Greetings and salutations from F&M! The themes of my remarks this year are Change and Thanksgiving. Change is constant in higher education and one of the joys of the job is to witness our students mature and grow during their time here before we launch them into the world. The class of 2017 (page 25) is no different and throughout the Newsletter you can read about their accomplishments and find out where they are now (see page 20). Change among the faculty is also upon us. Phyllis Leber has decided to retire after 36 years at F&M! As I write this, we are in the middle of the search for a new tenure-track organic chemist. Our new colleague will have large shoes to fill and will be able to look at Phyllis’ career as an exemplar of a teacher/scholar. Of course, when Phyllis began in 1982, she was hired because Ruth Van Horn retired. At Ruth’s retirement dinner John Farrell had this to say, “Ruth Van Horn is many things: a chemist, a gardener, a champion of wildlife, a scholar, a teacher, a colleague, and a friend… but she is not replaceable.” We feel the same way about Phyllis! For a profile of Ruth as she is approaching centenarian status, see page 17.

Other professorial changes have occurred in the department this past year. Amy Hofmann has left F&M to pursue a career as a NASA scientist. We wish her well in her research aimed at finding life in other parts of our solar system. We will be conducting a tenure-track search for an inorganic chemist next fall. Our three-year visitor, Jeff Pruet, has left for a tenure-track position at Valparaiso University, and Alec Brown has taken a visiting position at Juniata College, his alma mater, after two years at F&M. We also welcome a new visiting assistant professor, Taiwo Dairo, who is teaching general chemistry for us this year. The department also has two changes in rank that I am happy to report. As of July 1 both Scott Van Arman and Jennifer Morford were promoted to the rank of full professor – congratulations to both of them on this well-deserved achievement.

The second theme of my remarks is Thanksgiving. As this is mid-November, the theme may be an obvious one, but it is important to relate to alumni that the chemistry department at F&M remains very special. I am thankful for the bright, eager, curious, and hard-working students in our classes and research labs. I also appreciate my dedicated faculty and professional staff colleagues. Instruments break, colleagues get ill, and Old Main requires more reports … even though Ben Franklin did not list these along with “death and taxes,” they are just as certain. One of the joys of working in the chemistry department is that we help each other in these situations, as the Amish say, “many hands make light work.” I am also thankful for our tradition of shared decision making based on building a consensus. Thank you to our generous alumni for the gifts you made to F&M in support of chemistry (see page 24).

On a personal note, my teaching and research are progressing well. I am now using clickers to teach organic, and our work using vibrational reporters to study proteases, sfGFP, and nucleosides continues. More details can be found in the blurbs of my collaborators Scott Brewer and Christine Phillips-Piro. Finally, Ethan has matriculated at Columbia University in NYC, where he is having a challenging and fun first semester.

All the best,

Ed Fenlon
Chair and Professor
edward.fenlon@fandm.edu • 717-358-4201

Faculty Awards & Grants

Ed Fenlon & Scott Brewer
National Institutes of Health: “Oligonucleotide Conformational Heterogeneity” Ed and Scott received this sub-award from the R01 Grant received by Alex Mackerell (U Maryland)

Jennifer Morford
National Science Foundation: “Tracking middle-late Paleozoic global-ocean redox conditions using U isotopes in marine carbonates” Jen is Co-PI collaborating with Maya Elrick (U New Mexico), Steve Romaniello (Arizona State) and Tom Algeo (U Cincinnati)

Jennifer Morford & Kate Plass
American Chemical Society’s Petroleum Research Fund: “Influence of iron sulfide phase on the incorporation of Mo in marine sediments”

Kate Plass, Jen Morford, & Claude Yoder
National Science Foundation: funding received to obtain an LVEM25 - the world’s most powerful benchtop Transmission Electron Microscope (TEM).
It has been a momentous year in many respects – a productive sabbatical leave in the spring of 2017 and a decision to retire effective August 2018. This means that the summer of 2018 will be my last year to participate in the Hackman research program. I have yet to decide how many years of phased retirement are in my future. If my two little dogs had a vote, they would opt for zero.

