The Year in the Chemistry Department

The 2011-2012 academic year was another exciting year for the Chemistry Department. We graduated fourteen Chemistry majors eight of whom are certified by the American Chemical Society. Seven Biochemistry and Molecular Biology majors graduated last year, as well. A total of eleven Chemistry and BMB majors graduated cum laude, magna cum laude or summa cum laude. Fourteen members of the Class of 2012 are going on to do graduate work, one of whom, Amanda Pellowe, won a Fulbright Scholarship to Norway. The Department continues its strong research tradition with twelve students staying over the summer to do research and several others working on research projects off-campus.

Don Jameson is taking a research sabbatical this year and is enjoying some uninterrupted time working in his lab. His sabbatical leave has given us the opportunity to bring Dave Horn back to campus for the year. Some of you will remember that Dr. Horn taught organic and spectroscopy for us in 2005-2006. This time around he will be teaching introductory chemistry and spectroscopy.

Professor Steven Boxer from Stanford University was the 33rd Musselman Visiting Scientist. He delivered an excellent series of lectures on his work studying photosynthesis and proteins. While here he even enjoyed an impromptu battlefield tour courtesy of the Department Chair. This year’s Musselman speaker is Dr. Daniel Nocera from MIT. He and his research group are doing very exciting work developing robust solar cells that catalyze the formation of hydrogen fuel from water. If you would like to read more about him, his work was recently profiled in the May 14 issue of The New Yorker.

We were also excited to hear that two grant applications from the Department were funded. Tim Funk received a grant from the ACS Petroleum Research Fund to support his work with iron compounds. This work is detailed in the research section below. Also, a grant application to the Howard Hughes Medical Institute written by the Biology, Chemistry, and Physics Departments has been funded for $1.3 million dollars over the next four years. The money in the grant will go towards supporting student stipends for the summer research program in the sciences at the College, purchasing several pieces of new equipment, developing a residential theme house program, and funding the development of several new courses and enhancing some of our existing courses, with an emphasis on courses that incorporate connections between scientific disciplines. Gettysburg College was one of forty-seven schools in the country to receive a grant in this competition.
Fourteen chemistry majors and seven biochemistry/molecular biology (BMB) majors competed their undergraduate work in the past year. Twenty graduates received the B.S. degree and eight chemistry majors are ACS certified. Ten seniors were awarded Honors in their major, five were elected to Phi Beta Kappa, two graduated Summa Cum Laude, six Magna Cum Laude, and three Cum Laude. Fourteen are currently pursuing graduate work.

Jonathan D. Adams (Allentown PA), a Summa Cum Laude and Phi Beta Kappa graduate and the Chemistry Banner Carrier at Commencement, has entered the graduate program at the University of Chicago and Andrew P. Cinderella (Bear, DE) is enrolled in the graduate program at the University of Delaware. Luke W. Cuculis (Seven Valleys, PA), a Magna Cum Laude and Phi Beta Kappa graduate, has enrolled at the University of Illinois, while Thomas Field (Normal, IL) is studying at the University of Kansas. Kathleen M. Hillery (Stratham, NH) is planning her future and Alexis L. Kelly (Ridley Park, PA) is coaching lacrosse at a school in the United Kingdom. Daniel K. Kim (Maple Glen, PA), a Magna Cum Laude graduate, is enrolled at the University of California – Irvine, while Taylor N. Plank (Orrtanna, PA), a Cum Laude graduate with a second major in Spanish Linguistics, is taking time off before entering graduate school. Kelly A. Short (Massapequa, NY) is contemplating applying to graduate school and Ashley J. Sowa (North Huntingdon, PA), a Magna Cum Laude and Phi Beta Kappa graduate, is attending Illinois State University.

