

12-2014

The Update, December 2014

University of Northern Iowa. College of Humanities, Arts and Sciences.

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2014
2015

THE UPDATE

College of Humanities, Arts and Sciences

UNIVERSITY OF NORTHERN IOWA

HARLEM HELLFIGHTERS UNI ALUMNUS PUBLISHES AWARD WINNING BOOK

University of Northern Iowa alumnus, Gary Kelley's, BA Art 1968, illustrated book *Harlem Hellfighters* has been chosen by the *New York Times* as one of the top 10 children's books of the year. Released in September, *Harlem*

Hellfighters joins the list of award-winning collaborations between Kelley and author J. Patrick Lewis. *And the Soldiers Sang*, an illustrated version of the true story of the 1914 Christmas Truce released in 2011, won the Horn Book award for picture books.

Chronicling the achievements of the First World War's all African American 396th infantry, a regiment recruited in New York, the *Times* review applauds *Harlem Hellfighters* saying, "Lewis' poetics are perfectly complemented

by Kelley's evocative pastel illustrations, which both inspire and unsettle. The men are rendered with a stoic simplicity that conveys dignity and perseverance."

"The U.S. Army would not trust them to fight because they were black," said Kelley in an interview with the Waterloo-Cedar Falls Courier in early November. "The French said they wanted them, so the regiment was sent to France

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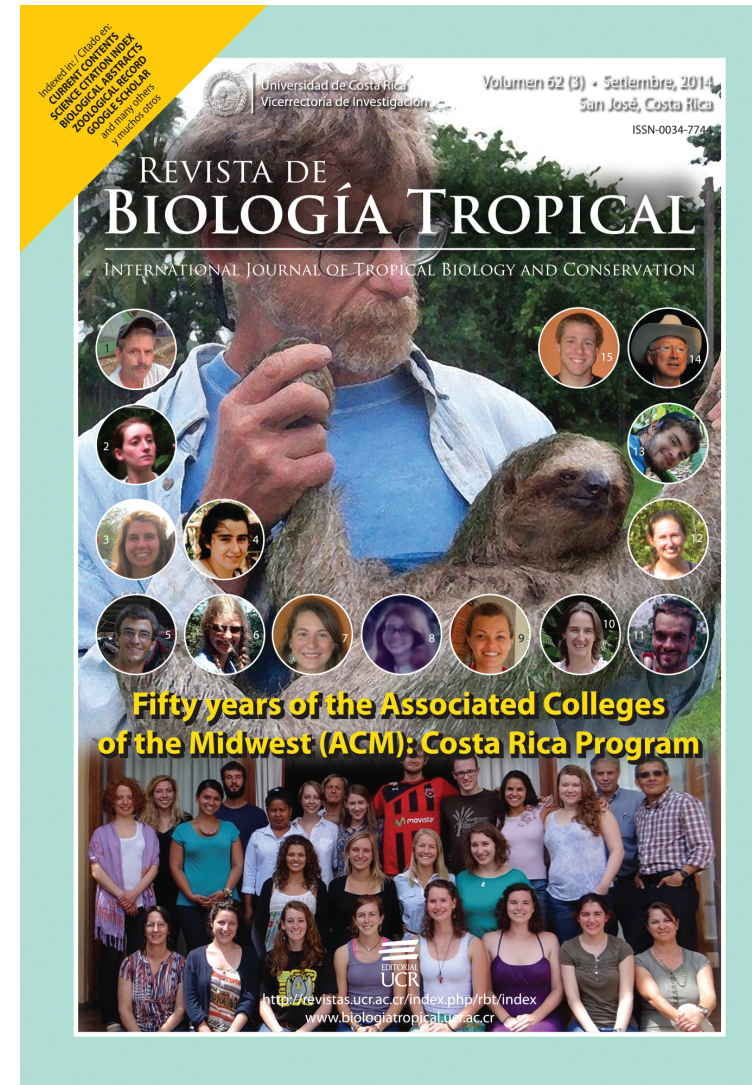
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Cara Wright

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SCIENCE

• The journal, *Revista de Biología Tropical / International Journal of Tropical Biology & Conservation* featured Professor Mark Meyers in the publication as a part of the Fifty Years of the Associated Colleges of the Midwest (ACM): Costa Rica Program. Several alumni are also quoted in the publication in relation to Meyers' recognition.

LANGUAGES & LITERATURE

• Professor Elise Dubord, professor of Spanish Linguistics published a book *Language, Immigration and Labor: Negotiating Work in the U.S.-Mexico Borderlands* in October 2014. The book explores dominant ideologies about citizenship, nation, and language that frame the everyday lives of Spanish-speaking immigrants in the U.S.-Mexico border region.



ART

• Art Department Head Jeffery Byrd recently performed at the City Gallery of Kalisz in Poland and at Gruntaler 9 Performance Space in Berlin.

MUSIC

• Melinda Boyd, Associate Professor of Music History, presented a research paper, "Dolly Parton's Kindertotenlieder," at the annual national meeting of the American Musicological Society, in Milwaukee, WI on Nov. 9.