The end of the Hackman research program of 2017 has allowed us to complete one multiyear study involving one former (Don Viray ‘16) and four current research students (Katie Kidder ’18, Hugo Zhang ’18, Eric Dietrich-Peterson ’20, and Ryan Fang ’19). In addition, we expect to finalize, by the end of the fall semester, a thermal study that has been pending while we acquire a new set of kinetic data. All of this shows how research progress proceeds in less than linear fashion. We also want to acknowledge that Katie Kidder, after joining us for the first three weeks of the summer 2017 research program, was involved in a very productive computational chemistry internship at the University of Minnesota.

Marcus Thomson has been sent up to Old Main, as an Associate Dean of Faculty, for three years. We will miss him walking the halls of Hackman, however, he will have much to contribute to the administration of dear old F&M.

Over the past year, I have been serving as the Mentor for Miami Posse 5 – an outstanding group of 10 students from the Miami area who are current sophomores. This continues to be a rewarding experience for me and I am excited to continue working with this group this year.

Last February I was an invited speaker at a STEM Education conference in Tennessee and in March, I attended the ACS meeting in San Francisco where I presided over a POGIL symposium and also attended the Executive Committee meeting of the Division of Chemical Education, for which I am an Alternate Councilor. I also presented a poster in June at the Gordon Conference on Chemical Education Research and Practice at Colby College in Maine.

This year is the 15th year for The POGIL Project; the Project began on January 1, 2003 and our first three-day workshop was held at Duke University in June of 2003. Another, more personal, milestone occurred this summer as I celebrated the 60th anniversary of the beginning of another lifelong project – me! In addition to a very enjoyable party attended by numerous friends and colleagues, I also enjoyed a birthday trip to Iceland with my wife. Although it might be a little cool for those who enjoy spending summer at the beach, I found it to be a truly beautiful and interesting place and heartily recommend it as a vacation spot. Where else can you see reindeer, glaciers, and boiling hot spring all in the same afternoon?

It’s hard to believe another year has come and gone, and I’m writing what I believe is my 30th newsletter update. Wow, how’d that happen? The GM3 synthesis collaboration with Clinic for Special Children continues as we continue to make progress toward the complete, efficient, and inexpensive synthesis of the ganglioside GM3. Katherine Kistler ’17 completed her CHEM 490 project by finding a novel way to eliminate a heavy metal catalyst from the pathway, and Bobby Gaston ’18 initiated efforts to prepare isotopically labeled GM3 that could be used as a tracer in biological studies of the fate of exogenous GM3. We’ve also ramped up the applications of the recently acquired Waters UHPLC-QTof mass spectrometer system to analyze intact proteins as part of Professors Piro, Brewer, and Fenlon’s research, and have assisted Professors Fields and Davis, from biology, in their work with peptide mapping and protein identification. I also continued to coordinate the summer immersion program and Pre-Collegiate Training sessions for another great set of Miami STEM Posse scholars.

Julie and the family continue to do well. Cooper (sophomore at George Washington University) and Jessie (junior at The Hill School) both enjoyed their first year in their new schools and anxiously awaited a return, and while we enjoyed the freedom of being empty nesters we also have to admit to missing the kids.

As always, I hope all is well in your lives and careers, and please feel free to keep in touch.
This past fall, I was on sabbatical whereupon I travelled all the way to HAC409 for the semester. I am still in the exploratory stage with several ideas for transfer reactions based on the bis-amido Hantzsch dihydropyridine but concentrated heavily on the prospect of benzyl group transfer. This has been reported once in the literature using the well-known Hantzsch ester. With more than one entire lab notebook filled with reaction attempts under various conditions, little evidence of such transfer revealed itself to me. I have been able to repeat the literature work successfully so for now I will thank the lab trolls for their attention and carry on. Robert Palkovitz ‘18 and Anthony O’Donnell (BMB) ‘19 were hardy souls this past summer extending our work on transfer hydrogenation to α, β-unsaturated aldehydes and nitrostyrenes. Thankfully the trolls had moved on (probably back to the Hess lab where they are held in high regard) and both Anthony and Rob made ample progress. Some such progress came quickly enough that it was included in our poster presented at the National Organic Chemistry Symposium at UC Davis in June.

My wife, Susan started a new job mid-season this past year and continues now as a Head Start teacher. Claudine is beginning to enjoy the undivided attention she now receives because Greta has started her own college career.

