



## Confocal image acquisition and colocalization analysis – seminar

Dr. Josh Udovich (Carl Zeiss, Inc) will be giving a seminar entitled *Confocal Microscopy and Quantitative Colocalization*. The talk should be applicable for users of any confocal on campus. The seminar will be held 10/27/2010 from 3-4pm in Life Sciences North, room 452.

For those interested in colocalization, a recent paper in *Cytometry: part A* is worth reading. **Quantifying colocalization by correlation: The Pearson correlation coefficient is superior to the Mander's overlap coefficient.** *Cytometry Part A* 77A:733-742 (2010)

## Small animal – High resolution ultrasound service

The Cellular Imaging Core provided funds to assist with the lease of this instrument. Because of that assistance, we have over 80 hours of instrument time available for SWEHSC investigators to use on this instrument over the next 18 months. Please contact Doug Cromey for information on what account number to use.

The facility uses a VEVO 2100 high-frequency, high-resolution ultrasound instrument, specifically designed to work with small animals. They have the necessary equipment for anesthesia and are in compliance with IACUC regulations. The instrument can be used to measure blood flow, locate & measure tumors, track embryonic development, image connective tissue changes, and can be used to image microbubble contrast agents.

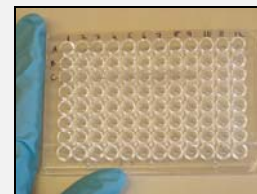
## Cellomics – high content screening instrument

The department of Molecular & Cellular Biology has just started offering limited access to a high-content screening device. The Cellular Imaging Core provided funds to assist with the lease of this instrument to ensure that center members have access to this instrument.

The Cellomics ArrayScan HCS Reader is an automated widefield fluorescence microscopic imaging system designed for high content screening and high content analysis. The instrument includes 12-bit cooled CCD camera, 5-wavelength LED light sources, temp/humidity/CO2 control and multiple objective lenses from 5x to 40x. Cellular samples are stained using assay kits from Thermo, imaged from multiple positions in multiwell culture plates, and then analyzed using validated image analysis algorithms.

The instrument can track changes such as: nuclear/cytoplasmic translocation, cell cycle analysis, cell health/motility/spreading, and cytotoxicity to name just a few things. For more information, see:

<http://www.cellomics.com/content/menu/ArrayScan/>



**High Content Screening** is an automated cell biology method drawing on optics, chemistry, biology and image analysis to permit rapid, highly parallel biological research and drug discovery.

(Source: [http://en.wikipedia.org/wiki/High-content\\_screening](http://en.wikipedia.org/wiki/High-content_screening))

## ARL Confocal - rate reduction

The Federal rules for calculating rates for service facilities are complex. They are based on estimating usage and expenses. Sometimes usage exceeds the estimates, and the facility ends up with a surplus of funds. Since facilities are not allowed to make a profit, the rates are adjusted lower to reduce the surplus.

The ARL Confocal microscope facility (Life Sciences North) has significantly lowered its rates for trained users. These new rates are effective October 1, 2010. Please take advantage of these lower rates; it is unlikely that they will stay this low for more than the next 12 months.

	NEW Rate	OLD Rate
<b>Routine use</b> ( <i>trained user operates the instrument</i> )	<b>\$25/hr</b>	\$32/hr
<b>Training</b> ( <i>typically 6-9hrs of training are required, 2 users can be trained at the same time</i> )	<b>\$46/hr</b>	\$44/hr

Doug Cromey is the manager for this facility. Please contact him regarding training for new users.

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