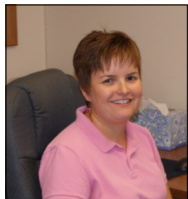


Department of Chemistry & Biochemistry Newsletter



Elizabethtown College

From the Chair



Welcome to the 8th annual Department newsletter! Within these pages, I hope that you will see evidence of engaged students, faculty, and staff members, all of whom contribute to the dynamic learning environment in which we continue to thrive. Let me take the opportunity to share a few highlights:

- Kristi Kneas** ♦ In an effort to stay connected with you, we launched the Elizabethtown College Department of Chemistry & Biochemistry Facebook Page. We hope you will “Like us!”
- ♦ In Fall 2011, E-Town’s Student Affiliates Chapter of the American Chemical was recognized by the ACS as a Commendable Chapter for its 2010-2011 activities.
 - ♦ At our annual Chemistry Awards banquet, we honored 5 students for their exceptional scholarship; Mark Madachik for his service to the department during Gary Hoffman’s sabbatical leave; and Kris Tussing, for the exceptional administrative support she continues to provide.
 - ♦ Eighteen departmental majors were engaged in independent research for credit during the 2010-2011 academic year. Students reported results of their research at the UMBC Undergraduate Research Poster Session (9 total-5 divisional first prizes!), the Intercollegiate Student Chemists’ Convention (5 total-1 first prize!), and E-Town’s Scholarship and Creative Arts Day (17).
 - ♦ Eight departmental majors and alumni were co-authors on one or more of 4 peer-reviewed publications in the Journal of *Organometallic Chemistry*, *Organometallics*, *Analytical Chemistry*, and the *European Journal of Inorganic Chemistry*: Mary (Harner) Carroll ('06), Alaina DeToma ('09), A.J. Fleisher ('07), Cameron Gettel ('11), Geoffrey Quinque ('11), Matthew Myers ('11), Christopher Strulson ('09), and John Tellis ('12).
 - ♦ Eight students conducted independent research on campus with 3 different faculty members during Summer 2011, and 4 students took advantage of off-campus research experiences and industrial internships.
 - ♦ Four juniors were inducted into the Chemistry Honor Society, Gamma Sigma Epsilon, and joined 6 senior members

In my own research and teaching, I enjoyed an enriching year and the opportunity to work with record enrollments of students in introductory chemistry, analytical chemistry, and instrumental analysis. My research students (Matt Myers, '11; Zac Kulp, '11; Justin Warner, '11; John Tellis, '12; Sarah Strohecker '12; Liz Costello '12; Mollie Mares, '13, and April Hang '13), some of whom have embarked on collaborative projects with the MacKay and Rood groups, made significant progress in the lab. Results of our efforts were presented at a number of meetings, included in our recent *Analytical Chemistry* paper (2011, 83, 928-932), and incorporated into an NSF proposal we submitted in July. At home, Garrison, now 4 ½, keeps Daniel and me busy with his varied interests, which include piano, soccer, all things Scooby Doo, and determining the limits of his parents’ ability to answer his many questions. My favorite quote when I was unable to answer one such question was: “Mom, we should do an experiment to find out.” Indeed! I wish you a fulfilling year that is rich with interesting questions!

Fall 2011
Volume 8, Issue 1

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Dr. E. Jane Valas '79
(center) and
Summer Research Students
she supported.



New Chem Club Logo

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Elizabethtown College
Chemistry Club

2011 Stambaugh Award Winner



The 2011 O. F. Stambaugh Alumni Award winner is Dr. Brian Barr '91 (r). Dr. Barr was presented the award during Homecoming ceremonies on Saturday, October 15, 2011, in the Masters Center. Also pictured are Dr. Kristi Kneas, chair of the Chemistry and Biochemistry department (l); and Sharon Duff Barr '91 (c), spouse of Dr. Barr and also an Etown Chemistry alum.