This past year, I taught during the Fall (General Chemistry I) and Spring (Chemical Analysis) semesters. I was fortunate to work with Kevin Allison ‘17 for both semesters and Zach Kolansky ‘18 for the spring. Kevin laid the groundwork for a new project, in collaboration with Kate Plass, on the synthesis of iron sulfide phases. Zach continued our group’s collaboration with Claude Yoder on the formation of molybdenum-organic complexes. Summer 2017 brought three students to the lab - Nathan Miller ‘20, Kate Meyers ‘19 and Grace Ni (GEO) ‘18. The students focused on different aspects of synthesizing iron sulfides and investigating potential interactions with molybdenum. Two grants were also funded this summer, one in collaboration with Kate Plass to fund our new iron-sulfide work, and another grant to fund a new external collaboration on trace metals in ancient marine carbonates. This funding will provide additional resources for our students over the next several years, and I’m looking forward to diving into these new areas of research. One paper was published this past year – the culmination of my work with Lydia Olson ‘15 on sediments from the Chesapeake Bay. A second cruise to the Chesapeake this past summer will give us another opportunity to better understand trace metal geochemical cycling in this very sulfide-rich environment.

Personally, this has been a very enjoyable year as well. Gregory had a successful 8th grade and is ready to begin high school. Benjamin enjoyed second grade and still prefers comics to any other kind of book. Theresa loves both books and Legos, and will be enjoying her last year of pre-school. Our quintet is happy and healthy, and we wish the same to you and yours.

This has been an eventful and exciting year! I taught Inorganic Chemistry for the first time in several years. Coming back to teaching group theory renewed my sympathy for students facing it for the first time.

Independent study students investigated new post-synthetic transformations of nanoparticles. One student team focused on ways of altering the surface of particles and consisted of Jack Kupsky ‘17 and Zichen Zeng ‘18, who were joined by new student Han Le ‘19. Another team explored how to control cation exchange processes and consisted of Ryan Kozloski ‘17, Angus Unruh ‘18, and new student Cameron (Boxi) Li ‘19. Zichen, Han, Angus, and Cameron all stayed for the summer. Not only were they very busy with research projects, but also had multiple opportunities to present their work. We attended the Mid-Atlantic Regional ACS meeting (MARM). As a new tradition we again ended the summer sharing our findings with the group of collaborator Raymond Schaack at the Pennsylvania State University. F&M and Penn State students gave group meeting presentations. F&M students were impressed by the degree of similarity and the extent to which they could contribute to a productive discussion with graduate students and other faculty.

Jennifer Morford and I began a collaboration that was inaugurated with receipt of a PRF grant and a productive first summer of work by Grace Ni (GEO) ‘18, Kate Meyers ‘19, and Nathan Miller ‘20. We are very excited to see where this work goes!
We are delighted to have received funding for a new low-voltage transmission electron microscope thanks to the National Science Foundation. Students were literally jumping for joy when they found they could image their nanoparticles with a real CCD camera and not photographic film! Thank you very much to those who helped with the grant submission, Profs. Jen Morford and Claude Yoder, as well as Mark Atwater from Millersville University, Mark Ellison from Ursinus College, and Matthew Sonntag from Albright College and the Office of College Grants.

**The Research Continues** to primarily focus on the development and application of vibrational reporters of local protein and nucleic acid structure and dynamics. The research resulted in several presentations at the American Society for Biochemistry and Molecular Biology (ASBMB) Annual Meeting and the Mid-Atlantic Regional Meeting (MARM) of the American Chemical Society.

The research during this past year continued to be highly collaborative. Ed Fenlon, Christine Phillips-Piro and I continue to collaborate on the development and application of vibrational reporters to probe local protein structure in multiple protein systems including sfGFP, H-NOX and several proteases; Ed Fenlon and I continue to collaborate on the development of nucleosides modified with vibrational reporters; and Ken Hess, Ed Fenlon and I continue to collaborate on the development of a cost-effective, efficient, and scalable synthesis of the ganglioside GM₃ to treat Amish children suffering from GM₃ Synthase Deficiency.

Numerous students worked on these projects during this past year including Caroline Kearney ’17, Katherine Kistler (BMB) ’17, Juliana Piacentini (BMB) ’17, Nicole Savidge (BIO) ’17, Christopher Eaton (BIO) ’18, Gwendolyn Fowler ’18, Bobby Gaston ’18, Trexler Hirn ’18, Maggie Luo ’18, Heather Hao ’19, Julia Weiner ’19, Darcy Harris ’20, Nicolette Runko ’20, Jeremy Kramer ’21, Judith Monzy ’21, and Brianna Popoutsis ’21.