COMMUNICATION SCIENCE

• The Department of Communication Studies hosted a dinner and special performance at the UNI Interpreters Theatre on Oct. 11 to celebrate the career of Phyllis Scott Carlin, who retired earlier this year after 38 years at UNI.

• Nichole Zumbach Harken started a blog that combines her storytelling/ethnography and Chris Martin's (communication studies) teaching background. She has pledged to blog about her family's experience with autism for 366 days straight. She reports an average of 150 readers from across the world every day. The blog site is 366daysofautism.wordpress.com.

• Cate Palczewski's book, *Disturbing Argument* (Routledge, 2014) has just been published. The edited volume represents the best of the scholarship presented at the 18th National Communication Association/American Forensic Association Conference on Argumentation. Palczewski will be the invited featured speaker at Penn State conference on debate as civic education, March 5-7, 2015 and the "esteemed scholar" for the DePauw Undergraduate Honors Conference, April 16-18, 2015. She will also be a seminar leader at the Rhetoric Society of America's Summer Institute, June 1-7, 2015 at the University of Wisconsin—Madison.

UNI New Horizons Band Winter Concert
Monday, Dec. 15, 7:30 p.m.
Great Hall, GBPAC

The New Horizons Band will offer its winter concert. Under the direction of Diana Blake, the New Horizons Band features musicians 55 and older who travel from all over Iowa. *This event is free and open to the public.*

Music Education Workshop
Saturday, January 10, 9:00 a.m.
Room 30, GBPAC

School of Music instructor of music education Michelle Swanson will coordinate this workshop. For more information, contact Michelle.Swanson@uni.edu.

Faculty Artist Recital: Julia Bullard, viola & Frederick Halgedahl, violin
Tuesday, January 20, 8:00 p.m.
Davis Hall, GBPAC

Faculty artists Julia Bullard, viola, and Frederick Halgedahl, violin, will present a shared recital with repertoire and additional collaborators to be announced. *This event is free and open to the public.*

Cantorei Concert
Friday, January 23, 8:00 p.m.
Jebe Hall, GBPAC

Under the direction of conductor John Len Wiles, the UNI Cantorei will present a concert with repertoire to be announced. *This event is free and open to the public.*

Guest Artist Recital: Anibal Dos Santos, viola
Monday, January 26, 6:00 p.m.
Davis Hall, GBPAC

Visiting artist Anibal Dos Santos will present a viola recital. Born in Caracas, Venezuela, Dos Santos has appeared as the principal violist of the Bogota Philharmonic Orchestra and professor at the National University of Colombia. *This event is free and open to the public.*

Guest Artist Recital: David Cutler, horn
Thursday, January 29, 6:00 p.m.
Davis Hall, GBPAC

Visiting artist David Cutler will present a horn recital. David Cutler balances a varied career as a jazz and classical composer, pianist, educator, arranger, conductor, collaborator, concert producer, author, blogger, consultant, speaker, advocate and entrepreneur. This recital will feature Robin Guy, piano, the Northern Brass Quintet (featuring Randy Grabowski, Jim Sherry, Yu-Ting Su, Anthony Williams) and Todd Williams, violin. Repertoire will include Suzuki's first book for violin and piano, American Music Roads Scholar by David Cutler and Rhapsody in Blue for piano and brass quintet. *This event is free and open to the public.*

Guest Artist Recital: Travis Reuter Quartet
Thursday, January 29, 8:00 p.m.
Davis Hall, GBPAC

Visiting ensemble the Travis Reuter Quartet will present a concert. This group will feature Travis Reuter, guitar, Peter Schlamb, vibraphone, Karl McComas-Reichl, bass, and Danny Sher, drums. *This event is free and open to the public.*

Guest Artist Recital: Heidi Hoffman, cello
Friday, January 30, 8:00 p.m.
Davis Hall, GBPAC

Visiting artist Heidi Hoffman will present a cello recital. Hoffman has toured the United States, South America, Europe, and Japan, with such groups as the American Symphony, Jupiter Symphony and Tchaikovsky Chamber Orchestra. She has also performed with such diverse ensembles as the Tanglewood Music Center Fellowship Orchestra, Northwest Sinfonietta, Pacific Northwest Ballet, Jimmy Paige and Robert Plant, and Heart. Heidi received her DMA and MM degrees from Stony Brook University, as well as her BM and Performer's Certificate from the Eastman School of Music. *This event is free and open to the public.*

UNI Reed Day
Saturday, January 31, All Day
GBPAC

School of Music faculty artists Amanda McCandless, Ann Bradfield, Heather Peyton and Cayla Bellamy will coordinate and appear as clinicians at this event. Guest clinicians Richard Faria (Ithaca College), Rhonda Taylor (New Mexico State University), Jan Eberle (Michigan State University) and Amy Pollard (University of Georgia) will also appear as clinicians and performers. For more information or to register, visit www.uni.edu/music/reedday.

