Dear Alumni and Friends,

In this 2017-2018 edition of The Wright Message, we are pleased to report news and stories about individuals in our core constituent groups that caught our attention. We have divided the edition into several sections. In the section “Around Wright Hall” we give a summary of the activities that our faculty and students engaged in this past year. In the section on Alumni Spotlights, we feature Melissa Pfohl ((B.A. ’05, M.A. ’08) in an article written by the always engaging Dr. Doug Shaw), Linh Nguyen (BA ’15), and Alvina Atkinson (MA ’95). In the Student Spotlight section, we feature Mark Ronnenberg (graduate student – pure math), Mackenzie Mitchell (secondary mathematics teaching major), Lucas Beving (liberal arts mathematics major), Destiny Leitz (actuarial science major), and Johanna Holck (mathematics minor). In the Donor Spotlight section, we feature Nate McCay (BA ’76). The Faculty Spotlight features Dr. Joel Haack, who, after over 20 years in administration, has come back to the department to pursue his first passion: teaching.

We round out the newsletter with an interview with 2017 Alumna-in-Residence Kamilla Svaigl (BA ’00), an update on the Center for Teaching and Learning Mathematics written by Julie Creeden and Vicki Oleson, a piece on the 2017 Hari Shankar Lecture, Russell Campbell’s article commemorating the 100-year anniversary of Wright Hall, news about the naming of two classrooms in honor of the late Dr. Bonnie Litwiller and Dr. Augusta Schurer, a piece about Dr. Campbell’s retirement by Emeritus Prof. Dr. David Duncan, notes on the Math Conference held at UNI, and a farewell to our two colleagues Betty Bagenstos and Dean Franzen. We hope that you will find the stories in this edition as interesting and engaging as we found them.

The stories in this edition demonstrate that the state of the department is strong. We are grateful to you, our friends and alumni, for the much-needed support you continue to provide to us and to the students we serve through your contributions to our UNI Foundation accounts. In all, we received $92,298 in gifts and pledges and $180,000 in planned gifts between July 1, 2016, and June 30, 2017. Most of the money funds scholarships, but some goes to accounts that cover other expenses (equipment, faculty professional development, and travel to conferences by faculty and students). The department has awarded $171,780 in scholarships to undergraduate and graduate students for the 2017-2018 academic year, an increase of 8.25% over last year. As you know, many students are graduating with huge student loan debts, on average $22,372 at UNI. They greatly appreciate any financial support we can offer them. We are appealing for your help again this year. If you are able to contribute, please use the enclosed form to direct your contribution to the account of your choice. Again, thank you for your support. We hope 2017 was good to you and that 2018 will be even better.

Douglas Mupasiri
Professor and Head

DEPARTMENT of MATHEMATICS
2017–2018
UNIVERSITY OF NORTHERN IOWA

Russell Campbell
Mark Ecker
Sam Eskelson
Adam Feldhaus
Heather Gallivan
Joel Haack
Theron Hitchman
Elizabeth Hughes
Syed Kimani
Min Lee
Shangzhen Luo
Catherine Miller
Douglas Mupasiri
Vicki Oleson
Olena Ostapyuk
Michael Prophet
Suzanne Riehl
Chepina Rumsey
Doug Shaw
Marius Somodi
Adrienne Stanley
Olof Steinthorsdottir
Brian Townsend
Bill Wood
Dr. Sam Eskelson earned his BA in Mathematics Education from Brigham Young University (2004), an MA in Educational Studies from the University of Michigan (2009) and an EdD in Instruction and Learning from the University of Pittsburgh (2013). Between 2013 and 2016 he was in an Assistant Professor position in the College of Education of the University of South Florida. He has also previously worked as a Mathematics and Spanish teacher at the Springville High School in Springville, UT (2004-2007).

Dr. Eskelson and his wife Denise have three children: Caleb (12), Garrett (9), and Ryan (4). He spends most of his free time chasing after his sons. He loves sports (both watching and playing) and enjoys hiking, camping, fishing, and just being in the outdoors.

“I am very excited to join the faculty in the Mathematics Department at UNI” says Dr. Eskelson. “The mathematics and mathematics education programs at UNI have great reputations nationally and I look forward to continuing the excellence of these programs. As a member of the faculty at UNI I look forward to aiding students to prepare to become great teachers and to working with in-service teachers to become even better teachers.”

Dr. Chepina Rumsey received two degrees in Mathematics (BA) and Elementary Education (BS) from the college in her hometown (Keene State College in Keene, NH). After teaching in an elementary school in New Hampshire, she attended graduate school at Illinois State University where she earned a Master's degree in mathematics and a PhD in mathematics education. For the four years prior to coming to UNI, she was an Assistant Professor at Kansas State University in the Department of Curriculum and Instruction. She enjoys quilting, gardening, traveling, and being outdoors. Dr. Rumsey and her husband Brian have one child, Jackie (4 months old).

“I am excited to be joining a Mathematics Department and look forward to collaborating with my new colleagues. I am also excited to have the opportunity to work with teachers and students in the Waterloo, Cedar Falls, and surrounding school districts” says Dr. Rumsey.

Sam and Chepina are currently in their second year at UNI.
Faculty Spotlights

You may recall that in the 2015-16 Wright Message we asked Dr. Haack to give our readers glimpses of the trajectory of his career (see https://uni.edu/math/sites/default/files/mathnewsletter2015final2.pdf for the story). We did so in recognition of his return to the department faculty after serving UNI in a number of administrative capacities. In this edition of The Wright Message we reprise and update the 2015-16 article, this time to mark the fact that Dr. Haack is the next most senior faculty after Dr. Min Lee, whom we featured in the 2016-17 Wright Message. As we did in the previous article, we used a question-and-answer format for the present article. We found Dr. Haack’s responses to our questions illuminating. We hope you will agree.

It’s now more than two years since you stepped down from your role as dean of the College of Humanities, Arts and Sciences. How have the last two years been for you?

They have been a real pleasure, Doug. I’ve had the chance to think about mathematics again and to teach hundreds of UNI students.

As was mentioned in the 2015-16 Wright Message, this is not the first time you have left an administrative position to come back to the faculty. You left your position as interim dean of the College of Natural Sciences and returned to the department to teach full-time from July 2001 to December 2004. How do your experiences in the last two years compare with your experiences from the July 2001-December 2004 period?

There has been a difference, with a renewed commitment on the part of UNI to support student learning. Working with ADA students (those with documented disabilities) is more streamlined. And the support offered by peer mentors and Supplemental Instruction in first-year-only sections of general education courses has increased the student success rate. I am impressed with the steps UNI has taken to help students reach their goals.

You seem to have a wide range of academic, social, and cultural interests. Would you mind telling our readers about your varied interests and how have you been able to sustain them over your long and illustrious career?

You’re right—I have interests in mathematics, history, the arts, and nature. My own scholarly interests have been in the relationship of mathematics to the arts and humanities, and especially in the history of mathematics. Combining these with my experiences in statistics and mathematics education has served me well, first as head of our department (with its wide range of interests) and then as Dean of the College of Natural Sciences, the College of Humanities and Fine Arts, and of course the combined College of Humanities, Arts and Sciences.

My interests in the arts and in nature have provided me with a retreat from academic responsibilities, helping me (most of the time!) to remain calm.

You have been on phased retirement since January 2016, how do you like it and how has it changed your life, if at all?