Dr. Brian Barr is Associate Professor and Chair of the Chemistry Department at Loyola University Maryland. Born and raised in western Maryland, he

graduated from Elizabethtown College in 1991 with a B.S. in biochemistry, *summa cum laude*. Brian went on to graduate school at Cornell University where he earned his Ph.D. in 1997 in Biochemistry, Molecular and Cell Biology, focusing on enzyme mechanism and structure-function relationships. Brian joined the faculty at Loyola in 1997 where he regularly teaches biochemistry (two semesters, lecture and lab) to Loyola chemistry, biology and biochemistry majors. Brian was tenured and promoted to Associate Professor in 2003. Currently he serves on a variety of university committees (mostly student-focused) and has been the Chair of the Chemistry Department since 2006. Brian's current research actively involves Loyola students and examines the kinetics and mechanism of cellulose-degrading enzymes, with the goal of modifying these enzymes to make them more useful for the production of biofuels. In his free time Brian enjoys spending time with his wife Sharon (a fellow Etown class of 1991 chemistry major), their two children and their dog. He loves to travel and is a fan of baroque music.



ΓΣΕ

On Thursday, February 3, 2011, four new members were inducted into the Rho Eta chapter of Gamma Sigma Epsilon, the national chemistry honor society. Only students with a grade point average of 3.3 or higher in chemistry are invited to join. Pictured at right in the front row (l-r) are new members Ayusa Sinha '12; John Tellis '12; Syeda Ahmad '12; and Timothy Goldkamp '12 (photo). In the back row (l-r) are Dr. Jeffrey Rood, advisor; Geoff Quinque '11, secretary; Kurt Deschner '11, treasurer; Cameron Gettel '11, president; Zachary Landis '11, vice president; Katie Diamond '11; and Zachary Kulp '11, sergeant-at-arms. We congratulate these outstanding new members.



Gamma Sigma Epsilon

**FACULTY NEWS****Tom Hagan**

As the end of summer approaches, I can almost hear the students arriving on campus with earnest anticipation of a challenging and exhilarating school year. Nah, it's just Kris Tussing reminding me to turn in my portion of the newsletter. Not wanting to let anyone down, I am compelled to oblige. The past year flew by. Graduation seems like a distant memory, but certainly a great memory. We had a great class graduate. The weather cooperated which was especially nice since the department hosted a graduation breakfast for all the chemistry department graduates at my farm. A good time was had by all! It was a culmination of a great year. Kurt Deschner made some progress with his project in establishing some baseline measurements for determining cortisol levels. His work will be continued this coming academic year by Syeda Ahmad. This past spring I taught my Cancer and AIDS class and had the good

fortune of taking my class to Washington, D.C. to attend one of the FDA advisory committee meetings. What an amazing opportunity for the students to see the formulation of public policy first hand. As the school year begins in a little over a week, I look forward to seeing how an initiative of the First-Year program unfolds. After a multi-year hiatus, we are implementing a common read for all the First-Year students. We have almost 150 student, staff, and faculty volunteers working with the First-Year students through book discussions. We will be discussing a truly amazing book, *The Immortal Life of Henrietta Lacks*. If you ever have the opportunity to read this book, PLEASE do so, it is a phenomenal read. We are especially excited that the author, Rebecca Skloot, will be coming to campus in the spring. Next year I can update you with the outcome of this project. In the meantime, I hope all is well with you. And please, keep in touch; we very much enjoy hearing from you!

**Gary Hoffman**

My sabbatical year turned out to be a great experience on many levels. I worked with Dr. Lawrence Pratt at Tulane University on the theoretical treatment of a supercapacitor device constructed from a forest of carbon nanotubes in a dielectric medium of propylene carbonate. Such devices are expected to be of value for the storage of energy at electric power plants and the particular model studied is a recently proposed candidate. We obtained some interesting results on the fundamental theory of carbon nanotubes when charged, resulting in two manuscripts that we plan to submit for publication. There are some *ab initio* molecular dynamics (AIMD) simulations still being performed that we hope will teach us more about these interesting systems.

I met and discussed science with a number of theoretical chemists in the New Orleans area. I also presented my work at several venues. I applied for and received computer time on some massively parallel systems that I am still using to perform the

simulations. I learned a lot, made some useful contacts, and made some progress on my research.

