

Cornell, McDougal, Peloquin Awarded Tenure

Writing research papers, sweating over submissions of numerous grant proposals, long hours spent grading lab reports, juggling multiple research student needs, countless hours spent serving on service projects—these are just a few of the many things that a tenure-track faculty member must do to achieve the goal of tenure. In spring 2009, *Dr. Ken Cornell, Dr. Owen McDougal, and Dr. Jeffrey Peloquin* were promoted to Associate Professor and granted tenure.

Ken is a biochemist specializing in antimicrobial and vaccination research, and is embarking on an ambitious research quest to develop a West Nile Virus vaccine. Many of Ken's former students have been accepted to medical schools and graduate schools around the country.

Owen has many organic and bio-organic research projects, including a project to investigate the molecular structure of neurotoxins from exotic marine life forms. His carbon-neutral fuel briquette research has been exhibited on campus and is always a hit—especially when the S'mores demonstrations take place. Owen is an avid supporter of his students and often seeks opportunities to send them to research symposia across the country, including places like Hawaii and Washington, D.C.

Jeff's research focuses on the use of optical spectroscopy and magnetic spectrometry to address a variety of topics, including solid state materials used in outer space. Jeff has been essential in the development of a graduate program in chemistry (which is pending State Board of Education approval). He was recently elected President of Faculty Senate.



Drs. Ken Cornell, Owen McDougal, Jeff Peloquin

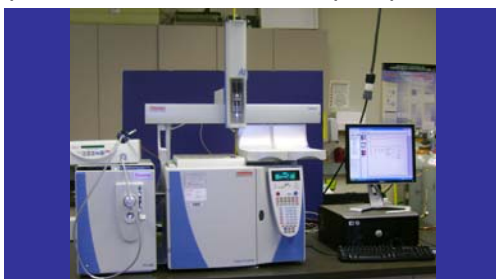
Chem-Bits

In an effort to modernize the department and provide improved student access to instruments, the **Analytical Balance Room** was recently remodeled. A new granite countertop has been installed to provide more stability for the analytical balances. This room will provide extra storage and house the two new IR spectrometers, a polarimeter, and a fluorimeter.



Freshman-level labs are the lucky recipients of a set of handheld data collection devices purchased by the Department. **Vernier LabQuest** units (pictured above) collect data utilizing various sensors, and have built-in graphing and data analysis software. During this past semester, students have conducted many successful experiments with these new instruments.

Computer lab modernization – The department invested in 24" LCD monitors for the computer lab, and plans to purchase 50 new computer workstations this May. These upgrades demonstrate the department's commitment to use technology in academic coursework and will allow researchers the computational power needed to solve complex problems.



Other **new equipment** recently acquired through various grants includes a GC/MS, GC, FTIR, PCR, Peptide Synthesizer, GeLogic© Imager, Chemical Microwave, and Liquid Chromatography system.

Alumni News

Chelsea Isom graduated from Boise State University in 2007 with her B.S. in Chemistry (Biochemistry emphasis). She later received a B.S. in Clinical Lab Science from Idaho State University and became a Certified Medical Technologist. While applying to medical school, Chelsea accepted a position in the department as a Laboratory Teacher. Chelsea has recently been accepted to the University of Nevada School of Medicine, Reno. We are proud of Chelsea's success and wish her the best at medical school!



Chelsea—packed & ready for med school!

The department welcomes *Chris Siepert!* He also graduated from Boise State University in 2007 with his B.S. in Chemistry. Over the last two years Chris was an apartment manager and real estate investor. In spring of 2009 Chris was hired as an adjunct and later accepted a Laboratory Teacher position in the department. If you don't find him in the chemistry lab teaching, or tutor center tutoring, you will find him out fishing with his fly rod. Chris is an avid fly fisherman! Chris and his wife Jill have a dog named Muggles the puggle (a poodle/pug breed) and an orange tabby cat named Guppy.

Chemistry on the Move...

The Chemistry Club

hosted a successful Chemistry Department Holiday Demo event, with a twist! Rather than limiting the audience for this event to the Chemistry Department, the Chemistry Club decided to invite the community. During the evening, Chemistry faculty performed fun and entertaining science experiments for an excited and eager audience of children and their parents.