BMB graduate Jennifer L. Frielle (Hummelstown, PA), a Cum Laude graduate, has taken a research position at Penn State Hershey and Jonathan D. Hibshman (Lancaster, PA), a Magna Cum Laude and Phi Beta Kappa graduate, is attending Duke University. Karlina J. Kauffman (Hollspol, PA), a Magna Cum Laude and Phi Beta Kappa graduate and the BMB Banner Carrier at Commencement, has enrolled at Yale University, while Brian M. Lauderback (Schwenksville, PA), a Summa Cum Laude and Phi Beta Kappa graduate, is attending the University of Pennsylvania. Shelby L. Lutz (Camp Hill, PA) is enrolled at the Johns Hopkins School of Public Health and William J. McCanney (Sinking Spring, PA) is working and applying to MBA programs. Amanda S. Pellowe (Alton, NH), a Magna Cum Laude and Phi Beta Kappa graduate, has been awarded a Fulbright to study at the University of Bergen, Norway.

Departmental Honors in Chemistry were awarded to Jon Adams, Luke Cuculis, Tom Field, Dan Kim, An Nguyen, and Ashley Sowa. Jon Hibshman, Karlina Kauffman, Brian Lauderback, and Amanda Pellowe received BMB Honors.

The Southeastern Pennsylvania Section of the American Chemical Society honored Ashley Sowa this past spring as the outstanding senior chemistry major. In addition Ashley received the 2009 Chemical Rubber Company Freshman Chemistry Achievement Award. Jon Adams earned the Stine Chemistry Prize, the 2012 ACS Inorganic Award, and 2010 ACS Polymer Division Award for Achievement in Organic Chemistry. Luke Cuculis received the Society for Analytical Chemists of Pittsburgh Award, the 2011 Undergraduate Award in Analytical Chemistry, and held a Women’s League Scholarship. Dan Kim was co-recipient of the John B. Zinn Chemistry Research Award and also received the 2011 ACS Inorganic Award, the 2010 Organic Chemistry Award, the 2010 Undergraduate Award in Analytical Chemistry, the 2009 Sceptical Chymists Achievement Award, and the Dougherty Mathematics Award. Tom Field earned the 2011 and Kelly Short earned the 2012 Laboratory Assistant Awards.

Brian Lauderback earned the Biochemistry/Molecular Biology Award. Brian also held the 2011 Glenn S. Weiland Summer Research Scholarship. Karlina Kauffman was co-recipient of the John B. Zinn Chemistry Research Award. At the 2012 Experimental Biology meeting in San Diego Jennifer Frielle received the Award for Excellence in Undergraduate Research. Jon Hibshman earned the Senior Scholarship Prize and the Henry W. A. Hanson Award. Amanda Pellowe received the Captain Michael Scotton ’82 Award (academics/athletics).
Staff Update

We have one addition to our staff this year. Dr. David Horn has re-joined the Department to fill in while Don Jameson is on sabbatical. Dave was previously at Gettysburg for the 2005-2006 academic year and we were delighted he will be back with us again. Before his retirement Dave had a long career as a professor at Goucher College in Baltimore and still teaches organic chemistry in the summer at the University of Vermont. Dr. Deepali Butani who taught in the Department last year has moved on to a position at Dickinson College for the upcoming year. Deepali was always a cheerful presence in the Department, even when teaching pchem lab, and we wish her the best in her new position.

33rd Musselman Visiting Scientist

Last fall, Professor Steven Boxer, Camille and Henry Dreyfus Professor of Chemistry at Stanford University, visited campus as the 33rd Musselman Visiting Scientist. Professor Boxer is a member of the National Academy of Sciences as well as an Elected Fellow of the Royal Society of Chemistry. He received the Earle K. Plyler Prize for Molecular Spectroscopy in 2008 from the American Physical Society and the Arthur Cope Scholar Award from the American Chemical Society in 1995. Professor Boxer’s research crosses interdisciplinary lines but focuses primarily on the physical chemistry of biological systems. Active areas of research in the Boxer group include: looking at electron transfer in photosynthetic systems, examining how electrostatics affect the function of proteins, and modeling cell surfaces by using supported lipid bilayers.

