Dear Alumni and Friends,

Oh, what a year it has been, and it’s not over yet. As we go to press, we are still in the grip of unprecedented challenges. Yet we forge on, because the cause of educating our students has never been stronger. Besides, we are wired for it. Solving problems is what we do best. One of our professors emeriti recently put it best, “If any group has the capability of surmounting them (the current challenges), it’s the UNI Department of Mathematics faculty, for if they cannot resolve them, no one can.” Not an unbiased voice, certainly. Nonetheless, we appreciate the vote of confidence, recognizing that ultimately, we will have to “prove” the vote of confidence is well deserved. We will have more to say in the next edition.

We begin this edition with the “Around Wright Hall” segment in which we give a panoramic view of the activities in the department over the previous year. We follow this up with spotlights on alumni Alexander Samuel, Brittni Donaldson, and Liz Mastalio. We next put a spotlight on secondary teaching majors Grant Kilburg and Jaclyn Miller; statistics and actuarial science majors John Rottinghaus and Andrew Owens; and elementary education major and mathematics minor Katy Larson, and pure mathematics graduate student Abdul Nasser. Our faculty spotlight feature this year is on Dr. Catherine Miller and our donor feature is on Rich and Dee James. We round out the newsletter with an article on the Hari Shankar lecture.

We are grateful to the people we feature in the newsletter and very much appreciate their willingness to abide our requests for information. We are also indebted to them for allowing us to share their stories with our readers. We hope that the stories will serve to showcase the promise of the myriad doors of opportunity that a UNI education opens. We also hope you will find the variety and uniqueness of the experiences portrayed in the stories as engaging as we found them.

I am pleased to report that the significant challenges we face notwithstanding, the state of the department is strong. A major reason we have been able to withstand the tremendous stresses to our wellbeing is the strong support we get from you, our alumni and friends. Year after year, you have voiced your confidence in what we do through your donations to our UNI accounts. All told, we received $131,254 in gifts and pledges and $251,250 in planned gifts between July 1, 2019 to June 30, 2020. Most of the money funds scholarships, the remainder goes to accounts that cover other expenses such as equipment, faculty professional development and travel.

The department awarded $192,817 in scholarships to undergraduate and graduate students for the 2019-2020 academic year. As you know, many students are graduating with huge student loan debts, on average $23,575 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 form that is included at the end of the newsletter to direct your contribution to the account of your choice. Again, thank you for your support. We hope 2019 was good to you and that 2020 is even better.

Douglas Mupasiri
Professor and Head
Blair Izard

Dr. Blair Izard graduated from the University of Connecticut with a BS in Secondary Mathematics Education (2009) and a MA in Curriculum and Instruction (2010). After graduating, she pursued a teaching job at the newly formed Global Experience Magnet School in Connecticut where she worked alongside colleagues to develop the school’s common core curriculum for 6th and 7th grade math and Algebra 1. She also took on leadership roles within the school, including supervising students on trips to China and California.

In May 2020, she earned her PhD in Curriculum and Instruction, with a focus in mathematics education, from the University of Connecticut.

She enjoys traveling, hiking, reading a good novel, and spending time with her wife, Chelsey. She is excited to be in the Mathematics Department at UNI and looks forward to working with new colleagues and students.

“I love working with pre-service teachers and am thrilled to be at a school that values teaching. I am also excited to work with teachers and students in the Waterloo and Cedar Falls areas.”

Catherine Miller

You are from the western part of the USA and you received all of your education there. UNI would seem an unlikely place for you, what attracted you to UNI?

I was fortunate to be on the job market when there were many openings for mathematics educators. I wanted to be in a Mathematics Department so I could continue to teach math. After six or seven interviews, I had three job offers. I decided to work at UNI because of its history in mathematics education, with faculty from here being leaders and innovators in mathematics education. I also found the community of mathematics educators and open-minded mathematicians already at UNI to be unique. It was very hard for me to leave California and be further away from my aging parents, but UNI was the best fit and best opportunity I had.

What were your first impressions of UNI? As you look back over your 22 going on 23 years on the math department faculty, have those impressions changed?

While I knew that UNI emphasized excellence in teaching, I was surprised to find teaching valued like it is here. This was confirmed by the support for teaching I had from my mentors, the Center for Excellence in Teaching (I think it had a different name when I began) programs, and hallway conversations about teaching and learning mathematics. It was clear to me that faculty in the Mathematics Department strove to “walk the talk.” I found this to be exciting and challenging, which has served my growth as a teacher.

I think that the focus on excellence in teaching has continued. I have been honored to give back to the community in Math-Land (my name for our department) as a mentor for faculty who want to invest in their teaching. I learn more about teaching from each conversation, planning session or class visit with colleagues. Learning is important to me since I think the most effective teachers are learners themselves. When I stop learning, it will be time for me to retire.
Catherine Miller

You have climbed up the professional ranks from assistant professor to professor, what challenges have you faced along the way and to what do you attribute your success?

I am a first-generation college student and got my doctoral degree sort of by mistake. When I left California to go to graduate school in Arizona, I was mostly running away from home. I did not think I would actually earn a doctorate, but I learned that I could soon after starting the master’s level coursework. Since I came to academia from what might be seen as a non-traditional path, much of what I have experienced has been a surprise. I was diligent in making long term plans that would lead to success and I sought advice from a variety of people on campus to help me succeed.

My biggest challenge has been my health, which started to deteriorate in 2002. After visiting several doctors and having several diagnoses, I learned that I had chronic Lyme disease in October of 2008. One of my symptoms was a decline in cognitive function, which made life and work difficult. I found it hard to be present and productive for several years.

Fortunately, I am in a remission-like state that is the goal for chronic Lyme patients. My brain has healed from the infection and I am thinking clearly again.

You have made advising of secondary teaching majors and leadership of the Educator Preparation Program Faculty cornerstones of your service to the department and to UNI. Why did you make these choices and what’s in them for you?

To be truthful, I became the coordinator for the secondary mathematics teaching program because Bonnie Litwiler told me to do it! She was a great mentor and support to me when I began at UNI. I found this work rewarding and challenging. Working with teacher candidates who have found their calling to be secondary mathematics teaching is amazing. These students persist and learn beyond the walls of their classes, becoming outstanding educators. Of course, not every teacher candidate is in the program because they were called to teaching. In these cases, being a secondary mathematics teacher might be secondary to other life plans, making it difficult to advise and promote these students. There are not many students in the latter category.

Do you have any particularly memorable experiences in your time at UNI which you might want to share with our readers?

I did not work the 2010-2011 academic year, due to being sick. When I walked into the first class I was teaching in fall of 2011, the students in class stood and clapped. I was overwhelmed with the caring and celebration embedded in this act. I will never forget being welcomed back to work and teaching in this way.

Your area of specialization is math education. It would be an understatement to say that some of society’s most vexing problems have to do with mathematics education. Can you share what some of the biggest problems in mathematics education are and what mathematics educators and others are doing to solve them?

Currently, I think the biggest challenge mathematics educators face is attracting new people to the profession. There is a need for secondary mathematics teachers in Iowa that is critical. At the same time, the teaching profession is less appealing. Politics, legislation, pay and work conditions combine to turn some away from teaching.

These are challenging times for public education. In mathematics education, the current challenge, in my opinion, is to systemically change how mathematics is taught to align with what we know about the needs of learners in this century. How math is taught has begun to change to address the needs of today’s citizens, but we need to keep adapting and changing how and what mathematics is taught to be effective. Mathematics educators need to collaborate so that the experience of students from pre-school to grade 12, and beyond, prepares graduates for today’s world.

