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## Senior Undergraduate Symposium and Banquet



Every year in the month of April, the entire department is busy preparing for one of the year's highlights. Faculty are busy mentoring students, polishing up last minute figures or running one last experiment. Senior students occupy every open lecture hall practicing their presentations. Staff are busy processing invitations, trouble-shooting computer and technology glitches, collating abstract booklets, and working as a concierge service to visiting families. Following months of planning and preparation, tensions run high in anticipation of the culminating event.

The annual event is our Senior Undergraduate Research Symposium and Banquet. For the last 19 years, we have combined into one weekend our senior students' research and literature presentations with a banquet in their honor. A degree requirement of our Chemistry and Biochemistry majors is the Chem 4185 seminar course, where all students present a chemistry talk. Many students choose to present on their undergraduate research projects, while others choose to review an exciting advancement in the field. Upwards of 50 to 60 senior students work with our over 20 faculty throughout the year, developing their theses, writing abstracts, navigating PowerPoint software, and honing their presentation skills.

Those presenting on their undergraduate research have the additional task of wrapping up experiments, analyzing the data, and putting together a story on their findings. These students often choose to compete in the judged portion of our symposium, referred to as the Casmir Ilenda Presentations. The Casmir Ilenda Presentations are named in honor of the 1969 alumnus, who endowed the event with a generous gift to the department (see article page 8). As a result we are able to give monetary awards to the "winning" students chosen from the competition. The award is therefore a very high honor, and one that all competing students diligently seek.

(continued on page 3)

## Dear Friends and Alumni of UMD Chemistry and Biochemistry,



Dear Friends and Alumni of UMD Chemistry and Biochemistry,

I hope that you enjoy reading through Transitions. In this year's issue, we highlight our Senior Symposium (p.3, 8-10), where our soon-to-be graduates present their in-lab or literature research on chemistry and biochemistry topics. We also provide updates on the 2016-2017 academic year, which has been a busy one. The department is educating and graduating amazing students (congratulations to the 66 undergraduates and 10 graduate students who received degrees this year). Our faculty and students are expanding scientific knowledge (with 24 publications in peer-reviewed journals), improving pedagogy, and providing key outreach in the northern Minnesota region. The department is excited to update you on the CAMS building, which will soon provide beautiful new laboratory facilities and will house our department office (p.7).

The work that we do here is strengthened by the generous support of our alumni and friends. Your gifts help us to provide scholarships to deserving students (p. 14-15), to maintain a strong undergraduate research tradition (e.g., p.8-9) and to support our instructional labs and undergraduate and graduate student development.

Please share with us your recent accomplishments and visit the department if you are in the area.

Sincerely,

A handwritten signature in cursive script that reads "Elizabeth Austin-Minor".

Elizabeth Austin-Minor

## Transitions - Summer 2017

The Newsletter of the UMD Department of Chemistry and Biochemistry

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## Senior Undergraduate Symposium and Banquet, cont.

The transition to a single weekend symposium event for student seminars occurred 19 years ago. Prior to this time, senior students delivered their research and literature presentations during the normal departmental seminar time at 3 pm on Friday afternoons. As the number of chemistry majors increased, it became increasingly difficult to accommodate all students during this time, especially since our growing Chemistry M.S. program also delivers their seminars on Friday afternoons in the spring. By moving to a single Saturday symposium we were able to accommodate all of our student presenters, usually in multiple parallel sessions spanning morning and afternoon sessions. In addition, concluding the day with a banquet to honor our graduating students enables family and friends to attend talks and the banquet in one event. Furthermore, the high quality of the student talks, the active participation of faculty and staff, the support of family and friends and the sharing of a meal makes for a very special event. This year's symposium was no exception.

On Friday April 21st, we kicked off the annual event with a keynote address from the internationally recognized Professor Marjorie Longo from the University of California Davis Department of Chemical Engineering. Our seminars are usually well attended, with over 100 faculty, students, and graduate students filling Chem 200, which is the recently named Brian Kobilka\* Lecture Hall. This year's high profile speaker attracted even more faculty and students from medical, pharmacy, biology, and related programs. Professor Longo spoke to us about her latest work on lipid biomembranes and their behavior with mixtures of lipid types, examined by state of the art fluorescence microscopy.