The general lecture on Thursday evening was titled “Green Fluorescent Protein: Breaking Up Is Hard To Do” and focused on the discovery of green fluorescent protein and its development into a significant probe of biological systems that ultimately won the Nobel Prize for its discoverers. The three technical talks, “The Initial Steps of Photosynthesis: The Path Not Taken,” “Electrostatics and Dynamics in Proteins: Stark Realities,” and “Reactions, Interactions, and Dynamics in Biological Membranes: Vesicles to Brains,” all illustrated how spectroscopic tools are being utilized by Professor Boxer’s research group to investigate problems at the interface of biology, chemistry, and physics.

Sceptical Chymists

With President Hannah Loch at the helm, the Sceptical Chymists once again organized a year full of activities including lectures, social events, game and movie nights, and, ultimately, the initiation of 11 new members. To kick off the year, Scep Chym members and faculty hosted an ice cream social in Glatfelter Lodge to welcome prospective new members. Ken Takeuchi of the University of Buffalo provided the first lecture of the Fall semester, in which he discussed chemistry’s role in developing new energy storage architectures. Continuing with the general theme of energy solutions, Eric Schelter from the University of Pennsylvania gave a lecture on new oxidation chemistry of the rare earth elements that will open avenues for separation of these critical elements from mining ore. A game night modeled on a chemistry edition of Family Feud infused much laughter.
into the fall lineup of Scep Chym events. Gettysburg College’s own Michael Wedlock moved the semester’s lecture series into a new area of research with his discussion of the vibrational states and dissociation of ammonia dimers. Later in October, Joe Fox of the University of Delaware spoke about developing new types of chemical reactions that utilize strain to design unusual reactivity in molecules. The final speaker of the fall was Frieder Jaekle, who traveled from Rutgers to present a seminar on the synthesis and applications of organoborane functional polymers for electronics and sensors. The Fall semester wrapped up with a holiday gathering that included all sorts of delectable treats.

The Spring semester began with the newest member of our faculty, Luke Thompson, speaking about his graduate and postdoctoral research on the unique optical properties of planar and nanostructured gold. The University of Pittsburgh’s Craig Wilcox continued the semester’s speaker series by discussing his work on the halogen bond, which is in many ways similar to the more common hydrogen bond. Later in March, Rob Scarrow from Haverford College provided a lecture on the coordination complexes of a tripodal ligand with hydrogen-bonding guanidine groups. Visiting Professor Deepali Butani concluded the speaker series for the academic year with her talk on her research into pericyclic and pseudopericyclic sigmatropic rearrangements. Social events, including a movie night and a cookout at the Quarry Pavilion, were interspersed amongst the Spring semester’s lectures before the 2011-2012 academic year culminated with the Sceptical Chymists’ distribution of student awards, initiation of its new members, and election of new officers for the upcoming year.

Taking a Break from Summer Science!
**Faculty/Student Research**

Professor Grzybowski and his students worked on three projects last year. Minh An Nguyen ('12) investigated using cobalt clathrochelates as electrocatalysts in the production of hydrogen. This project was continued by Andrew Kotila ('13) last summer. Avani Amin ('13) explored the interaction of cobalt clathrochelates with DNA using differential pulse voltammetry and Diana Kao ('13) synthesized molecular squares using iron clathrochelates as end pieces and palladium and rhenium complexes as corner pieces.

Professor Jameson is continuing to investigate Troger’s base and carbazole as 90 degree platforms for the self-assembly of supramolecular complexes. Tom Field ('12) explored the mechanism of Troger’s base racemization using a combination of the Hammett substituent effect and the kinetic isotope effect. Nick Mastascusa ('12) worked on a new strategy for the preparation of Troger’s bases bearing poly-ynne substituents. Amanda Pellowe ('12) prepared a bis amidine derivative of carbazole and obtained NMR evidence for the formation of a self-assembled macrocycle. In collaboration with both Professor’s Funk and Jameson, Andrew Cinderella ('12) probed the mechanism of a new “green” methylation of phenols using dimethyl carbonate, focusing particularly on the observed induction period in the DABCO catalyzed reaction.