One of my goals as a mathematics educator is to elevate awareness of how the combination of knowledge of mathematics on the part of some and lack of mathematical understanding on the part of others is used as tool for oppressing marginalized segments of society. Rent to own and check cashing stores are examples of businesses that engage in predatory practices targeted at communities of vulnerable people, people who have not had the privilege of a good and sound mathematics education. I want to prepare teachers to be aware of this and use education to put an end to these business practices, and other practices where mathematics is used to oppress.

You have made advising of secondary teaching majors and leadership of the Educator Preparation Program Faculty cornerstones of your service to the department and to UNI. Why did you make these choices and what’s in them for you?
Around Wright Hall

The Seventh Annual Conference for the Exchange of Mathematical Ideas was hosted by the UNI Department of Mathematics on June 14-15, 2019. This is a conference jointly organized by Embry-Riddle University-Prescott and University of Northern Iowa. The aim of this annual conference is to improve communication among mathematicians in different specializations to enhance and stimulate their research. Among the participants giving talks were UNI Mathematics faculty members Syed Kirmani, Douglas Mupasiri, Douglas Shaw, and Bill Wood.

Dr. Douglas Shaw has been selected as the 2018-2019 recipient of the Beverly Funk Barnes Educator Excellence Award. Recipients are selected, according to the criteria for the award, because they “continually create new value for those they work with through dedication, passion, and creativity for the benefit of the University of Northern Iowa.” Congratulations, Doug!

Dr. Sam Eskelson is the recipient of the 2020 UNI Outstanding Teaching Award, which recognizes significant contributions to the quality of teaching by pre-tenure faculty. Congratulations, Sam!

Dr. Min Lee (jointly with YoungJu Choie) wrote a monograph entitled “Jacobi-Like Forms, Pseudodifferential Operators, and Quasimodular Forms” which was published by Springer-Verlag in the Springer Monographs in Mathematics series.

Dr. Douglas Shaw has written a book on collaborative creativity called Social Nonsense: Creative Diversions for Two or More Players – Anytime, Anywhere. It is a collection of twenty-five writing, drawing, and storytelling games that can be played in ten minutes or less. According to Shaw, “I’ve been disheartened by the amount of times I’ve gone to restaurants and family gatherings, only to have us all staring at our screens in our own worlds. These games are great ways to reconnect; it’s always fun creating with friends and loved ones. Selfishly, I’ve spent my career writing like Stewart for the ancillaries I’ve written for him, and like Hungerford for the textbook I wrote with him - it was amazing being able to finally write like myself.” Six feet tall and ruggedly handsome, Doctor Shaw is celebrating his 21st anniversary in our department, along with Drs. Prophet and Stanley.

Dr. Catherine Miller (professor, mathematics education) completed her first, two-year term as Educator Preparation Program (EPP) Faculty Chair in the spring semester of 2020. She helped to lead work done to update the governance structure for EPP. Dr. Miller has served as the chair of the Elementary and Secondary Teacher Education Senates, and the Graduate Licensure Council. The next goal Dr. Miller addressed as EPP Faculty chair was leading work to update the Teacher Education, following changes to UNI’s Liberal Arts Core, which is likely to be completed in 2020.

In 2017, Dr. Heather Gallivan received two grants from UNI in connection to her Rocketbook notebooks study. The study involves students scanning the pages of their notebooks with a smartphone app and uses cloud-based technology to store them and inform her teaching. The grants allowed her to first purchase a class set of Rocketbook Wave notebooks and later a set of Rocketbook Everlast notebooks. In 2019, Dr. Gallivan received a new UNI grant which was used to purchase a set of whiteboards (currently installed in WRT 119). She, Dr. Sam Eskelson, and Dr. Chepina Rumsey are using them to conduct a study that uses the Rocketbook app technology in combination with these whiteboards.

Congratulations to Dr. Olly Steinhorsdottir for being awarded a Professional Development Assignment during the 2020-2021 academic year. The title of the project is “Cognitively Guided Instruction in International Settings.”

Patrice Ness Essombey-Ndambwe, a graduate student in our department, presented a poster at the UNI 2019 Summer Undergraduate Research Program Symposium. The title of her poster was “The Math Behind the Lotka Problem on Chemical Oscillations.” Patrice used a simplified mathematical model, called the Lotka model, to show why the Lotka chemical reaction oscillates. His research project was supervised by Dr. Douglas Mupasiri.

Dr. Joel Haack’s most recent publication, “Mathematical Considerations of the Rhythmic Patterns in the Music of Steve Reich,” appeared last summer in Twentieth-Century Music and Mathematics, edited by Roberto Illiano and published by Brepols. He continues to serve on the Editorial Board for the Classroom Resource Materials book series of the MAA. Additionally, he serves as a judge of undergraduate mathematics papers for the annual contest organized by the MAA Special Interest Group in the History of Mathematics; he proofreads examinations for the American Mathematics Contest; and, he writes reviews of books in statistics, the history of mathematics, and general mathematics, all of which appear regularly on the MAA website.

Speaking of Dr. Joel Haack … After 29 years of tireless service to the university, Dr. Haack has retired from UNI. We plan on publishing an article to honor his remarkable career in the next edition of the Wright Message. We wish Dr. Haack all the best in his retirement!
Written by Doug Mupasiri
Head, Department of Mathematics

After 20 years of service at UNI, Debra Blanchard retired on December 28, 2018. Deb began her career at UNI on October 26, 1998 as a Secretary I in the Department of Modern Languages (now known as the Department of Languages and Literatures).

She was promoted to the Secretary II class on September 30, 2005. Almost a year later, on September 14, 2006, she transferred to the Department of Mathematics as a Secretary II. Deb so quickly distinguished herself as highly competent that when a Secretary III position became available in the department, she was a natural candidate for it. She successfully applied for the position and began on July 22, 2008 what would turn out to be an 11-year tenure of service in the Department of Mathematics.

Because I had held part-time appointments first in the Graduate College as Coordinator of Minority Graduate Student Recruitment and subsequently as an Administrative Fellow in the Provost’s Office for 18 months, I had only had limited opportunities to interact with Deb. I had, however, leaned heavily on her to manage a couple of my federally-funded projects to be very impressed with her work performance.

I got to know Deb better when I became department head in January 2010 following former head, Jerry Ridenhour’s, retirement. In many ways, I learned a great deal about some aspects of my new job as department head from Deb. I found her to be always kind, helpful, respectful, patient, congenial, and all-in-all a superb face of the department. I considered her to be an essential component of the nerve center that made the department operate like a well-oiled machine. She always completed her tasks with remarkable accuracy and on time. The department faculty loved her, students could count on her to help them, and faculty and staff across campus, who interacted with her, found her to be a reliable and trusted partner.

Deb’s invaluable contributions to the department did not go unnoticed. She was recognized by UNI President Nook with a Panther First Award for Service Excellence in October 2018.

According to President Nook’s letter notifying Deb of the award, her nominator wrote: “Deb makes us, the Department of Mathematics, look good! She not only does the day to day work needed to keep us going, she anticipates some of our needs before they happen! Her attention to detail, communication skills, and overall demeanor make a visit to the department office productive and pleasant for all who enter.”

