Remember to cite the SWEHSC Center grant:

Publications from the labs of center investigators need to cite the support of the SWEHSC Center grant. It is particularly important to use the grant number, P30-ES06694. The NIEHS looks for these citations when it reviews our renewal application.

Motorized stage coming to the Zeiss LSM 510 confocal:

Later this fall the Zeiss confocal microscope will be upgraded with a motorized XY stage. With the stage and the associated software for stitching images together, we will be able to create multicolor fluorescence images of large fields of view. Doug Cromey and Barb Carolus will be receiving training from the vendor as soon as the stage is installed. The ARL division of Neural Systems Memory & Aging (NSMA) provided the funds for this upgrade.

Capabilities of the new FACS Aria flow cytometer:

Now that the joint AZCC/ARL-Biotechnology Cytometry service is up and running in room 4920 of the Cancer Center, we wanted to let users know about the capabilities of their new instrument. The FACS Aria cell sorter has three lasers (407/488/633 nm) and can detect eleven colors. It is very fast, being able to count over 30,000 events/second and sort 20,000 cells/second. It can sort four different populations of cells onto tubes of many sizes, plates, slides and culture dishes. The instrument can sort out a single cell if needed. Funding for this instrument came from Prop 301 tax monies and a number of UA departments.

For more information about the instrument, contact Barb Carolus at 626-2450 or <carolus@email.arizona.edu>. BD Biosciences has more information on this instrument available on-line at:

http://www.bdbiosciences.com/immunocytometry_systems/products/display_product.php?keyID=53

Plate and slide scanning instrument available:

For the next few months Dr. Runyan's lab in the Department of Cell Biology & Anatomy has access to an AlphaArray instrument that is on loan from Alpha Innotech. While this instrument was originally designed to image slide and multiwell plate microarrays, it is also capable of taking very nice widefield fluorescence images of large areas at 4 μ m resolution. The instrument uses a mercury lamp, filters, motorized stage and a CCD camera to capture the images. The loaner instrument has filters for FITC, CY3, CY5 and near-IR dyes. It can capture an entire 96 well plate or scan up to 12 microscope slides at a time. The instrument can be used to read any type of fluorescence-based assay.

Alpha Innotech is interested in other ways (besides microarrays) that the instrument could be used for research. Center members should contact Doug Cromey if they are interested in trying out this instrument. We expect that the instrument will be available until the summer of 2005.

Our contribution to the SWEHSC Fall 2004 newsletter:

We invite you to visit a web page with two short articles that the Core submitted for the Center's Fall newsletter. The first article [Using Light To Measure Contraction Frequency](#) is based on research being done in Dr. Qin Chen's lab. The web version of the article includes a movie of a beating cardiomyocyte that was imaged using the Zeiss confocal microscope. The second article is entitled [Avoiding Twisted Pixels: 12 guidelines for the appropriate use and editing of digital images](#). See: <http://swehsc.pharmacy.arizona.edu/exppath/new/001.html>

Short article on Freezing Biological Tissue:

MyNeuroLab.com has a short article that explains the importance of properly freezing biological tissue for histology. <http://www.myneurolab.com/neuronews/default.asp?AID=63&issueid=18&sitebannerid=&stylesheetid=>