Over the academic year, Dr. Koren A. Lipsett (note: change in name) worked with four students. Brian Lauderback ('12 BMB) and Shelby Lutz ('12 BMB) continued their summer research understanding the mechanism of pathology for the Rdy CRX gene mutation that causes blindness in a pedigree of cats. Their work focused on determining whether the truncated protein (from the mutated CRX gene) interfered with the normal protein activity. Will McCanney (BMB '12) continued his summer work from '10 hunting down the deafness gene in a pedigree of horses using microarray data from a SNP chip! Kelly Short ('12 Chem) continued Matt Brady’s ('11) work by sequencing the Fibroblast Growth Factor Receptor 1 gene (FGFR1) in Scottish Highland cattle to determine whether this gene was responsible for abnormal hair length (long hair cattle) and also focused on the PITXI and LIXI genes of a horse with symptoms similar to muscular atrophy. Over the summer, three BMB majors work with Professor Lipsett. Miles Paszek ('14 BMB) and Stephen Bilheimer ('13 BMB) continued the work of Brian and Shelby and by cloning an affiliated transcription factor into a vector for protein over-expression to develop an assay to measure the transcription transactivation activity (Miles) and to perfect the over-expression of CRX clones for optimized electrophoretic mobility shift assays (Stephen). Alicia Caravana ('14 BMB) extended Will’s preliminary work by designing STR assays (short tandem repeat regions in DNA) to also fish out the deafness gene in the Spanish Colonial Mustang family.

Joe Fortenbaugh ('13) worked in the Wedlock lab over the summer. The first part of the summer was spent trying to do some preventive maintenance on the laser. Unfortunately, getting a replacement flashlamp that would work in the laser proved a challenge. The upside is that Joe is now a wizard at finding his way through the guts of a Nd:YAG laser. The second half of the summer was more productive and we made good progress on generating resonance Raman spectra of dissociating dimethyl disulfide and also developing some useful background subtraction procedures that make it easier to separate the interesting from the uninteresting parts of a spectrum. During the upcoming year Jennifer Middlebrooks ('13) will be starting work in the laser lab.

Much like last year Prof. Tim Funk and his students are still focused on iron catalysis. After success in the spring, summer, and fall of 2011, Jessica Drake ('11), Taylor Plank ('12), Dan Kim ('12), and Prof. Funk published their development of a class of air-stable, nitrile-ligated iron catalysts for transfer hydrogenations of ketones and aldehydes and transfer oxidations of alcohols. Not only do these reactions use iron, an inexpensive, abundant metal, as a catalyst, but they use relatively harmless solvents (isopropanol or acetone) that double as the reductant or oxidant, respectively. These (cyclopentadienone)iron carbonyl compounds have turned out to have some interesting reactivity, and Prof. Funk recently received funding from the American Chemical Society Petroleum Research Fund to explore them in more detail over the next three years. During the spring semester Taylor Plank and Dan Kim began exploring how the cyclopentadienone substitution impacts the catalyst activity. Gabby Pros ('13), and Becky Sponenburg ('14), continued exploring cyclopentadienone substitution during the summer of 2012 while Casina Malinchak ('13), examined the substrate scope of the iron-catalyzed oxidative lactonization of diols.
In the lab, Prof. Shelli Frey continued work revolving around the theme of structure and dynamics of cell membranes with a particular focus on understanding biophysical interactions of particles and proteins with cells. During the past academic year, Luke Cuculis ('12) explored the effects of nanoparticle exposure to membrane structure and stability, concentrating on the role of various non-ionic surfactants on these nanoparticle-lipid membrane interactions. Luke delved into protocol development for Lipid Lab, creating and imaging physiologically relevant giant unilamellar vesicles, essentially spherical lipid bilayers that model a cell membrane without any cellular contents. Karlina Kauffman (BMB ’12) continued our collaboration with researchers at West Virginia University to quantify how the cell membrane affects protein aggregation implicated in Huntington’s disease and explored how different protein regions contribute to said aggregation. Karlina also developed a new model system for the lab, using small unilamellar vesicles as cell models to quantitatively measure membrane leakage when exposed to external agents. During the summer, Frey began a collaboration with David Wendell at the University of Cincinnati to study the surface active functionality of ranaspummin-2, a surfactant protein from the foam nests of a tropical frog.

