



Different name, same commitment to service:

After consulting with the SWEHSC Internal Advisory Board, we have changed the name of the Experimental Pathology Core to the Cellular Imaging Core. We felt that the new name was more evocative of what we've been doing in the Core all along. If you'd like to know more about what the Cellular Imaging Core can do for your research, please contact us.

Over the next few months we will be updating the Core's web site to reflect our new name. We'll be taking this opportunity to add to the resources available at the site. We do not plan to change the URL at this time.

Time-lapse imaging of cultured cells:

Several labs have discovered that the image analysis workstation in Cell Biology & Anatomy is capable of performing time-lapse studies on cultured cells. The inverted Olympus IMT-2 microscope on this system has a stage adapter for a BiopTechs live cell system. The BiopTechs monitors the dish's temperature via a thermocouple and then warms a special glass-bottomed 35mm culture dish as needed by passing a current through a thin metallic coating on the glass. The BiopTechs includes a heated glass lid that allows humidified gas (e.g., 95% CO₂/5% O₂) to be passed over the culture media.

Grayscale digital images can be captured using phase contrast, differential interference contrast (*a.k.a.*: DIC or Nomarski) or fluorescence microscopy techniques. The time-lapse images can be saved individually as Tiff files, or the time-lapse image sequence can be exported to an AVI movie (*with features such as: contrast enhancement, cropping, file compression, elapsed time and calibrated scalebars*). The acquired time-lapse images can also be analyzed using the SimplePCI software.

We would like to acknowledge the equipment contributions of the following faculty members that have made it possible to perform time-lapse microscopy on this system; Drs Cress, Gandolfi, Lantz, McCuskey, Meade-Tollin, & Payne. The SWEHSC, the Arizona Cancer Center and the College of Medicine Dean's Research Council have also provided significant funds or equipment for this system.

New on-line calendars for Leica & Zeiss confocal microscopes:

The Biotechnology Computing Facility (*Arizona Research Labs*) has developed new calendar software for users who want to schedule time on either the Leica TCS-4D confocal or the Zeiss LSM 510NLO-Meta multiphoton. Links to these new calendars can be found at their respective web pages on the Core's web site. The old calendars will not be available after January 1, 2003.

The new calendar software requires users to register on-line. Users are asked to provide the following information: user name & password (*use the same ones you log onto the microscope with*), first & last names, email address, phone number, an address, your department name, the name of the principal investigator you work with, and a six-digit account number. The advantage to the new software is that users can bill their time to several different grants more easily and there are a number of administrative advantages as well.

Leica TCS-4D (*located in BRL G109*) - <http://schedule.arl.arizona.edu/ocfs/azcc/month.php?user=azccleica&rid=21>

Zeiss LSM 510NLO-Meta (*located in LSN 410*) - <http://schedule.arl.arizona.edu/ocfs/biotech/month.php?user=zeiss&rid=18>

If you have any questions about the calendars, contact the Core for assistance.

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