I also spent some time seeing the sights in the area. There is so much to see and do – not just in New Orleans, but in the nearby area. I visited the French Quarter a number of times, especially with visitors, but rarely went to Bourbon Street. The best jazz is on Frenchmen Street. There are a number of museums, historical buildings, restaurants, and a great zoo. I did some hiking in swamps nearby, did some boating, saw Avery Island (home of Tabasco Sauce) and nearby plantations, and even ran with the bulls (in NOLA, that is). I also played my trumpet with several musical groups in the area. Then there was Mardi Gras, Jazz Fest, Zydeco Fest, and many others.

On the personal side, my daughter Alyson is now working for DuPont and enjoying it. Cynthia has decided to focus her attentions on jewelry making, a passion of hers for many years.

It was difficult to leave New Orleans, but not difficult to return to E-town. The break from teaching and administrative tasks was welcome and now I'm ready to get back into teaching.

**James MacKay**

Hello Alumni! I'm pleased to report on another great year. Here are some highlights from 2010-2011: I continued my responsibilities teaching Organic I and II. For the second year in a row, the O-Chem II class scored well above the national average for the ACS-Organic Exam. I also had the chance to teach Advanced Organic Chemistry this year and enjoyed incorporating a unit on the classic total synthesis of Monensin.

Our work in asymmetric catalysis and heterocycle synthesis continues. I also initiated some collaborative projects with Kristi Kneas for the sensing of lactate. Numerous students have been involved in organic research including Corey Green, Steve Motika and John Tellis ('12) and Lydia Whipple ('13). The senior member of the group, Zach Landis ('11), successfully completed his senior thesis and honors dissertation on "Studies of an Allenolate Variant of the Intramolecular Rauhut-Currier Reaction". He will be missed and we wish him the best in medical school.

I co-authored two manuscripts (both from my

pre-Elizabethtown days). *J. Org. Chem.* **2010**, *75*, 4674 & *Org. Lett.* **2011**, *13*, 3214.

This year was the first full year of operation of our new Varian 400 MHz NMR spectrometer. In July, Jeff Rood and I attended new user training in Carey, NC. I was a judge in two local science fairs: the Lititz Area Mennonite School 8th grade fair, and the North Museum Science and Engineering Fair held at F&M. I have been active in service to the college as a member of the Core Program committee, chair of the nominating committee, and member of the Health Professions Advisory committee. This year marked the graduation of the first cohort of students with which I spent an entire four years. They were a great joy to work with and will be sorely missed.

Outside of work I have mostly just been learning how to be a dad. Leah is 1 now (born the day before school started in the Fall last year). Though we have begun chemistry lessons, I have not made it past hydrogen on the periodic table. We were able to take a family cruise to the Bahamas in May and a relaxing week at the beach in August.

I hope you are all doing well. Do come visit if you are in town!!

**Dick Papez**

This is my second year at E-town College. I teach forensic science (lecture and lab), general chemistry and organic labs. Except for general chemistry lab, all the courses listed above have been a new teaching experience for me. My scientific background has been most helpful. Nonetheless, much planning and review has been necessary to prepare lessons and make them interesting. Staying ahead has often meant late nights and long weekends, but this new way of life has been very rewarding. I have been delighted that the students are polite, friendly and show a keen interest in the subjects being discussed.

The forensic courses are particularly fascinating because most students are not chemistry nor science majors. However, these same classes are a challenge because of the glamorous portrayal of crime investigation shown on TV CSI programs. The science must be taught and the discipline

maintained to master the subject while keeping it interesting. One high point last year was creating crime scenes in forensic lab for investigation. These scenes included many different types of evidence. In an effort to make them true to life many of these did not lead to solving the crime and many leads went nowhere. This was frustrating for the students, but taught them our world is complex and evidence does not always coordinate to neatly solve a crime.

I would be remiss if I did not thank my colleagues for the tremendous help and encouragement that I have received, especially the chemistry staff. Without their help, advice, and patience I would be at a total loss. Finally, I must mention Mike Bierbower, a colleague from my previous years in industry who is the chemical hygiene officer in the Chemistry department. He had a similar job at Armstrong where we both worked. It's been nice to see a familiar face from the past.

I am looking forward to this coming year and whatever it brings at E-town College.

