



*In Conjunction with the American Chemical Society
Student Affiliates at the University of Pittsburgh*



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Dear Friends in Science:

The year is almost over! And, I suppose as a senior, it's my responsibility to impart some wisdom on you. I have no advice for seniors, because I'm a senior. We're in this together, and I'm sure we're equally terrified. But I do have some serious advice for any underclassmen who happen to pick this up: GET CURIOUS.

It's no secret that the first few semesters of any hard-science track at any major university are, to some degree, meant to winnow out those that simply did well in high-school science classes out from the real scientists—those who find the fundamental laws of the universe intuitive, or are at least endlessly vexed by them. But there are a lot of students, myself included, who are borderline. Day-in-day-out frustration can make this major unbearable, and it's possible for one's wellspring of curiosity to run dry after failing out of organic chemistry.

But that curiosity is your greatest asset. If you aren't conscious, on some level, of how utterly cool what you're learning is, it's going to get harder and harder to learn it. We're installing computational chemistry software on our laptops that a mere quarter-century ago could only run on room-sized supercomputers. We have free access to expensive academic journals that contain explicit instructions on how to identify fibers in ancient textiles. We are being trained to handle some of the most dangerous substances in the world. And none of this is to mention that enhancing our understanding of chemistry allows us to reduce waste and develop technologies that can significantly raise the global standard of living. And if we're just drilling reaction mechanisms every day, we can ignore the precious significance of our knowledge. It is as abstract and fine as the air around us, and needs only to be breathed in.

So do undergraduate research! And when the time comes to critique articles or develop independent projects in your later semesters, take the time to figure out what you're interested in—it makes the work so much easier! If you asked me what I've done in my research lab, I could tell you that I replaced metallic counterions in self-assembling organic nanostructures with silicon-containing quaternary ammonium cations, then annealing them to encase them in silicon dioxide. In doing that, I could accurately convey the inevitable tedium of chemistry research. OR I could tell you that I'm coating tiny DNA smiley-faces in glass. Sure, it's a little reductive, but it's not false, and it's a hell of a lot cooler.

And if you think you can get away from the tedium of chemistry by joining another major, you're wrong. I'm also a creative writing major, and that work is not any less painstaking. Proofreading 10,000 words is about as boring as studying for a cumulative chemistry final. The bottom line is, you have to work to live, and work is tedious by definition. But if you nurture your curiosity, you can balance that tedium with fascination, or even with love. I'm only 21, so I'm really not qualified to make that statement. But I hope it's true for me, and I hope it's true for you too.

Good luck, Dan Willis, *Newsletter Co-Editor*

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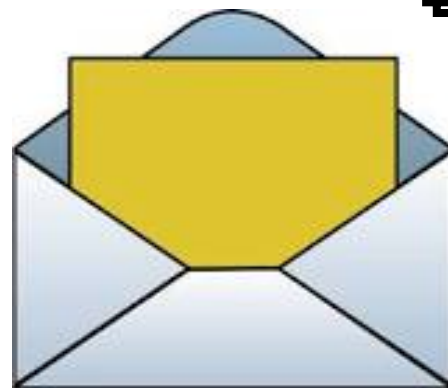


Congratulations *to our 2016 Spring Term Award Winners*

- The Valspar Award* *Jake A. Melby*
- The Lowy Scholarship* *Caitlyn Choe*
Ian M. Harmatz
- The Esther and Tobias Dunkelberger Memorial Scholarship* *Julianna E. Buchwald*
- The Organic Division Undergraduate Research Fellowship* *Erika M. Gotway*
- The McKeever Summer Undergraduate Research Fellowship* *Viktor C. Polites*
- The Wass Summer Undergraduate Research Fellowship* *Ronald T. Debiec*
Matthew Nieberding
- The Teplitz Memorial Scholarship* *Cara E. Maloney*
Marina C. Sarcinella
Eric W. Sobieski
- The Rita R. and David A. Rossi, Sr. Scholarship* *David W. Newhouse*
Viktor C. Polites
- The Richard F. Zarilla Award* *Andrew V. Friedman*
Cindy H. Jiao
Andrew Warburton
- The Silverman Prize* *Jessie Jiang*
- The American Institute of Chemists Award* *Ben A. Barnhart*
- The SACP College Award* *Matthew J. Patrick*
- The Mary Louise Theodore Prize* *Sarah Dubnik*
Joseph D. Dudenhoeffer
Taylor J. Hochuli
Corinne M. Kuebler
Michael J. LeClaire
Bradley J. Lukasak
- The Phillips Medal* *Zachary A. Eddinger*

