



Life Science Department News

December 5, 2002

New Faculty



Please welcome Lewis Obermiller to the Life Science Department. Lewis comes to us after working for nearly 3 years at the Carl T. Hayden VA Medical Research Center on diabetes and cardiovascular research. He completed his Ph.D. at ASU in the MCB program where he studied the phylogenetic relationships of elopomorph fishes. He is originally from Texas and graduated from UT Austin. Lewis will be teaching BIO 181 and helping with the biotech program.

Please also welcome Randi Papke and Stan Kikkert to the department. Both are doing OYO's with us this year. Randi finished Ph.D. dissertation on butterfly sexual selection at ASU over the summer. Congratulations! She will focus on BIO 100 again this year.



Stan received his Ph.D. in microbiology from UC Davis. Ask him about the last year, which he spent traveling around the world. He will be teaching microbiology and BIO 181 as well as helping out with the biotech program.

Please also welcome Ji Khalsa who is serving as a half-time advisor/recruiter for the biotech program in addition to teaching microbiology.

Red Mountain News

Dennis Wilson, Greg Hocutt, and Peter Brown are teaching at Red Mountain. In addition, Lori Wood, Michael Thomas, Larry Bricker, and Laura Crews are teaching as adjunct faculty there. We are offering 4 BIO 100 classes, 2 BIO 105, and 3 BIO 181. All of our BIO 181 classes were full, so we are planning to expand our offerings as much as the lab space will allow.

Next year, we will continue our Red Mountain Rotation Policy, but we will try to have someone teach their full load at Red Mountain each semester.

Emily Dimson, our RM lab tech, is finally getting some help. Paperwork is in process to hire a full time lab tech to serve the lab classes taught at night. Until someone is hired permanently, Michael Thomas is helping out in this capacity.

Tutoring Opportunity for Students and Faculty

The Learning Enhancement Center has an increased commitment to providing reasonable tutoring services for our students. She is increasing the staff of student tutors and is asking for help in recruiting tutors. Please send names of potential students to Sarah Henderson. You might identify your best students and ask them individually if they are interested in tutoring. The pay is in the \$7-8 range and tutor training will be offered. Students can earn tutor certification, which apparently is a nice addition to their resume. Please send names of potential students to Sarah Henderson.

The Learning Enhancement Center also needs some professional tutors. If anyone is interested in helping our students while making a little money, please contact Sarah Henderson at 17678.

AV- Computer Systems

The AV touchscreen software was updated over the summer. We now have control of the lights and screen from the touchscreen. Hopefully, they have also fixed any other problems that were present. Please let me know if there are and problems with the new touchscreen software.

All of the windows computers in the LS building and the LS Study Room have been updated. They all now have Office XP running on Windows 2000. The computers in the LS building also have had more RAM added.

Scanning Slides

The department slide and negative scanner arrived a while back. Here is what you can expect from it:

- It will scan 35 mm slides & negatives, black and white or color.
- It will scan at any resolution you set up to 4000 dpi, in 8 or 16 bit (per color). File sizes (if saved as TIFFs) at the highest resolution and bit-rate are large, around 110 MB. Scanning at a resolution appropriate for PowerPoint will yield file sizes around 4 MB or less.
- You can save scans as uncompressed TIFF files, great for printing but large file size, or compressed JPEGs, great for PowerPoint or the web because file sizes are small.
- It can scan 35 mm slides in batches of up to 50 slides. This is an automated process. You load the slides, set the resolution, go away, and come back. All images will be saved to the hard drive of the machine to which the scanner is attached.
- You scan negatives manually by loading the negative strips I into a holder.
- It will connect to any machine with a firewire port. All Macs will have this, some newer PC's may also have port (firewire PCI cards are available).
- Give Dennis feedback on this: He suggests we hook the scanner up to the G3 Mac in the Adjunct Faculty office so all have access. You can scan your slides, save to the hard drive of the Mac, then burn to a CD (we are still trying to get burning software for the Mac). If you prefer, you can take the scanner back to your office, scan, then return. You will need to load the Nikon scanning software to do this.

What do you do with the scans?

- You can print them. Even a \$50 ink-jet using photo-paper does a nice job.
- Add them to your website. Photoshop has an automated function to make web albums which is very easy to use.
- Insert them into PowerPoint presentations.
- Place them on a CD as a library of images. Give the disc to the students or leave a copy on reserve at the library.
- Allow access from machines in the Life Science study room (either on a CD they can check out, loaded on the hard Drive, or on a network disc)
- If you want to get fancy, you can incorporate them into a DVD as a slide show (making the slideshow this is an automated process) so students can view on their DVD enabled computer or TV sets if they have a DVD player, X-BOX, or PlayStation.

How can you learn these things?

- Dennis has offered to give an orientation on how the scanner should be operated. It is delicate, expensive, and needs to be handled/treated appropriately with TLC.
- The software is reasonably straight forward. Dennis can show you the basics, then direct you to the manual.
- Save this info for future reference.