This quotation accurately captures only part of Deb and her contributions to the department. Even after she retired, her loyalty and dedication to the department remained intact. When we asked her to come back on a temporary basis to train her successor, she, true to character, agreed without hesitation. This is typical of Deb, always willing to go the extra mile to help. She has been gone for slightly over a year now. She still lives in Cedar Falls and is making the most out of her retirement. She wishes she could travel, but COVID-19 has made that impossible.

We wish Deb and her husband Craig many happy years in retirement and lots of opportunities to spend some quality time with their grandchildren!
Alex Samuel

Alex Samuel is a Quantitative Audit Manager for U.S. Bank, located in Minneapolis, MN. Alex graduated with an MA in Mathematics from the University of Northern Iowa in 1997. After completing a couple of years of graduate work in the PhD program in Mathematics at the University of Notre Dame and earning a Master’s degree in Mathematics from that school, Alex decided to try the business world and went and completed an MBA program in Finance/Accounting at Indiana University. Since then, Alex has gained over sixteen years of experience in data analysis and credit risk modeling for both wholesale and retail portfolios. He spent eight of the sixteen years primarily developing models and the other eight years in validating models built by others. Currently, Alex audits the model development and validation processes at U.S. Bank. He lives in Arden Hills, MN with his wife and three children. He loves playing cards with neighbors during his spare time. Alex has a keen interest in serving the underprivileged and he met Mother Teresa in 1995.

Recently, Alex visited our department as an Alumnus in Residence, where he answered a few questions for our newsletter.

What are your responsibilities as a Quantitative Audit Manager?

There are a lot of models that are littered across the entire spectrum of the banking industry. That was not the case twenty years ago. When we use models, everything is now automated. If a model is built correctly, then we are making right decisions all the time, while if it is built wrong, then we are making wrong decisions all the time. The government put in the first regulations in 2000, and then made the regulations even stronger in 2011 because models are booming everywhere and there is an enormous amount of risk associated with them. There are three lines of defense against these risks: first, there is the person who builds the model; when they build a model, they put some controls in place so that the model is built and used correctly. However, sometimes, no matter how honestly you try, you might miss something, so there is a second line of defense, overseeing the first line of work. Is the model built correctly? Is the underlying theory correct? Maybe the theory is correct, but you coded it wrong. Maybe the underlying theory is correct and you coded it right, but someone is using it in a wrong way. The model is monitored continuously. For instance, if it is a forecast model, then you monitor how the forecast is performing over time. There is also a third line of defense, that oversees the first and the second. That is the audit, which I am doing. Originally, I started in the first line (I used to build models), then I went to the second line (I used to oversee), and six months ago I went to the third line.

Which professional accomplishments are you most proud of?

Generally speaking, the big banks get all the money and all the talent. Small banks don’t have quantitative analysis (quant) teams or the money, or even if they have the money, the managers might not be quant-oriented, so they struggle. Either they outsource things or don’t do it at all. I developed model risk management programs (which is the second line of defense) for two banks: one is Irwin Financial and the other one is Old National Bank. That entailed introducing a model risk management policy, because when you put a model into use, there is a risk you introduce and you need to understand that model risk. You need to first identify the risk, then you need to be able to measure the risk. Then, are you going to mitigate that risk or accept it? I put in place what is needed to control that risk at these two small banks.

What are the skills and/or educational background a successful data analyst must have?

Data science is a very fast developing field. Older people are less familiar with it but the younger generation comes out of school knowing machine learning and big data. About twenty years ago, SAS was the biggest name. About five years ago, R and SAS almost tied with market shares of over 40% and all the other statistical software names were very small. This year, Python came very strong at almost 40%, while R and SAS are lower. This is a hot market. Finding that skill set is difficult because it is new, but in the next five years, I think there is going to be a significant need for building machine learning models using Python.

As someone with a good understanding of how important mathematics is, do you have any advice for our math students?

It would help them to know statistics, particularly logistic regression. There are a lot of scorecard models; scorecards are used everywhere, from marketing to approving credit to detecting fraud. The scorecards are everywhere and, while other tools may be used to build scorecards, logistic regression tops the chart. Knowing time series modeling and survival analysis would also help. If anyone knows any subset of this list, they are good for the banking industry in either developing models or overseeing developers.
What are your favorite UNI memories?

Leaving my country for the first time and going to another country, this is the place I landed. The teachers were very, very nice. They were like family: they would invite me for Thanksgiving, they would play cards with us, and they were ready to help. You could knock on their doors anytime. They also helped me get to the next level by giving me good references. I was very, very happy that I chose this school. I also enjoyed teaching in the math lab as a graduate assistant.

How do you find our campus today, compared to the years when you were a student?

In the last 22 years, I came to UNI three times and I noticed a lot of changes. Even today, they showed us a video of the dormitories, how they changed on the inside. They showed how they were updated with technology like routers, TVs, computers, or Playstations. Other things have not changed though: when I go inside the Maucker Union, I can see the differences, but when I stand outside, it looks like the same building. Wright Hall also looks like the same building from the outside.

Liz Mastalio (BA Math 2013, MA Math 2019) won the 2019 Yager Exemplary Teaching Recognition Award

By Catherine Miller

Liz’s passion for mathematics was at least equaled by her passion for teaching while an undergraduate student at UNI. She did research in Graph Theory during a summer REU at Illinois State University. When she returned, Ms. Mastalio gave a talk about her work. I had wondered if her attention might turn to mathematics instead of teaching mathematics after attending her talk. This was not the case. In fact, the care and finesse she used during her research talk was evidence that she was a teacher, which is the path she took.

Ms. Mastalio is an exemplary teacher; I saw her in action during a visit I made to her classroom at Mid City High School in Davenport, Iowa in 2018, which is considered to be an “alternative” school in the district. This means her students’ needs are not or cannot be met in a traditional high school. The school culture is inclusive and welcoming. In her classroom, Ms. Mastalio has created and maintains a culture that makes mathematics accessible and real to her students. Her students do math and learn it well. This is in part due to her use of research-based mathematics pedagogy and the National Council of Teacher of Mathematics’ principles. Perhaps more important is that she gets to know and exhibits caring for every student in each course she teaches. Ms. Mastalio is more than a model teacher, she is the teacher her students need to succeed.

Brittni Donaldson

TORONTO – Scotiabank Arena, home of the Toronto Raptors, might need to change its name to Cedar Falls-North. Today, the Raptors announced the promotion of data analyst and UNI women’s basketball alum Brittni Donaldson as an assistant coach by head coach Nick Nurse, another Panther basketball alum.

Donaldson becomes just the 10th female assistant coach in the history of the NBA, but her path to the bench is unusual. Most of the women being hired by NBA teams have extensive college resumes or experience as a pro, but she has neither.

Donaldson moves to the coaching staff from the front office where she served on the Toronto staff as a data analyst for two seasons. Before her time with the Raptors, she was an analyst with STATS LLC in Chicago, her first job in sports. Her first job after graduating was working for CBE Companies in Cedar Falls where she analyzed internal data. She started there right after graduating from UNI in 2015 with a degree in Statistics and Actuarial Science.

She was a two-year starter at guard for the Panthers and played in four Women’s National Invitational tournaments. She played in 114 games in a Panther uniform and still holds the record for three-pointers made in a game with eight. She was named honorable mention MVC Scholar-Athlete her junior year. Donaldson joins the reigning NBA champions but got her start on the bench earlier this summer when she served as a member of the Raptors’ coaching staff at NBA Summer League in Las Vegas, Nevada.
The Center for Teaching & Learning Mathematics (CTLM) believes that good work should never go unnoticed. Good work should be shared. Good work should be easily replicated and sustainable. And at the core of really good work, there is usually a really good story to be told.