SCIENCE STUDENTS TRAVEL TO MINNEAPOLIS

50TH ANNIVERSARY OF THE NOBEL CONFERENCE

Science students and faculty at the University of Northern Iowa traveled to Gustavus Adolphus College in Saint Peter, MN to attend the 50th Anniversary of the Nobel Conference on Oct. 7 and 8. It was a truly interdisciplinary trip that involved two Biology vehicles, an Earth Science van, students from Biology and Physics, faculty from Biology and Chemistry & Biochemistry, funding from the Department of Biology, Joel Haack, Dean of the College of Humanities, Arts, and Sciences, and Lyn Redington, Director of the Department of Residence. In all, 37 faculty and students attended the event. Eric Peterson, faculty member in the Department of Chemistry & Biochemistry did his undergrad-

uate work at Gustavus Adolphus, he wrote, "I very much enjoyed returning to my alma mater – I was able to see my old advisor and several other professors as well as wander the campus between sessions – The conference was also very good, and of course it was great to spend some time with the other occupants of McCollum Science Hall!"

Biology graduate student Jason Ratcliff stated, "Thank you and the Department of Biology for the opportunity! The presentations were both engaging and inspiring. I have returned to Cedar Falls with an expanded reading list!"

The Nobel Conference is an annual event that showcases past Nobel

laureates and researchers who are among the top in their fields.

The travel to this year's event was stimulated in part by the desire to provide freshmen students in the Department of Biology Living and Learning Community with a chance to travel and interact with other science students and faculty.

Talks at the Nobel Conference covered a variety of areas that included energy and climate change. Dr. Steven Chu, former U.S. Secretary of Energy under President Obama and 1997 Nobel Prize winner in physics, evolution at the molecular and planetary scale spoke as well as others such as Dr. Sean Carroll, an evolutionary developmental biologist at the

University of Wisconsin-Madison. Other technology driven lectures included lectures like Dr. Harry Gray's. He is the Director of the Beckham Institute, California Institute of Technology. He spoke about solar-driven water splitting.

Plans are under way to attend next year's Nobel Conference where the overarching theme will be on the science of addiction. It continues to be the goal of the science departments at UNI to provide students with opportunities beyond the classroom to experience science and to have interactions with others in their fields of study.

Written by Dr. David Saunders

FACULTY RESEARCH, SCHOLARSHIP AND CREATIVE ACTIVITY AWARDS

FACULTY AWARDS

These awards are presented to tenure track faculty with one or more successful grants or multiple submissions

- Julie Kang, Biology
- Josh Sebree, Chemistry and Biochemistry
- Olly Steinhorsdottir, Mathematics

INTER-DISCIPLINARY AWARDS

These awards are presented to faculty or staff who connected with others from different departments or from different disciplines and have implemented successful grant funded projects.

- Leisl Carr Childers, History
- Bettina Fabos, Communication Studies

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in 1917 and fought with great distinction in French uniforms. They took their ragtime piano with them to war.”

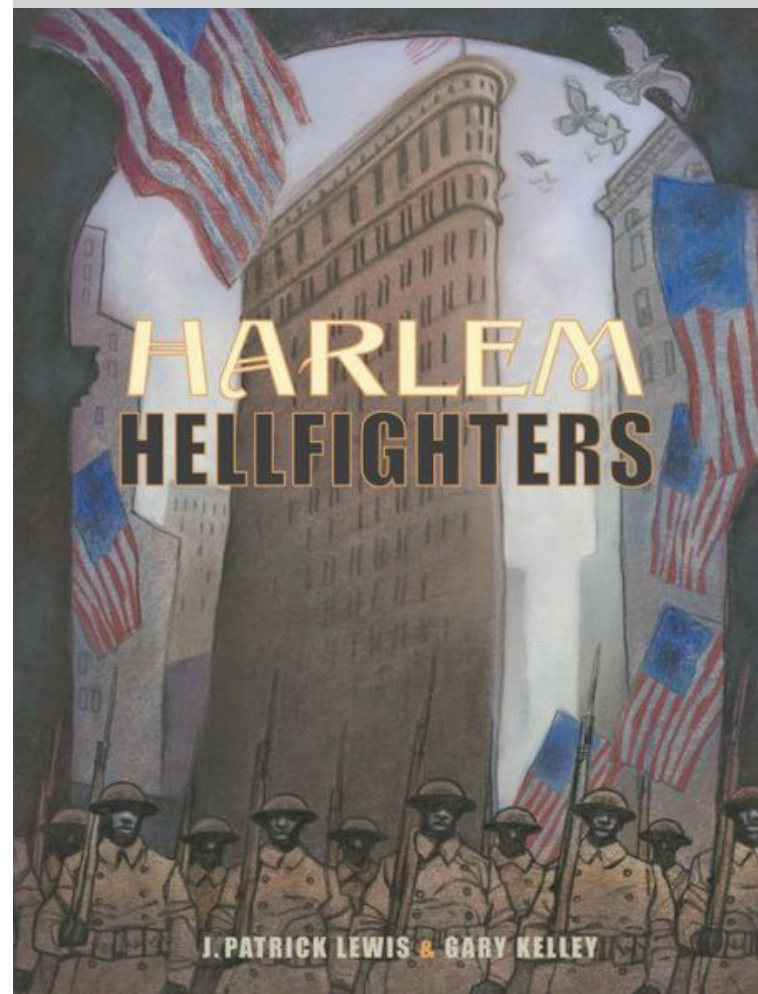
As well as being a national, recognized illustrator, Kelley has done a fair amount of work with the Department of Theatre at UNI. Over the years, Kelley has been asked to create material for a number of productions including *Bat Boy: The Musical*, *Spring Awakening*, *Macbeth*, and the upcoming *Avenue Q*.