Research in Prof. Lucas Thompson’s lab focused on the synthesis and applications of gold nanorods. Jeremiah Johnston’s (BMB ’13) project involved analyzing the uptake of hydrophobic molecules, such as pharmaceuticals, by the bilayer of surfactant on the surface of gold nanorods. As nanoparticles are increasingly being studied as potential drug delivery vehicles, gaining a fundamental understanding of how the structure of a molecule impacts its ability to be carried by a nanoparticle is a critical challenge in the field. Andrea Sitton (BMB ’14) joined the lab and began work on modifying the surface chemistry of gold nanorods, enabling their incorporation into pH sensitive thin films. These gold nanorod composite thin films are being studied as a way to amplify signals in an optical sensor format.

**Presentations and Publications**

Professor Tim Funk traveled with a few students to the 243rd American Chemical Society National Meeting in San Diego in March and presented two posters with students. The first, presented by Taylor Plank ('12) was titled “Air-Stable, Nitrile-Ligated, Iron-Based Shvo-Type Compounds as Transfer Hydrogenation Catalysts.” Jessica Drake (‘11) was also a co-author. In addition, Dan Kim (‘12) presented “Oppenauer-Type Oxidations Using an Air-Stable, Nitrile-Ligated (Cyclopentadienone)iron Catalyst.” Jessica was a co-author for this work as well. Dr. Funk presented a seminar titled “Development of Air-Stable, Iron-Based Shvo-Type Catalysts” at the same ACS National meeting.

Dr. Tim Funk published a paper with three student co-authors. “Air-Stable, Nitrile-Ligated (Cyclopentadienone)iron Dicarbonyl Compounds as Transfer Reduction and Oxidation Catalysts” was published in *Advanced Synthesis & Catalysis* (2012, 354, 597–601) with Taylor Plank (’12), Jessica Drake (’11) and Dan Kim (’12) as student co-authors.

Dr. Luke Thompson and six colleagues from Illinois had a publication in *J. Phys. Chem C*. His work was titled “Photocatalytic Hydrogen Production at Titania-Supported Pt Nanoclusters That Are Derived from Surface-Anchored Molecular Precursors,” (2012, 116, 1429-1438.)

Dr. Thompson was our distinguished Sceptical Chymist’s Lecturer in February and presented “From Nanoparticles To Nanostructures: On The Relation Of Gold To Light”.

At the February Biophysical Society Annual Meeting in San Diego, Dr. Shelli Frey had two presentations. The first poster, presented by Karlina Kauffman (’12 BMB), was titled “The role of protein context in disease-related huntingtin protein/lipid interface interactions.” Two other colleagues from West Virginia University were also co-authors. The second poster, titled “Nanoparticle and surfactant interactions with model cell membranes,” was presented by Luke Cuculis (’12). Nicole Meredyth (‘11) was also a co-author of this presentation.

In addition, Dr. Frey was a participant on the Education Committee Panel at the Biophysical Society Meeting. The focus of the panel was "Faculty positions at predominantly undergraduate institutions: finding a job and finding success."
**Student presentations:**

Dr. Don Jameson had three students present their research at the Gettysburg College’s Celebration ‘12. “Investigation of the Mechanism of Troger’s Base Racemization” was presented by Tom Field (‘12). “Green Methylation of Phenols with Dimethyl Carbonate and the Controlling Mechanism” was presented by Andrew Cinderella (‘12) and Hannah Loch (‘12) presented her work “Synthetic Explorations of Alkyne Derivatives and Shape-Persistent Molecules of Tröger’s Base.”

Dr. Koren Lipsett’s student, Brian Lauderback (‘12 BMB) presented his research at the Gettysburg College’s Celebration ‘12 as well. His poster presentation was titled “Generation of plasmid vectors for expression of CRX and Rdy CRX (ΔCRX) for use in determining biochemical differences caused by the Rdy mutation.”