Department Picnic

On November 16, many departmental colleagues gathered at Lost Dutchman State Park for a potluck picnic. We had great food and conversation over a roaring campfire. Stan's much anticipated dish never made it to the picnic because his car broke down on the way. Maybe next time Stan.



RECOMMENDATIONS OF SAFETY COMMITTEE FALL, 2002

After attending the Safety Seminar on August 21, 2002, it was determined that the District is in the process of working out a district wide safety process. Until that is completed, the following recommendations were discussed at the meeting and were deemed satisfactory by our OSHA representative as well as the safety and legal experts present.

1. For simple cuts if it is determined that a band-aid is all that is needed, you should still fill out the incident reporting forms that the lab techs will have on hand.
2. For anything more serious, call Campus Safety at 17777. In extreme emergency call 911.
3. General safety procedures (including location of fire extinguishers, exits, eyewash, etc.) should be in every lab manual and be discussed in the first lab. Students should not be allowed to eat or drink in lab.
4. Each Lead Instructor should go through the lab manual and determine if hazardous chemicals are being used. The lab techs have the MSDS forms. A written procedure should be in place for each lab that has special hazards. (Use of hood, disposal, etc.) The students and the instructors (including the adjuncts) should be aware of the precautions.
5. If a student does not follow the precautions, they should not be allowed to do that lab.
6. If an instructor does not follow the precautions, they should not be allowed to teach that lab.
7. There should be a zero tolerance for serious breaches of safety.

Shirley Henderson is our on campus OSHA representative. 461-7360
hendersons@mail.mc.Maricopa.edu

Additional health/safety issues have been pointed out by the Ms. Henderson since the committee met. The most serious is the presence of food in the prep room refrigerators. We must eliminate all food from these refrigerators. Hopefully, the Safety Committee can develop a recommendation for preventing this violation.

Miscellaneous Notes

- Please refrain from using the classroom whiteboards to post notices. This is inconsiderate of other faculty who might need to use that board space for their class.
- Please be careful with the door locks. This means that you must NOT use your key to open a door -- use your key to unlock the door and then use the handle to open the door. We have had the department office lock broken twice this semester leaving the office wide open.

- Please try to conserve the white board markers. We go through these expensive markers at an alarming rate.
- Remember that scantron sheets are for faculty use only. We do not provide scantrons for students.
- We are developing a policy for biology students who have special status -- effectively, these are students under 16. Please look for a policy and a form to be completed by students who are underage. In the interim, please advise the chair if you have any students who are underage.

ARIZONA BIOLOGY NETWORK INFORMATION

Since 1993, Pima Community College has received over \$1,000,000 from the National Institutes of Health to increase the number of Bachelor's degrees in the behavioral and biomedical sciences awarded to Arizona students who are members of ethnic groups that are underrepresented in these fields. Ultimately, when this goal is met, it is hoped that minority leaders in these sciences will help to decrease the health disparities that continue to exist in minority populations in this State. Currently, only 4% of graduate degrees awarded in the health sciences are awarded to minorities.

Over the years, the project evolved from including a few schools to including all 21 Community Colleges and the 3 State Universities. The Arizona Biology Network (ABN), as the project came to be known, reaches out to underrepresented minority students from all over the state and provides them with enrichment activities that include participation in public health and other biomedical research activities, writing and public speaking workshops, tutorships, mentorships. The project has enjoyed a tremendous success and has supported 75 students since its inception. The transfer rate to 4-year schools currently stands at 72%. Of those who transferred, 42% of these have earned B.S. degrees and 4% of these students have completed or are near completion of post-graduate degrees. These statistics exceed the national average for comparable programs in other states (62% transfer and 35% B.S. degrees awarded).

Unfortunately, an evaluation of the ABN pointed out three problems that need to be rectified by improved recruitment strategies: 1) not all community colleges in the consortium have had students participate in the program, 2) the number and quality of students applying to the program needs to be increased and 3) the number of students supported by the program should be increased. Funds are being sought from the Dean's Minority Education Initiative to strengthen this program. Institutional funds will be a strong show of support in the May 2002 grant proposal for continued funding of this program, in which \$600,000 will be requested. (In the event that this proposal is not funded, a re-application will be submitted in January, in time for funding the summer research program.)

Further information regard applications and eligibility of students and faculty participants can be found on the web site: <http://wc.pima.edu/~abn>

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News Contributions

Apologies from the chair for the lapse in publishing the department news. Somehow it was delayed in making it to the top of my to do list. I will do another issue at the beginning of the new semester. If you have news items to share, it would really help the production if you would send me the edited text

along with a web optimized picture if appropriate.

By the way, I am starting to archive all news issues on the department website. Catch up on your reading at <http://www.mc.maricopa.edu/dept/d22/bio/html/news.html> or navigate there by clicking on News in the under the department homepage banner.