Our internal research collaboration with Ed Fenlon’s and Scott Brewer’s labs have been incredibly fruitful over the past year! I hope to have another 3 (!) papers submitted by the end of the academic year (putting it in the Newsletter seems to be a good way to hold myself accountable). The scope of projects in our lab continues to grow – with projects centered on GFP, H-NOX, and now proteases!

Last academic year I mentored two CHM490 students (Caroline Kearney ’17 and Juliana Piacentini (BMB) ’17) and a CHM390 student (Nicole Savidge (BIO) ’17) and all three seniors accompanied Prof. Brewer, Prof. Brandt, and myself to the Annual American Society for Biochemistry and Molecular Biology (ASBMB) meeting in Chicago, IL in April. In addition, we made two trips to the synchrotron at the Argonne National Lab, outside Chicago, this past year to collect X-ray crystallographic data. I also had the opportunity to teach Advanced Biochemistry this past spring for the first time—and am thankful to all the BMB and CHM majors who worked so hard in the course! I really enjoyed the class and look forward to teaching it again this coming spring.

This past summer was a busy one in the lab with some new students joining (Darcy Harris ’20, Nicolette Runko ’20) in addition to some familiar faces (Trexler Hirn ’18 and others). I am particularly excited about the progress that we made on the H-NOX project and look forward to writing and resubmitting that manuscript this fall/winter.

My sons Finn (4.5 years) and Ollie (16 months) are both doing great! Finn is convinced he wants to be a biochemist when he grows up “just like Mommy!” and Ollie is an incredibly independent and active little guy whose favorite phrase is “uh-oh!”
My lab continued its work on the biochemistry of malaria parasites and the development of photoactive kinase inhibitors. We also added new projects on the role of protein stability in coral bleaching and on the role of amino acids with unusual Ramachandran angles in protein structure. I took my Junior Faculty Leave in the spring, so I was able to concentrate on research for the spring and summer of 2017. We were able to generate two manuscripts reporting the first inhibitors of a class of kinases important to the most common (Plasmodium vivax) and most deadly (P. falciparum) species of malaria parasite worldwide. The first will come out in the Bioorganic Chemistry journal and the second in the American Chemical Society’s new open access journal ACS Omega. In addition to this work, we began a collaboration with Prof. Peter Fields in Biology, who has been examining the role of temperature in leading to the breakdown in symbiosis that leads to coral bleaching. Janse Schermerhorn ’18, Astrid Perez (FRN) ’18, and Jacob Wolfe (BMB) ’19 crystallized and solved the structure of the enzyme GAPDH from the coral Acropora millepora, in the presence and absence of its cofactor. They also crystallized GAPDH from two different clades of the coral’s algal symbiont, enzymes that exhibit differing degrees of heat stability. In the fall, we’ll send these crystals with Prof. Philips-Piro to the Advanced Photon Source synchrotron at the Argonne National Laboratory. Lucy Kirkman (ENG, CHM minor) ’17 worked together with students of Prof. Wally Novak, of Wabash College, on a project to investigate protein structures that contain conformationally strained amino acids. We re-solved a set of structures from the P. falciparum enzyme OMPDC, showing that these strained amino acids were an artifactual result of poor crystallographic practice. Lucy also presented a poster on our lab’s work at the Experimental Biology national meeting in Chicago in April. She has since graduated and returned home to Zimbabwe, taking some time off before applying to graduate school. Ben Lin (BMB) ’17, Dennis Winston ’17 and Lingyin Xu (BIO) ’17 also graduated from F&M. Ben is obtaining his MD at the University of South Florida, Dennis is in the Chemistry PhD program at Penn State, and Lingyin is planning to work in a clinically focused lab for a year or two. I have continued to teach General Chemistry and Introductory Biochemistry, as well as serving on the college’s advisory committee for the Public Health program.