The symposium continued early Saturday morning in the UMD Campus' Kirby Ballroom with a continental breakfast. Three parallel sessions followed, spread over the Ballroom and Rafters, featuring research talks by our Ilenda speakers. This year's cohort spoke on the wide array of research projects in which they had been involved at UMD, many of them for multiple years. The morning session broke for lunch around noon, with an informal catered lunch for students and their families in the UMD Griggs Center. Student talks resumed promptly at 1 pm, with another three parallel sessions of student speakers. We were universally proud of the accomplishments demonstrated by this year's cohort of 50 student speakers. Their dedication and professionalism in preparing for the event was clearly apparent in the quality of the presentations. The students' poise and their ability to answer questions from the audience seems to improve each year.

Following completion of the afternoon session, we had a brief break before the banquet. This year's symposium fell on one of the warmest days of spring. Students were therefore rewarded with some time in the sun, relaxing with family and friends after a hard day's work. Everyone soon reconvened back in the Kirby Ballroom, where faculty, students, staff, and families shared an excellent dinner prepared by the UMD catering service. Following dessert, each graduating senior was introduced by their academic advisor, including the announcement of their post-graduation plans. We also announced the winners of our Casimir Ilenda Presentation competition. To conclude the evening, our invited keynote speaker, Prof. Marjorie Longo, again spoke to our graduating seniors, passing on words of wisdom regarding their promising future careers and the future of the chemical sciences.

The Senior Undergraduate Symposium ends up being one of our favorite events of the year. The months and weeks of preparation, and days of anxiety for students anticipating the talks, give way to celebration and a deep sense of accomplishment as another senior class of Chemistry and Biochemistry majors successfully navigate the symposium weekend and draw near to graduation day. For our faculty, the event reinvigorates our core mission by highlighting the major transformation our students undergo over the short timespan in which we have to educate and engage them at UMD. It is summer now, and the event has long since passed, but we are already eagerly planning and preparing our students as we look forward to next spring's Senior Undergraduate Symposium and Banquet.

\*UMD Graduate and Recipient of the 2012 Nobel Prize in Chemistry

# Faculty & Staff Updates

## In Memory:



**Professor Emeritus J. C. (Charlie) Nichol**, a dear friend and colleague, passed away on June, 20, 2017. Charlie grew up near Edmonton, Alberta, earned B.Sci. and M.S. degrees from the U. of Alberta, and a Ph.D. in physical chemistry at the U. of Wisconsin (Madison). His first teaching position was at Willamette U. (Salem, OR) in 1949 and in 1957, he was recruited to UMD to help change UMD from a teacher-training institution to one with a wider range of research activities. Charlie was the first of the new faculty hired to transform the Chemistry Department into the modern department that it is today.

Charlie was the ultimate faculty member; he was a true scholar, a passionate and concerned classroom teacher, and a wise and caring mentor. All of us, faculty, students, and graduates of the UMD Chemistry and Biochemistry Department were blessed to have worked with and learned from such a truly outstanding human being. We will greatly miss him. Please find an article on his significant role at UMD and his obituary on the department's website: <http://www.d.umn.edu/chemistry>.

## Fond Farewell To:



**Bilin Tsai** retired in May 2017 after forty-one years on the UMD faculty. She plans to spend more time traveling, reading, volunteering, exercising, and visiting with family and friends.



**Viktor Nemykin** left the department in August 2016 to become Department Head of the Department of Chemistry at the University of Manitoba, Canada.

## Congratulations To:



**Elizabeth Austin-Minor** received the Sabra S. and Dennis G. Anderson Scholar/Teacher Award in recognition of her scholarly distinction and teaching excellence.



**Ahmed Heikal** received a 2017 Outstanding Academic Advisor Award for his work with students during the 2016-2017 academic year.



**Romesh Lakhan** received a 2017 Outstanding Faculty Advisor Award for his work with students during the 2016-2017 academic year.



**Erin Sheets** received a 2017 Outstanding Student Organization Advisor Award for her work with the Society of Chemists and Biochemists Club during the 2016-2017 academic year.



**Neil Weberg** received a 2016 Outstanding Service Award for his work on the Chemistry & Advanced Materials Science Building

## SCSE Academy of Science & Engineering



The Academy of Science and Engineering was established in 2002 to recognize alumni and special friends of the Swenson College of Science and Engineering who have distinguished themselves through their participation, commitment, and leadership in their chosen professions. Our 2016 inductee to the Academy is Dr. Fawn Atchison.