Dr. Jameson’s students had several presentations at the 76th Intercollegiate Student Chemists’ Convention (ISCC) at Bloomsburg University. “Green Methylation with DMC” was presented by Andrew Cinderella (‘12). Tom Field (‘12) presented “Racemization Kinetics of Substituted Troger’s Base Derivatives” while Amanda Pellowe (BMB ‘12) presented “Toward Supramolecular Assemblies via Amidinium-Carboxylate Salt Bridges.”

Also at the ISCC, Dr. Funk’s students, Dan Kim and Taylor Plank, both gave talks. The titles of the talks were the same as their poster titles from the ACS conference mentioned above. Taylor won first place in the organic division for her presentation.

Mihn An T. Nguyen (‘12), a research student in Dr. Joe Grysbowski’s lab, presented “Don’t Be So Negative! Shifting the Redox Potential of Cobalt Clathrohelate Complexes,” at the 76th ISCC as well as participating in Celebration.

**Gifts to the College**

Many Chemistry Department alumni and friends have made gifts to the College through the Gettysburg Fund over the past year. Donors to the Gettysburg Fund include: Frank ’75 and Wendy Patterson ’76 Barr, Jennifer Becker ’97, Mary Botterbusch, Dean ’72 and Marilyn Litwak Bushey ’72, Ronald Castellano ’95, Lauren Celano ’00, Benjamin Chaloner-Gill ’86, Owen Coble ’51, Elizabeth Shearer Fisher ’90, Christine Folz ’93, Jennifer Frielle ’12, John Glass ’55, Judith Keyes Guss-Nelson ’60, Erick Hagaman ’67, Joanne Hill Heller ’55, Angela Mendel Hunter ’96, Amy Dickerson ’98 and Craig P. Johnson ’98, David Jones ’67, Kimberly Rain Kelly ’92, Darby Kiley ’97, Robert Knopf ’54, Gordon Kotora ’87, Arthur Kriner ’59, George Krone ’59, Michael Lawlor ’92, Constance Hedland Lee ’64, Keith F. McDaniel ’80, Maureen C. Miller ’99, M. Lynn Myers ’81, Ronald Myers ’69, Martha Krug Nelson ’64, Roger M. Nelson, Donald Oakley ’61, Taylor Plank ’12, Pauline Dale Platt ’53, Jeanne Scott Robinson ’57, Cynthia LeCompte Salisbury ’84, David Salisbury ’85, Kylie Schleicher ’11, Doris Pickel Schumacher ’69, John Socey ’63, Robert Stevens, Richatd Strunk ’63, Karl Thaliner ’80, Vincent Venditto ’03, Alison Kranitz Walsh ’93, Margaretta Curry Weaver ’47, Quentin Weaver ’47, Walburga Mank Weber ’63, D. Scott Woodcock ’82, William Wunner ’60, John Young ’03, M. LeRoy Zeigler, Jr. ’51

If you designate your gift for the Chemistry Department – Special Gifts Fund, it will directly support the Department and help pay student stipends for summer research. Alexandria L. Craig ’07, Rich Carter ’93, and Deborah Otis ’73 generously supported the Special Gifts Fund this year. The Department also received a gift from Abbott Laboratories in honor of Keith McDaniel’s (‘80) success as a member of their “Outstanding Research Team” for 2011.

**Alumni/Alumnae News**

**Homecoming:** Alums who visited the Department during Homecoming included:

Darcy Bates ’04, Ted Grimm ’09, Emily Savidge ’09, Zach Travis ’10, and Joel Musser ’11
Philadelphia ACS Meeting: Professors Jameson, Thompson, and Grzybowski met many alums who were attending/presenting at the ACS meeting in August, including ERIN PODLESNY '07, DAN ZIEGLER '09, TIM LANE '08, PAUL SMITH '10, JESSICA WALLICK '09, ANDREW KRALEY '10, ANDREW STEFFENS '10, LISA GUINE ZAWACKI '91, and HILARY SCHENCK EIDAM '00.