I’ve greatly appreciated the opportunity to be on phased retirement, teaching full-time in the fall semesters when the number of students taught is highest in the department. The spring and summer semesters have offered me the opportunity to remain active as a mathematician. For example, I’ve had the time to produce two published papers. One of the publications was requested by an editor upon hearing a presentation of mine after an MAA study tour to China in 2006. When I was serving as dean, I had no time to write it up. The paper has now been completed and published in an online MAA journal this past year. Additionally, I’ve written several dozen book reviews for the MAA. Phased retirement has also offered me the opportunity to travel with my wife Linda during the spring semester. We have traveled to Cuba, to Kearney, Nebraska to experience the spring migration of Sandhill Cranes, to support UNI at the Missouri Valley Conference Basketball Tournament in St. Louis, and to attend the Westminster Kennel Club Dog Show in New York. In the spring of 2016, I also sang with the Varsity Men’s Glee Club and traveled with them to perform in Iceland and Norway. I’d never had that opportunity until I began phased retirement.

Finally, being on phased retirement gave me the time to research the history of the UNI Department of Mathematics for a presentation last October in recognition of the 100th anniversary of Wright Hall.

Looking back at your illustrious career in higher education and knowing what you now know from the many hats you have worn, what would you say was the thing or thing(s) that made you successful?

First, thank you for the kind words. I believe what has made me successful is listening to people and treating them with dignity and respect. I’ve found that if you treat other people that way, they will respond to you in kind.

We know you love teaching, what is it about it that you find so compelling?

Since I left the dean’s office, I have taught primarily mathematics education students and first-year students in statistics. I have enjoyed the opportunity to talk with them, to learn what their interests and passions are, and to help them reach their goals. Returning to the classroom has also allowed me to share what I have learned as well as the photos and artifacts that I’ve collected on MAA study tours around the world—Greece and Turkey, England, the Mayan culture (Mexico, Guatemala, and Honduras), China, Italy, Switzerland, Russia, and Germany.

Do you have any other comments you would like to make to our readers?

In spite of the ongoing budgetary difficulties that UNI has faced, the university has remained committed to the success of its students. I’m proud to have been associated with UNI over the past 25+ years.
Graduate students Mark Ronnenberg and Eric Scheidecker participated in the 51st Spring Topology and Dynamical Systems Conference, hosted by New Jersey City University in March 2017. They were accompanied by Dr. Adrienne Stanley.

Aashita Vadhera, Marcus Reihman, Eric Nichols, Josh De La Bruere, and Daniel Tamow, all undergraduate students, attended MUMS 2017. Dr. Theron Hitchman organized the trip to the symposium which was hosted by Simpson College.

Congratulations to Drs. Catherine Miller, Shangzhen Luo, and Marius Somodi on achieving promotion to the rank of Professor!

Congratulations to Dr. Michael Prophet on being awarded a Professional Development Assignment for Spring 2018. The title of his semester-long research project is Chalmers Equation and \( L_p \) projections.

In March 2017, the spring meeting of the Iowa Precalculus Advisory Council was held in Wright Hall. This organization facilitates the exchange of information and ideas related to precalculus education between Iowa educators at the secondary and post-secondary levels. Dr. Suzanne Riehl represents UNI on this council. Teachers—check out the resources at https://sites.google.com/site/iowaprecalc/

Dr. Samuel Eskelson presented his paper entitled Working Together: Using Consultations to Improve Mathematics Teaching for Students with Special Education Needs at the 39th Annual Conference of the North American Chapter of the International Group for the Psychology of Mathematics Education (PME-NA 2017) in Indianapolis, IN. His article will be published in the conference proceedings.

A group of four faculty members consisting of Drs. Samuel Eskelson, Elizabeth Hughes, Chepina Rumsey, and Olly Steinthorsdottir was among the participants at the 21st Annual AMTE Conference organized in Orlando, FL in February 2017. Dr. Rumsey gave a talk at this conference entitled Embedding Mathematics Teacher Preparation Courses in the PK-12 Setting.

Dr. Heather Gallivan is the recipient of a Pre-Tenure Faculty Grant through the UNI Office of the Provost for the purchase of equipment/supplies needed to conduct a research study related to using electronic journals in the problem solving course for K-8 math minors.

Dr. Joel Haack has given a number of presentations and published two papers since the last edition of our newsletter. The presentations have included “From the Smithsonian Institution Exhibit for the MAA Centenary: Founding Member Richard P. Baker” at the 2016 meeting of the Iowa Section of the MAA (as part of its centennial celebration) and at the 2017 MathFest meeting of the MAA; “Why consider the history of (mathematics at your institution)?” at the 2017 ICTM meeting; and “The Evolution of Mathematics at UNI,” the inaugural lecture in the Wright Hall Centennial Lecture Series. In addition to a number of book reviews published online for the MAA, he has also published Illustrating The Nine Chapters on the Mathematical Art: Their Use in a College Mathematics History Classroom in Convergence, an online journal of the MAA. He was co-author of an article, “Humanistic Reflections on Hundredth Powers--A Case Study,” in a book, Research in History and
Philosophy of Mathematics: The CSHPM 2015 Annual Meeting in Washington, D.C., published by Birkhäuser in 2016. Having sung with the UNI Varsity Men’s Glee Club in 2016, he was pleased and surprised to be made an honorary member of Phi Alpha Sinfonia, a national music fraternity, and to have received from the Glee Club the “Most likely to have already succeeded” award!

Dr. Theron Hitchman joined the team of workshop developers for the NSF funded PRODUCT professional development program through the Academy of Inquiry Based Learning. The PRODUCT project (PROfessional Development and Uptake through Collaborative Teams: Supporting Inquiry Based Learning in Undergraduate Mathematics) develops and runs several 4-day workshops for mathematics faculty who wish to learn how to incorporate inquiry based learning into their teaching practice. In the summer of 2017, there were three such workshops (in Chicago, IL, San Luis Obispo, CA, and Rochester, NY) with a total of over 80 participants. Dr. Hitchman helped to develop the workshops, and ran sessions at the workshop held at Cal Poly San Luis Obispo in June 2017.

Dr. Syed Kirmani gave a talk at the 5th Annual Conference for the Exchange of Mathematical Ideas, Cedar Falls, June 10-11, 2017. The title of his talk was “Log-Concave Probability Distributions.”

Dr. Min Lee was awarded a Summer Research Fellowship by the UNI Graduate College during the summer of 2017. The title of his research project is “Quasimodular forms and Jacobi-like forms.”

During the 2016-2017 school year, Dr. Chepina Rumsey conducted monthly professional development (PD) sessions with early career K-2 teachers in order to support the inclusion of classroom discourse and mathematical argumentation during math instruction. Through the PD project, she is collecting data on the novice teachers’ growth, characteristics of K-2 students’ mathematical arguments, and tasks that provide opportunities for students to notice patterns, predict, conjecture, and explain their thinking. The project, which is continuing this school year, is taking place mostly virtually through video conferencing with a school in California. Dr. Rumsey traveled to the school in May 2017 to deliver in-person PD to the whole school and to collect additional data. During the summer, she had a research fellowship to analyze the data and draft manuscripts to share the work with other educators. She is planning to write a grant to support Iowa K-2 teachers in similar professional development.

Dr. Marius Somodi presented his recent research at the 30th Midwestern Conference on Combinatorics and Combinatorial Computing at Illinois State University in October 2016, and at the Southern Regional Number Theory Conference, hosted by Louisiana State University in April 2017.

Dr. Olof Steinthorsdottir continues her extensive involvement in the professional development of teachers locally and nationally. In June, she presented Proportional Reasoning: Choosing your Numbers with Purpose at the 2017 Cognitively Guided Instruction conference in Seattle. Additionally, she has developed and led 18-hour PD workshops for mathematics coaches in the state of Texas. Locally, Dr. Steinthorsdottir continues her work with the George Little Rock Community School District in Northwest Iowa, where she has provided professional development and support.