Karen Hammond and *Drs. Henry Charlier, Don Warner, and Gary Mercer* put together some fantastic demos on stage, after which *Drs. Susan Shadle and Jeff Peloquin* provided a musical interlude. If that weren't enough, the kids were allowed to do some "hands-on" experiments of their own—they loved it, and so did their parents! The extraordinary success of this event was due to the promotion efforts (such as radio advertisements and flyers on campus and at elementary schools), led by *Lisa Young*, Chemistry Club President. What a great way to expose the community to what the Chemistry Department and the Chemistry Club can offer, and to show kids how cool and fun science can be!

The Chemistry Club definitely keeps busy in the community. Visiting 1st and 3rd grade classes at Washington Elementary the first part of 2009, they shared many valuable skills, such as how to make elephant toothpaste.

The Club provided scholarships for eight students to attend the ACS National meeting in Salt Lake City during spring break, bringing the total of students able to attend up to 20! Seven of those attending presented their research posters, and all gained valuable experience through visiting with national and international researchers.

What was next for the Chemistry Club you ask? It was tie-dying at the Spring Fling fundraiser on May 9th! Participants learned about the chemistry of color and dyes, and took home a t-shirt design of their own creation!

On February 28th, Boise State University held its **42nd Science Competition Day**. The Committee Chair, *Dr. Brad Bammel*, shared that the event was very successful and was met with enthusiastic participation—what high school student across Idaho and Eastern Oregon wouldn't want to win one of the two \$18,000 Boise State University scholarships awarded at each year's event?

Focus on Students...



The newest generation of Chemistry Wizards!!!

2009 Chemistry Graduates...

Three of our graduating seniors have been accepted to PhD programs. *Richard Cox* will attend the University of Utah to study physical chemistry. He and his wife *Kim* are expecting their first child in October. *Emma McInturff* is heading to the University of Texas in Austin, where she will be studying organic chemistry. *Alina Schimpf* will attend the University of Washington in Seattle to study physical inorganic or theoretical physical chemistry, or according to Alina, "something with lots of math!" Prior to graduate school, Alina will travel this summer to Germany, Greece, Venezuela, and Vancouver Island; and she will teach organic chemistry lab for the department. *Ben Parker* will stay in the valley with BHS Marketing, a chemical distribution company. He plans to earn an MBA, then attend graduate school in either chemistry or chemical engineering. *Konrad "KC" Billetz* will shadow several local physicians, and one in Chile! Then he hopes to start medical school in the fall of 2010.



Konrad Billetz and Dr. Don Warner at the 2009 Boise State University Undergraduate Research Conference

Focus on Faculty and Staff...

Dr. Eric Brown has just completed his third year at Boise State University. He has built an active research program that addresses a variety of important problems, such as antibiotic resistance and heavy metal contamination. One of the outcomes of his research is a provisional patent filed on a new technology aimed at measuring protein levels in cells. In addition to his research, *Dr. Brown* has also made significant contributions to the local scientific community as a co-organizer of the 50th Anniversary Meeting of the Idaho Academy of Science and as Chair of the Snake River Chapter of the American Chemical Society.

Drs. Ken Cornell, Dee Ann Force, and Henry Charlier recently obtained a Technology Incentive Grant from the Idaho State Board of Education to redesign and reequip the biochemistry laboratory. A service learning component of this grant involved working with high school students to introduce them to the use of chemistry and biochemistry to study "Water Quality in Idaho." From May 1 to May 9, the biochemistry laboratory students in courses taught by *Drs. Cornell and Force* hosted around 350 students from Boise area high schools.

Another Technology Incentive Grant was obtained by *Drs. Owen McDougal, Mike McCormick, Eric Brown, and Don Warner* along with Special Lecturer *Karen Hammond*. This grant focused on incorporating "Green Chemistry" (environmentally friendly chemistry) into the chemistry curriculum.

Welcome to the Department...

We welcome *Dr. Gerry Chingas* as Facility Manager and *Eva Lu Hale* as accountant.

Departures from the Department...

Dr. Mike McCormick has accepted a position with Department of Homeland Security in Chicago. *Paris Humphries* has been accepted to Drexel College of Medicine in Philadelphia. *Chris Corwin* accepted a position in Blaine County (Hailey) in GIS database management. *Kristen Fil* has graduated with a degree in psychology. *Shaun Magnuson*, who has worked in the stockroom for several semesters, graduated with a degree in biology. His plans include joining the Peace Corps. Thanks to everyone for their dedication and service to the department! Best of luck in your new endeavors!