Department of Theatre Head Eric Lange said, “Gary [Kelley] always takes a great interest in learning the story of the play and seeking input from the creative team working on the show. His designs are powerful and intuitive, and often explore little details that

related back to the characters and story of the play.”

Kelley has also contributed work to the *North American Review*, America’s longest running literary magazine housed here on Campus. He has created the cover art for many of the issues, along with many in-magazine artworks to coincide with the stories.

Written by Tanner Sandrock



SEE THIS SPACE?

IT'S UP TO YOU TO FILL IT!

We, the creative wizards at CHAS Promotions, want to showcase all of the big things happening in your department. Are you, a fellow faculty member, or a student doing something noteworthy? Send it our way! Show off your own writing talents or leave it to us.

Here's how you can contribute:

Option 1: Department News

Send us a brief description of an event (lectures, awards, publications, and other accomplishments) to be included in the Department News section of *The Update*.

Option 2: Write an Article

Send us an article (around 300 words) describing the event and participants.

Option 3: Suggest an Article

Send us a brief description of the event and let us know who to contact for more information.

CHASUPDATE@UNI.EDU

GRAPHIC DESIGN STUDENTS CREATE WORK FOR THE COMMUNITY

Students created work for the Hearst Center for the Arts and Cedar Rock State Park

Students in Graphic Design: Digital Image Design (taught by Roy Behrens) designed more than seventy posters to commemorate the annual Frank Lloyd Wright symposium at Cedar Rock State Park, organized by the Friends of Cedar Rock. This event was comprised of a few notable speakers including Sanjay Jani, a prominent Iowa City architect and Professor Roy Behrens.

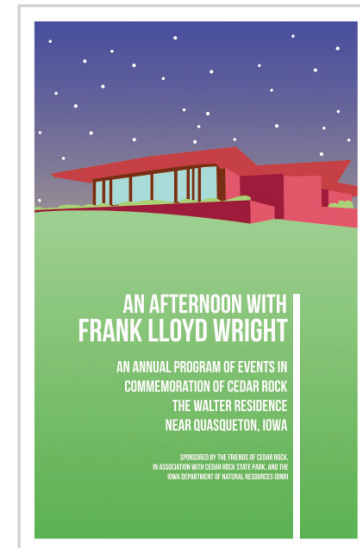
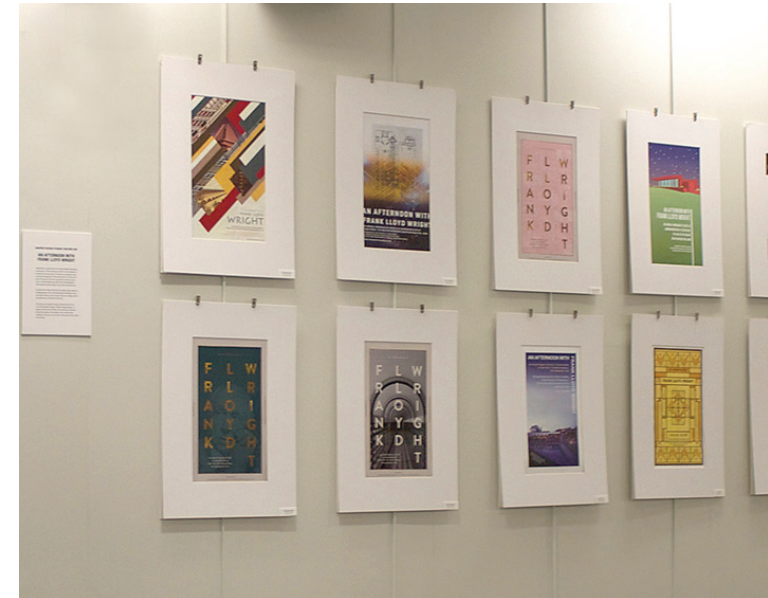
The poster project was pro bono for all of the students, but one poster by student Danielle Shearer was chosen by the Friends of Cedar Rock to be used as their event identity for future years.

“They really loved Danielle Shearer’s poster, so they have decided to commission its use for future events as well. Through repeated viewing, the public will begin to associate that poster with the Walter House [Friends of Cedar Rock headquarters], like a pictorial logo of sorts,” Behrens said.

“I feel very honored and delighted to even be considered by the Friends of Cedar Rock. It is nice to know that something I worked so hard on will have a purpose in the future promoting a historical landmark here in Northeast Iowa,” said Shearer, junior graphic design student.

In addition, Behrens’ class created collective books of digital imagery of James Hearst’s poetry for the Hearst Center’s 25th anniversary commemoration. The poem and student imagery books were published with the help of CHAS funding and were donated for fundraising purposes to the center. Each student received a copy as well.