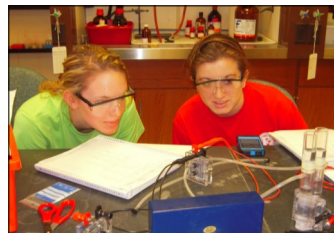
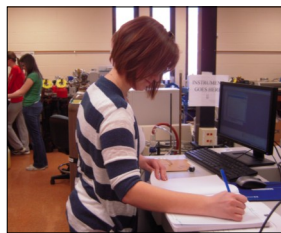
**Jeffrey Rood**

Sometimes it's hard to believe that I've already been at Elizabethtown for two years. I've had such a great experience during this time. In the past year, I taught courses in general and inorganic chemistry. Additionally, I taught advanced inorganic chemistry for the first time. I decided to focus mainly on organometallic chemistry and relied fairly heavily on the primary literature as a basis for discussion during the course. Overall, I was quite pleased with the results and I think the students enjoyed seeing the many applications of inorganic chemistry in other fields such as organic and polymer chemistry. This semester I'll be teaching two lecture sections of general chemistry and two labs. I'm anxious to meet our group of new majors as well as the many other students who will be taking the course.

On the research side, I've been fortunate to work with a number of great students. We continue to work in the areas of solid-state materials, through funding from Research Corporation, and in coordination

chemistry. We've established a nice collaboration for X-ray crystallography at the University of Notre Dame and the synchrotron radiation source at Lawrence Berkeley National Lab. Ashley Huttenstine ('12), Tim Goldkamp ('12), Steve Boyer ('12) and Liz Costello ('12) (in collaboration with Kristi Kneas) all carried out research in the lab over the summer. Senior Ayusa Sinha and junior Zak Schmidt will also join the group this fall. My former student, Geoff Quinque ('11) and I published the results of our work with magnesium complexes in the *European Journal of Inorganic Chemistry*. Additionally, Ashley Huttenstine and I recently submitted a manuscript to *Acta Crystallographica* dealing with a rhodium carbene complex.

On a personal side, my wife Liz and I just bought our first house. We've moved to Maytown, which provides a nice, scenic commute to campus for me each day. Between the responsibilities of owning a home and chasing after our dog, we are definitely kept busy. In closing, I always enjoy seeing alumni, so please feel free to stop in and say hello when you come to campus!

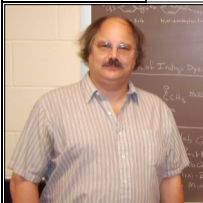
**Charles Schaeffer**

Our research in main group organometallic chemistry of silicon and germanium compounds continues. Cameron J. Gettel '11 worked during summer of 2010 and in both semesters of the 2010-2011 academic year. The most recent research manuscript containing Elizabethtown student coauthors (underscored) is: C.H. Yoder, T.M. Agee, A.K. Griffith, C.D. Schaeffer, Jr., M.J. Carroll, A.S. DeToma, A.J. Fleisher, C.J. Gettel, A.L. Rheingold. Use of ^{73}Ge NMR Spectroscopy and X-ray Crystallography for the Study of Electronic Interactions in Substituted Tetrakis(phenyl)-, -(phenoxy)-, and -(thiophenoxy)germanes. *Organometallics* **2010**, *29*, 582-590 (DOI: 10.1021/om900905c).

Recent poster and oral presentations include: C.J. Gettel and C.D. Schaeffer, Jr., "Synthesis and Multinuclear NMR of Germanium-Phosphorus Complexes," Scholarship & Creative Arts Day, Elizabethtown College, Tuesday, April 19, 2011.

Our long-time collaboration with Professor Claude Yoder, Charles A. Dana Professor of Chemistry at Franklin and Marshall College, began in Fall of 1966 (for a history, see: <http://www.fandm.edu/chemistry/yoder-schaeffer-collaboration>).

I continue supervising research students in my role as A.C. Baugher Professor of Chemistry Emeritus and exploring aspects of digital photography.