Dr. Olof Steinthorsdottir and Dr. Suzanne Riehl presented Implementing the Five Practices using Missing Value Problems at the Iowa Council of Teachers of Mathematics fall 2016 conference. They also presented the paper, Proportional Reasoning: Choose Your Numbers with Purpose at the Wisconsin Mathematics Council conference.

Actuarial Fair
On September 19, 2017, UNI hosted the first UNI Actuarial Networking Day, organized by Dr. Syed Kimani. Over forty students from UNI and other schools participated in this event. They met with recruiters from Athene, Blue Cross Blue Shield of Illinois, EMC Insurance, FBL Financial, Global Atlantic, Nationwide, Principal, Sammons, Transamerica, and Travelers, and with Megan Klein from All State, who is our liaison to the Casualty Actuarial Society.
Kamilla, a UNI alumna who graduated with bachelor’s degrees in applied mathematics and computer science, is a principal with Milliman Financial Risk Management, LLC. She joined the firm in 2003. She is a Fellow of the Society of Actuaries (FSA) and a Member of the American Academy of Actuaries (MAAA). At Milliman, Kamilla has managed large-scale hedging activities for financial institutions and insurance companies, executed Mergers and Acquisitions (M&A) transactions for US and Japanese multinationals, and worked on a range of Liability Driven Investing (LDI) and Pension Risk Transfer solutions. A frequent speaker at industry events, she is sought after to provide expertise on the use of risk management to strengthen the retirement security system.

In April 2017, Kamilla visited our department as an Alumna in Residence. During her visit, she answered a few questions for our newsletter:

What are the skills / educational background a successful actuary must have?

There are the obvious ones: you need to have very strong analytical skills and you have to be able to pass actuarial exams. But there are also other skills that are equally important. First and foremost, people need to know how to think, write, and speak. The actuarial profession is not what it used to be 20 to 30 years ago. Industry trends and the Society of Actuaries are redefining what it means to be an actuary. We are expected to communicate well, write eloquently and know how to think outside of the box.

When I write an email to one of my peers at an insurance company, I write with the expectation that it will eventually be read by the CEO of the company. Sometimes it happens, often it doesn’t, but that is the standard I set for myself. If I were to give one piece of advice to someone who is still in college, I would encourage them to take a writing class, a literature class, and a humanities class, regardless of what their future professional plans are. The skills learned in those classes are priceless.

Secondly, you absolutely have to know how to build models and how to program. You don’t have to be a computer science major (although it helped me that I double majored in mathematics and computer science), but you have to have some basic skills in that area. You will be hard pressed to find a job in the actuarial profession where modeling and programming are not required. So, in addition to that English class, definitely take some programing classes!

At what point did you decide to become an actuary and why?

Like many of my colleagues, I didn’t plan on becoming an actuary until after I graduated from college. I had a short stint as a software engineer, decided it wasn’t for me, and eventually passed my first exam in the spring of 2003 and joined Milliman later that summer. When I started at Milliman, I was the sixth person in my group - now we are about 150. I took all of my exams in three years, got my FSA in 2007, and became a principal in 2011. I have to admit that it is becoming more competitive with many more schools offering actuarial programs and many students having numerous exams under their belt before they graduate. However, as long as you are willing to work hard, you can enter the profession at any age and any point in your life.

Do you have any favorite memories from UNI?

I think for me UNI was different because of the relationships I developed with the professors, which you don’t get in most other schools. I had many friends when I was here, but the interaction with my professors was the most defining factor of my positive experience here. On a personal note, I met my husband here, so obviously that makes my memories of UNI more wonderful.

What are the professional accomplishments you are most proud of?

Successfully passing all of my exams, becoming a partner at Milliman relatively early in my career, and being an expert in the field of risk management, which is a very interesting and unique field within the actuarial profession.
Alvina Atkinson

Alvina earned her Bachelor of Science in Mathematics from Dillard University (1993) and her MA in Mathematics from UNI (1995). After graduating from UNI, she continued her studies as a graduate student in the Department of Mathematics at Auburn University and in 1999 earned a PhD in Mathematics.

Her first post-doctoral position was at Fort Valley State University, where she started as an Assistant Professor of Mathematics in the Department of Mathematics and Computer Science. She was granted tenure and was promoted to the rank of Associate Professor in 2005. Between 2001 and 2006, she served as Interim Department Head. Her administrative duties included the supervision and evaluation of 14 full-time faculty in mathematics, computer science, computer information systems, and physics, along with two adjunct faculty, and one administrative assistant. She was responsible for scheduling, advising, budgeting, resolving faculty and student grievances, outcomes assessments (core and majors), program reviews, NCATE reviews, annual reports, and other duties as assigned by the Dean of the College of Arts and Sciences.

Since 2007, she has been at Georgia Gwinnett College (GGC), where she started as an Associate Professor of Mathematics in the School of Science and Technology, and in 2014 was promoted to Professor of Mathematics. Between 2010 and 2011, she served as Faculty Administrator, whose responsibilities included the supervision and evaluation of 37 part-time faculty, scheduling, hiring, and other duties as assigned by the Dean of the School of Science and Technology. Since January 2012, she has been serving as an Assistant Dean of the School of Science and Technology. In June 2012, she co-founded the Mathematics in Action Scholars program, a weeklong mathematics intensive summer program for academically talented or motivated middle school students hosted by GGC. This program is now a part of the GGC STEM Academy. Alvina is the Director of the STEM Academy. She also currently serves as the President of the Georgia Mathematical Association of Two-Year Colleges (GMATYC).

Alvina enjoys participating in a variety of campus events and programs. She has served as an announcer for the college’s Commencement ceremonies, a volunteer at Open House, a volunteer at convocation activities, a standard bearer at a fall commencement, and has volunteered at several Bear Essentials, the college’s new student orientation program. She also served on the GGC Black Student Association Planning Committee. Alvina has the unique honor of being a co-lyricist for the GGC Alma Mater. In addition, she enjoys mentoring 25-30 students each semester.

Alvina’s favorite memories from UNI include the friends she made, the late nights studying in Wright Hall, and experiencing snow for the first time. “I am from New Orleans and not used to snows there,” she points out. When asked about the UNI professors who made an impact on her education, Alvina responded: “There were several professors that made a major impact on my education. Dr. Douglas Mupasiri served as my advisor and mentor. Dr. Maura Mast introduced me to topology (which is now one of my favorite subjects). Dr. Joel Haack was the Department Chair at that time. It was great that his door was always open. I also received support and encouragement from Dr. John Somervill, who was the Dean of the Graduate School.”
Alumna Spotlight

Linh Nguyen

Linh was born and received her early education in Hanoi, Vietnam and went to high school in Singapore. As she was planning to get her college education in the US, she met with Kristi Marchesani (a UNI recruiter) in Vietnam to learn more about our school. “I felt an instant connection to UNI,” says Linh. “The presidential scholarship that I was offered was also an important factor in my decision to attend UNI.”

After graduating from UNI, Linh was offered and accepted a full-time position at Transamerica. “Even though my time at UNI was relatively short (I graduated after 2.5 years), I owe my personal development as well as professional skills to UNI, especially the Mathematics Department. I received a lot of guidance on not only technical skills to succeed as an actuary, but also leadership skills that helped me develop into a well-rounded professional,” says Linh.

Linh enjoys travelling, especially to the beach. She and her husband own a condo close to the beach in Florida, where they spend most of their vacation days.

Alumna Spotlight

Melissa Pfohl

by Douglas Shaw

Think about our graduates and ask, “How many of them were changed for the better by our department?” I’d hope the answer would be “All of them.” When I use the phrase “our department” I mean our resources, our overall culture. If these aspects of “a department” are working as they should, our students will be changed for the better.