Behrens’ Digital Image Design course is taught in Kamerick Art Building for all art majors. In the class so far, the projects have all been community and real-world based, something that Behrens’ thinks is valuable for students to experience.

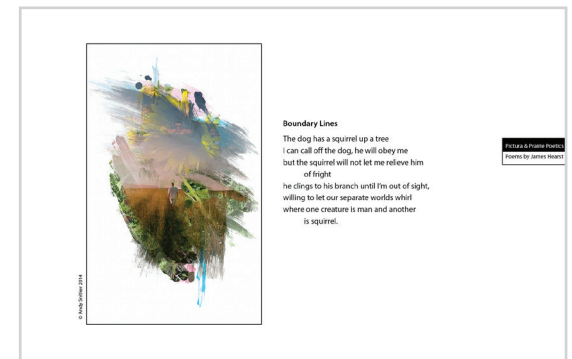
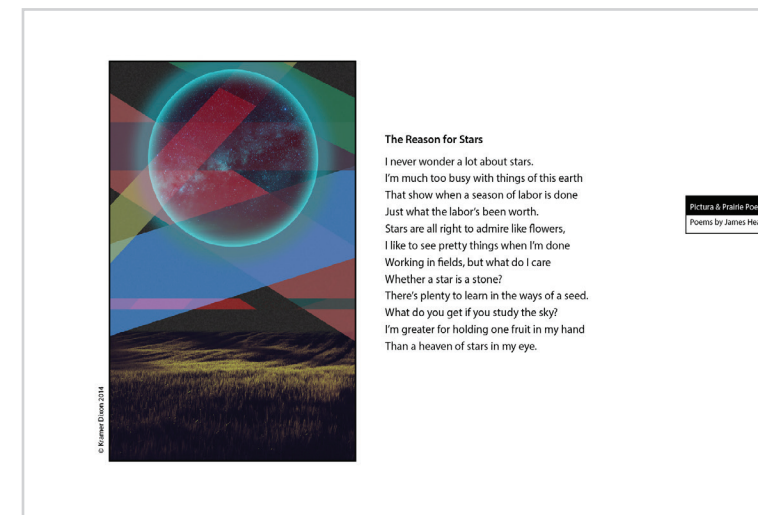


Top: Exhibition In Rod Library

Bottom Left: Work by Kramer Dixon

Right: Winning Poster by Danielle Shearer

Bottom Right: Work by Andy Snitker



DANE JACOBSON

Department of Chemistry & Biochemistry

Dane Jacobson graduated from the Department of Chemistry and Biochemistry in 2006 with a Bachelor of Arts in Biochemistry. He is now a Fellow in Pediatric Critical Care Medicine at Lucile Packard Children's Hospital at Stanford University in Palo Alto, CA, a pediatric ICU.

"There are very few other venues in life that allow a person to have such an immediate and lasting impact on patients and their families. I get to see families at their most vulnerable time and I get to help them through that one way or the other. Plus, children are just better patients than adults," Jacobson says.

He began his studies at UNI at the Department of Chemistry and Biochemistry as a segway to continue his studies and get an M.D certification. He would eventually do this through the University of Iowa as medical certifications are not offered here at UNI. However, he considers his experience here invaluable.

"Of course I was provided with the knowledge and tools required to both get me into medical school and to help me succeed therein," he said.

But practical knowledge isn't the only important factor, he says. Networking and relationships are also critical. In his graduating class, three others went on to

medical school, one of which obtained a PhD in biochemistry.

"In a relatively small graduating class, having these colleagues sets an infectious standard for success," he remarked.

His successes at UNI also contributed to his success in the medical community. He received the Purple and Old Gold Scholar award at graduation as well as the Larrie D. Sarff award for Resident Education. This award is given to one graduating resident who contributes the most to other residents.

However, after graduation at UNI, Jacobson didn't attend medical school right away.

"After graduating from UNI I spent a year bouncing between teaching General Chemistry at Hawkeye Community College and working as a compound pharmacy technician at a local hospital," he said.

The next year, he attended medical school at the University of Iowa, graduating in 2011, then traveling to the Children's Hospital of Wisconsin in Milwaukee to complete his residency.

Today, Jacobson works in academic medicine, training physicians to be better physical care providers. "I'd like to contribute to the body of



knowledge of critical care medicine through clinical research," he said. But regarding his legacy, he said "I'd like to be remembered as kind and generous, and to think that once I'm gone there will be a part of the world that was better for my having been in it."

JACK DOSTAL

Department of Physics

Jack Dostal started his career here at UNI, graduating in 1996 with degrees in Mathematics. Now, Dostal teaches at Wake Forest University in Winston-Salem, NC. After completing his degree at UNI, he received a Master

Following his life goal of teaching, he traveled to MSU to study physics as well as teach. However after a few years, he left his position at MSU and took a position at Wake Forest University, a position he enjoys a great deal.

"I think the opportunity to do undergraduate research is something that is extremely valuable; I got involved in two or three different projects and got pushed out of my comfort zone each time," Dostal remarked.