Our story began in 2016 in Mascoutah, Illinois, thanks to a Department of Defense Education Activity (DoDea) grant co-authored by CLTM Director, Vicki Oleson, and the Mascoutah School District. The grant work is supported internally by Karis Townsend, Assistant Director of the center. It consists of professional development delivered by Annette Louk, Math Consultant at Prairie Lakes AEA, to help teachers become more effective math educators. It also incorporates teacher training delivered by Connie Terry, Math Consultant at Green Hills AEA, to help teachers become more effective math educators. These students have voluntarily continued to return each summer to Mascoutah Math Mania (M-Cubed) camp.

The grant funding will conclude in 2021, but the story will not end there, and neither will the good work! The CTLM will leave behind seven brand-new Facilitator Guides — one for each of the six PD courses and one for the summer camp training. These guides are written by Julie Creeden, the center’s writing coordinator, and Amy Fohardt-Schafer, technical writer and editor at the center.

These guides will include detailed agendas and embedded video clips, captured by Alex Larsen, CTLM video editor. Before the grant ends, the center will complete facilitator training in Mascoutah so that new facilitators will be able to use these guides to sustain this good work for years to come in their district.

Due to the extremely positive feedback we have received from all of the stakeholders, the Mascoutah grant directors, Laura Yarber and Brittney Manning, suggested that the CTLM should consider creating a “video showcase” of the entire grant. So that is exactly what we did. We hired Around the Corner Productions (ATCP), a local video production company, who travelled to Mascoutah to capture each piece of our story.

The first video, entitled Making Sense of Mathematics and Teaching in Mascoutah, tells the story of the journey of professional development taken by an incredible cohort of Mascoutah teachers. A second video, entitled Mascoutah Math Mania, tells the story of the small group of extremely dedicated teachers who teach the summer campers. In both of these videos, the teachers, students, administrators, and facilitators all share the part they played in each of the stories. The CTLM is very grateful to both Eric Braley and Brad Wells, owners of ATCP, for their unique visual storytelling talents.

We encourage you to visit our CTLM website (https://ctlm.uni.edu/), scroll down to “News,” and view both of these incredible stories, because good work should never go unnoticed. Good work should be shared.
In spring 2019, Teaching Educators About Mathematics (TEAM) hosted approximately 80 students from Kingsley Elementary School in Waterloo, IA for UNI’s Thirteenth Annual Math Fair. The students engaged in meaningful mathematical activities and games with UNI Elementary Education majors. The young students also had the opportunity to check out various parts of UNI’s campus and experience dining at the Piazza.

Also in the spring, TEAM took their show on the road to Lou Henry Elementary in Waterloo to create a similar experience for students at that school. The students enjoyed snacks, games, and interactions with our UNI students. We hope to continue these outreach opportunities moving forward.
Andrew is a May 2020 UNI graduate who majored in Statistics and Actuarial Science, with a minor in Finance. He started at UNI in the fall of 2018 and completed his degree two years later. Andrew came to UNI as a traditional age student, although he wasn’t a typical student as he had already earned two associate degrees while in high school. At UNI, he continued to be a top honors student, graduating Summa Cum Laude with a 4.0 GPA and with the distinction in peer education while working as a math tutor. Andrew completed an internship at Athene USA during the summer of 2019 and was offered a full-time position as an Actuary Associate upon graduation. As an intern, he was part of the model validation team that worked on ensuring that annuity contracts were consistent with the models used to value the contracts and diagnose potential issues. He was also an active member of the UNI Actuarial Science Club, a math tutor and PLUS leader. Upon graduation, he will continue to work in Athene’s model validation department to ensure that the calculations in the models are accurate.

Andrew’s professional goal is to earn his ASA (Associate of the Society of Actuaries) before he turns 21 years old. At the time of graduation, he had already passed five actuarial exams (P, FM, IFM, LTAM, STAM) and sat for the sixth exam (SRM) a few days after graduation in May 2020. Academically, he challenged himself knowing that he had the support of his friends, family, professors, and the entire math department. Furthermore, he received financial support while in college, which allowed him to manage his academic workload. He was the recipient of multiple scholarships, including: UNI Distinguished Scholars Award, UNI Science Symposium Award, Elks Legacy Award, Iowa Grocers F. William Beckwith Scholarship, John and Marie Carter Scholarship, and Prairie Meadows Scholarship. Andrew is grateful for the community support, which he intends to pay forward in the near future by creating an endowed scholarship for high school and college students.

In his free time, Andrew enjoys running long distance - he ran his first half marathon in November 2019.

Why did you decide to become an Actuary?

I always knew that I wanted a mathematics career, as early as elementary school, but it was not until near the end of high school that I decided to become an actuary, after consulting my uncle who works in a similar field and Professor Syed Kirmani. To reach my goal of becoming an actuary, I was determined to pass numerous actuarial exams at a rapid pace. In May 2018, during my senior year of high school, I passed my first actuarial science exam, exam P. When I started my college search, I knew that I wanted to attend a college or university that was a good fit. After visiting UNI, meeting with the math and statistics department faculty, and being familiar with the area, I was confident in my decision to go to UNI and continue to pursue my studies in Actuarial Science.

What are your thoughts about our actuarial program?

The UNI Actuarial Science program opened many doors for me. Each of my professors supported me by providing and recommending supplemental study materials in order to prepare for the actuarial exams. Furthermore, the staff assisted in the selection of courses that lined up with the Actuarial exam sequence and they provided me the opportunity to take additional math courses, aligning with my personal goals. The professors at UNI were instrumental, as they provided me individual support, promptly answered my questions, created projects with numerous learning opportunities, facilitated valuable career connections and challenged me to be a better student.

Who are the people who have made a major impact on your education?

I would not be here without the Statistics and Math departmental staff, as they were essential toward achieving the success that I have found over the past two years. I am extremely grateful for their support and guidance, especially Professor Syed Kirmani, who helped me to plan my program of study along the Actuarial exam process. In addition, I would not be where I am without the support of my friends and family, specifically my parents, who assisted me in the initial planning of courses and exams.

What are your favorite UNI experiences?

I had many UNI experiences that I will remember. My experiences in the Actuarial Science and Math clubs, as well as my work as a math tutor and PLUS leader allowed me to meet interesting people and engage in many fun activities. My favorite time of year was during the fall, specifically during homecoming, as it is the time of year that highlights most of what it is like to be a Panther in this supportive, family-like community.
I remember wanting to be a teacher from the time I was in third grade, though I had not decided on math teaching at that time. I loved school as a child and thought it would be fun to be the teacher someday. I started noticing early on that the way I thought about and understood math was often different than the way it was taught, and I would often figure out my own methods of understanding by breaking apart the way I was taught a concept.

In high school, I had a teacher, Mr. Zoske, that explained things in multiple ways. For the first time, I did not have to come up with the methods on my own, and I loved it. Then, during my senior year, I took Calculus with Mr. Kollbaum. He is the reason I finally decided on math teaching as a way to continue to work in a subject that my dad and I did together.

When I was in sixth grade, my dad passed away. He was a computer programmer and we were extremely close. He always helped me with my math homework because we thought about math in the same way, so I started looking at math teaching as a way to continue to work in a subject that my dad and I did together.

What are your favorite UNI memories?

