



Navigational assistance

Every scientific technique has its strengths, weaknesses and potential pitfalls. It is easy to get lost while trying to navigate through the technical issues and the specialized jargon associated with a new technique. One of the reasons that centers like the SWEHSC have facility cores is so that investigators, post-docs, staff and students can draw on the experience of the core staff. The Cellular Imaging Core has extensive experience in the areas of histology, electron microscopy, digital imaging, image analysis, fluorescence microscopy, and live cell imaging to name just a few areas. Please feel free to contact us and allow us to assist you with your research.

Remember to cite the SWEHSC

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

Immersive 3D imaging facilities announced

The University of Arizona's Center for Computing & Information Technology - Scientific Visualization Lab recently announced the availability of the Arizona Laboratory for Immersive Visualization Environments (AZ-LIVE). "AZ-LIVE combines 3-D computer graphics, stereoscopic projection technology, acoustical tracking devices and four-channel audio to create the illusion of being present in a virtual world." Applications of this technology that might be of interest to SWEHSC investigators include 3D chemical modeling and 3D reconstruction of image stacks from the confocal or deconvolution microscopes. For more information, see: <http://azlive.arizona.edu/>

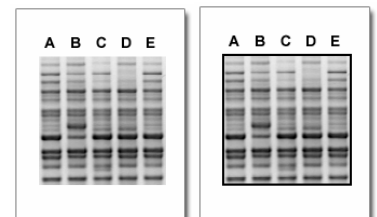
Histology lab – update

The Histology Service Lab web site has been redesigned and revised. The new fee schedule (as of April 1, 2005) is available on-line. In addition, the lab has added a link to a PDF file of the sample submission form, so that users can print and fill out the form before coming to the lab. See: <http://www.cba.arizona.edu/histo/index.html>

Drawing boxes in Photoshop

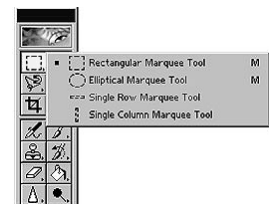
Recently we were asked to explain how to draw a "box" around a gel for a journal figure. There are number of ways to do this in Adobe Photoshop, but this is probably the simplest way. (Note; this explanation assumes that you are somewhat familiar with the tools in Photoshop)

1. Make a new layer, by going to the menu and choosing LAYER | NEW | LAYER. Make sure that this layer is selected in the LAYERS palette before proceeding. (Note: if you don't like the results of the following steps, you can discard this layer).
2. Draw a box around the outside edge of the gel image using the rectangular marquee tool (located in the upper left of the Photoshop toolbar).
3. Go to the menu and choose EDIT | STROKE
4. In the Stoke dialog box, set the width to 3 pixels (for large images, this may need to be 4 or 5 pixels, for smaller images 2 might be better, see what looks best to you).
5. Next, in the Stoke dialog box, click in the color square to open the Color Picker dialog box and select black (lower left corner of the window that pops up, or set RGB to all equal zero). Click OK to close the color picker window.
6. Click OK in the STROKE dialog box.



Before

After



Note: Photoshop tracks the history of the changes you make. To step backwards at any time, use the keyboard shortcut **Ctrl-Alt-Z** (Windows) or **Command-Option-Z** (Macintosh).