That’s not the question to ask about Melissa Pfohl (nee Potter). Rather, the appropriate question in her case is, “How was our department changed for the better by this student?” And the answer here is, “In many ways, and always positively.” Many of us still have fond memories of how Melissa lifted our department’s culture - how much the faculty and her fellow students enjoyed working with her. She was an active, enthusiastic, student whose talent, collaborative skills, and great sense of humor affected every class she was in. Her involvement in Math Club led to wonderful and ridiculous events such as the Pi day chain, Iron Math Teacher, math charades, math movie nights, game nights and regional field trips. She showed an active interest in her professors’ work, often collaborating with them on projects including a publication in the American Journal of Undergraduate Research on isometries of the hyperbolic plane with Dr. Ribando, accompanying student poster presentation to the Joint Mathematics Conference in Phoenix with Dr. Miller and working with me on instructor’s guides to pre-calculus textbooks. When she graduated with honors, many of us couldn’t wait to see how, released into the wild, she would similarly change education in Iowa for the better!

So she moved to Wisconsin.

But even as she has settled with her husband and two children in the land of cheese, snowblowers, bratwursts, the Packers, and “bubblers,” Melissa has taken her UNI education with her, as she now seriously rocks the Sconnies. “The day I got my scholarship to attend UNI shaped the rest of my life up to this point. I wouldn’t be where I am without a lot of things falling into the right place, but going to UNI was the first piece of the puzzle that fell in place for me. You and the math faculty as a whole challenged me, supported me and taught me a heck of a lot.”

Melissa taught high school mathematics for 2 years in Janesville and 7 in McFarland, teaching a variety of classes from consumer
She learned at UNI with her administrative skills. She has since transitioned to a district-wide leadership role, bringing her analytic abilities to bearing as the Data and Assessment Coordinator (where she worked to emphasize teacher's formative assessment and feedback skills instead of state summative assessments) and currently as the Director of Teaching and Learning. In this role she has expanded her influence to all content areas for grades PK-12, but consistently works to apply the mathematical and organizational skills she learned at UNI to all content areas. “I like being able to take things off teachers’ plates,” she says. “I like to research ideas.” Melissa left UNI with cutting edge knowledge of good education practices, and the tools she needed to stay current, which is helping her succeed as an educational leader.

If you were a teacher in a district with a stagnant math curriculum, a district that was ready to become amazing, think of how wonderful it would be to have your new Director approach you as Melissa did, with the words, “Are you ready to jump off a cliff with me without a parachute and we’ll build one together on the way down?” Her pilot program consisted of “jumpers,” introducing manipulatives and collaborative learning to students who had not experienced them before in a systematic way. Now picture asking your Director to describe her role, and having her say, as Melissa did, “There are rules that make things harder for teachers. My job is to lift the burden so they can focus on the students in front of them.”

Instead of starting by throwing manipulatives at people (which was done in Math Club during her tenure - stellated dodecahedra hunt), Melissa wanted her colleagues to start by developing a philosophy to underlie what they do. The simple words, “We believe embedding the mathematical practice standards is at the core of what we do,” were the result of those conversations and continue to drive the work they are doing to update math curriculum K-12. Melissa’s superintendent has been impressed by how well she integrated the rigor and skills she learned at UNI with her administrative assignments. “She approaches everything through a mathematical lens. She uses her analytical training as she thinks through change, curriculum development, etc. and helps provide leadership to our administrative team.”

If you would like to see her latest project, you can go to this url: http://bit.ly/2zeive9 and see the local conference she put together. The theme of the day was “feedback.” Teacher leaders presented information on grading and feedback strategies to each other to help improve their practice. As a part of her keynote in the morning, she collaborated with a technology teacher to record teachers in her district talking about feedback strategies and cut it together with YouTube clips of educational experts talking about student feedback. Teachers and teams have asked the presenters to schedule follow up sessions, meaning that the impact of her conference has been spreading throughout the Cheesy State.

She misses some aspects of being on a team of classroom teachers. “I miss interacting with the same students day after day, but my new role lets me visit classrooms PK-12 anytime to see what students are working on. That diversity is really interesting and I love helping teachers make connections across classrooms, grade levels and content areas.”

She also misses Cedar Falls and UNI, but particularly the friendships she formed. She used to love walking leisurely through campus, wandering by the campanile, Rod Library, and her other favorite haunts. The traditions around UNI Homecoming - window painting, Panther Pride Cry, Campaniling and the Parade - hold a special place in her memory due to her involvement in the UNI Homecoming Committee.

If you ever want to visit, Melissa, you will always be welcome at our city and our university!
Wright Hall Centenary:  
A Celebration of the Building and the Man

by Russell Campbell

David Sands Wright was born in 1847. The Vocational Building (now Wright Hall) was opened in 1876 soon became too small for the needs of the growing school. The Vocational Building (now Wright Hall) became the fourteenth building on the ISNS campus. The specific needs it addressed were Agriculture (now Biology) on the first floor, Manual Training (now Technology) on the second floor, Domestic Science (now Applied Human Science) on the third floor, and Art (now Art) on the fourth floor. In 1949 Art and Industrial Arts moved into the present Latham Hall. There was some renovation as Mathematics moved into the building and the man.

The Building

The civil war orphanage building in which Iowa State Normal School (ISNS) opened in 1876 soon became too small for the needs of the growing school. The Vocational Building (now Wright Hall) became the fourteenth building on the ISNS campus. The specific needs it addressed were Agriculture (now Biology) on the first floor, Manual Training (now Technology) on the second floor, Domestic Science (now Applied Human Science) on the third floor, and Art (now Art) on the fourth floor. In 1949 Art and Industrial Arts moved into the present Latham Hall. There was some renovation as Mathematics moved into the building and Home Economics and Biology expanded their presence in the building. In 1968 most of Biology moved into the present McCollum Science Hall, but the office of the dean of the new College of Natural Sciences was located in Wright Hall.

The Department of Mathematics and Computer Science bifurcated into the Departments of Mathematics and Computer Science during the renovation, and those departments moved back into the renovated building in 1992. Most of Computer Science moved into the Innovative Teaching and Technology Center (former Women’s Gym) in 2006. The department office of Educational Psychology and Foundations was located in Wright Hall during the 2015-2016 renovation of Schindler Education Center.

Today the Mathematics Department is the primary occupant of Wright Hall, with some laboratory space for Computer Science. All mathematics classes are taught in Wright Hall, and several other departments also teach some classes in Wright Hall.

Wright Hall is a solid building and much of it is unchanged since it was built. Because it has interior bearing walls and the floors are 20 inches of concrete to support the manual training and domestic science equipment, the wide interior corridors were retained during renovation (except for the top floor where interior walls were moved to allow for private faculty offices). The stairs are original (the steps were turned over to expose the unworn side during the 1990-1991 renovation), but an elevator was added in 1978. The large north windows on the top floor (the original windows were replaced, but their size was not reduced) attest to original use of the top floor for art, where indirect light is desired. The original skylights were removed because they leaked and were not restored because of HVAC needs. The high ceilings were also lost because of HVAC needs. During the 1990-91 renovation, the slate chalkboards were saved and reinstalled, and marble from the bathrooms was repurposed for window ledges.

Unique to Wright Hall on the UNI campus is that it has quotes over its eastern doors. There is no record of why it has quotes, or why President Homer Seerley chose those quotes. Above the southeast door is inscribed ‘FOR THE PEOPLE HAD A MIND TO WORK’ which is from Nehemiah 4:6 (King James Version), and that context provides a meaning. But ‘DO NOT DO WHAT IS ALREADY DONE’, inscribed over the northeast door, is more enigmatic, especially since much of education entails redoing what has already been done. If it is a translation of the Latin ‘actum ne agas’, there are two possible sources. Publius Terentius Afer (Terence) in Phormio uses it in the sense: what’s done cannot be undone, do not spend time trying to undo it. Marcus Tullius Cicero in a letter to Atticus uses it in the sense: do not dwell on past mistakes.