Most of my favorite memories of UNI are found in Wright Hall. I loved working in the student lounge on assignments, especially during my junior and senior years. Because I enjoyed so many of my math courses, they hold fond memories for me as well. It was always funny when Dr. Wood would get on/joke with me about the ‘essays’ I would write in the ‘true/false with justification’ section of his quizzes; or when Dr. Stanley had us stand up and act out the 3D coordinate plane to understand it in Calc III, which made it look like the class was doing weird math yoga. I also loved doing proofs at the board for Dr. Stanley, especially impromptu proofs in Advanced Calc.

Name a few people who have made a major impact on your education.

Several people from UNI made a positive impact on my college experience. I will briefly share a few of them. From the moment I stepped foot into DAM (Discrete and Argumentative Mathematics), I felt like Dr. Stanley cared about who I was and whether I would succeed. She always believed in me and pushed me to be better. I enjoyed every minute of being in class with her and got to take both my math elective courses with her. Dr. Stanley’s inquiry-based style of teaching helped me learn and grow as a mathematician and a future educator (and Dr. Hitchman’s model of inquiry-based learning did as well). She made challenging mathematics fun, and what’s more, she made the struggle of the mathematics seem worthwhile and exciting. There is nothing like figuring something out and showing Dr. Stanley you know what you are talking about. Her confidence in me made me more confident in myself. (Also, she answered all my emails even when I was sure they were annoying. The amount of time she makes herself available to students is insane and very special.) I will use many of the lessons she taught me in my own classroom, including her Stanley-isms. Woot!

There are too many professors in the math department that supported me to list them all here. I think the Mathematics Department at UNI is amazing. The amount of questions people answered for me about their classes is insane (I always ask lots of questions). I remember I took Modern Algebra I with Dr. Somodi and Euclidean Geometry with Dr. Hitchman at the same time and I would often just bounce between their offices during their office hours. Both men were always extremely helpful and kind. I truly felt that the Math Department took me under their collective wing and cared about me, from everyone previously mentioned to Dr. Miller, Dr. Hughes, Dr. Gallivan, Dr. Steinthorsdottir, Dr. Wood, Dr. Riehl, and Dr. Ecker.

Outside of the Math Department, Dr. Graziano in the Philosophy and World Religions Department is a professor that made learning about the religions of the world something I greatly looked forward to each week. His class was very engaging, and he inspired me to want to learn more about the beliefs of different people all over the world. He is another professor that I could tell truly cared about me and my success as much as I did, and I appreciated that greatly. I wished I had taken his course earlier in my collegiate career because I would have added a Study of Religion minor in a heartbeat. Professor Hesse was another professor in the same department that was extremely supportive of my UNI journey, and often asked me about math theories. He spoke to me like an adult and always asked me how I was doing. I would recommend him to any UNI student who needs Humanities credit.

There are many other professors that inspired me along the way. I just can’t name them all or I would be at this all day.
What awards and/or scholarships have you received at UNI?

When I was taking a methods course with Dr. Gallivan, she recommended me for the Iowa Space Grant Consortium Pre-service STEM Educator Scholarship. I applied and received it in the Fall of 2018. It was a huge honor to be selected on behalf of UNI that year. The award is also a long-term study, so they followed me through the remainder of my undergraduate studies and checked in on my grades.

I also had the honor of receiving the RC Hendrickson Crane Scholarship for two years, the Helscher Math/Science Education Scholarship for two years, and the Jessica Allen Terri Scholarship for a year. These donor scholarships were incredibly instrumental in my success at UNI because they showed that people believed in me and my academic ability and sacrifices.

Recently, I was awarded the Purple and Old Gold Award for Meritorious Scholarship from the Mathematics Department for the 2019-2020 academic year. This was a wonderful surprise for me, and I still cannot get over my excitement. It is such an honor and one I will especially cherish since it was given to me by the Math Department, by people that helped me grow and succeed. I am forever grateful for all of them.

Where you active in any clubs?

I was active in a few student organizations in my time at UNI. During my first two years, I was involved in the Panther Marching Band, which was a great way to meet people coming into college. During my freshman year, the band director was Dr. Galyen, and he taught me so much about life and how to be a successful leader for a group of people. I will never forget that.

During my sophomore year, I was a peer mentor for a section of Dr. Riehl’s Calculus I class. I loved helping freshmen with the college transition and with the math content of the course. So many students struggle with Calc I, so it was nice to be there to help some of them through.

I was inducted into three honor societies as well: Kappa Delta Pi Education Honor Society (KDP), Kappa Mu Epsilon Mathematics Honor Society (KME), and Omicron Delta Kappa Leadership Honor Society (ODK). In KDP, I served as a fundraising committee cochair for two semesters, which allowed me to assist in raising money for the community outreach activities funded by the chapter. KDP provided me excellent opportunities to get extra preparation for my future career.

KME extended my love of math content. I was Vice President during my junior year and President for my last semester on campus. I really enjoyed KME meetings because I got to learn more about different areas of math through member presentations and met different faculty members than those I had taken classes with. Finally, I was a member of ODK during my junior and senior years. They were rebuilding years, and I learned a lot from ODK about leadership and what it takes to run successful student organizations.

The Mathematics Department at UNI is amazing. I truly felt that the whole department took me under their collective wing and cared about me.

Give us a few details about the field experiences you completed.

I completed my level one field experience at Waterloo West High School with Mr. Aaron Reinhart. My biggest take-away from this experience was the importance of using different teaching techniques and the power of communication. Mr. Reinhart was a master teacher and he observed all the other math teachers and helped them grow. While I was there, he would take me along so I could experience different teaching styles, which I appreciated. He also discussed each teacher observation with me and let me give my own input. This open communication made me feel valued and validated, which reaffirmed how important such communication is in the workplace.

My level two field experience was at Grundy Center High School in Cedar Falls with Ms. Jody Bisgrove. My biggest take-away from this experience was how important lesson ‘hooks’ are. My students at Holmes were in an advanced math class but holding their attention could still be challenging. I realized that if I could bring in something they were super interested in (like UNI and its campus) they would be more engaged with my lesson. I knew this would generalize to all students I would work with, and I have kept that link between student interest and engagement at the forefront of my mind since.

My level three field experience was at Grundy Center High School with Ms. Lindsey Aronson. My main take-away from Grundy Center was how important student relationships were.

Grundy Center is a ‘Capturing Kids’ Hearts’ school, so they focus on those teacher-student relationships. Ms. Aronson and I always greeted students at the door before they entered the classroom and during the first few minutes of class we held an activity where students had to interact or share about themselves in a way not related to
academia. The benefits of this were obvious because students at Grundy seemed to look out for each other and have mutual respect. It is something I plan to take to my future classroom.

My first student teaching placement was at Woodside Middle School in a math intervention classroom with Ms. Brooke Knudten. I learned so much from Ms. Knudten about how to relate to students and build relationships with students that are often deemed ‘difficult’. Truly, this was my most enlightening field experience because it taught me so much about classroom management. At Woodside, I learned that having a good relationship with other staff members is helpful when you need support after a hard day. I also learned that if you build a relationship with your students, have clear expectations, and follow through with what you say, students will work with you and respect you. This was a wonderful experience and I miss those students and Ms. Knudten every day.

Finally, my last field experience was at DC-G high school with Mr. Dan James. Unfortunately, I only got to do two weeks at DC-G because of the pandemic.

Tell us about your upcoming job.