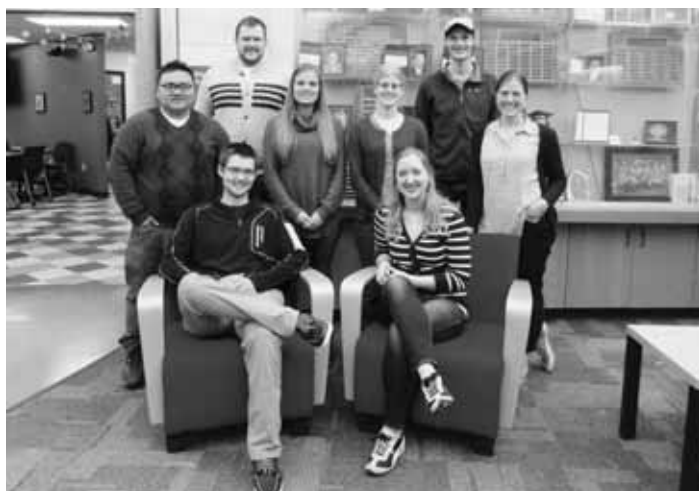
Dr. Atchison has excelled in higher education and in her medical field. She graduated from UMD in 1998 with a degree in Biochemistry and Molecular Biology and was the fastest MD/PhD to graduate in her class at Duke University Medical Center because she published original research while completing her medical school curriculum. In 2008, she was elected Chief Resident by her faculty and peers while at the Mayo Clinic in Rochester. Another of her academic accomplishments was earning the highest score in the country on the American Board of Anesthesiology written examination in 2009. She eventually chose a career in rural and community healthcare and is now the anesthesiologist at Cuyuna Regional Medical Center as well as the Center's Director of Education, Chief-of-Staff, and board member.

Upon receiving this award, Dr. Atchison said, "UMD is a special place. My experience here made me a better student, better citizen and a better human being. I will cherish this honor for the rest of my life."

## Major Grants Awarded

**Melissa Maurer-Jones** (co-PI): Qualifying Properties for Mechanistic, Predictive Understanding of Aqueous Impact on Ageing of Med and Low Voltage AC and DC cabling in Nuclear Power Plants. US-DOE. Total award amount: \$640,000

**Anne Hinderliter** (PI) and **Alessandro Cembran** (co-PI): Entropic Springs in Tandem Repeat Proteins. NSF. Total award amount: \$674,999



## Decades of Positive Change by Cheryl Reitan



What is most noteworthy about Dr. Bilin Tsai isn't the list of important positions she has held at UMD – although the list is impressive. Instead, it is the change she has made in the lives of women and individuals who are underrepresented in our classrooms and offices. Since her arrival at UMD in 1976, she has mentored students and faculty across the campus but especially in the sciences and led UMD on a path toward diversity, acceptance, and respect for all.

This work has earned her high praise. On May 3, Bilin Tsai, retired professor and UMD administrator, was presented with the 2017 University of Minnesota President's Award for Outstanding Service. "Many of us on the UMD campus have benefitted from Bilin's generosity of time, mentoring, and sound advice," says Andrea Schokker, Interim Dean of the Swenson College of Science and Engineering. "She is widely respected on campus and in the community as a steady voice for inclusion, strong student educational opportunities, and exceptional planning for the future."

When Dr. Tsai arrived at UMD, she began by teaching courses in general and physical chemistry. Along the way, she took on several high level administrative positions including Department Head, College of Science and Engineering Associate Dean, Interim Associate Vice Chancellor for Academic Administration, and Interim Executive Vice Chancellor for Academic Affairs. In addition to her demanding schedule, Dr. Tsai provided leadership in establishing the women's studies minor, emphasizing academic expectations and skills during the freshman orientation program, and creating and advancing an inclusive campus climate. She co-lead the campus unit change team. "She has shaped so much of UMD's culture in a positive way that it is hard to imagine what our community would be like without her." says Schokker.

Dr. Tsai received her Ph.D. in Chemistry from the University of North Carolina. She completed a postdoctoral appointment at the University of Nebraska before joining the UMD faculty. Her research area was in single photon spectroscopy and molecular energy levels.

Established in 1997, the President's Award for Outstanding Service is awarded to University of Minnesota faculty and staff who have provided exceptional service to the University, its schools, colleges, departments, and service units; such service must have gone well beyond the regular duties of a faculty or staff member, and demonstrate unusual commitment to the University community.

## Chemistry and Advanced Materials Science Building Update



This June the legislature approved bonding for our new Chemistry and Advanced Materials Science (CAMS) building and the Board of Regents approved construction. Groundbreaking occurred on July 11, 2017. The building was designed in 2015-2016 and is projected to be 56,000-square-feet. It will house offices and research spaces for the Department of Chemistry and Biochemistry and the Advanced Materials Center (AMC), a recently developed center whose personnel focus on research of importance to the region and the state, both economically and environmentally. CAMS will be located next to the Medical School Building, with a skyway connecting it to the rest of campus. Its themes include “Science on Display” and linkages between the past, the present, and the future, and it is designed to celebrate Duluth’s cultural connections to bedrock, forest and lake, and to industry and materials.