The Man

David Sands Wright was born on December 7, 1847, in Ohio, where he attended several country schools and became a country school teacher in 1866. In 1872 he became Associate Principal of Whittier College and Normal Institute in Salem, Iowa, and was one of the original faculty when ISNS opened in Cedar Falls, Iowa, in 1876. He received a Bachelor of Arts degree (1871) and a Master of Arts degree (1873) from the National Normal University in Lebanon, Ohio, and a second Master of Arts degree from Penn College at Oskaloosa, Iowa, in 1887.

Although he was hired to teach mathematics, Principal James Gilchrist assigned him to teach English and he taught the first lesson at ISNS beginning with the question “What is grammar?”. In addition to grammar, during the first year he also taught orthography, word analysis, reading, English literature, Virgil, arithmetic, algebra, bookkeeping, physiology, and history.

In 1881 his teaching duties changed to mathematics, and in 1916 he left the
Department of Mathematics to become the Director of Religious Education, in which capacity he served until he retired (he was a minister of the Quaker church, as were his father and grandfather). He wrote textbooks for English, mathematics, and religious studies, which were widely used and are now available on the web. He was active in the Iowa State Teacher's Association, in particular he was elected president in 1904. He wrote over 100 professional articles. He also wrote “Fifty Years at the Teachers College”, and many more of his writings about the early years of ISNS and ISTC, including his diaries and sermons, are in the UNI archives.

He married Eliza Rawstern in 1880 in the evening of the day she graduated from ISNS. They had three daughters and a son. He died in Cedar Falls on October 30, 1931 and is buried in Fairview Cemetery, Cedar Falls. Several great grandchildren and their descendants now live within and outside of Iowa.

David Sands Wright’s 53 years on the faculty saw the transition from Iowa State Normal School to Iowa State Teacher’s College (ISTC). During these 53 years he helped the school grow from an undertaking which many questioned to a foundation of education in the state of Iowa and beyond. Today’s University of Northern Iowa is a legacy of David Sands Wright. Another legacy is the written record of the early years of ISNS and ISTC which he left.

The Celebration

A celebration of Wright Hall and David Sands Wright was held in Wright Hall 009 on October 7, 2017 (during homecoming). The building was open, with some open house activities from 9:00 until 1:00 that day. During the fall, there was a display of objects used in mathematics education from the time of David Sands Wright to the present in Wright Hall, and Rod library displayed some pictures and artifacts from its archives which are related to David Sands Wright and Wright Hall. There were also several lectures during the fall in departments associated with Wright Hall or David Sands Wright.

Further information on Wright Hall and David Sands Wright is available at Rod Library’s web pages: https://www.library.uni.edu/collections/special-collections/university-archives/building-histories/wright-hall and https://www.library.uni.edu/collections/special-collections/biographical-sketches/david-sands-wright
During the past year, the Center for Teaching & Learning Mathematics (CTLM) has become more familiar with our neighbor to the east – the state of Illinois. In last year’s newsletter, the CTLM reported on funding of $1.5 million from the Department of Defense Education Activity, which allowed us to expand our Making Sense of Mathematics and Teaching (MSMT) professional development (PD) courses beyond Iowa’s borders. We began this work in the Mascoutah Community School District in Mascoutah, Illinois, during the summer of 2016.

That first year involved careful collaboration with Laura Yarber, project director for the grant; Annette Louk, Prairie Lakes Area Education Agency (AEA), course facilitator; and the CTLM staff. With our ultimate goal of training new facilitators from Mascoutah, the first step in that process was to actually deliver the courses to a cohort of their elementary and middle school teachers.

Twenty-five Mascoutah teachers are currently enrolled in the first two courses in the series: Making Sense of Numbers and Making Sense of Operations. These MSMT courses are designed to help teachers increase their content knowledge of mathematics and improve their ability to implement research-based best practices. The innovations developed in these first two courses are Number Sense Routines (Shumway, 2011) and Number Talks (Parish, 2010). This past June, teachers began their PD. “This math program has provided an opportunity to explore and dive deeper into the background behind math. Being able to collaborate with colleagues and demonstrate number sense routines and number talks has been a game changer for math instruction. My students are really enjoying hearing and seeing math strategies from each other, and I’ve seen evidence in their classwork that proves they are using new ways of thinking,” stated Neshala Warner, Mascoutah fifth-grade teacher. There will be four additional courses which will cover geometry, measurement, algebra and fractions. Upon completion of these courses, the CTLM will train new facilitators from this cohort to continue this PD in Mascoutah with a new cohort of teachers beginning in 2020.

Additionally, during the summer of 2017, Mascoutah Math Mania (M-Cubed) came to town with over 125 fourth through seventh graders from across the district who dove into a summer camp experience! The camp’s mantra was that ALL students can achieve at the highest level of mathematical working closely with the CTLM, facilitator Connie Terry, Green Hills AEA, trained seven Mascoutah teachers to lead this math camp. The curriculum for the camp was based on the Growth Mindset work of Carol Dweck and Jo Boaler. Yarber made sure that parents were kept well-informed. Camp was created by Dana Lechtenberg. Another opportunity with the great state of Illinois happened in March when the CTLM brought Lisa Ginet to campus from Chicago’s Erikson Institute Early Math Collaborative to provide a day-long PD session for approximately seventeen AEA consultants, UNI faculty, and school district leaders. The focus of the PD was on the “Big Ideas” of early math and facilitation strategies for exploring early math with adult learners. Upon completion of the session, participants knew more about how to provide PD to teachers in order to help them both identify and close learning gaps in mathematics for the young children they teach. Because we are committed to closing math learning gaps for children, it makes sense to attempt to address those learning gaps when they are smaller, in pre-kindergarten through grade two. We believe that we will increase students’ chances for success in mathematics learning later. Our ultimate goal is to develop one or more 1-credit-hour courses for pre-K through second grade teachers that can be delivered by these participants and provide UNI graduate credit through Continuing Education.


Branding for the Mascoutah Math Mania (M³) Camp was created by Dana Lechtenberg.
What made you choose the actuarial major?

Prior to coming to UNI, I had never heard of actuarial science. My freshman year, I attended the Majors in Minutes event in Maucker Union to get a feel for the Mathematics, Finance, and Economics majors. Little did I know then that I would eventually major or minor in all three. It was in January that I declared my Actuarial Science major, drawn by its practical application to the business world. Now, I wish I had discovered it sooner. The actuarial profession is alluring in many ways, and UNI’s program does an excellent job preparing students for full-time positions after graduation.

In your opinion, what are the strengths of our actuarial program?

The major classes are taught to equip students with the knowledge to pass actuarial exams. Thanks to that program, I have completed two exams and am currently studying for another. Also, the Actuarial Science Club welcomes about ten companies to campus each year, so that students can learn about the profession and network with recruiters. The large majority of students who find internships do so through the Club.

You are currently a senior. What are your career plans?

As the recipient of the Athene Actuarial Scholarship, I was automatically granted home office interviews for a summer internship at Athene in West Des Moines following my junior year. After interviewing, I was offered the position. For me, the internship shed light on what actuaries really do on a daily basis, as well as taught me how to use common actuarial software, such as MG-ALFA, Excel, and VBA. During and outside of work, the interns were given plenty of opportunities to network with working actuaries and executives within the company. In my position on the product development team, my double major in Economics was useful in helping me understand how competition and profit drive the creation of new products. At the end of the summer, I was offered a full-time position after graduation, and I am incredibly excited to join Athene!

