

### From the Chair



Gary Hoffman

Hello again from E-town! Another year has gone by and we have another edition of the newsletter to produce. We'd like to provide you with news from your alma mater. There have been a lot of changes – I don't think that will ever change! New personnel, new courses, new directions. Take a look at what we've been doing and plan to do. We invite you to provide us with your feedback in whatever form is convenient for you. This is your department. Help us make it as great as possible.

We have a new faculty member. Dr. Lauren Gibson is our new analytical chemist, taking over from Krisi Kneas, who (you will remember) took on the role of Dean for Academic Affairs & Faculty Development. Lauren received her BS from Murray State University and her PhD from

Vanderbilt University. Her thesis focused on nanoparticle-based signal amplification strategies for detecting biomolecules. She developed methods and diagnostic devices for the detection of

diseases in low-resource settings. She did some field study on these devices in Zambia. Lauren has taken on her teaching duties with enthusiasm and is currently setting up her research lab. Welcome, Lauren.

We also welcome Michele Herndon, our new administrative assistant. Michele has fit in nicely and has the department office running smoothly.

Another change is that we don't have James MacKay around this year. Well, at least not as much. James is on sabbatical leave at Binghamton University. He has received an NSF grant that is helping fund his work for the next three years and he is taking a full year off from his teaching duties at E-town. He is close enough that we see him every now and then, though.

To teach James' classes, we have hired another member to the department, Dr. Jon Amoroso. Jon received his BS in Biochemistry from UMass, Dartmouth and his PhD from UMass, Amherst. He has taught at the College of the Holy Cross (Worcester, MA) and Bloomsburg University.

A lot of new faces this year. Almost like a new department. On a sad note, there are a couple of faces we will be missing. Jack Hedrick passed away suddenly last fall and Zoe Proctor passed away this last September. I've heard many fond comments about both Jack and Zoe.

This department continues to be active in research. Twelve students performed research with faculty during the academic year. This past summer, four students performed research at E-town and three in addition performed research elsewhere, one at Virginia Tech, one other at Imperial College in London, and the third at Eötvös Loránd University Institute of Chemistry in Budapest. Our students get around! Two students presented at the Intercollegiate Student Chemists Convention in April. Two students successfully defended their honors theses. Our majors are incredibly active.

We are looking forward to several events in the coming year. We are hosting the 82nd Annual Intercollegiate Student Chemists Convention in April. We are also planning a Career Expo in February. If you are interested/willing to participate in the Career Expo, we'd love to hear from you. Please contact us. Finally, we are planning to send a group of students to the national ACS meeting in NOLA next March.

But you can read more about these things in the rest of the newsletter. As far as my activities are concerned, I taught the usual set of courses. I am regularly teaching general chemistry now and, of course, I taught physical chemistry. Ryan Thomas continued to perform research with me. He prepared a poster for SCAD last April and another for SCARP in the summer. In the summer, he continued some of the research that Chad Cronce started on. He is taking a closer look at hydrogen fluoride, performing some high quality CCSD(T) calculations for this project. A first-year student, David Krebs, has expressed an interest in computational chemistry and is exploring the software we have. Some of the work I performed at Tulane during my sabbatical (way back in 2010-11!) is still bearing fruit. Oral presentations on this work were given at several meetings in the last year: the scientific workshop on Ions in Solution in Telluride; the Asilomar conference on Polymers for Fuel Cells, Energy Storage, and Conversion; and the APS March meeting. I have now increased the cluster computer to 160 processors and it is running with a 10 Gigabit Ethernet network. After making some adjustments to the operating system and software, it is running more efficiently.

I am still playing the trumpet and I'm still having fun with it. And I think I'm getting pretty good! Alyson is close to finishing her PhD at Duke. She presented at a conference in Prague last summer and is thinking of a possible post-doc in Europe after she gets her PhD. Cynthia is looking to change careers again. She is attending school for massage therapy. Carlos is doing well with his business in Miami. There was some excitement with Irma earlier this year. Susie and I have done some traveling this past summer. Stop by and I can fill you in on the details.

Enjoy the newsletter. Please let us know what you are up to.