There will be three floors with offices, laboratory space, and gathering places for study groups, small meetings, and general conversations among faculty and students. The departmental office and the AMC office will be located on the first floor, which will welcome people into the campus from the surrounding road and parking areas. The skywalk on the second floor will connect to the existing Medical School Building and the rest of campus. The third floor will contain research labs, offices and gathering areas for small group discussions. The

exterior of the building is designed to provide lots of natural light for the science on display. There will be outdoor seating areas and landscaping to create a perfect setting for our summer departmental cookouts and other gatherings.

Please feel free to contact the department office for further information on this building’s progress.



## Casmir Ilenda Outstanding Undergraduate Research Program



Dr. Casmir Ilenda (pictured, center) grew up in Proctor, Minnesota and attended the University of Minnesota Duluth for his bachelor's degree. As an undergraduate, he did research with Professor Ronald Caple and was a co-author of two publications. After completing his B.A. in Chemistry in 1969, Casmir was awarded an NSF graduate fellowship to support his Ph.D. work. He completed his doctorate in organic chemistry at the University of Colorado. After a postdoctoral position at the California Institute of Technology, Dr. Ilenda began his research career with Rohm and Haas in Philadelphia.

As a senior scientist he was involved with many successful research projects from plastics to fiber-optic lighting systems. He and his colleagues hold fourteen patents. In 1991, Dr. Ilenda was awarded the "Otto Haas Award of Scientific Achievement" by his company. He generously gave this monetary award to the UMD Chemistry department. To honor his gift, the faculty established the Casmir S. Ilenda Outstanding Undergraduate Research Program.

The program is open to graduating seniors registered for CHEM 4184/85 who are also Chemistry BS or Biochemistry BS majors and have faculty sponsorship (i.e. research advisor). Participants compete for one of three coveted research awards. In addition to the honor of being chosen as a winner, each recipient receives a \$150 award.



## Casmir Ilenda Presentations: The Judges' Perspective

"The Spring Symposium provides an excellent opportunity for our graduating seniors to showcase what they've learned. A significant number of our students participate in cutting-edge research and deciding upon the best presentation for a given session has become increasingly difficult due to the quality across the board.

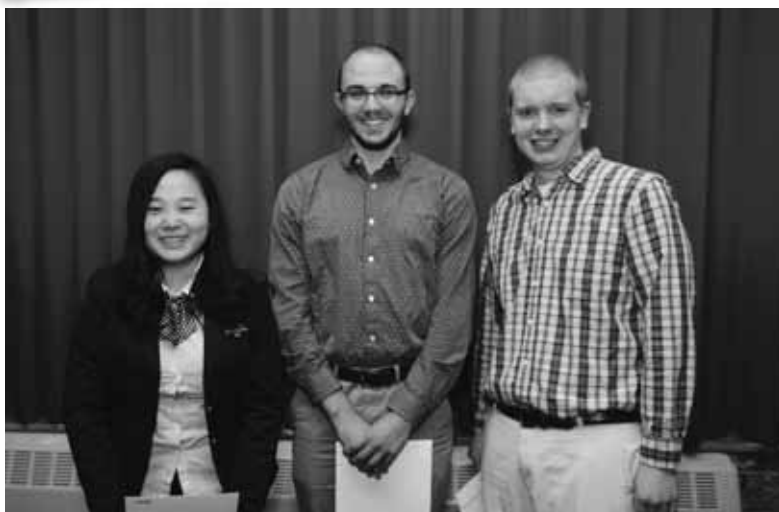
I have served as a judge several times. When judging in these sessions, I evaluate the presentations based on a number of criteria. First, I take notice of how the student frames the problem being addressed which leads to the specific question they ask or hypothesis they test. This is captured in their written abstract as well as the introduction to their presentation. Next I look at the quality of the science and the student's individual involvement and contribution. I evaluate their understanding of the experimental design, interpretation of their data, and use of experimental controls that serve to strengthen their conclusions. Throughout their presentation, I take note of their enthusiasm and how they engage their audience along with observing their ability to speak to the level of their audience without sacrificing scientific accuracy. The final aspect of judging for me is to see how the students respond to questions, ranging from simple to technical. The quality of these student presentations is impressive." - Joseph Johnson, Associate Professor

"If you want to feel optimistic about the next generation of scientists, then the Department of Chemistry and Biochemistry Annual Casmir Ilenda Presentations are the place to be. During the morning, students are asked to present their research in a similar way that scientists regularly do at department seminars or scientific conferences. This year, I had the opportunity to serve as a symposium judge, assessing the quality of the students' presentations and ultimately choosing a "best" presentation. It is fair to say that the decision of choosing just one was not easy!