"Music has always been a first love," he said, "I even use my trombone in my physics classes when we study sound and waves."

As for his hopes for the future, Dostal hopes to continue teaching at Wake Forest University, a position that he greatly enjoys. But he also hopes to research acoustics and offer classes about it.

"I'd like to get to the point of offering some more senior undergraduate courses in acoustics. My current position allows me the time to follow interests in several different directions, which is how I ended up rediscovering acoustics," Dostal said.



of Sciences from Iowa State University and a PhD in Physics from Montana State University-Bozeman. However after graduating from UNI, he was unsure of what to do with his degree in Mathematics. He decided to study astronomy at ISU as a graduate student, but developed an interest in teaching by becoming a teaching assistant.

"I enjoy teaching a great deal, and in my current position that is what I get to do as the emphasis of my job. The material might be similar from semester to semester, but the students are always different," Dostal said.

During his days at UNI, Dostal said that the things he experienced and learned were incredibly valuable to his career.

Dostal worked on projects related to holography and modern physics while in his undergraduate classes, "both of which were excellent early hands-on courses," he said. It was a "hands-on approach has stuck with me as an effective way of learning."

Work in the Department of Physics was not the only great learning experience for Dostal. He was involved in several different on campus organizations such as a variety of jazz bands, the Panther Marching Band, Alpha Phi Omega, Kappa Kappa Psi, Physics Club and a few others.

Several of these organizations are related to music, something that Dostal holds close to his heart as well as something that he hopes one day he can research.

CARA WRIGHT

Department of Earth Science



we planned a Bank Erosion Hazard Index study and I got to present it to the Dry Run Creek Watershed Board,” she said.

Wright was also a part of several on campus organizations while at UNI. She was a member of the Golden Key International Honor Society, The National Society of Collegiate Scholars, Phi Eta Sigma National Honor Society, The University of Northern Iowa Honors Program and Sigma Gamma Epsilon.

Wright has not been out of the university setting for long, but she is already finding success in the field. In her current position, Wright is responsible for interpreting and enforcing Minnesota Pollution Control Agency permits, a job that requires working with a wide variety of media.

MPCA is an agency that Wright holds in high regard for their efforts in the environment, and also one that she is proud to serve.

“I love being part of an agency whose focus is protecting human health and the environment. The work I do helps preserve the cleanliness of our rivers, lakes, and groundwater, which I feel is

important and makes it easy to go to work every day,” Wright states.

In the future, Wright hopes to stay with the MPCA while moving around the agency in order to learn how to better protect the environment.

She offers advice to struggling graduates who wish to find a job in their field.

“It took me a year, probably hundreds of applications, and many interviews, but I love my job and I could not have found a better first job! It can take persistence and a lot of effort, but you shouldn’t give up or settle for a job you don’t really want,” Wright said.

Since graduating in 2013 with a B.S in Geology, Cara Wright has been successful in working for the state government in Minnesota by ensuring environmental protection, a career that Wright feels is critical to human health. She attributes this passion to the UNI Department of Earth Science.

“I enjoyed working on projects and homework with our close-knit geology group and I liked that classes were small so that we got personal attention and could feel comfortable asking questions, which made for a great learning environment,” Wright said.

She also attributes the attention to research based learning a positive experience in her educational career.

“I also liked working with Dr. Walters to complete my undergraduate research in which



HANSEN BREITLING

Department of Philosophy & World Religions

“The first semester of my freshman year I took an introductory philosophy course and it changed my perspective on everything,” said Hansen Breitling, junior philosophy major. “I made the decision to join the department before my first semester had even ended, and now two years later I could not be more happy with my decision.”

While attending UNI, Breitling has had a number of experiences that helped form his current and his future paths in life. Currently, he is a member of the philosophy club, Ethnic Student Promoters and is a teaching assistant at the Department of Philosophy and World Religions. Also, he has traveled to Japan, been accepted as a member of an undergraduate literary journal and works three jobs.

Breitling’s opportunities to participate in organizations and events outside of the classroom have proven to be invaluable,

not only in academic growth, but personal growth as well.

“For myself, being involved in these organizations also help me take my mind off school and focus on other aspects of life like volunteering or participating in interesting discussions,” he said.

Breitling remarked that his experiences at UNI, both inside and outside of the classroom have been positive and have contributed to his success.

“My impression now is that UNI is my home, and I feel lucky that I get to attend this university! I am so grateful for the chance to attend a school that has such intelligent, diverse, and simply awesome people in it,” Breitling said.

Before attending UNI, Breitling was apprehensive about the university mentality between students, professors and the university, but he said that it has changed now. “The people in this

UNI family took away any remainder of my apprehension and have helped me in innumerable ways, and I will never stop being thankful for that,” he said.

While in the Department of Philosophy and World Religions, Breitling has nothing but positive reviews to share. “I have been aided in preparation for grad school both by getting a first-rate education where I am learning all the skills needed to succeed in any future career, as well as by having professors and advisors invest their time and effort into me outside the classroom,” he said.