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Commencement 2017



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**Department of Chemistry & Biochemistry Newsletter** 

### 2017 Stambaugh Award Winner



Dr. Gary Hoffman, Chemistry department chair (r), presents the 2017 O. F. Stambaugh Outstanding Alumni Award to Cindy McCrone Bergethon, M.D. Dr. McCrone Bergethon received the award during Homecoming ceremonies on Saturday, October 21, 2017, in the Masters Center.

The recipient of the O. F. Stambaugh Chemistry Alumni Award for 2017 is Dr. Cindy McCrone Bergethon, class of 1971. Cindy received a BS in Chemistry-Medical Technology from Elizabethtown College in 1971. She started a career as a microbiology technician, receiving an MS in Clinical Microbiology from Thomas Jefferson University along the way and working her way up to division head by 1979. Career direction changed and Cindy attended Jefferson Medical College, receiving an MD in 1983. As an Infectious Disease physician, the timing was perfect for



On Thursday, March 2, 2017, six 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.

*New members standing in the rear (left to right):* 

Aaron Rathsam, Kayla Hess, Morgan Chambers, Eric Zimmerman, Colby Schweibenz and Amanda Williams.

The faculty advisor is Dr. Jeff Rood. We congratulate these outstanding students.

her to "hit the ground running", as she puts it. The HIV syndrome was first described in 1982 and little was known at that time about how it was caused or transmitted. Yet, physicians were treating those with the symptoms and Cindy was in the front lines, applying advances as they became available. Her career spanned a range in time from "all of them dying within 2 years, to almost all of them living a normal life." Cindy remained abreast of advances in the field, with additional training in an Internal Medicine Residency at Boston City Hospital and an Infectious Disease Fellowship at the Brigham & Women's and Beth Israel Hospitals. She is also certified as an HIV Specialist by the American Academy of HIV Medicine. One can tell Cindy truly cares for her patients and she has made a difference in many lives. Her career is an excellent example of "Educate for Service" and we are proud to present the Stambaugh Award to Cindy McCrone Bergethon.





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### FACULTY NEWS



Hi Everyone! My name is Lauren Gibson and I am the new analytical chemist here at E-town. I completed my dissertation titled, "Development of Sensitive Biomolecule Detection Strategies for Low-Resource Settings", under the direction of Dr. David Wright at Vanderbilt University this past March. Though it is an adjustment moving from Nashville, TN to E-town, I am enjoying the slower pace and beautiful rolling hills of Lancaster County.

Lauren Gibson

As a little background on me and my previous work, I completed my undergraduate degree in chemistry at Murray State University in Murray, KY, which is my hometown. The following fall I began the chemistry Ph.D. program at Vanderbilt University and soon after joined Dr. Wright's research group. During my time at Vanderbilt, I worked on several interesting projects all related to the development of medical diagnostics for low-resource settings with specific application to malaria. My primary work looked at using porphyrin nanoparticles as signal amplification detection methods for diagnostics as they are sensitive but also simple and stable relative to commonly used enzyme-based methods. If you are interested, some of this work has been published in Analytical Chemistry (Anal. Chem. 2016, 88 (11), pp 5928-5933). My other projects were much more collaborative and focused on field deployable diagnostics for malaria. As such, I was able to take a couple trips to Zambia for field testing. The results from



There's been a number of changes in the department this year. Michele Herndon is now charged with keeping everyone in line as the departmental administrative assistant. Kris Tussing would be pleased that Michele has accepted the challenge without complaint and is quite Tussingesque in her ap-

Tom Hagan

proach to getting what she needs! It is rather quiet without having James MacKay around to cause his usual ruckus! Though the hallways are definitely too quiet, we are excited for his opportunity to be taking a full year sabbatical. We are thrilled to have Jon Amoroso (James' replacement) and Lauren Gibson (new analytical chemist) in the department now. We look forward to getting to know them better through the year! The past year has been pretty status quo. Colby Schweibenz, in preparation for a semester abroad, did some of her senior research with me this past summer, continuing her exploration of giant unilamellar vesicles. I have also been working with James MacKay through the Integrated Laboratory

course experience on the development of nucleobases for use with peptide nucleic acids to probe recognition of double stranded RNA. Though there was no trip to the national ACS meeting this past year, the Integrated Lab I students and I have our eyes set on New Orleans next spring! Please keep in touch, w



next spring! Please keep in touch, we really like hearing from you!!

our most recent trip have been recently published in *Malaria Journal (Malar. J.* **2017**, 16:350).