Hello, I am David Yeagley. I am an adjunct instructor teaching various Biology classes at Harrisburg Area Community College since 2004 and various Chemistry labs at

David Yeagley Elizabethtown College since 2006. As a dual major, I acquired a B.S. in Chemical Engineering and a B.P.S. in Biology from Clarkson University. I earned my Ph.D. in Biochemistry and Molecular Biology from the Pennsylvania State University College of Medicine in Hershey. This semester I am teaching Environmental Science, Introduction to Human Biology and Microbiology at the York Campus of HACC, as well as the Organic Chemistry II lab and Techniques in Biochemistry I lab at Elizabethtown. During my “free time” I enjoy hiking and camping, as well as music. As such I am a long-standing member of the Blues Society of Central Pennsylvania. I am grateful to Elizabethtown College for the continued opportunity to teach at such a fine institution and to be an asset to the Department of Chemistry and Biochemistry.

Thank you, Dr. Madachik



Dr. Kristi Kneas, (*r*) chair of the Chemistry and Biochemistry department, thanked Dr. Mark Madachik at the annual Department Awards banquet as he concluded his year as visiting professor. Dr. Madachik taught physical chemistry while Dr. Gary Hoffman was on sabbatical for the 2010-2011 academic year.

Relay for Life

Relay for Life, Pie the Professor participants are Dr. Jon Coren, chair of the Biology department (*l*) and “good sport” Dr. Jeff Rood, assistant professor of Chemistry.



Career Exploration Event

On April 6, 2011, the Chemistry and Biochemistry department in conjunction with the College’s Career Services department hosted its second Career Exploration Event. This gathering gave students an opportunity to talk with ten invited guests representing a wide variety of chemistry-related career paths. The following organizations were represented: Agilent Technologies; Berry Plastics; Bureau of Forensic Services, Harrisburg Office; D.F. Stauffer Biscuit Co., Inc.; Dow Chemical Co.; Elizabethtown High School; Elsevier Health Sciences, Medical Education Division; GlaxoSmithKline; Lancaster Laboratories; and the University of Florida.





STUDENT NEWS



2011 Graduates

Kurt Deschner
University of British Columbia
Medical School

Cameron J. Gettel
Pennsylvania State University
College of Medicine

Matthew M. Myers
Merck Pharmaceuticals

Kathryn Diamond
The Hershey Company

Zachary M. Kulp
Temple University
Kornberg School of Dentistry

Geoffrey T. Quinque
GlaxoSmithKline

Bradley D. Gallagher

Zachary C. Landis
Pennsylvania State University
College of Medicine

Justin M. Warner

Michael R. White
Graduate School
University of Maryland

Students recognized by the Department of Chemistry & Biochemistry for their educational accomplishments:



Elizabeth J. Crow '14
First Year Chemistry Award



John Tellis '12
Inorganic Chemistry Award



Lydia Whipple, '13
POLYED Organic Chemistry Award



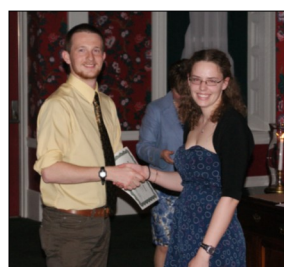
John Tellis '12
Analytical Chemistry Award



Cameron J. Gettel '11
Biochemistry Award



Kurt Deschner, '11
ACS Outstanding Senior Award



Lydia Whipple '13
ACS Student Affiliate Award



Cameron J. Gettel '11
A.C. Baugher Award

Student Presentations at Local, Regional and National Meetings*



Pictured above is the student research group of Dr. Kristi Kneas (*front row center*). They are: (*front row, l-r*) Minqi Hang and Mollie Mares; (*back row l-r*): Sarah Strohecker, John Tellis, Zachary Kulp and Matthew Myers. Their projects are listed below.

Development of a Luminescence-Based Lactate Sensor Using Smart-Hydrogels and an Environment Sensitive Luminophore by Minqi Hang, Matthew Myers, and Dr. Kristi Kneas, presented at UMBC, ISCC and SCAD.

Authentication of Questioned Documents Using High Performance Liquid Chromatography by Mollie Mares with Dr. Kristi Kneas, presented at SCAD.

Development of a Luminescence-Based Alcohol Sensor for Forensic Applications by Sarah Strohecker and Dr. Kristi Kneas, presented at SCAD.

Synthesis of Dapoxyl Derivatives for Applications in Luminescence-Based Sensing by John Tellis, Dr. James MacKay, and Dr. Kristi Kneas presented at UMBC and SCAD.