Goodbye to Friends:

Seniors, we made it. After four grueling years of lab reports, homework assignments, and tests, we finally made it. Tomorrow we won't have to panic about an assignment we forgot to finish or dread walking through the doors of Chevron for an 8am lab. Our never ending lists of things to do will finally be completed. We have made our final climb up the hill to Chevron, attended our last ACS meeting, and crammed for our last exams. This chapter of our time at the University of Pittsburgh is closing and while all this finality may seem daunting, it is a time for us to be proud of what we have accomplished and to look back on our fond memories from the past four years.



We did not choose the easiest path through college. Chemistry is a rigorous major and that speaks to the drive and passion we all possess. We should take a moment and pat ourselves on the back for successfully completing our requirements. Tomorrow, some members of our class will head off to continue their education at some of the finest schools in the nation while others will begin careers that will no doubt be rewarding.

The friendships we have cultivated over the years are certainly for life. We inspire and drive each other when times are tough and stress is high, but also support and encourage each other's endeavors. The Chemistry Department is a special place at Pitt. We have been pushed to think outside the box and to differentiate ourselves. We are certainly prepared to enter the real world. While it is saddening to know that our time here is over, think fondly back on the experiences we had. Those late nights, group study sessions and long labs will be times we remember forever.

In closing, I, on behalf of the graduating senior class, would like to thank the numerous professors, advisors, faculty members, laboratory personnel, administrators, and family members who helped us reach this milestone. Without your unending support and dedication to our success throughout the years, graduation day would not have been possible. Congratulations to the University of Pittsburgh's Department of Chemistry's graduating class of 2016!!

"Roads? Where we're going, we don't need roads." - Dr. Emmett Brown, Back to the Future
Make your own roads.

Sincerely,
Stephanie McPhillips
and the Senior Affairs Committee

***Congratulations and best wishes
to our
2016
Undergraduate Chemistry
Graduates!***

***From your friends in the Chemistry
Undergraduate Program Office***



The Search for a Meaningful Career

by: Jordan M. Leventhal

“What do you want to do with your life?” It’s the question that signifies it is time to start drinking at the family reunion. Parents, grandparents, teachers, neighbors—they all ask the same question. My first answer when I was seven was Astronaut. Over time this evolved to Architect, then Musician, then Dentist. Regardless of the answer though, the commentary always centered around two themes: (1) Do something you enjoy and (2) make money doing it.

Once I got to college, I did my best to heed my relatives’ advice by picking a major that was neither enjoyable nor lucrative: Physics! That didn’t last long, so the following semester I tried my hand at Biology—animals are fun, right?—Nope! Finally, my sophomore year I found my home in the Chemistry department.

The problem was that even though I was enjoying my Chemistry coursework and it was steering me towards a lucrative field, I still didn’t feel good or excited about the direction I was heading. That’s when I realized I had it all wrong. A fulfilling career is about more than just money and enjoyment. It’s about a goal, a purpose. The question shouldn’t be ‘What do you want to do with your life?’ It should be ‘What are you going to contribute in your life?’

For me, I found my passion in tackling the problem of climate change. And once I reoriented my thinking towards positioning myself to get involved in solving this global issue, my whole attitude changed. I became excited for my career and the opportunity to dedicate my life to something larger than myself. It became obvious what kinds of jobs I should be applying to. Money and enjoyment became secondary to pursuing this passion because I knew that they alone would not bring fulfillment.

For some in this department, that contribution might be found in synthesizing new drugs to cure diseases, creating new materials that will better our world, improving science education, or finding an explanation for the sudden disappearance of Schrodinger’s cat (kidding). The education that we have received in this department allows us to tackle a wide-range of critically important problems, both in and out of science.

Find out what you are passionate about and set your sights on it. If you are an underclassmen, it will motivate you and guide you in your studies. If you are graduating, it will guide you in your career path. Most of all, it will bring meaning and purpose to work that can often feel meaningless.

“Being human always points, and is directed, to something, or someone, other than oneself—be it a meaning to fulfill or another human being to encounter. The more one forgets himself—by giving himself to a cause to serve or another person to love, the more human he is.”

—Viktor Frankl, 1959

P.S. This will be my last article in this newsletter as I am graduating and joining the real world (hence the preachy, unscientific article above). Hopefully you enjoyed reading this column for the past year!