All through graduate school my goal was to find a job teaching undergraduates, so I am thrilled to get to do just that here at E-town. This semester I will be teaching general chemistry lab, laboratory methods and advanced instrumental methods. I will also have one student (Lacey Mac-Rhyann, '18) working with me to set up my research lab and get my research project off the ground. As I begin research here at E-town, I am looking to apply my previous experience with nanoparticles and diagnostics to the development of a simple, sensitive and costeffective test for heavy metals in drinking water. Needless to say, I am excited about all the opportunities I will have at Etown this year and am looking forward to becoming a part of this community.

Outside of the lab, I love anything outdoors. Playing sports with friends, hiking and traveling are my favorite ways to spend my time. This summer, I was able to travel to three na-

tional parks with family and friends. As would be expected, I had a great time exploring the canyons of Utah and unbelievable landscapes of California. Nevertheless, I am happy to be settled in at E-town now and so thankful for the support everyone in the department has al-



ready shown me. I would love to meet you all; so come visit!



Hello, alumni and friends! I am so grateful that you are staying connected with us by reading the pages of our latest newsletter. I have been delighted by the numerous surprise visits to my new "digs" in Alpha Hall, and I absolutely love seeing your updates on Social Media and/or coming into the department via e-mail. As for my update: I'm now in my second year as Dean for Academic

Kristi Kneas

Affairs and Faculty Development, and I find that I'm enjoying the opportunity to apply my analytical thinking and problemsolving skills in this new and different way (still with plenty of Excel spreadsheets). This past year, I also enjoyed teaching Chemical Instrumentation and meeting regularly with Dr. Rood

and our team to discuss our collaborative research on luminescent metal-organic frameworks. In June, Dr. Rood and I presented the work of the group at the Middle Atlantic regional Meeting of the ACS, and in July, I was officially promoted from Associate Professor to Professor of Chemistry. (Thank you so very much to those who contributed a letter as part of that process!) On the home front, I continue to enjoy the hustle and bustle of family life ("embrace the chaos" seems to be our family mantra) with Garrison (10) and Benjamin (4) continuing to push boundaries and Daniel staying busy with Pearson. Please stay in touch!







Sabbatical! This year you will likely not see me around if you wander around Musser. I was awarded a grant from the National Science Foundation for \$196K which is allowing me to spend a yearlong sabbatical at Binghamton University working with my collaborator, Eriks Rozners, on the project "Nucleobase-

James MacKay

Modified Peptide Nucleic Acid (PNA) for Sequence Selective Triple-Helical Recognition of Non-Coding Ribonucleic Acid (RNA)." The project is aimed at the development of new methods for molecular recognition of biologically-significant, non-coding RNA. The majority of cellular RNA consists of non-coding RNAs that play important roles in regulating gene expression even though these processes are not fully understood. Selective recognition, imaging, and functional regulation of such RNAs are useful for fundamental studies and practical applications in biotechnology. The project expands interdisciplinary, collaborative research across traditional institutional boundaries and continues our collaboration of 2 years in both my research group and in integrated lab (CH 455/456). I arrived on August 1<sup>st</sup> and will be here through at least the end of June 2018. I'm super excited to be full time in a lab (for a season) and working on some exciting science. Additionally, I am looking forward to doing some reading and writing. I have at least 2 manuscripts in progress and hopefully will get a start on one or two more.

Last year was a busy year in the research lab. I mentored 4 students: Holly Sofka, Alex Plowman, Chris Ryan, and Brian Lupold. Each was on a different project so I had my hands full...



Hi, my name is Dick Papez and serve as an instructor here at E-town College. I teach the forensic science courses (lecture and lab), general chemistry labs, organic chemistry labs and help with the chemical instrumentation lab. With two years of retirement in between, I have enjoyed the change from thirty-five years of industrial/research chemistry to the college scene. It has been

**Dick Papez** a nice change.

I am married to Dottie. We have two sons, four granddaughters (ages 11-17) and a 2 year old grandson. One of my favorite activities is teasing the granddaughters.