Low Cost Preparation of Membrane Electrode Assemblies for Polymer Electrolyte Membrane Fuel Cells by Zachary Kulp and Dr. Kristi Kneas, presented at ISCC and SCAD.



Dr. James MacKay (*r*) is pictured with his student research group (*l-r*): Corey Green, Stephen Motika, John Tellis, and Zachary Landis. Their research projects are listed below.

Development of a Green Discovery Laboratory Utilizing Allylic Rearrangements by Corey Green and Dr. James MacKay, presented at SCAD.

Functionalization of Cyclopentenones and Cyclohexenones Obtained through an Intramolecular Rauhut-Currier Reaction by Stephen Motika and Dr. James MacKay, presented at UMBC and SCAD.

Studies on an Allenolate Variant of the Rauhut-Currier Reaction by Zachary Landis and Dr. James MacKay, presented at UMBC, ISCC, and SCAD.



Pictured above is Dr. Jeffrey Rood (*front row center*) and his student research group. They are: (*front row, r*) Ashley Huttenstine; (*back row, l-r*) Michael White, Geoffrey Quinque, Steven Boyer and Timothy Goldkamp. Their projects are listed below.

Synthesis and Characterization of Cationic Transition Metal-Carbene Complexes by Ashley Huttenstine and Dr. Jeffrey Rood, presented at UMBC, ISCC, and SCAD.

Metal Organic Frameworks Constructed from Phosphinic Acids and Divalent Metals by Michael White and Dr. Jeffrey Rood, presented at UMBC, ISCC, and SCAD.

Studies into the Structure and Reactivity of Bis (salicylaldiminato) Magnesium Complexes by Geoffrey Quinque and Dr. Jeffrey Rood presented at UMBC and SCAD.

Synthesis and Luminescent Properties of metal-Organic Frameworks by Steven Boyer and Dr. Jeffrey Rood presented at SCAD.

Preparation of Organomagnesium Complexes as Potential Initiators for Ring-Opening Polymerization Reactions by Timothy Goldkamp and Dr. Jeffrey Rood presented at SCAD.



Dr. Tom Hagan (*center*) is pictured with his research students Kurt Deschner (*l*) and Katie Diamond (*r*). Their research projects are listed below.

Developing Low Cost methods for the Non-Evasive Detection of Cortisol in Children by Kurt Deschner and Dr. Tom Hagan, presented at SCAD.

Giant Unilamellar Vesicles as Models for Exploring Interactions of Catechins with Cancer Cell Membranes by Kathryn Diamond and Dr. Tom Hagan, presented at SCAD.



Pictured above is Dr. Charles Schaeffer and his research student Cameron Gettel. Cameron's research project is listed below.

Synthesis and Multinuclear NMR Studies of Germanium-Phosphorus Complexes by Cameron Gettel and Dr. Charles Schaeffer, presented at SCAD.



Summer Research

Steve Boyer, a senior chemistry major, studied the synthesis and luminescent properties of metal organic frameworks with Dr. Jeffrey Rood.

Elizabeth Costello, a senior chemistry education major, was involved in research in synthesis and characterization of transition metal complexes for use in luminescence applications. She worked with Dr. Kristi Kneas and Dr. Rood.

Tim Goldkamp, a senior chemistry education major, spent his summer working with Dr. Rood researching preparation of organomagnesium complexes as potential catalysts for polymerization reactions.

Ashley Huttenstine, a senior chemistry education major, worked with Dr. Rood on two research projects. The first was synthesis and characterization of cationic transition metal, and the second was carbene complexes and metal organic frameworks comprised of alkaline earth metals and phosphinate compounds. In August, Ashley and Dr. Rood published an article in *ActaCryst* entitled *A cationic rhodium(I) N-heterocyclic carbene complex isolated as an aqua adduct*.

Mollie Mares, a junior forensic chemistry major, spent the summer as an intern in the Department of Drug Metabolism and Pharmacokinetics at Merck & Co., Inc., developing an assay for determining the level of siRNA binding to plasma or serum proteins using techniques such as ultrafiltration and reverse transcriptase quantitative polymerase chain reaction. This is thought to be important for understanding the pharmacokinetics of an administered siRNA.