Jeremy Kramer (Moore-Schaeffer Scholar), Trexler Hirn, Prof. Yoder, (Moore-Schaeffer Scholar), Kristen Beckett (Moore-Schaeffer Facey, Bobby Gaston, Prof. Davis, Robert Palkovitz, Juliana Piacentini, Prof. Fenlon, Prof. Van Arman, Prof. Brewer, Janse Schermerhorn Dougherty, Cameron Li, Zichen Zeng, Maggie Luo, Angus Unruh, Phillips-Piro, Katherine Kistler, (Sitting): Xueing Lyu, Kathleen Stepie, Prof. Plass, Han Le, Julia Weiner, Darcy Harris, Caroline Kearney. Julie
In my second year here at F&M, I enjoyed teaching kinetics and thermodynamics (CHM321), general chemistry (CHM112) and a half course on atmospheric chemistry (CHM378). I look forward to teaching CHM321 again this fall and both CHM112 and a new half course on computer programming for scientists this spring.

Last year my first research student, Shomith Mondal ’17, graduated and will be starting graduate school in chemical engineering at Duke University. Before he left, Shomith gave an oral presentation on the oxidation mechanism of 1,3-pentadiene at the spring 253rd national ACS meeting in San Francisco. This summer our group gained two new members Horace Facey ’19 and Victoria Bublin ’20 in addition to Connor Protter ’19 who returned for another Hackman summer research experience. Horace and Victoria started new projects involving the development of a virtual reality molecular modeling kit, and the production of a 3D printed stop flow reactor and Vis Spectrometer, respectively. Connor started the summer with a trip to the ACS mid-Atlantic regional meeting (MARM) in Hershey, Pa where he presented a poster on the unimolecular decomposition of 2-ketohept-n-oxy radicals. Michelle Pan ’18 spent her summer working at the Johnson Space Center in Texas and will be rejoining our group this fall to finish her work on 3- and 4-ketohept-n-oxy radicals. Katie Kidder ’18, who was working on a joint project on norbornenes between Prof. Leber and myself last year, spent her summer at the University of Minnesota steeped in theoretical chemistry. This last year, Heather Hao ’19 made progress on determining the mechanism by which antioxidants remove reactive oxygen species. Finally, we had a visiting graduate student researcher, Samah Mohamed, join us in January from King Abdullah University of Science and Technology.

Welcome to Visiting Assistant Professor Taiwo Dairo, who received his PhD in Inorganic Chemistry from Iowa State University studying the preparation of new metalloporphyrins, as well as the catalytic applications of iridium porphyrin and supported nanogold. After his PhD, he had been teaching at Minnesota State University Moorhead.
Faculty Publications
(F&M Faculty authors are in **bold**, F&M student co-authors are *underlined*.)


Moore, J.*; Stanitski, C*. Lengthening the Chain: Polymers in General Chemistry. *Journal of Chemical Education*, DOI: 10.1021/acs.jchemed.6b00811, March 1 2017

[*Alumnus, John Moore and retired instructor, Conrad Staniski]*

Department News

**AFTER OFFICIALLY RETIRING** last year, Emeritus Charles A. Dana Professor of Chemistry, Claude Yoder remains on campus actively researching, mentoring students, and keeping tabs on chemistry alumni.

He shares, “I continue to work with students (Melissa Bollmeyer ’18, Kathy Stepien ’20, and Xueying Lyu ’19) on our research on substitution in apatites. The three papers in progress report on IR spectroscopy of A-type carbonated apatites and the NMR spectra of carbonated strontium, barium, and lead apatites.”

Emeritus Professor, Ruth VanHorn celebrates her 100th Birthday in March 2018!

Dr. Yoder shares some thoughts about Professor Ruth Van Horn:

**FOR 33 YEARS** (1949 to 1982) the Chemistry Department was graced by the presence of Ruth Warner Van Horn, the first female faculty member in the chemistry department and one of the first female instructors on campus. In 1954, she was the first female faculty member to be tenured and in 1968, she participated in the special task force on coeducation.

Ruth taught the organic course for majors headed to graduate school (Robert Cross taught the premeds). It was a tough course and there were only a few As! Waiting outside her office for a chance to ask a question, I overheard Ruth telling a student that he really had done quite well in the last exam (he had a grade of C). In 1960 when I was in her course, the textbook was Geissman’s Principles of Organic Chemistry (1959), which used a combination of what had been the traditional functional group approach and the new mechanistic approach championed by the book Cram and Hammond (1959). Ruth received her bachelor’s and master’s from UCLA and her PhD from Penn State. UCLA was where both Geissman and Donald Cram taught, and consequently her approach to organic was also largely mechanistic.