When did you realize you liked mathematics?

My passion for mathematics came largely in high school, inspired by my math teacher, Mr. Ratliff. His excitement for solving problems was visible, and made his classes enjoyable.

Why did you decide to come to UNI?

I chose to attend UNI because of its university feel, without having to attend large-sized classes. However, when I came to UNI, I was largely undecided on a major. I knew I loved mathematics, but I didn’t know what to do with it - especially since I knew I didn’t want to become a teacher.

Johanna graduated from Gilbert High School in 2013 and came to UNI to get a degree in Elementary Education. She was also admitted into the UNI Middle Level Education program and later declared a K-8 mathematics minor to go with her major. Following in the footsteps of her aunt and her grandmother (who both graduated from UNI with degrees in education), she is the third member of her family to have attended UNI. Says Johanna: “I chose the mathematics minor because I loved my level 1 mathematics class. I was never an advanced math student in high school, but I knew I was pretty good at explaining what I did know about math. When I read the course description, I thought it would be silly to relearn elementary mathematics. My thoughts quickly changed when my professor, Dr. Olly Steinthorsdottir, required us to dig deeper into the math, and to explain and expand our thinking. I loved the challenge and the creativity that we used in that class. In Dr. Catherine Miller’s class (Mathematical Reasoning for Elementary Teachers II), we continued our discussions and ideas that math can be creative and exciting. An upperclassman came into our class and explained that there was a minor that would let us take more of these classes and I was sold.”

One of Johanna’s favorite mathematics classes taken at UNI was Mathematical Problem Solving, taught by Dr. Heather Gallivan. Johanna recalls, “We learned what it felt like to not understand how to solve a problem so we could empathize with our students.”

Destiny is a senior in the UNI Honors Program, double majoring in Actuarial Science and Applied Economic Analysis, with a minor in Finance. She has passed actuarial exams P and FM and is currently awaiting the results of exam MFE. She has been on the Dean’s List every semester since Fall 2014. She assumed leadership roles in the UNI Actuarial Club, serving as co-president (2016-2017) and secretary (2017-2018) of the club. Her work experience includes a research assistantship at the Iowa Workforce Development (since 2015), a data analyst position at the UNI Small Business Development Center (since 2016), and an actuarial internship at Athene in West Des Moines (summer 2017). With her graduation around the corner, we asked Destiny a few questions:

When did you realize you liked mathematics?

My passion for mathematics came largely in high school, inspired by my math teacher, Mr. Ratliff. His excitement for solving problems was visible, and made his classes enjoyable.

Why did you decide to come to UNI?

I chose to attend UNI because of its university feel, without having to attend large-sized classes. However, when I came to UNI, I was largely undecided on a major. I knew I loved mathematics, but I didn’t know what to do with it - especially since I knew I didn’t want to become a teacher.
students (this happened to me often). Professor Gallivan taught us to be facilitators of math discussions rather than just telling students the answers. We had a math journal that she would read. I loved to just write her some funny comments in there as well, mostly about how frustrated I was or to go into painful detail about how I finally reached my answer (my mom says I have a talent for the theatrics). I would love to take ideas from this class to use in my own classroom, perhaps to organize a problem solving Friday or to use math journals to help communicate one-on-one with students during the year.”

Several professors from our department made a big impact on Johanna’s education: “Professor Olof Steinthorsdottir challenged me to think deeper and be creative with math. I also learned from her that I could take an entire course just on proportional reasoning and learn something new every day. Professor Catherine Miller is the one who sat down with me and encouraged me to get the math minor. Instructor Margaret Magner taught us a lot of fun math games to play in class and to not take ourselves too seriously.”

In college, Johanna participated in the Panther Pacers Running Club, Salt Company College Ministry, UNI Women’s Soccer Club, Habitat for Humanity, and TESOL Club. She is one of the recipients of the Mathematics Department Book Awards.

Johanna graduated in May 2017 from UNI. She is currently teaching eighth grade mathematics at the Fountain Middle School in Fountain, Colorado (she has endorsements in mathematics, science, and social studies). “I am very excited to spread my love of math to new minds,” says Johanna. "This summer she got married to Ryan Jolivette, an educator who is teaching seventh grade World History, down the hall from her, at the Fountain Middle School."

“I have truly loved my time at UNI and believe it did an outstanding job preparing me for my future classroom,” says Johanna. “I know that at any time I can call upon my professors for advice and encouragement and I look forward to continuing that relationship. I loved going to class and seeing my fellow math minors and really getting to know them by my senior year. I can’t count the number of times I laughed so hard during class, we really made math fun. My faith has played a major role in my college experience; just keeping perspective of who I am and what I am called to do helped me to get through those stressful days. I am very excited to teach and love my future students, and to remember that I am still a student and learner for life.”

Lucas started at UNI as an honors student in Fall 2013. Having enjoyed very much his high school physics class, he declared a physics major. After a semester, he decided to add a major in liberal arts mathematics to strengthen his understanding of the operations and identities frequently encountered in theoretical physics. “As I progressed through the mathematics curriculum, my initial reason for majoring in mathematics was overshadowed by my interest in various subjects that I had been introduced to in my math classes,” says Lucas.

Lucas graduated from UNI in May 2017 with a BA in Mathematics and a BS in Physics. He has already embarked on a new journey: he is currently a graduate student pursuing a PhD in Physics at the University of Iowa where he plans to study plasma physics. His choice of research area is motivated in part by his undergraduate research experiences at UNI and the Princeton Plasma Research Laboratory. He points out that “both of my majors provided opportunities for me that have helped me to gain experience (especially with programming and reading technical works) that I will use as a graduate student.”
Mackenzie Mitchell

A Cedar Rapids native, Mackenzie came to UNI in the fall of 2013 as an athletic training major. In fact, she was not even thinking about studying mathematics in college. However, during her sophomore year she took Calculus I which opened the door for her to a new major. Says Mackenzie: “I enjoyed understanding not only the computations of mathematics but also what mathematics relates to. I loved seeing how my classes started to connect and flow together.”

Mackenzie declared a mathematics teaching major during her sophomore year because she “loved mathematics and she loved to teach and assist others.” Later she added middle grades science and math endorsements and a Spanish minor. In fact, she would like to be a middle grades teacher: “As I started exploring my mathematics teaching major and entered my field experiences, I developed a new passion for middle school teaching. Middle schoolers have a different way of looking at concepts and are willing to try new things. I hope to teach at a middle school after my semester of student teaching,” says Mackenzie. She completed field experiences at Oak Forest Elementary School, in Houston, TX, Central Middle School and East High School in Waterloo, and at Orchard Elementary in Cedar Falls.

Mackenzie’s mathematical growth was particularly influenced by several professors and courses. Says Mackenzie: “One day I will not forget was when Dr. Adrienne Stanley walked into our classroom for the first day of Discrete and Argumentative Mathematics. Using an inquiry-based learning method, she said she would only be speaking for 10 minutes the whole semester and the rest would be up to us. There was very loose structure for the class and the content was all up to us. This freaked me out at first but I fell in love with inquiry-based learning. This class prepared me well for Euclidean Geometry, taught by Dr. TJ Hitchman, which was the most challenging class I took at UNI. I had to push myself to try harder proofs as well as to think outside the box. I enjoyed the process of questioning my classmates if I had a question or if something didn’t go quite right. I also loved when my classmates solved problems as it was a victory for the whole class. I liked taking an original text and creating our own mathematical discoveries (which were new to us). This was a very challenging class but rewarding. I hope to incorporate inquiry-based learning into my future classroom.”