A few things stood out about the symposium as we were evaluating the presentations. First, all the presenters were very earnest in their work. It was clear that the students not only took their presentations very seriously, some practicing many times in advance of the day, but they also took their laboratory research seriously. This especially shone through as the students were delivering the motivation for their research and how their research contributions fit into the larger scientific understanding of a particular problem. These students understand how their work as chemists and biochemists makes an impact on society.

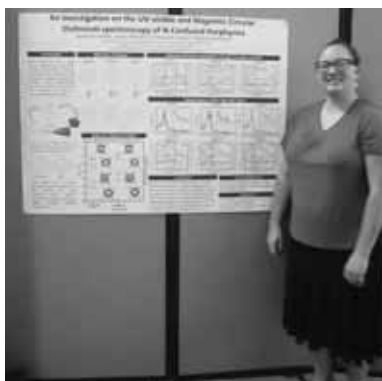
Secondly, I was reminded of the amazing care and dedication my colleagues have toward our students. In the question period of the presentations, the faculty in the room were engaged in meaningful discussion of science with the students. Also, the discussion with the other judges as we were choosing the presentation winner reinforced the commitment our faculty and staff have to developing excellent scientists.

Lastly, as judge of the symposium, I was struck by the thought that I was seeing this new cohort of chemists and biochemists launch into their next endeavors. Most, if not all, of the presenters I saw this year were headed for graduate and professional school. It is exciting to see these students on the cusp of their next big adventure, and I personally look forward to watching their successes stack up." - Melissa Maurer-Jones, Assistant Professor



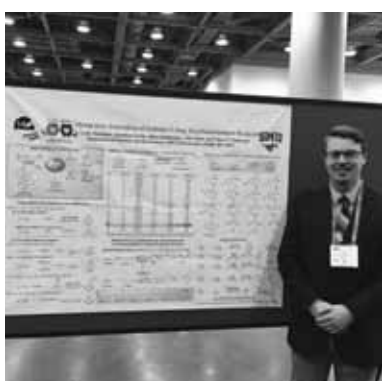
The winners of the 2017 Casmir S. Ilenda Outstanding Undergraduate Research Program Awards are Yishu Zhang (left), Mackenzie Liebl (center), and Kevin Wielenberg (right).

## Casmir Ilenda Presentations: The Students' Perspective



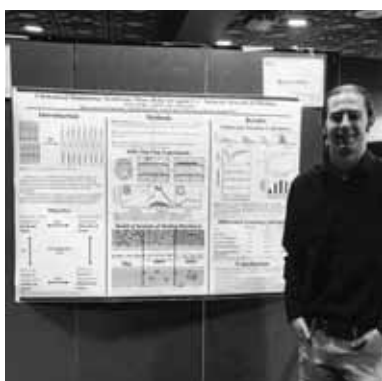
"I was the first to present on the day of the symposium and it was a bit terrifying. But once I got up to the podium, took a deep breath, and looked out to audience, I relaxed. Some were just as nervous as I was, some were proud that I was up there giving my speech, and all were eager to hear what I had to say."

- Samantha Doble, B.S. Chemistry, Class of 2017



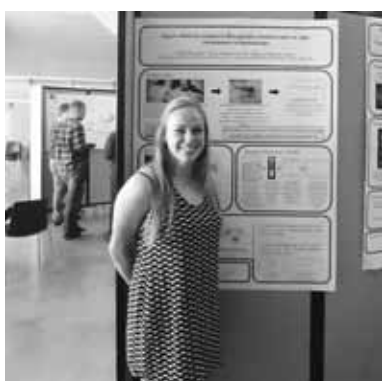
"People tend to put too much pressure on themselves for the presentation, but it really is not meant to be stressful. Every student who presents has four years of knowledge gained through coursework, research, self-interest, etc. You are ready for the presentation whether you feel it at first or not."

- Cody Makitalo, B.S. Biochemistry, Class of 2017



"One of the most important decisions to make is choosing a topic. As a student who is presenting this complex scientific topic to a group of individuals with varying backgrounds, it strengthens the presentation significantly to speak on subjects that one feels very passionately about."