Her presence in the department seemed always to exert a positive influence on departmental decisions. She was the one to turn to for a fair but generally positive evaluation of a new idea for a course or laboratory project. The respect that students had for Ruth is illustrated by the rumor that she taught at F&M for a contract salary of $1 per year because of her royalties from the invention of Nylon. This rumor persisted for most of Ruth’s teaching career at F&M.

Ruth was born in 1918 and next spring will celebrate her 100th birthday. Fittingly, we have dedicated our newsletter this year to her and share some other alumni’s reflections. If you would like to share a memory with her and us, please email Julie Gemmell (jgemmell@fandm.edu).
Seminar Speakers

Rebekka Klausen, PhD (Johns Hopkins Univ.): “Rational Synthesis of Semiconductor Fragments.”

Daniel Strongin, PhD (Temple Univ.): “Surface Science Studies of Environmentally Relevant Chemistry on Metal Sulfide and Oxide Minerals.”

Mike Heagy PhD ’90 (New Mexico Institute of Mining & Technology): “Illumination and Irradiance: Efforts Toward WOLEDs and Solar Driven Bicarbonate Reduction to Formate.”

Dave Powers PhD ’06 (Texas A&M Univ.): “Lattice-Confined Catalysts for Selective Hydrocarbon Upgrading.”

P. Andrew Evans, PhD (Queen’s Univ. – Kingston, Ontario): “New Vistas in the Development of Higher-Order Carbocyclization Reactions: Emulating Terpene Biosynthesis.”

Matthew Wipperman PhD ’11 (Memorial Sloan Kettering Cancer Center): “Effects of Antibiotic Therapy on the Gut Microbiome of Tuberculosis Patients in Haiti.”


Department News (continued)

Recently, some alumni shared their thoughts and memories about Professor VanHorn:

Ruth’s longevity is yet another data point that supports my contention that chemists tend to live extremely long lives, or die at relatively young ages. My most salient memory of her was that she was so NICE to us! I had become accustomed to the daily digs proffered by S&S, and was therefore baffled by her diametrically opposite approach.

John Burmeister PhD ’59, University of Delaware

Ruth is a superb role model for all of us. I remember once when working in the lab on a Saturday she expressed her concern to me that I should take care not to be too narrowly focused. A very sweet and kind sentiment indeed. I have always been somewhat obsessed about certain interests.

Scott Moore MD ’74, Nephrologist, VA

I shall never forget hearing the morning greetings between Drs. Cross and VanHorn. The contrast was something I enjoyed imitating for our time at F&M. “Good morning, Ruth” said Bob in a growling low voice, which was followed by Ruth’s piercing soprano “Good morning, Bob”. Ah sweet memories!

On the more professional side I remember her fair treatment of all of us—the A students and below. She was so supportive and never negative. She found goodness in even the slightest accomplishments in my independent study. (My research with her came back to haunt me with a specific reference to a decarboxylation reaction (The Hunsdiecker) that I needed within just the last decade.) She was a pioneer for women. She might have been a subconscious factor that led me to accept a faculty position at Goucher College, an all female institution in 1967. She was a perfect role model for women well before the time of the NOW movement—a wonderful professor/chemist who just happened to be a woman. Despite my average performance among my peers, she was my solid advocate and mentor. Her contribution to my life is inestimable. We who studied under her shall consider ourselves fortunate, indeed.

David E. Horn PhD ’62, Goucher College, retired

Dr. Van Horn was such an inspiration to me to continue my studies in chemistry, both at F&M and in the years that have followed. After F&M, I received a MS degree from Bucknell University and then a PhD degree at the University of Virginia, both with an emphasis on organic chemistry – would you believe that? I certainly did not shine or even perform well at F&M, but I certainly had great preparation in chemistry to continue in that discipline.