“Another important class I took at UNI was History of Mathematics. I loved seeing how the different mathematicians and concepts connect over time as well as across courses. I also loved Dr. Joel Haack’s style of teaching. He was very engaging and told the facts/history just like a story. I love it when students ask me something about the history of mathematics and I actually know the answer to it! This has happened on quite a few occasions and I feel that all students should take this course.” She also names Megan Balong, Marius Somodi, Michael Prophet, Catherine Miller, and Glenda Christensen as some of the UNI professors who made a major impact on her education.

An important chapter in Mackenzie’s life at UNI is related to cheerleading. Between the fall of 2014 and the spring of 2017 she was an active member of the UNI Cheer Squad. Since April 2017, Mackenzie served as the captain of the UNI Cheer Squad. She had the opportunity to cheer at several major sports events like the NCAA volleyball tournament, the MVC men’s tournament, the MVC women’s tournament, and the UNC game at home.

In addition to cheering, Mackenzie served as the secretary of the Kappa Delta Pi Educational Honor Society and as a math mentor in the UNI Peer Mentor program. She has been on the Dean’s List every semester at UNI.

“My goal is to help students develop conceptual understanding just as my professors have helped me do during my time at UNI. I want to inspire my students and support them academically, emotionally, and mentally.”

Mackenzie is currently student teaching at Vinton-Shellsburg High School and Center Point – Urbana Middle School. She hopes to return to Houston, TX to teach mathematics at the middle school level.
Student Spotlights

Mark Ronnenberg

Mark came to UNI in 2013 to get his BA in mathematics. As an undergraduate student at UNI, he was on the Dean’s list every semester. He completed several research projects, presented his results at various conferences, and participated in mathematics competitions, placing second in the Iowa Collegiate Mathematics Competition in 2014. He published an article (jointly with Dr. Olena Ostapyuk) in the prestigious mathematics journal Involve. He completed all the requirements and got his degree, summa cum laude, in May 2015.

After graduation, Mark continued into the MA in Mathematics program in our department. As a graduate student, he served as a graduate assistant and tutor in the Academic Learning Center and as a grader for Calculus I-III and Dynamical Systems. He wrote an MA thesis entitled “Butterly Diagrams: Reidemeister Moves and Classification of Links” under Dr. TJ Hitchman’s supervision and earned his MA degree in May 2017. He is currently pursuing a PhD in Mathematics at Indiana University.

We asked Mark a few questions about his experiences as an undergraduate and graduate student in our department. The interview follows:

When did you realize you wanted to study mathematics?

In high school, I did rather poorly in my math courses (I once got a D+ in Algebra!). I did not discover my love of mathematics until after a two-year stint in community college. I originally planned on being an English teacher but, as my time at community college was coming to an end, I realized I had no idea what I really wanted to do. So I took a year off from school, moved to Cedar Falls with a friend who was starting at UNI, and worked full time at a grocery store. In my spare time, I visited the public libraries in Cedar Falls and Waterloo and read books on various subjects, trying to spark my interests. One day, on a whim I picked up a Precalculus textbook and started working through it. I ended up enjoying myself a lot, and made it through the entire book. Eventually I picked up a Calculus book and started working through that. It didn’t take long for me to consider going back to school for math. I worked on my own through the equivalent of Calculus I and II at UNI and passed the CLEP exam, which allowed me to earn credit for Calculus I and II, without ever setting foot in a Calculus class. When I arrived at UNI in Fall 2013, I started out in Calculus III.

What were some of your favorite courses at UNI?

It’s hard to pick a favorite math course at UNI; I enjoyed so many of them! If I have to pick, I might go with Modern Geometries, taught by Dr. Bill Wood. That class introduced me to the weird world of Non-Euclidean geometry, which was very exciting. Also, Dr. Wood let me create a hyperbolic geometry Space Invaders game for my final project instead of taking a final exam, which is probably my favorite project I’ve ever done. I also have fond memories of watching Dr. Douglas Mupasiri fill up the chalkboard over and over again in his Real Analysis courses, and me scribbling as fast as I can in my notebook to get it all down. If he wasn’t such a great guy, those classes could have gone a lot less smoothly for me.

Any favorite memories from your time at UNI?

My trips to conferences were always positive experiences. In particular, my favorite trip was to the Spring Topology Conference in Jersey City, New Jersey, with Dr. Adrienne Stanley and Eric Scheidecker (a graduate student in the department) in Spring 2017. The three of us spent many hours playing games together (especially Set), and this trip was my first time ever flying on an airplane. On some of our downtime, Eric and I got to explore nearby New York City. And, on the last night of the conference, there was a big banquet with free food and drinks which we enjoyed thoroughly. Most of all, I enjoyed getting to know Eric and Dr. Stanley better.

Please name a few UNI professors who made a significant impact on you.

Dr. Olena Ostapyuk is someone who had a major impact on me. She agreed to take me on for an undergraduate research project, despite not knowing me very well at all. I emailed her out of the blue asking about research opportunities, and after meeting with her, she agreed to work with me. Dr. Ostapyuk gave me a taste of what research is all about. I was often intimidated, but she constantly encouraged me to press on. She always encouraged me to go to conferences, and eventually to get our work published, which we did in Involve, an undergraduate research journal.

Working with Dr. Hitchman on my master’s thesis was an awesome experience. Writing a thesis is a very intimidating task. I spent most of the time working on my thesis oscillating between thinking “this is no problem, this is going to turn out great” and thinking “this is terrible, I just quit.” Dr. Hitchman was always very encouraging if I ever felt unsure about my progress. He made research fun and exciting. There were many days where we would get completely sidetracked talking about math that had nothing to do with my research, but that was something I really enjoyed. I appreciate those days a lot now, looking back.
What do you enjoy doing in your free time?

I have played guitar since I was 13 years old (I'm 25 now). I started out self-taught with that too, just like with math. I play the video game Super Smash Bros. Melee competitively. Formerly I was ranked 10th on Iowa’s power rankings. I like to spend time reading books, playing with my two cats, Lucy and Luna, watching movies, going for walks, and going out to eat with my fiancé Brittany.

What are your thoughts now, at the beginning of the PhD program?

I'm nervous to start my PhD program at Indiana University since it's a much, much larger school than UNI. But I think, mathematically speaking, that UNI has given me all the preparation I will need to be successful. I'm excited to meet new mathematicians and to learn new mathematics.

The Exchange of Mathematical Ideas Conference

The Fifth Annual Conference for the Exchange of Mathematical Ideas was held June 10-11, 2017, on the UNI campus in Cedar Falls, IA.

By way of context, the conference series started as a collaborative venture of the Departments of Mathematics at Embry Riddle Aeronautical University (ERAU – Prescott, AZ), the University of Northern Iowa (UNI – Cedar Falls, IA), and the University of Mary Washington (UMW – Fredericksburg, VA).

The goal of the conference series is to stimulate and enhance research by improving communication among mathematicians with expertise in different branches of mathematics. As such, conference talks are expected to give an overview of the speaker's area of research, describe open problems in the area, and address future prospects for research in the area.

The conference this year featured three invited speakers, Dr. Todd Eisworth (a set theoretic topologist at Ohio University), Dr. Victor Brunsen (a functional analyst at Penn State University – Altoona), and Dr. Talitha Washington (an applied mathematician at Howard University, Washington, DC). All told, a total of 15 mathematicians, including five UNI professors, presented papers during the two-day conference.

The next conference in the series, the Sixth Annual Conference for the Exchange of Mathematical Ideas, will be held at ERAU in Prescott, AZ next year.

*The conference was funded in part by a grant from the dean of the College of Humanities, Arts and Sciences, Dr. John Fritch
Nate McCay graduated from the University of Northern Iowa in 1976 with a BA in Mathematics. The following fall, he entered graduate school at the University of Minnesota to pursue an advanced degree in mathematics. “After a quarter or two I sensed I was getting a little crazy and reaching the limits of my talent and, at the suggestion of my father [a former English professor at Iowa State University], I applied to law school,” recalls Nate. “I entered Drake Law School the following fall and found that the logic of math translated very well to law. Law school was a pleasure consisting primarily of studying history.”