He also remarked about the intense care and passion that professors in the department have for teaching. “Being a part of the Philosophy and World Religions Department means you are surrounded with some of the most passionate, caring, and intelligent students and professors at this university.”

Breitling plans to graduate in

may of 2016 and hopes to attend graduate school so he can become a philosophy professor himself one day. He said that simply because he is a student in the department, as well as being a Teaching Assistant, he has gained a deep network of professors who are willing to help him find opportunities to grow professionally in the field.

For prospective students looking for a major to grow their marketable skills, Breitling highly recommends classes in the department. “I would say that joining our department is an excellent decision for anyone who wants to try and become the best student they can, as well as prepare themselves to be successful in almost any potential career or profession they could go on to hold.”

KAPPA MU EPSILON

Department of Mathematics

Kappa Mu Epsilon (KME) is an honor society in Mathematics. The organization was founded in 1931 to promote an interest in mathematics among undergraduate students. The primary purposes of Kappa Mu Epsilon include furthering interest in mathematics in schools that place their primary emphasis on undergraduate programs, helping undergraduate students understand the important role that mathematics has played in the development of civilization, developing an appreciation of the power and beauty possessed by mathematics, providing a society for the recognition of



outstanding achievement in the study of mathematics at the undergraduate level, and disseminating knowledge of mathematics to its members.

Students are selected from the field of mathematics and other closely related fields who have maintained standards of scholarship, have professional merit, and have attained academic distinction. After being invited, must submit a paper (for example, a project paper from a class or a challenging proof that they have worked on) in order to join KME.

“Each qualifying student is initiated into KME at our banquet held each December and Late April/Early May,” Dr. Mark Ecker, faculty advisor of Kappa Mu Epsilon, explained. “At the initiation banquet we encourage students to invite their parents and/or significant other in their life to share in a moment of their accomplishment; this a fantastic opportunity to celebrate the student’s hard work!”

“Not only have I met a lot of other students and teachers of mathematics, but I have learned a lot about different topics in mathematics from the presentations given at each meeting. I’ve learned about basketball statistics, number theory topics, and even how to create the game Yahtzee from scratch. It’s just great to meet with other people who have

the same interests and passions that I do,” said KME President Elizabeth Johnson.

As an academic organization, KME’s member’s or students wishing to be initiated presentations are frequent and often end in member initiations.

“Our most recent meeting, held on October 8, 2014 had Luke Peterson present his Honors Thesis (a work in progress) entitled “In Defense of Defense: A Statistical Look at Roster Construction, Coaching Strategy and Team Defense in the NBA”, Ecker said.

Naturally, mathematics is the core feature of KME and the organization hopes to foster passion for mathematics that will translate into passion that can be utilized.

Teaching is something that being a part of a mathematics community brings naturally.

“We would all sit in my basement as I stood at my childhood chalkboard and carefully taught each concept to my classmates. Watching their frustrations ease and hearing their words of gratitude after they took each test really opened my eyes. I loved the feeling I got when their confusion became comprehension and when their glazed looks morphed into looks of excitement,” Johnson said.

BAILEY KNUDSON

Department of Communication Sciences & Disorders



Bailey Knudson is a graduate student looking to graduate in May 2016 with a Master of Arts in Speech Pathology.

Knudson, from Guthrie Center, IA came to UNI from a small town 50 miles West of Des Moines, IA. The small town atmosphere of UNI appealed to her. But the small town atmosphere was not the only thing that brought her this university.

“The small class sizes and student to professor ratio were both surprises to me. Throughout my undergraduate career, I always felt a great connection between students and professors,” she said.

She also remarked about how the university has changed since she arrived. “My impression of UNI has changed over the years because now it feels like home.”

Professionally, Knudson feels that UNI has prepared her for the real world.

“UNI has done a wonderful job shaping me into a young professional. I have been blessed with great examples at UNI of the professional I want to become once I finish school,” she said.

The university was not the only driving force that helped her become a professional; student organizations also greatly shaped her. Knudson was involved in UNI’s National Student Speech Language and Hearing Association as the vice president her senior year and now has been elected as the graduate representative of UNI’s NSSLHA chapter. She has also been recognized by the NSSLHA, receiving a \$5,000 scholarship. Lastly, she was recognized by the American Speech-Language-Hearing Association at a conference in Orlando, FL in November.

Knudson plans to graduate in 2016 and work in a hospital in order to work with patients who may have lost their ability to communicate, an endeavor she considers central to her studies.

“I chose to major in Communicative Disorders because I am interested in

helping individuals regain their independence through communication,” she said.

Her advice to current communication science and disorder students or prospective students is to “work hard, be passionate, and always ask questions. The professors in our department are always willing to help students succeed through the program.”

STUDENT ENVIRONMENTAL RESEARCH PROJECTS

Department of Earth Science

The Department of Earth Science is a department dedicated to research. Earth Science in particular demands in the field observation, testing and hypothesizing. This is indeed the case with Earth Science's environment focused student led projects.

For years, UNI's science departments have been focused on this type of learning, but this year several student projects have brought to light the importance of project based learning.