I have accepted a job for this fall at Woodward Granger High School in Woodward, Iowa. I will be a high school mathematics teacher there, which is very exciting as I always wanted to teach at the high school level.

actuarial profession?

I spent a lot of time worrying about what my future career would look like. Many hours were spent searching for the “best” careers in terms of salary and work/life balance. Often times, actuaries were ranked near the top, and I thought it fit well with my interest in math and finance. After taking Intro to Financial Mathematics, I was sold.

What mathematics courses at UNI have you found important and/or challenging?

Introduction to Probability was the hardest course in my eyes. It taught me to be comfortable with being confused, and how to use my resources to learn difficult material. Having said that, I think all of the actuarial science courses were challenging in their own way. Some required a good deal of memorizing, while others were more conceptually difficult. I’m also very grateful for the coursework that covered the Society of Actuaries’ exams, as they helped me pass three exams before graduation.

What UNI professors have made a major impact on your education?

Most of the actuarial science courses I took at UNI were taught by Dr. Kirmani and Dr. Luo. While their teaching styles differ, both care greatly for their students and the program. They went the extra mile to guide me in the right direction, whether it be career advice or planning my future exams. I found tremendous value in attending a smaller program because it allowed me to build a meaningful relationship with them.

What are your favorite UNI memories?

My favorite memory at UNI is the Traveler’s Case Competition, which took place during my sophomore year. A small group of UNI students (including myself) stayed overnight in St. Paul, Minnesota to compete against teams from other
Katy Larson

Katy came to UNI in the fall of 2016 and declared an Elementary Education major, with a Mathematics minor. Prior to her arrival at UNI, during the spring 2016 semester, she followed her passion for teaching by participating in the Community Awareness Program, as a first grade classroom volunteer, in Rochester, MN. During the summer of 2018, Katy served as a camp instructor at the Quarry Hill Nature Center in Rochester (where she taught two curriculum-based camps), while during the summer of 2019, she served as a youth development professional at the Boys and Girls Club of Rochester. The latter experience gave her an opportunity to guide 25 kindergarten and first grade members through daily self-development programs that dealt with the arts, character and leadership, academic success, and health and life skills.

What are your post-graduation plans?

Thanks to the Actuarial Science Club, I was in direct contact with recruiters throughout my time at UNI. During the Fall of 2018, I was able to get a series of interviews following the Actuarial Career Fair, which led to a full time position. In June 2019, I started in Transamerica’s Actuarial Development Program, which assigns a new role every two years. My current assignment is within Product & Pricing, working with variable annuities. Also, I’m in the process of attaining the Associate and Fellowship of the Society of Actuaries.

She served as the President of the UNI Women’s Club Soccer (since August 2016, details below) and as an elected member of the National Residence Hall Honorary (since December 2017). Between January 2018 and May 2019, Katy was a UNI Resident Assistant and, during the fall of 2017, she served as the President of the Noehren Hall Senate. She has been on the Dean’s list six semesters and graduated from UNI in May 2020, with a BA in Elementary Education, a minor in Mathematics and an endorsement in Science.

Why did you decide to pursue teaching?

As a young girl, I was constantly playing “teacher” with my siblings and friends. I loved helping my teachers with various tasks and assisting my classmates when they struggled to understand concepts. I had many opportunities throughout high school that gave me a chance to try out teaching. I volunteered as a Sunday School teacher at my church and I took a course through my school where I assisted with a 1st grade class at a local elementary school. Both of these experiences allowed me to further solidify my career path and love of the profession.

Why did you choose a math minor?

I have always loved my math classes. However, I recognized that many of my peers didn’t feel the same way. Once I officially decided I would study education, I quickly chose a math minor because I wanted to combat the stigma that math has in society. I want all my students to have an access point into math, and I want to provide them with opportunities to truly enjoy the problem solving experience.

What are your favorite aspects of the UNI college experience?

Throughout my time here at UNI, I’ve had many opportunities to follow my passions. Outside of my work in the education world, I have been heavily involved in Residence Life. This community brought me to some of my closest friends, and I’ve learned so much about myself throughout my experiences. I also played on the Women’s Club Soccer Team, which allowed me to continue playing the sport I love at a competitive level, while also having time to lead and participate in other organizations. We finished up our Fall 2019 season with just one loss - a great way to end my senior season! Residence Life and Women’s Club Soccer have been a huge part of my UNI story, and I’m so grateful for all the opportunities this university gave me to follow my passions.

Grant Kilburg

A high school valedictorian, Grant spent his freshman year at Iowa State University, before transferring to UNI in 2016 to major in Mathematics – Teaching. He was on the Dean’s list all four years and received the Purple and Old Gold Award from the Department in Mathematics when he graduated, in May 2019. Shortly after graduation, Grant answered a few questions for our newsletter (located on the following page).
When did you realize you wanted to study math in college?

Like many high school students, I had no idea what I wanted to study in college. Growing up, my plan was always to become a professional athlete. However, these plans quickly changed when reality set in and I realized that I wasn’t going to surpass the 5’11” mark or run a forty-yard dash in under five-and-a-half seconds. So, like the majority of the kids my age, I began to explore other (more realistic) options. I knew that I wanted to do something that would make a difference in peoples’ lives and throughout high school, math had always been one of my favorite subjects, so I decided that engineering at Iowa State would probably be a good fit for me. However, after a grueling semester of early mornings, late nights, and pages upon pages of code, I decided that engineering was not what I wanted to do for the rest of my life, so I went back to the drawing board. Ultimately, it was while attending my high school’s fall play that I decided that education at Iowa State would probably be a good fit for me. However, after a grueling semester of early mornings, late nights, and pages upon pages of code, I decided that education was not what I wanted to do for the rest of my life, so I went back to the drawing board. Ultimately, it was while attending my high school’s fall play that I decided that education might be a good fit for me. I found it to be one of the most difficult, but practical, fields of study. My high school math teacher, Mrs. Melissa Sturm, was also a big influence for me. Mrs. Sturm always knew exactly what to say to encourage me to persevere with a tough problem, and her willingness to come early and stay late to allow extra time for student questions really spoke volumes about her selflessness and passion for teaching. I guess I just wanted to be for others what Mrs. Sturm was for me.

What math course have you found to be particularly challenging?

I’d like to say that all of the math classes I took were challenging, but I have a feeling that the University would run out of paper before I finished, so I’ll try to narrow it down to just a few. I think that for me, the most challenging math course I took in college was Calculus II at Iowa State. Unlike UNI, my Calculus II class at Iowa State had well over 200 students, and the class was set up more as a flipped classroom. I can remember having to take these 20-point quizzes in my dorm room over every section before we had even covered it in class. As a first-year student, this was ludicrous to me, and I can remember getting 12/20 on more than one occasion. Our tests were not much better. They were only five questions, but each one had anywhere from 3-5 parts which made finishing the entire thing in 50 minutes near impossible. At the time, I absolutely hated the class. I felt it was unfair and that my professor was far too picky. However, after I completed the course, I was truly grateful for having taken it, as it taught me a lot about my own resolve. This resolve proved to be vital to my time at UNI as well, where I took several other challenging math courses like Combinatorics, Calculus III, Euclidean Geometry and Modern Algebra I. These were just a few of many classes at UNI that I felt enabled me to grow as a mathematician and educator, thanks largely in part to my amazing professors: Dr. Doug Shaw, whose incessant humor taught me how to build relationships with students within the confines of classroom, Dr. Adrienne Stanley whose ability to use mundane objects to illustrate theoretical concepts taught me how to reason abstractly, Dr. T.J. Hitchman, whose Euclidean Geometry class taught me the true meaning of productive struggle, and Dr. Marius Somodi, whose overall passion and enthusiasm for mathematics left an indelible mark on me as a student. Collectively, the classes I took at UNI helped me learn math, but it was the professors and people I met along the way that helped me learn how to teach.