Steve Motika, a senior chemistry major, was involved in the solvent manipulations in an allenolate variant of the Rauhut Currier reaction under the supervision of Dr. James MacKay.

Zachery Schmidt, a junior biochemistry major, participating in an REU program did research with Dr. Wayne E. Jones and his graduate student Ken Skorenko at Binghamton University. The main emphasis of their research was to find affordable, flexible, organic solar cells for industrial use. Zak specifically researched replacing the expensive transparent conducting oxide layer with a cheaper, safer material.

Sarah Strohecker, a senior forensic chemistry major, studied the development of luminescence-based alcohol sensor for forensic applications with Dr. Kneas. Sarah also interned at Fenner Precision Corp., Manheim, PA, which involved the analysis of the degradation of pre-polymer mixtures for polyurethane manufacturing.

John Tellis, a senior biochemistry major, participated in the National Science Foundation REU program at Vanderbilt University in Nashville, TN. John worked with Dr. Jeffrey Johnston to apply the enantioselective chiral proton catalyzed α -Henry reaction to the synthesis of unsymmetrical derivatives of the Nutlin class of anticancer therapeutics. Two different derivatives were synthesized and their chemotherapeutic potency was tested by Kip Guy at St. Jude's Children's Research Hospital.

Lydia Whipple, a junior biochemistry major, and **Corey Green**, a senior chemistry major, worked with Dr. MacKay on the studies of intramolecular cyclization utilizing nucleophilic catalysts and isocyanates.



STUDENT AFFILIATES

The Student Affiliates of the American Chemical Society had a very exciting 2010-2011. Major events from the previous year included fundraising at Hershey Park, adding new experiments to Into the Streets, and participating in Relay for Life for the second year. About nine to ten students worked at Hershey Park for a seven hour shift, selling food at various stands throughout the park. The group was able to earn almost \$400. For Into the Streets old experiments were replaced with new, exciting ones. One new experiment involved freezing objects like banana peels and rubber gloves. The children watching were jumping out of their seats with excitement. Students and professors took part in Relay for Life. Participation increased from the previous year allowing for two, representative teams for the Club: Chem Boyz and Chem Ladies. Donations were collected by individuals and \$850 were raised at the Relay For Life Midway Fair through “pie your professor” and a cornhole tournament in which prizes were offered. Additionally the Elizabethtown Chemistry Club was awarded the commendable award for 2010-2011 by the American Chemical Society, and is looking forward to a new year with new events. The new cabinet consists of Ayusa Sinha, President; Sarah

Strohecker, Vice President; John Tellis, Secretary; Syeda Ahmad, Treasurer; and Lydia Whipple, Events Coordinator.

In the “International Year of Chemistry” the Club is making an extra effort to share their love for chemistry with the campus and the greater Elizabethtown community. Plans include holding monthly demonstrations in the Student Center during the lunch hour and performing experiments at Elizabethtown Area Nursery School during National Chemistry Week. In a partnership with the Biology department clubs (Tri Beta and Medicus) the Chemistry Club will be hosting a meet and greet with Dr. Roger Hoerl, the recipient of the Elizabethtown Educate for Service award, on October 20th. The Club would also like to bring in more graduate school speakers in an effort to better guide students with their future plans. Fundraising for students attending the American Chemical Society national meeting in San Diego are underway through volunteering at Hershey Park, selling water bottles and t-shirts at Homecoming and providing laboratory materials for first-year students. If you have any suggestions or questions about the Chemistry Club, feel free to email: chemclub@etown.edu.





From the E-Mailbag



I have finished graduate school, medical school, OB/GYN residency, and a Maternal Fetal Medicine fellowship. I really enjoy my career, which focuses on taking care of women with high risk pregnancies and performing ultrasound for prenatal diagnosis of birth defects. I have been at Wake Forest University for all of this training and been on faculty as Assistant Professor for the last two and a half years. I have made the decision to go into private practice and we are moving to Oklahoma. I am joining some people I know from years ago. I have two children, who are 7 and 4, so they keep us busy, too!

