



## **Ten years worth of newsletters:**

Back in December 1994 we started sending out a newsletter (5x/year) to keep members of the SWEHSC informed about the Core. What do you do with 10 years worth of newsletters? Here's what we've done:

Turn some of the articles into on-line instructional materials and tutorials. These files are available at: <http://swehsc.pharmacy.arizona.edu/exppath/resources/handouts.html>

Archive the newsletters on-line as PDF files. We highlight the last year's worth of Core newsletters, including a list of each issue's headlines at: <http://swehsc.pharmacy.arizona.edu/exppath/core/news/index.html>

Archive the back issues at the AHSC Library. The library keeps newsletters like ours as a means of tracking the history of the Health Sciences Center.

## **Histology – soon to be at the “cutting edge” of science again:**

How can a technique that is over one hundred years old move to the forefront of science? Under development in the SWEHSC Proteomics Facility Core is the "MALDI-TOF MS Tissue Imaging Initiative". Building on the pioneering work done in Dr. Richard Caprioli's lab at Vanderbilt, the Proteomics Core is working to add the capability to obtain proteomics information (spatial protein localization and identity) from discrete image points sampled from 10  $\mu\text{m}$  frozen tissue sections. The mass spectrometer for this initiative (Applied Biosystems DE-STR MALDI-TOF) has been purchased and is installed in the Proteomics Core. Dr. Tsaprallis estimates that it will take approximately six months before the Proteomics Core will be ready to perform this technique on a routine basis. Applications of this technique and its utility are currently being evaluated on tissue slices provided by SWEHSC Center Director, Dr. Serrine S. Lau. For background information on this technique, see "Integrating Histology and Imaging Mass Spectrometry" in *Anal. Chem.* 76:1145-1155 (2004).

## **Need to open a digital image that is in a proprietary file format?**

Vendors usually have a good reason for storing images in a proprietary file format, but their reasons aren't very helpful when you want to open the image and you don't have the correct software handy. These two pieces of free software have a reputation for being able to open a very large number of file formats. Please note that to open some file formats the user may be required to install the software and a specific "plug-in". Both web sites contain lists of available plug-ins.

**Infranview** - <http://www.irfanview.com/> (Windows)

**ImageJ** - <http://rsb.info.nih.gov/ij/> (Linux, Mac OS 9, Mac OS X and Windows)

After you've opened your image, the Core recommends saving your file as a TIF image. The TIF file format is not perfect, but it is as close to a universal, loss-less file format as is currently available for scientific images. We do not recommend the use of the JPEG or GIF image file formats for scientific images as information is often lost when converting to these file formats.

## **We are here to help you get your microscopy-based research done right.**

If you, or your lab, are interested in doing a microscopy-based experiment, let us help you. We have 50 years of combined experience in the field of microscopy and imaging. We are familiar with the strengths and weaknesses of a number of techniques and technologies. We are happy to meet with individuals or lab groups for brain-storming, problem solving or training.

## **Quick Links anyone?**

Get the most important information about the Cellular Imaging Core from one web page. On-line instrument calendars, our latest newsletter, contact information for the facilities associated with the Core, handouts and more. <http://swehsc.pharmacy.arizona.edu/exppath/core/quicklinks.html>