The forensics courses are most exciting for me due to the everchanging breakthroughs in CSI related science. Also, the case studies do not seem to stop coming. Recently we are studying two twenty and twenty-five year old cases, the murder of Christy Mirack, a local school teacher and the death of Princess Diana, accident or not? Upon my transition from industry to academia, I have found many similarities between analytical chemistry in my past life and forensic chemistry that I now teach. The big difference is the devious plot that goes with crime solving.

The on-line forensic summer course has now run for five years with increasing attendance each summer. I try to keep it fresh and different from the classroom course if for no other reason than it takes place in the summer when I can manage much of it from my backyard with a cool lemonade nearby. Dr. Linda Macaulay has been great helping me through the many computer aspects of the conversion. but they did awesome and it was sad to see them all graduate. Holly just started at the University of Arizona as a graduate student in chemistry (please ask her if she has been to a rodeo yet). The other three are off exploring various employment and educational opportunities and we are excited to hear about where they each land. I have high hopes for all four of these graduates!

Personally, the family is really enjoying Binghamton. The parks here are great so in the summer we enjoyed many playgrounds, carousels (Binghamton parks have free carousels all around...its crazy), and public pools. We will be taking several weekend trips including visiting the Almanzo Wilder Homestead, the 1000 Islands, Corning museum of glass, the Adirondacks, Cooperstown and the baseball Hall of Fame, among other things. We are just praying that the winter is not too hard on us. It's hard to be away from all our family and friends in PA, but we are grateful for the opportunity to have this adventure and for the new relationships we will develop. I was just back in Etown last week to pick up some things and it was really fun to

come home to Elizabethtown. It reminded me what it probably feels like for you all to come back to campus. It's a great feeling so let me encourage you to visit too! And, if anyone is in the Binghamton area and wants to stop in and see our facilities and research, please let me know. You are always welcome! Until next time...



The MacKay Family

The high point for me is the Forensics Lab in the spring. Working the students through the cases and the science, watching them run the analyses and wrestle with the myriad of conflicting results is very inspiring.

In the last couple years, I have had the opportunity to return to active research following up on ideas many of which were started in my previous career. Some of these were completed then but many were not due to more pressing duties. This effort led to an active role with four students over the last two summers in the SCARP program. If there is any interest in polymer research, feel free to contact me.

In previous newsletters I have noted that playing/coaching soccer is my favorite out-of-school activity. Although I grew up with baseball, football and basketball, once my sons needed a soccer coach when they first started playing (many years ago), I converted and never looked back. Soccer is constantly moving and for me exciting. I liken it to molecules in a container, always in motion. I have been in an over-30 league for many years and as the oldest member have gone three years without a goal – until this past summer in the league when I put 3 in the net. Both of my sons are now on the same team with me. The one is the goalkeeper, the other plays up front and scores the goals and I just run around in the middle and have fun.

As always, I want to acknowledge the staff here at E-town for the tremendous help and encouragement that I have received. They are always very supportive.

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Hello everyone! I hope this year's newsletter finds you well. As usual for the fall semester, I am involved with our general chemistry course. I have three lecture sections and one lab section this term. Some new lab experiments have been added to the course and some others have been reworked, so I am excited to see how it all comes

Jeff Rood

together. I am also working through some new experiments for my spring inorganic course that utilize microwave reactors. Dr. MacKay and I were able to secure some funding through a grant from the College to help offset the cost of new microwave reactors. He and I attended a workshop at St. Mary's College of Maryland this summer and I got a lot of good ideas to incorporate into my courses here at E-town.

On the research front, my main focus is currently on an exciting project with Professor Kneas' group that aims to synthesize new solid-state luminescent sensor materials. We have had a number of students work on this project over the past few years. Dr. Kneas and I presented the work at the Middle Atlantic Regional Meeting of the ACS this past summer. Currently, we are working on a paper that we hope to get submitted for publication later this year. Some of my students plan to present at the University of Maryland, Baltimore County Undergraduate Research Symposium and the ACS National Meeting in New Orleans. We



My wife and I were blessed to welcome our second daughter,

Kaceley, into the world on December 29<sup>th</sup>. Kaceley is doing great and has a loving big sister in Kella. Kella is now 5 years old and started kindergarten this fall. Time surely flies! If you find yourself with a little spare time, though, we would love to see you on campus! I hope you are doing well!