- Robert Miller, B.S. Biochemistry, Class of 2017



"By the time symposium day arrives, a few nerves are still hanging around, but they are the good kind. These are the kind of nerves that mean you are ready. I had the opportunity to watch a friend present before it was my turn and I would recommend doing the same if you have the option. You find out the questions the faculty ask are not scary, and that as the presenter, you are the most knowledgeable person on that topic in the room."

- Faith Murphy, B.S. Chemistry, Class of 2017

# Master of Science in Chemistry Program Graduates: 2016-2017

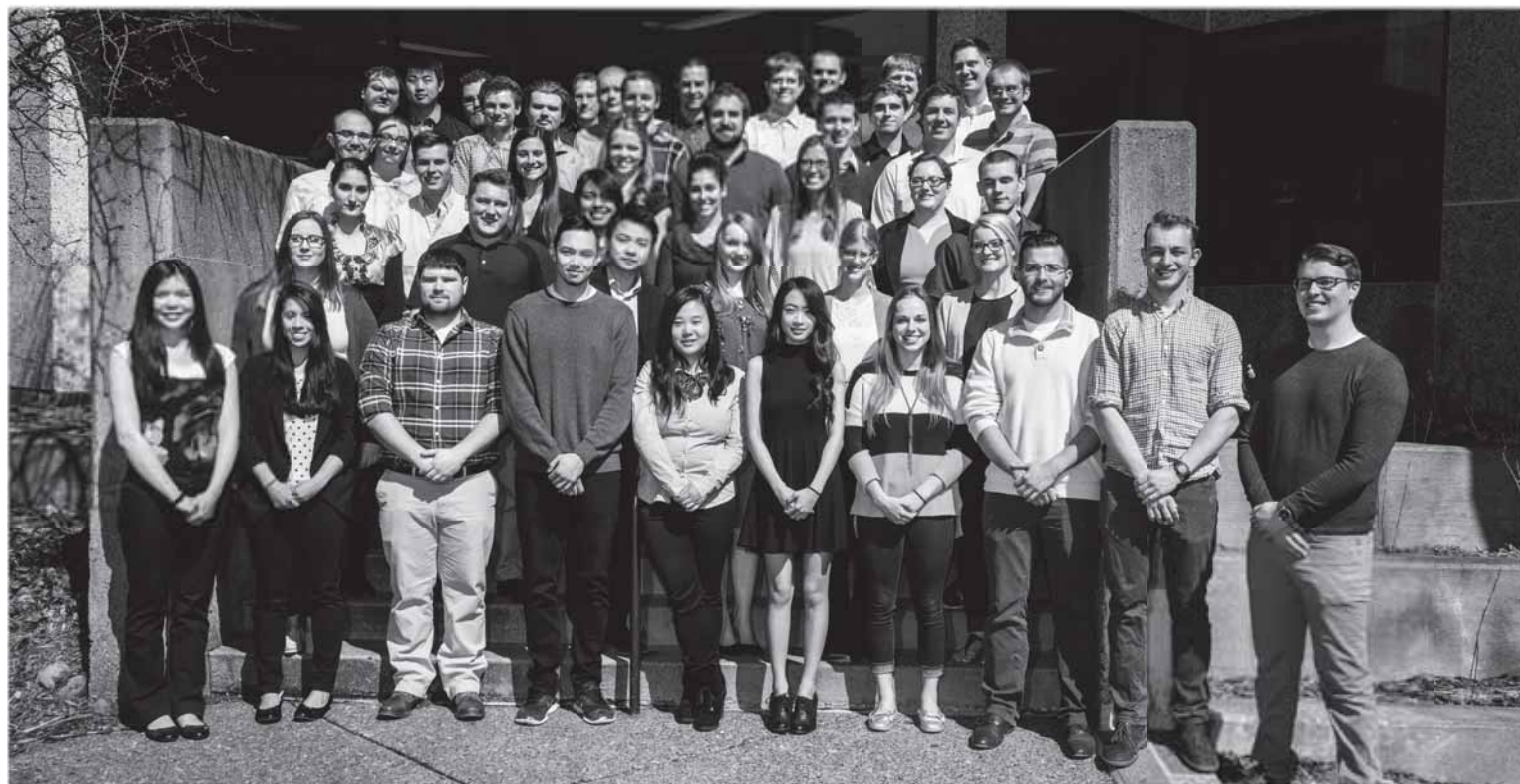
The Master of Science in Chemistry degree program at UMD provides an excellent opportunity to acquire and develop advanced technical expertise and problem-solving skills expected of today's chemical and biochemical professionals. Coursework is designed to provide a firm fundamental basis for students going into a variety of chemical specialties in both professional and academic settings. Following is a list of students who are completing their Master's degree over the 2016-2017 academic year:



**Top Row:** Jonathan Fuchs, Valerie Bruner, Erik Hendrickson (M.S. Water Resources Science), Anthony Meger

**Bottom Row:** Kyle Anorve-Andress, Jacob Schwarz, Shane Wilson, Hannah Leopold, Erica Lueth, Conor Ronayne

# Graduating Seniors: 2016-2017



Matthew Almquist, BA-Biochem  
 Christy Atkinson, BA-Biochem  
 Madison Barr, BA-Biochem  
 Alisher Battalov, BS-Biochem  
 Meghan Becker, BA-Chem  
 Brenden Berry, BS-Chem  
 Lauren Braun, BA-Biochem  
 Caleb Brown, BS-Biochem  
 Collin Christians, BS-Biochem  
 Dyllon Dahlquist, BS-Chem  
 Katherine Dennison, BS-Biochem  
 Maija Doran, BA-Biochem  
 Ariel Field, BA-Biochem  
 Tylor Franklin, BS-Biochem  
 Mark Gooley, BS-Biochem  
 Melody Grafton, BS-Biochem  
 Paul Hanson, BS-Chem  
 Zachary Hartnady, BS-Biochem\*  
 Jessica Haugen, BS-Chem  
 Kelsey Hedquist, BA-Biochem  
 Holly Israelson, BA-Chem  
 Melissa Jarvi, BS-Biochem

Dalton Jeske, BA-Biochem  
 Dustin Johantgen, BS-Biochem  
 Robert Kajer, BS-Biochem  
 Adrian Kipp, BS-Chem  
 Nathan Korson, BS-Biochem\*  
 Luke Krawiecki, BA-Biochem  
 Matthew Lambert, BS-Chem  
 Tong Lee, BA-Chem  
 Mackenzie Liebl, BS-Biochem\*  
 Yesenia Lopez-Mendoza, BS-Biochem  
 Wing Luu, BA-Biochem  
 Joel Madsen, BS-Biochem  
 Cody Makitalo, BS-Biochem\*  
 Kendall Mallery, BA-Biochem  
 Jenna Martinson, BS-Biochem  
 Dillon McCann, BS-Biochem  
 Elizabeth Marshall, BS-BMB  
 Robert Miller, BS-Biochem\*  
 Aaron Moore, BS-Biochem  
 Faith Murphy, BS-Chem  
 Noah Nagle, BS-Biochem  
 Holden Nelson, BA-Biochem

Tucker Olson, BS-Biochem  
 Cyrina Ostgaard, BS-Biochem\*  
 Annie Phetprapai, BS-Biochem  
 Abby Quinnell, BS-Chem\*  
 James Randle, BA-Biochem  
 William Renier, BS-Chem  
 Nick Ruha, BS-Chem  
 Jenny Schweitz, BS-Biochem  
 Michael Shea, BA-Biochem  
 Kaelt Simpson, BS-Biochem\*  
 Seth Stafki, BS-Biochem  
 Shelby Strain, BA-Biochem  
 Erik Swanson, BS-Chem  
 Matthew Terhaar, BS-Chem\*  
 Sintayhu Tesfaldet, BA-Chem  
 Katie Tomberlin, BS-Chem\*  
 Scott Vonbank, BS-Biochem  
 Paul Vue, BS-Chem  
 Kevin Wielenberg, BS-Chem\*  
 Jordan Wolf, BA-Biochem\*  
 Xuanming Zhang, BS-Biochem  
 Yishu Zhang, BS-Chem\*

\* **With Distinction**  
 (Departmental or University  
 Honors)

# Student Awards

Our department is fortunate to be able to recognize our outstanding and deserving students. Former students, faculty, and friends of the department established some of these awards; others are from organizations in the field. Award details can be viewed at <http://www.d.umn.edu/chem/undergraduates/awards.html> and <http://www.d.umn.edu/chem/graduates/awards.html>

## UNDERGRADUATE AWARDS:

### Swenson Family Foundation Scholarships for Academic Excellence

2016/2017: Kaitlyn Erola, Jennifer Fournier, Jonah Fuls, Rowan Simonet, Brenden Pekarek-Stay, Maddie Zamzow