After graduation, Nate took a job as an associate in a three-person firm in Estherville, Iowa. While professionally all was going well, he felt that his personal life was less than he desired. Therefore, after four years, he moved to Arizona, took up residence, and passed the bar. During that time, Nate says, “I volunteered at Recording for the Blind, where I read textbooks that were recorded for students. I read math books, a couple of calculus books, finally getting all the way through the multivariable integration. Sometimes I read law books.”

One day, when he was reading a finance book, he encountered and was intrigued by the idea that “the value of a stock is equal to all future profits discounted to present value.” He had been reading about investing and watching the Nightly Business Report for some time, trying to learn more about public companies. “Math had taught me to be simple in my thinking. That simple line was what I sought and much came from it,” says Nate. “Price is the perception of value and this perception is altered by the rational and the emotional, so both the technical analysis of studying price movement and the fundamental analysis of studying income, debt, and expense matter. The investor buys future profits. Inflation, which affects the appropriate discount, can be consequential on prices. All these ideas were the consequences of the above axiom.” After this, stock investing became a significant and joyful part of Nate’s life. “It is one area, perhaps the only area, where my patience and discipline excel.”

Nate and his wife reside in Del Mar, California. While retired for many years, Nate enjoys volunteering his time in the Del Mar community. In fact, volunteering has always been an integral part of his life. While in Arizona, he volunteered for the Arizona Civil Liberties Union, at a time when the ACLU had an ongoing case over conditions in Arizona prisons and the governor had been impeached. In California, he served for six and a half
years on the Design Review Board of Del Mar, which reviews modifications and new constructions of structures in the city, as well as on the Housing Element Advisory Committee, which recommends modifications to existing City ordinances in order to create incentives for the development of low-income housing. In addition, Nate served on the Board of the Consumer Credit Counseling Service, a non-profit agency that provides financial education and counseling to improve the financial well-being of individuals and families. This piqued his interest in guest teaching personal finance to high school students at Torrey Pines High School in San Diego, which he has done since the early 1990s. He has also volunteered at the Del Mar Community Connections - a volunteer-driven organization that provides programs and services to improve the well-being of seniors and residents with special needs, where he served in different roles, from bus driver to President of the Board of Directors.

In his free time, Nate enjoys playing bridge. “I have been a duplicate bridge player most of my adult life and often enjoy tournament bridge. Bridge is a game which one never needs to stop learning. It also undergoes development from time to time, so it changes in subtle ways. Bridge players tend to be serious, perhaps a little too intense at times, but still the game can bring great gratification,” says Nate. Ever the volunteer, Nate also gave back to the bridge game. For more than a decade, he chaired the local Unit Board of the American Contract Bridge League, which involved running bridge games and tournaments. He also served as the Appellate Chairman of the local District of the American Contract Bridge League, whose charge is to hear reviews of disciplinary matters appealed within the district.

Nate’s other interests include horseracing, coin collecting, angel investing, and puzzles. Though math strikes him as beautiful, he gets equal enjoyment reading history. Whether it is the history of companies, law, or culture, for him learning is a joy. However, what he enjoys most is the company of his friends. Says Nate: “Whom we get to know and be with in our lives is our fortune. Nothing is more important to me than the people I share my life with. That is my view of life.”

At UNI, Nate established the Nathan McCay Mathematics Scholarship to provide scholarship support to mathematics majors. He summarizes his motivation to support education as follows: “We hear the word freedom often but not in the context of education. What freedom does a person who can’t think really have? Or one that doesn’t think (which is functionally the same thing)? So there is that. And then, for some of us, perhaps most of us, learning is a pleasurable experience.”

Russell Campbell is retiring from the Department of Mathematics at the end of the 2017 Fall Semester. He joined the department in 1983, coming to UNI from Purdue University after earning degrees from Brown University and Stanford University. During his years at UNI he maintained a heavy teaching load, plus a steady series of publications in his research field of population genetics.

Russell takes a strong interest in the entire mission of the Mathematics Department. He enjoys organizing events to recognize milestones in the department, such as the observance of the centennial of the building of Wright Hall. Beyond the department, Russell has been a good citizen of the university as a whole. He is helpful in a variety of campus activities, and rarely misses a performance at the Gallagher Bluedorn Performing Arts Center.

On a personal level, Russell is a committed environmentalist. Although he owns a car, he rarely uses it in town, instead going by bicycle in all kinds of weather in all seasons. In total, Russell has been an interesting colleague and a helpful departmental citizen. We wish him all the best in this next phase of his life.
Two classrooms in Wright Hall have been named in honor of two former faculty members: room 105 is now called the Augusta Schurrer mathematics classroom and room 217 is now the Bonnie Litwiller mathematics classroom. Plaques in honor of the two faculty members have been installed by their entrances. The plaques’ approximate size is 9”x12”, with an aluminum looking back and black trim. In addition to a photograph of the faculty member, they display the following texts:

**Augusta Louise Schurrer**
(1925 - 2015)

Augusta Schurrer joined the Iowa State Teachers College faculty in 1950 and retired from the University of Northern Iowa in 1997. She is remembered for her outstanding teaching and mentoring of students at all levels. She introduced the area of mathematical analysis into UNI’s curriculum and served on multiple National Science Foundation funding panels.

**Bonnie Helen Litwiller**
(1937 - 2012)

Bonnie Litwiller joined the University of Northern Iowa faculty in 1968 and retired in 2003. She was responsible for the secondary mathematics teaching program at UNI and was a national leader in mathematics education with more than 1000 publications. She was recognized with alumni awards from the University of Illinois and Indiana University, awards from the Iowa Council of Teachers of Mathematics, the University of Northern Iowa, and the Iowa Board of Regents, State of Iowa.

The Actuarial Science Club at UNI is a student organization that welcomes anyone who is interested in actuarial science. It is highly encouraged that all students, whether undecided about becoming an actuary, definitely wanting to become an actuary, or having no clue what an actuary is/does, come to at least a couple of meetings.

The Actuarial Science Club hosted its first UNI Actuarial Networking Day on September 19, 2017 in the Rod Library. There, students were able to network with representatives from ten companies in the area looking to hire UNI students for internships and full-time positions.

Additionally, the club hosts companies throughout the semester to present on topics ranging from industry topics to advice on exams and interviews. These presentations benefit students in two (well, three) ways.

1. Attending these presentations helps students get a feel for what the actuarial field is. It is alright if some students don’t know what the speakers are saying half the time - it is part of the learning experience.

2. The companies’ presentations are about themselves and what it is like to work for them. This allows students to ultimately choose which actuarial company is their number one choice to land a job with. Every company that presents is looking at UNI students to hire for both internship and full-time positions. Introducing yourself or asking questions at one of these meetings makes recruiters notice you!

3. Every meeting provides free food because there are no membership fees to join the club.

Joining the Actuarial Science Club and becoming executive board members this past year is what ultimately helped us get either internships or full-time positions:

- Chloe Rosdail (Secretary) - Full-time job in Cedar Rapids
- Dalton Lillie (Co-President) - Internship with Transamerica in Florida
- Destiny Leitz (Co-President) - Internship with Athene in Des Moines
Contributions to an Account - Recognition*

210174 - E.W. Hamilton Quasi-Endowed Scholarship
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212664 - George and Mary McCoige Math Education Scholarship
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Coaching Actuaries

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223080 - Principal Financial Group Actuarial Exam Reimbursement Fund
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