Charles Schaeffer

of the Intercollegiate Chemists (ISC) on April 16, 2016. The ISC is the oldest continuous meeting of its kind in the United States: E'town will host the event on Saturday, April 7, 2018. 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 73Ge 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). The most recent collaborative presentation with Dr. Rood and Elizabethtown students (underscored) is: (1) J. Pigga, J.A. Rood, C.D. Schaeffer, Jr., "Germanium

Coordination Complexes: Synthetic Development and Structural Characterization," oral presentation, 80th Annual Convention of the Intercollegiate Student Chemists, Ursinus College, Saturday, April 16, 2016; First Prize, Inorganic Division.

Our long-time and ongoing research collaboration with Professor Claude H. Yoder, Charles A. Dana Professor of Chemistry Emeritus at Franklin and Marshall College, began in fall of 1966 and enters its fifty-first year (see: https:// www.fandm.edu/chemistry/chemistry-faculty-research).

I continue to explore aspects of medium-format digital photography. The chemistry student affiliate chapter distributes a calendar composed of some of these campus images, with proceeds supporting various student affiliate activities.



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**Department of Chemistry & Biochemistry Newsletter** 



# **STUDENT NEWS**

### 2017 Graduates

Christopher Budnicki Smeal Business School at PSU

**Tyler Butkus** Awarded Fulbright Research Grant for 1 year in Yogyakarta, Indonesia

### Rícky Castro

Attending St. Luke's School of Nursing Working at St. Luke's Univ. Hospital **Elení Kotretsos** NMS Labs, Willow Grove, PA

**Kathryn Laraía** Penn State Hershey Rehab Hospital

Jake Lenkiewicz Attending Thomas Jefferson University Working at LABS Inc., Philadelphia, PA Alexandra Plowman Friendship Community, Lititz, PA

*Chrís Ryan* Plans to attend graduate school

> Holly Sofka University of Arizona

### **Students Recognized for their Educational Accomplishments**



*Tyler M. Butkus* '17 Physical Chemistry Award ΓΣΕ De-Lap-Holcomb Scholarship A.C. Baugher Chemistry Award



*Holly Sofka* 17 Undergraduate Award in Organic Chemistry SEPSACS Outstanding Senior Chemistry Major Award



*Kayla Hess '18* Inorganic Chemistry Award Judith Bond Scholarship Award



*Kaitlyn Jacoby '20* CRC Freshman Chemistry Achievement Award



Amanda Williams '18 Analytical Chemistry Award Biochemistry Award



Haley L. Young '19 Sophomore Organic Chemistry Achievement Award ACS Student Affiliates Award *Emergent Scholar* 

Congratulations to all of our honorees!

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# COLLECE

## 2017 Summer Research & Internships

### **RESEARCH:**

*Sawa Al Absi* along with *Emily Kagarise*, both junior chemistry majors, worked with Mr. Papez on a project called "Continuation of polyurethanes systemesis from non-isocyanate starting materials."

*Colby Schweibenz,* a senior biochemistry major, worked with Dr. Hagan doing research entitled "The synthesis of giant unilamellar vesicles."

**Ryan Thomas**, a junior chemistry major, worked with Dr. Gary Hoffman on "A systemized procedure for the theoretical study of a diatomic substance."



2017 SCARP Students

### **RESEARCH ABROAD:**

*Kayla Hess* — Worked in an organic chemistry lab studying the kinetics of dehalogenation reactions of alpha-bromo ketones with transition metal complexes and light as catalysts at the Eötvös Loránd University Institute of Chemistry in Budapest, Hungary. During her research, Kayla gained experience working with different instrumentation and with air and light sensitive reactions.

*Lacey MacRyann* — Participated in research & clinical trials at the Imperial College in London where she worked on developing a method of non-invasive continuous blood glucose monitoring, using platinum electrodes modified with glucose oxidase. Throughout the project Lacey worked a lot with electrochemical methods like impedance spectroscopy and cyclic voltammetry.

*Haley Young* — Spent the summer at Virginia Tech participating in a research experience for undergraduates focusing on the intersection of food, energy and water systems. Her project consisted of synthesizing a polymer that can release hydrogen sulfide in the presence of biological enzymes. Hydrogen sulfide is an endogenous signaling molecule in plants, and it increases a plant resistance to describe a clarify a conditions. As a

es plant resistance to drought and high salinity conditions. As a result, this polymer could help plants/crops grow in arid climates or with salty water rather then freshwater.