80's KEITH McDaniel '80 stopped by the Department for a visit. Keith continues to work at Abbott Labs in Chicago where he was selected as a member of the “Outstanding Research Team” for 2011. DAVE LISSY '82 and his wife dropped by the Department while in the midst of an 800 mile motorcycle tour of NJ, DE, MD, VA, and PA. Dave lives in New Jersey and works for TestAmerica, an environmental testing firm. EILEEN KWIECINSKI GARTLAND '83 stopped by the Department last spring. Eileen, who lives in Timonium, MD, is a home health care nurse who works out of Johns Hopkins Hospital. SCOTT OWENS '83 visited campus last fall with his son, Grant, who was touring Gettysburg as a prospective student. Scott is a urologist in Camp Hill, PA. Last fall ALLISON CAMPBELL '85 was presented with the Pioneer of Science Award by the Hauptman-Woodward Medical Research Institute for her work on tooth formation and artificial bone. Allison is currently director of the Environmental Molecular Sciences Laboratory at the Department of Energy’s Pacific Northwest National Laboratory.

90's In case you missed it, DAN ALLEN '91 was featured on the College’s web site (http://www.gettysburg.edu/news_events/press_release_detail.dot?id=3346443). When he’s not teaching high school chemistry, Dan runs a community garden that was featured in Michelle Obama’s book, “Community Grown.” You can find an article Dan wrote about community gardens at http://www.energybulletin.net/52674. LONNEKE BUJTEWEG '98 is an emergency physician in Utrecht, Netherlands. MAUREEN MILLER '99 wrote to tell us that in addition to her teaching duties at the Westminster Schools in Atlanta and her travels around the globe (Kenya, Hawaii, and Alaska last year), she has opened up a bakery (www.thebunnybakery.com) with all of the profits going toward the House Rabbit Society bunny shelter in Marietta, GA.

00's CARLA COLICIGNO GALLAGHER '00 presented a seminar (“Human Genetic Variants and Lung Cancer Risk”) on campus last fall. Carla is an Assistant Professor at the Penn State University College of Medicine in Hershey. MELISSA COOK KIEHL '00 was on campus last fall for the Volunteer Leadership Summit. RAY GEPHART '02 completed his PhD at Georgetown University last spring. Ray is currently a postdoc at the Naval Research Laboratories. EMILY HAAS '04 stopped by the Department for a visit. Emily practices law in North Carolina. BROOKE KROVIC '04 moved back to Harrisburg where she works at the Pennsylvania State Department of Environmental Protection. Brooke is taking classes at Wilson College to obtain her teaching certification. BECCA GORODETZER '05 has moved from the heat of Arizona to New York City. Becca continues to work as a sales representative for Pfizer where last year she was awarded a trip to Hawaii for being in the top 5% of sales. WALT KOWTONIUK '05 was back on campus last spring conducting a leadership seminar. Walt is currently a consultant with Clarion Healthcare. Taking a break from graduate school at the University of Wisconsin, MEGAN CAMPBELL '06 returned to campus last fall to attend a wedding of her former roommate; LINDA FORT HOOPER '06 was a bridesmaid in the wedding. ERIN PODLESNY '07 hopes to defend her Ph.D. at the University of Pennsylvania this December and then begin a post-doc at MIT. Check out this link to see how Erin is using her knowledge from Spec class: http://brsmblog.com/?p=1398 . KIM GROVE '08 received a MS in Food Science from Penn State University. TED GRIMM '09 is attending graduate school in Geoscience at the University of Illinois (Champaign-Urbana).

10's

SARA MOYER '10 completed her Masters at the University of Wisconsin. Currently Sara is applying to law school.

Keep those cards, letters and e-mails coming - we enjoy hearing from you! If you can provide information about your classmates, we like that, too. For those who prefer to correspond electronically, you can find our email addresses through the departmental web page:
http://www.gettysburg.edu/academics/chemistry/