### Achievement in Organic Chemistry (ACS) Award

2016/2017: Mackenzie Liebl

### Achievement in Inorganic Chemistry (ACS) Award

2016/2017: Nathan Korson

### Achievement in Physical Chemistry (ACS) Award

2016/2017: Nathan Korson

### Achievement in Organic Chemistry (POLYED) Award

2016/2017: Jacob Sawyer

### HyperCube Scholar Award

2016/2017: Nick Ruha

### Peterson Memorial Scholarship

2016/2017: Benedict Monley

### Lake Superior Section of ACS Outstanding Senior

2016/2017: Nathan Korson, Kaelt Simpson

### The American Institute of Chemists Outstanding Senior

2016/2017: Abby Quinnell

### F. B. Moore Academic and Leadership Award

2016/2017: Yishu Zhang

### General Chemistry Award for Excellence

2016/2017: Tiana Eng, Ashley Fankhauser, Brynna Gorackowski, David Lisson, Jenna Swenson, Maddie Zamzow

### Warren F. Davis Award for Excellence in Biochemistry

2016/2017: Claire Baetzold, Vitaliy Goncharov, Kaleigh Nelles, Alexander Wooner

### Catherine E. Cox Scholarship for Chemistry & Biochemistry

2016/2017: Christopher Huss, Lauren Messerschmidt

### James H. Maguire Scholarship

2016/2017: Alida Besch, Erin Groth, Shawn Bourgeois, Ellen Monzo

### Undergraduate Analytical Chemistry Award

2016/2017: Tana O'Keefe

### Robert Bayer Memorial Scholarship

2016/2017: Akquaa Anye, Victoria Fringer

### Larry C. Thompson Inorganic Chemistry Award

2016/2017: Kevin Wielenberg

### James C. Nichol Scholarship

2016/2017: Nathan Korson

### Casmir Ilenda Award for Outstanding Undergraduate Research

2016/2017: Mackenzie Liebl, Kevin Wielenberg, Yishu Zhang

### Dr. Nathan and Elaine Ballou Scholarship

2016/2017: Joshua Adamek, Luke McCutcheon, Tana O'Keefe, Kayla Schabacker

### Departmental Honors

2016/2017: Mikelle Dougherty, Zachary Hartnady, Nathan Korson, Mackenzie Liebl, Cody Makitalo, Robert Miller, Ellen Monzo, Cyrina Ostgaard, Abby Quinnell, Kaelt Simpson, Katharine Tomberlin, Kevin Wielenberg, Yishu Zhang

# Student Awards, cont.

## Departmental Outstanding Service Award

2016/2017: Megan Currie, Samantha Doble

## Chemistry and Biochemistry Outstanding Undergraduate Teaching Assistant

2016/2017: Zachary Hartnady, Faith Murphy, Andrew Sabir

### GRADUATE AWARDS:

## John C. Cothran Memorial Fellowship

2016/2017: Valerie Bruner, Hannah Leopold, Khiem Chau Nguyen

## Moses Passer Graduate Fellowship

2016/2017: Ryan Anderson, Shane Wilson, Rachel Van Allen

## UMD Siders Chemistry Graduate Fellowship

2016/2017: Anthony Meger

## SCSE Outstanding Graduate Teaching Assistant

2016/2017: Erik Hendrickson, Hannah Leopold, Conor Ronayne

### CAMPUS AWARDS:

## University Honors

2016/2017: Mackenzie Liebl, Cyrina Ostgaard, Matthew Terhaar, Jordan Wolf, Yishu Zhang



2016-2017 Award Recipients



## Research Publications

- **Gauer, J.W.**, S. Leblanc, P. Hao, R. Qiu, B.C. Case, M. Sakato, M.M. Hingorani, D.A. Erie, K.R. Weninger. Single-Molecule FRET to Measure Conformational Dynamics of DNA Mismatch Repair Proteins. *Methods in Enzymology*. 2016, 581:285-315.
- Fealey, M.E., R. Mahling, A.M. Rice, K. Dunleavy, S.E. Kobany, K.J. Lohese, B. Horn, **A. Hinderliter**. Synaptotagmin I's Intrinsically Disordered Region Interacts with Synaptic Vesicle Lipids and Exerts Allosteric Control over C2A. *Biochemistry*, 31;55(21):2914-26. doi: 10.1021/acs.biochem.6b00085. Epub 2016 May 18. PMID:27191789
- **Poe, D.P.** Theory of Supercritical Fluid Chromatography, Chapter 2 in Supercritical Fluid Chromatography, *Handbooks in Separation Science*, Colin F. Poole, editor, Elsevier, 2017.
- **Poe, D.P.**, S. Helmueller, S. Kobany, H. Feldhacker, K. Kaczmarek. *Journal of Chromatography. A*. 2017, 1482, 76-96.
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