Tell us about your favorite UNI memories.

Reflecting back on it now, I have so many amazing memories of UNI and the people I shared them with that it’s nearly impossible to narrow them all down. A few highlights that come to mind would be: the night my roommate hypnotized a group of three or four of our friends in our dorm room, the night when I was on call, when over half of the Combinatorics class came to my residence hall so that we could study for an upcoming test, the glow-in-the-dark game of Capture the Flag between the quads that Rider Hall won, the time I finished eating three full plates of food in Piazza before any of the seven people I was eating with had even sat down, the impromptu euchre games a group of us would play before class started, the time I played catch outside of Redeker for so long that I couldn’t use my arm to even open the door to get back inside, the time that I didn’t take a single note in Biology because a girl was in my seat and I was too busy thinking about what I could do to get her to move, or the time where another group of us had gotten together to study for Number Theory, but my classmate and I spent most of the night trying to figure out how to get the Bears/Rams game from our computers to the library televisions.

The biggest reason for me wanting to be a teacher is to help and inspire students to reach new heights they never even imagined.

The WRIGHT Message – 2020 15
What leadership positions have you held?

While at UNI, I was a member of UNI’s Service and Leadership Council (SLC), where I served as a member and executive of the Leadership Committee. While in this role, I helped to organize, promote, and execute leadership panels on campus, participated in service events throughout the Cedar Valley community, and held weekly meetings to different components of leadership. In addition to being a member of SLC, I also served as a Resident Assistant (RA) in Rider Hall. Deciding to become an RA was one of the scariest things I had to do while in college, but it also turned out to be one of the most rewarding, too. Through my position, I was able to meet so many amazing students and staff and interact with people in ways I otherwise wouldn’t have, whether it be through spontaneous house dinners, one-on-one conversations, or impromptu pick-up basketball games at the WRC. Being a Resident Assistant also gave me a platform which I could use to get others involved. It allowed me to serve as a friend and mentor and gave me a platform to voice my opinions about campus happenings. As an RA, I was also able to experience firsthand the importance of developing relationships, which was perhaps the most valuable lesson I took away from my time at the University of Northern Iowa.

Tell us about your teaching position.

I currently serve as a middle/high school math teacher for the Lisbon Community School District, where I teach 8th grade math, Algebra I, and Geometry. Having graduated from a high school with a total enrollment of fewer than 80 students in grades 9-12, I always knew that I wanted to teach at a small school where I would have the ability to build those individual relationships with students, and so far Lisbon has enabled me to do just that. I have already had the opportunity to serve as one of the statisticians for the football team and I am currently serving as the 7th grade boys’ and girls’ basketball coach; I hope to be a volunteer assistant for high school basketball as well. My first year has been quite chaotic, as I try to juggle things like lesson plans, practice schedules, and home renovations. It has been exciting, nonetheless, and I have a great team to lean on in Lisbon. I cannot wait to see how far I can go with their support.

After completing my undergraduate degree at the University of Iowa, I decided to enroll in UNI’s Master’s in Mathematics program. There were, however, some challenges that accompanied my decision. I was working and living in Cedar Rapids. At the time, a move 65 miles north was not an option for me, so I decided that the education that I would receive at UNI would be worth a five-day a week, 130-mile, round trip commute. For the experience I had at UNI, I would easily double that commute.

All the professors in the mathematics department are of a special caliber. Every one of them is clearly committed to the actual teaching and learning of mathematics. With the guidance of professors like Dr. Douglas Mupasiri, Dr. Min Lee, Dr. Bill Wood, and Dr. Theron Hitchman, I have come to learn my strengths and weaknesses as it pertains to my future in mathematics, and I have been able to develop and hone a critical and logical based thinking that is essential for success in any mathematical endeavor.

One of the biggest challenges I faced during my time at UNI was having to juggle the workload associated with pursuing a master’s degree and focusing on the birth of my first-born child.

Without a doubt, I could not have succeeded in my studies, as well as be there for my family, without the unwavering support from this department.

UNI most definitely helped me ascertain my academic goals. The two years I spent studying and learning in the mathematics department will no doubt help me with my future endeavors as I begin to tackle a Ph.D. in mathematics at Western Michigan University.
The Hari Shankar Mathematics Lecture Series is an annual event hosted by the Department of Mathematics, which features a lecture intended for general audiences given by a distinguished personality in the Mathematical Sciences. The spring 2019 guest speaker was Dr. Alicia Carriquiry.

Dr. Carriquiry received a joint PhD in statistics and animal science from Iowa State University in 1989. She has been on the faculty in the Department of Statistics at Iowa State University since 1990. She is currently Distinguished Professor of Liberal Arts and Sciences, President’s Chair in Statistics, and Director of the Center for Statistics and Applications in Forensic Evidence (CSAFE), a National Institute of Standards and Technology (NIST) Center of Excellence. She is an elected member of the National Academy of Medicine, a Fellow of the American Statistical Association, the Institute of Mathematical Statistics, the International Society for Bayesian Analysis and the American Association for the Advancement of Science, and an elected member of the International Statistical Institute.

The title of her talk was “Statistics and the Fair Administration of Justice.”

The abstract of her talk says: “In the US criminal justice system, jurors choose between two competing hypothesis: the suspect is the source of the evidence found at the crime scene or s/he is not. Much of the evidence to inform these decisions comes in the form of images, which do not lend themselves to standard statistical approaches such as hypothesis testing. The likelihood ratio framework, which relies on Bayes’ theorem for assessing the probative value of evidence and is the basis for probabilistic DNA analysis, is difficult to implement in practice, when evidence is in the form of an image. We argue that learning algorithms, a form of artificial intelligence, provide a good alternative for determining whether the evidence supports the proposition that the suspect may have been its source. We illustrate these ideas using firearms examination as an example.”

2019-2020 Tenure Stream Faculty

Kimberly Conner  
Mark Ecker  
Sam Eskelson  
Adam Feldhaus  
Heather Gallivan  
Joel Haack  
Theron Hitchman  
Elizabeth Hughes  
Syed Kirmani  
Min Lee  
Shangzhen Luo  
Catherine Miller  
Douglas Mupasiri  
Vicki Oleson  
Michael Prophet  
Suzanne Riehl  
Chepina Rumsey  
Douglas Shaw  
Marius Somodi  
Adrienne Stanley  
Olof Steinthorsdottir  
Brian Townsend  
Bill Wood
As a native of Cedar Falls, Rich became aware of the Iowa State Teachers College at an early age. Over the years, he attended many athletic and arts events on campus. As a high school athlete, he participated in the Art Dickinson Relays. As a member of the Cedar Falls High School marching band, he participated in “Band Day.” He used the State College of Iowa library, which was located in Seerley Hall, to do research for his classes. As a junior and senior in high school, in the mid-60s, Rich was invited to participate in the SCI Space and Science Symposium, to learn more about the U.S. priorities in the post-Sputnik era, as related to the study of mathematics and science. “When it became time to consider a college to attend, my parents said: “We can afford to have you stay at home and go to SCI.” End of discussion! F.Y.I. at that time, tuition only was $146/semester”, recalls Rich.