# Memories '16-'17

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**Department of Chemistry & Biochemistry Newsletter** 

# Student Presentations at Local, Regional and National Meetings

**2016-2017**—Numerous chemistry and biochemistry majors participated in research within the department. Some presented the results of their work at several venues including Scholarship and Creative Arts Day, Elizabethtown College; the local section meeting of SEPSACS; the Intercollegiate Students Chemists Convention held at Muhlenberg College and at the Undergraduate Research Symposium in the Chemical and Biological Sciences at UMBC in Baltimore, Maryland. Student researchers were: Tyler Butkus '17, Ricky Castro '17, Kathryn Laraia '17, Jake Lenkiewicz '17, Brian Lupold '17, Alex Plowman '17, Chris Ryan '17, Holly Sofka '17, Kayla Hess '18, Colby Schweibenz '18, Ryan Thomas '18, Sawa Al Absi '19 and Emily Kagarise '19.



# **Renovations & Study Abroad**

### New Look for Musser 232

This past summer Musser 232 got a major face-lift! The orientation of the room was completely turned around, the black boards were replaced

with white boards and new furniture was brought in to replace the old. Gone are the green chairs (which Dr. Kneas said could probably have been auctioned off), the iconic computer podium and bulky demonstration bench. It took some getting used to at first but everyone agrees it was an exciting change

and it looks great!





Colby Schweibenz: This fall semester senior biochemis- Junior biochemistry major Aubrey try major Colby Schweibenz is studying abroad at the University of San Francisco do Quito in Ecuador! She has reported that she is has taken trips into the Ecuadorian Rainforest to go on a toxic tour to see the con-

tamination by petroleum companies and to the Tiputini Biodiversity Center to learn about the research involved with animal behavior. Colby is excited about all her classes and to be learning so much about the Ecuadorian culture. She will also be involved in a research project with a local hospital where they will be focused on identifying master genes associated with breast cancer for better diagnosis and treatment of the disease. Finally, her study abroad group will be traveling to the Galapagos Islands in October. She will be posting updates and pictures throughout her time abroad to our Facebook page so be sure to check them out!

**Study Abroad Experiences** Aubrey Maryniak: Maryniak is spending her fall semester studying abroad at the University of Otago in Dunedin, New Zealand! Aubrey reported because she lives in a complex with almost all international students, she has met people from all



over the world. Her classes are in large lecture halls which is very different from the smaller, more intimate classrooms here at E-town. Plus she has had over a dozen different lecturers so far because of the high number of faculty at the university which allows each faculty member to present on just their subject of specialization. Beyond her biochemistry and neuroscience studies, Aubrey is hoping to develop her "ability to be more conscious of the people and environment" that she lives in and she is recording her thoughts/activities/insights in her travel blog. Visit her blog at https://muddybutmindful.blogspot.co.nz to read up on her experience and see some amazing photographs!





STUDENT AFFILIATES



In the past year, the Chemistry Club has participated in many exciting events and is looking forward to some of the big events for this year! Students presented research at the Undergraduate Research Symposium in the Chemical and Biological Sciences at UMBC in Baltimore, Maryland and the Schol-

arship and Creative Arts Day at Elizabethtown College. The presenters were able to engage with other undergraduate researchers as well as professors from the college and others.

In addition to research presentations, the club was involved in professional development. This included two Chemistry in a Box programs presented by the American Chemical Society. The first focused on professional etiquette and allowed the students to engage in discussions about professional behavior. The second engaged students in the biochemistry of sports, which gave insight into the diversity of chemistry outside the classroom. Students also engaged with the community through Into the Streets and trips to Lancaster Science Factory. During Into the Streets, club members helped local children create homemade lava lamps with vegetable oil, water, and food dyes that the kids got to take home with them. At Lancaster Science Factory, a larger version of the homemade lava lamp was demonstrated to participants, but the main focus was on chromatography! Participants and students got to create different designs using a variety of markers and solvents to explore how chromatography works. Relay for Life was a great success this year and members participated in raising money for

cancer research.