Andy Turner PhD ’62, Saint Vincent College, retired
**Student News**

**Class of ’17 Honors & Awards**

Chemistry Department awards are marked with an *asterisk.*

**Kevin Allison**  
*W.E. Weisgerber Chemistry Award*

**Molly Carney**  
*Royal Society of Chemistry’s Merck Index Award; Phi Beta Kappa Honor Society; Benjamin Rush Honor Society*

**Caroline Kearney**  
*Fred A. Snively Research Award; American Chemical Society, Southeastern Pennsylvania Section, American Chemical Society Award*

**Ryan Kozloski**  
*Theodore Alexander Saulnier, Jr. Prize*

**Jack Kupsky**  
*Willig Pentathlon Chemistry Prize; Theodore Alexander Saulnier, Jr. Prize; Omicron Delta Epsilon Economics Honor Society*

**Shomith Mondal**  
*American Chemical Society, Division of Organic Chemistry Award; *American Institute of Chemists Award; *Annie & Ernest Weibrecht Award (2016); *American Chemical Society, Division of Inorganic Chemistry Award (2016); Phi Beta Kappa Honor Society; Isaac E. Roberts Prize*

**Dennis Winston**  
*Phi Beta Kappa Honor Society; Nolt Award for Musical Excellence; Mu Upsilon Sigma Music Honor Society; Music Dept Award for Outstanding Instrumentalist*

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**In the News**

At F&M’s 2017 Award Ceremony, special recognition was given to a former teacher who has made extraordinary impact on a current student’s education. This year’s High School Teacher Award was presented to chemistry teacher, Theresa McCafferty, from Downingtown STEM Academy. Dave Mix ’17 (chemistry minor and Moore-Schaeffer Chemistry Research Scholar) nominated Ms. McCafferty.

Congratulations to Darcy Harris ’20 for her exceptional work in General Chemistry last year. She received a *CRC Handbook of Chemistry & Physics* and a beaker engraved with her name. Engraved glass beakers were also awarded to the following students for their excellent work in both semesters of General Chemistry: Ahmed Barakat, Joseph Burns, Ruochen Du, Matthew Hamby, Xueying Lyu, Triet Nguyen, Kyle Perezous, Zeima Rodriguez, Wenyu Yan, Xinquan Yang, and Ziyi Zhang.
Alumni Sightings

Along with many of this past year’s seminar speakers being Alumni (page 19), we had other Alumni Sightings including a “Chemistry Alumni Friday” in October 2016 featuring:

**Neal Langerman PhD ’65,** from Advanced Chemical Safety, Inc., who spoke with current students on “Quo Vadis: Alternative careers, professional development, and you as a chemist.”

**Tony Zook PhD ’97,** from Merck & Co., who presented a seminar on “Applications of Analytical Chemistry in the Investigation and Detection of Counterfeit Medicines.”

Then the entire chemistry department (students, faculty, and alumni) shared a feast in honor of benefactor, **George Martin PhD ’79,** from NewPage Corp., who provided funding for an Ultra Performance Liquid Chromatography-Quadrupole Time-of-Flight (UPLC-QToF) LC-MS system. (See the 2015 F&M Chemistry newsletter for full details.)

In June, **Will Hancock - Cerutti ’12,** a current MD/PhD student at Yale, shared his experiences with our summer research students.

**Charles Lieber PhD ’81** is named the first Joshua and Beth Friedman University Professor, Harvard’s highest faculty rank. He is well known for his pioneering work in the field of nanotechnology. Visit the Harvard announcement at [http://www.thecrimson.com/article/2017/7/28/lieber-university-prof/](http://www.thecrimson.com/article/2017/7/28/lieber-university-prof/).

**Stop by and say hi!**

Several Chemistry Alumni stopped by the department in Hackman during the past year to show their families where they spent many many hours while a student, or just to say hello to their professors and mentors. If you are in town for Reunion or Homecoming weekend, or any time, please come by and say hello!

**Carol Lamberson PhD ’85,** with her daughter looking at her name, forever embossed in gold, as a Weisgerber award winner.

**Maria Arwitz Avillo ’95,** with her family, visiting for Reunion weekend.

**Ed Fenlon** visits with **Liz Margolis ’12** at Reunion weekend.

If you missed the Spring/Summer issue (#89) of F&M Magazine, two of Chemistry’s alumni were featured for their adventures around the world, whether that be operatic singing with **Stephanos Tsirakoglou ’99** (page 23), or volunteering and building homes with **Tricia Vos ’94** (page 36).
Thank You for your Gifts!

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