Probably his closest tie to UNI was that Rich’s father was also a Cedar Falls native (who was born in 1910). At that time, his home was in the current location of the UNI Campanile (in 1910, that location was not a part of campus property). His house was later “re-purposed” as the Student Health Center and became the KUNI radio station (behind the former Baker Hall) during the time Rich was a SCI/UNI student.

While in college, Rich met a young woman at a Sunday night dance in the Commons ballroom who, two years later, became his wife: Dee. During their dating, the women’s dorms had closing hours and, if a female resident wasn’t back inside the dorm before the house mother locked the door, she was locked out and subject to being “campused” for arriving late! Rich says: “The semester that we were engaged, both of us got our best grades, perhaps because we went to the library nearly every evening so that we could be together.”

Rich has many fond memories from his years at UNI. He remembers nostalgically the Homecoming football games which were “a fun time on a nice fall afternoon at O.R. Latham stadium. The men usually wore a sport coat and purchased a Homecoming mum for their date. The Homecoming Parade started in downtown Cedar Falls and reassembled about 18th Street and College Street to make the trek up College Hill. The hill was a challenge for the “Bumble-Bee-Bomb”, a model A Ford owned by the Sigma Alpha Epsilon fraternity and an annual participant in the parade.”

Maucker Union was built during Rich’s time at UNI. According to him, before its construction, “the place to gather to see posted notices and see friends was the
Rich’s teaching career spans eight years. “It was a very innovative curriculum that blended individual instruction via faculty developed packets and classroom instruction that allowed students to progress at an accelerated rate if they were so inclined” he recalls.

In 1977, Rich resigned from teaching and began a 37-year career as a financial advisor with a national investment firm. “The critical thinking skills I developed during my coursework at UNI were particularly useful in evaluating investments for my clients and advising them with sometimes complicated situations with which they were dealing. Organizing a proposal presentation for a client was not unlike presenting a new concept to students. The broad range of coursework I engaged in for my mathematics BA degree prepared me well for my teaching experience. I am amazed to think that I studied Modern Algebra and Modern Geometry and also used an archaic manual calculating device with a sea of keys on its surface that had a carriage at the top of the machine and a little crank to turn forward or backward and another “T” lever at the bottom to move place values in Dr. Hamilton’s Math of Finance class. What a range of experiences!” says Rich.

Rich’s involvement as an alumnus extends all the way to the present day. A few years ago, he was asked to serve as a member of the Board of Trustees of the UNI Foundation. “During this time, I have become more acutely aware of how important it is for alumni and friends of the university to continue to support the students and faculty. It was during this time that I became aware of the Dean’s Fund for Excellence within CHAS. That fund, which supplements the Dean’s budget, was created for donors to the UNI Foundation to direct money that the Dean of CHAS can use, at his discretion, to benefit students and faculty within the College. This has become a part of my yearly giving to the UNI Foundation, as well as adding to our endowed scholarship which has increased to two students per year. Each time I am on campus, I am able to interact with a variety of students and continue to see that my investment in future generations is well placed.”

Rich’s first opportunity to serve UNI was when Dee and he volunteered to host a phone bank in the Quad Cities, to raise money to build the UNI Dome in the early 70s. In the 90s, he was asked to serve on the Advisory Board for the UNI College of Natural Sciences (before the creation of CHAS). Rich says: “It was during that time that I became aware of the many and varied student experiences afforded to those pursuing a degree in the Natural Sciences. Because I have been fortunate in my career as a financial advisor to have accumulated some discretionary assets, I believed that it would be a good use of some of these funds to endow a scholarship for the teaching of secondary mathematics (the Rich and Dee James Secondary Mathematics Teaching Endowed Scholarship). Both Dee and I have been so pleased to meet our scholarship students at the annual Scholarship Luncheon sponsored by the UNI Foundation. This has become such a large event that it was necessary to schedule an additional date to accommodate all of the donors and students.”

Rich’s involvement as an alumnus continues to this day. As an alumnus, Rich says: “Each time I am on campus, I am able to interact with a variety of students and continue to see that my investment in future generations is well placed. I encourage all who are reading this newsletter to become more aware of the many and varied student experiences afforded to those pursuing a degree in the Natural Sciences. Because I have been fortunate in my career as a financial advisor to have accumulated some discretionary assets, I believed that it would be a good use of some of these funds to endow a scholarship for the teaching of secondary mathematics (the Rich and Dee James Secondary Mathematics Teaching Endowed Scholarship). Both Dee and I have been so pleased to meet our scholarship students at the annual Scholarship Luncheon sponsored by the UNI Foundation. This has become such a large event that it was necessary to schedule an additional date to accommodate all of the donors and students.”
In May, Dr. Doug Shaw, UNI math professor, improv aficionado and published author, was the first professor to be awarded the Beverly Funk Barnes Educator Excellence Award. Shaw, who has been teaching at UNI for twenty years, is known for his upbeat teaching style and classroom activities.

“The Beverly Funk Barnes Educator Excellence Award is focused on rewarding educators who continually create new value for those they work with through dedication, passion and creativity for the benefit of the University of Northern Iowa,” according to the Office of the Provost and Executive Vice President for Academic Affairs.

The award is centered around the principle of “Fred the Mailman,” a postal carrier who embodies sincerity and warmth and never failed to put others before himself. This “Fred Factor” identifies those who go out of their way to help people even when it’s inconvenient for them, a trait that, for Shaw, is important in his teaching and life.

Shaw goes the extra mile to help students succeed both in and out of the classroom. In his teaching style and classroom management, Shaw believes in the importance of keeping students active and involved in creative ways rather than simply lecturing for the entire class. He incorporates technology into his classrooms by having students use Poll Everywhere as a way to monitor student responses to learning and keep them engaged.

Shaw makes sure to add style to everything he does, whether it’s teaching in the classroom, or one of the many extracurriculars he is involved in, such as improv workshops, Pizza With Professors, orientation programs or any number of other roles he takes on.

Shaw has been actively involved with the UNI improv comedy troupe Half Masted and has taught courses in improvisational comedy for various age groups. Regarding his involvement with improv, Shaw lives by the phrase, “Listen carefully, react quickly, make bold choices,” and tries to instill the same concepts in his students’ lives.

His published book, “Social Nonsense,” is a collection of activities to do when there is a little extra time while you’re in a group. It is designed to create interesting conversations and memories in a group setting and move away from the distraction of cell phones.

Shaw specifically loves being a part of the learning community at UNI, and uses every conversation and relationship as an opportunity to learn and grow. He said that the students at UNI know they have to work hard to succeed, which makes it so much easier to help them learn.

Shaw said he is also inspired by his colleagues, and especially loves being on committees with people from all over the university campus. He enjoys events like Campus Connexus, in which professors from different departments get together to have conversations. He said he is honored to learn about what everyone else is doing, and seeing all the great work further motivates him to be better.

“UNI makes it easy to do great things,” said Shaw. “[The university] allows me to do the things that I am honored [to contribute to campus].”

Shaw continues to be impressed by the consistent attitude of “what can we do to make this work?” and “what help do you need?” from staff and students. Shaw encourages students of all majors, and especially those majoring in education, to make connections and build relationships with professors by visiting them and keeping in touch. Making these connections expands students’ repertoire of resources and also makes it easy to get good letters of recommendation when the time comes.

*Story courtesy of the Northern Iowan*
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