Fundraising was a big focus last year due to the upcoming ACS National Meeting this year. Homecoming was a success with tie-dye socks and mugs being sold in addition to the usual mugs and t-shirts. The whole department was involved in a quarter zip sale, with most of the majors and professors buying department quarter zips that are now frequently seen around Musser! Most of the quarter zips will probably make an appearance at the annual pre-Thanksgiving trip to Shady Maple.

The focus for this year will be on continued fundraising in preparation for the ACS National Meeting in New Orleans this March. There will also be an emphasis on increased involvement in the Chemistry Club and the creation of more of a community in the department. Professional development will continue with SEPSACS events and ACS sponsored events.

By Kayla Hess, president

### Chemistry Club '17-'18 Officers:

President—Kayla Hess Vice President—Amanda Williams Secretary—Sitara Ramjit Treasurer—Haley Young



# From the E-Mailbag

This past May I graduated from Lebanon Valley College with my Master of Science Education. I also had a major life change and moved to Auburn, Alabama with Kurt Shollenberger (2014) for him to attend graduate school. Thankfully, I was able to easily find a new chemistry teaching job. Based on my interviews with various principals, I know my success had a lot to do with the education and experience I gained while at Etown! All the best,

### Lauren Eltringham ('14)

At the end of April I took an early retirement from my position in the quality control laboratory of Bayer Consumer Care in Myerstown, PA. I had been employed there for 25 years.

Prior to working at Bayer, I had been a chemist in the R&D laboratory of Carpenter Technology Corp. in Reading, PA for 10 years. Then from 1988 through 1991, I was a full time City Councilman and Director of Public Safety for the City of Reading, PA.

I am now focusing on volunteer work, especially with Lions Clubs International. Lions Clubs is the largest service organization in the world with about 1.45 million members in 210 countries and geographic regions of the world. In 1925, Helen Keller asked Lions to be her "knights of the blind" and that has been a major focus since then. However, our motto is simply "we serve" and we help our communities and world wherever there is a need. Currently there is a major effort on disaster relief after the recent hurricanes.

I am currently First Vice District Governor for Lions District 14P which is Berks and Chester Counties in PA. Hopefully I will be elected District Governor starting next July 1st. **David M. Hunsberger ('77)** 

### Married to Jim Miller Living in Badin, NC. Graduated with BS in Medical Technology. Obtained MPH from UNC Chapel Hill in 1993. Working in Clinical Research assessing and monitoring labs all over the world.

Frances Whalen ('72)

In January 2017, my wife Emily ('08) and I welcomed our second daughter Tessa into our growing family. Tessa (9 months) and her older sister Tobin (21 months) enjoy eating, sleeping, jumping, dancing, running, slides, swings, the pool, and chalk (among other things). In the lab at NIST we also continue to grow, with expanding laboratory space, new collaborations, and a summer student. I was awarded the Kaminow Early Career Prize by the Optical Society (OSA), and our recent paper on the laser detection of radiocarbon [J. Phys. Chem. Lett. 8, 4550 (2017)] is highlighted in C&E News!

### AJ Fleisher ('07)

I received my PhD in physics in 2012 and have since been working as a condensed matter physicist in Germany. Last year I was promoted to a permanent position (equivalent of tenure). In addition, a paper in which I am one of two corresponding authors, was accepted in Physical Review Letters and received the distinction of Editors' Suggestion and Featured in Physics. Also, I was featured in a number of articles and even a TV show called Tomorrow Today for their segment entitled Brilliant Minds. I wanted to thank you again for all of your support during those years. Your encouragement and dedication are still very much appreciated.

Best regards, Liz Green ('07)















### DEPARTMENT OF CHEMISTRY & BIOCHEMISTRY ONE ALPHA DRIVE ELIZABETHTOWN, PA 17022-2298

### A Special Thank You

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

### Chemistry and Biochemistry Faculty and Staff:

Dr. Gary Hoffman, Chair Dr. Jon Amoroso Mr. W. Michael Bierbower Dr. Lauren Gibson Dr. Thomas Hagan Ms. Michele Herndon Dr. Kristi A. Kneas Dr. James MacKay Mr. Richard Papez Dr. Jeffrey Rood Dr. Charles Schaeffer Dr. David Yeagley

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