Jennifer Green Smith '93

I recently obtained a job with the Hershey Company in the Analytical Research and Services department. I must say that everything I am working on leads back to analytical classes. I am working on two different projects: one with fatty acid distribution analysis and the other with antioxidants. In the antioxidant research I'm doing a lot of ORAC assays! It was nice to have prior experience before jumping into ORAC with chocolates. I also do a lot of other antioxidant assays like DMAC and total polyphenols. It's quite an exciting field to be in right now with chocolate and analytical research.

Kathryn Diamond '11

Greetings, E-Town! I hope everyone is enjoying the new academic year. In August I finished my Ph.D. studies at the University of Pittsburgh and promptly moved to Boulder, CO, to begin a postdoc appointment in the group of Jun Ye at JILA, a joint venture between NIST and the University of Colorado. It is a world leader in atomic, molecular, and optical physics. Besides exploring new opportunities in research, I also am enjoying hiking in the picturesque Colorado Rockies, and will be skiing as much as possible in the coming months. I'm sure Tom Hagan is jealous! Best wishes everyone!

Adam J. Fleisher '07

I have started my first online graduate class. During the summer I decided I wanted to pursue my Master's degree while still working fulltime at Lancaster Labs. Since I enjoy working in the Environmental division, I wanted to pursue something environmentally related. The Master's program I'm in is Environmental Policy and Management. This will allow me to continue at Lancaster Labs and potentially work for the EPA. The school I'm taking classes from is American Public University. Each class is an 8 week session so I should finish in 3-4 years.

Laura Krieger '10

I am currently working as a Senior Scientist at GlaxoSmithKline in King of Prussia, PA. I have been employed with GSK for 4 years since obtaining my M.S. in Chemistry from Villanova University in 2007. I work in early phase research and development providing purification support for both the pattern recognition receptor and heart failure target areas. My husband, **Ryan Leister '05**, and I reside in Oxford, PA.

Ashley Sprenkle Leister '05

I'm getting settled at Vanderbilt, working hard to purify protein and getting my project running. I like Vandy, but the central time still throws me. The lab is very big (almost 25). There are to be three groups in the lab: synthetic chemists, structural biologist, and cell biologists. Dr. Fesik seemed adamant that I stick to just structural biology, which is fine. I'm about to apply for fellowships.

Mary Harner Carroll '06

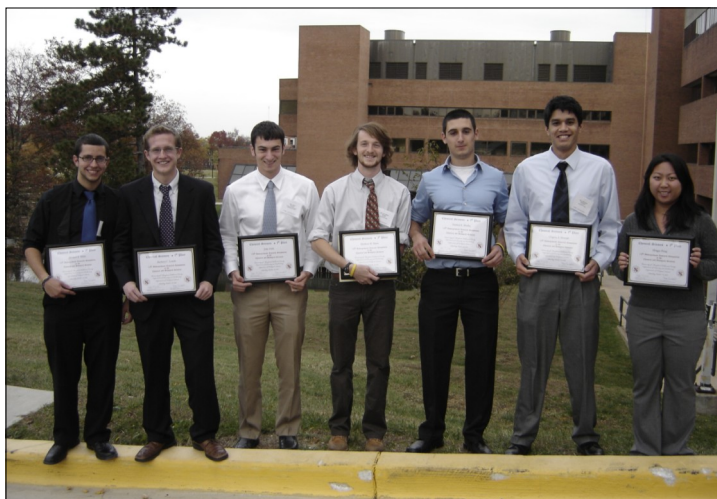
**Be sure to check the
Etown Chemistry
Facebook page
for the
latest updates**



Elizabethtown College

DEPARTMENT OF CHEMISTRY & BIOCHEMISTRY
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First Place Recipients



Pictured above are the 2010 Elizabethtown College first place recipients at the 13th Annual University of Maryland Baltimore County Undergraduate Research Symposium in the Chemical and Biological Sciences. They are: Michael White '11, Zachary Landis '11, John Tellis '12, Matthew Myers '11, Stephen Motika '12, Gregory Berends '13, and Minqi Hang '13. All are majors of Etown's Chemistry and Biochemistry department.

A Special Thank You

*To the faculty, students and alumni
who contributed to this newsletter.*

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