Research projects are not always confined to the likes of biology or physics majors. Non-STEM majors can also participate in learning about and connecting with the environment in real, tactile ways. This has traditionally been achieved through the creation of capstone courses that can be taught to any junior or senior student that has met the course math prerequisites, says Professor Mohammad Iqbal.

"I don't see any significant differences between STEM and non-STEM majors in handling projects. They are all mature enough to connect with the natural world from their life experiences and conduct successful projects," Iqbal says.

The subject matter for these projects can vary greatly, although naturally, the common theme is centered on the environment. For example, one student, Ashley Worthy, a senior double major in Earth Science and Environmental Science, conducted research about the effects of agricultural nutrient runoff into water systems. The research was designed to discover

the effects on farm nutrient levels in the Cedar Valley.

"My personal reason for wanting to do this project leaned more in the societal issues related to health impacts," said Worthy.

A significant project requirement, and also a source of real information is actual community involvement. Many of these projects require the students to conduct interviews and surveys with the community or with industry or scientific experts.

"One of the most interesting parts of this project has been having the opportunity to talk to people," says Worthy. "It is a problem that needs to be addressed from all sides."

Learning that is not research based may miss the mark in terms of real world impact, Iqbal says. "When students go out and see these interactions, they end up gaining knowledge and skills needed to address complex questions," he said.

"My field of study is hydrology, which deals with movement, distribution and quality of water on the Earth. The difference between project based learning and traditional instructing is huge. It would be practically impossible to understand the hydrologic environment without being involved in field based projects," Iqbal said.

Just learning is not the only goal of these projects. The effects of the findings are clear and real. Doing research this way may shine a light on a glaring environmental issues that have real impacts.



Photos Courtesy of Ashley Worthy

"I believe we have a duty to protect our children, but I am not a doctor, an agronomist, or an economist to determine how best to solve this issue. I am however a geoscientist and can instead identify where problem areas are," Worthy said.

Another real effect can be seen by research done by Britta Berry, a senior double major in Earth Science and Environmental Science. Over a course of nine weeks, Berry was able to collect data from three sites along the Cedar River that will impact future flood predictions.

"She recorded water level fluctuations in the stream over the past several weeks to understand how that relates to factors like precipitation and dissolved solids under post-season, low flow conditions," Iqbal said. "Information gathered through this project is useful to develop future flood models," he continued.



Berry hopes the findings from the report will be put to good use.

"They will be able to use my data in future research as a background for any new topics. I also want to educate people on cause and effect relationships that can be brought forward by analyzing easy to get data," she stated.

UNI FORENSICS TEAM

Department of Communication Studies

The UNI Forensics Team is one of UNI's longest-running student activities, now more than a century old.

Over the years, though, the original meaning of "forensics" has become distant. A question we are frequently asked by parents on Panther Open House days: why is it called "forensics?" No, there are no autopsies on cadavers, no analysis of bullet trajectories or blood splatters. That is forensic science, the stuff of television's "CSI."

What you will find headquartered in the Department of Communication Studies is a Forensics Team with two squads of students who compete in public discourse. Aristotle identified forensics (or legal discourse) as one of three types of rhetorics in 4th century BCE. The English term forensics

derives from the Latin *forensis*, which means "in open court" or "public" (also related to the word forum). Students on a forensics team compete in various types of public speech and are often evaluated on who has the best delivery or the best argument. Considering the root word, you can see how forensic science got its name; the scientists gather criminal evidence, which then will be presented in an argument before a public court.

UNI is the only institution in Iowa that has both debate and speech teams as part of the overall Forensics Team. Last year, UNI's top debate team made it to the CEDA (Cross Examination Debate Association) national tournament at Indiana University and finished in the top 32 out of a field of 170 teams. The UNI Speech Team finished 10th in their national tournament

last year, the third year in a row they've ended the season with a Top Ten ranking.

This year, both teams continue their successes competing against some of the biggest universities in the country. For example, in November the UNI Debate Team duo of Tatiana Rice (junior Criminology major) and Dante Miller (freshman Sociology major) won the junior varsity division of the Butler University debate tournament. The team won debate rounds against Wayne State, Michigan State, and Butler, and beat an Indiana team in the final round.

Meanwhile, the UNI Speech Team placed 2nd overall in combined tournaments at University of Wisconsin-Whitewater and UW-Madison. Keegan Bosch (junior English major) won first place overall among speakers,

with Jake Westphal, Maddison Jansen, Kelly Krueger, Heather Kelly, Jessica Wayson, Hunter Thompson, Ryan Courtney, and Anthony Peavy all winning one or more individual awards in events such as impromptu speaking, duo interpretation, persuasive speaking, prose interpretation, after dinner speaking, informative speaking and dramatic interpretation.



STEM DAY

UNI Science Departments Hosted STEM Related Activity Day on Campus

The Departments of Biology, Chemistry & Biochemistry, Computer Science, Earth Science, Mathematics and Physics hosted the second annual UNI/Iowa Community College STEM Day on the University of Northern Iowa Campus on Friday, Oct. 31. More than 50 students and faculty from six Iowa community colleges attended the event.

Each participant chose three different academic departments in which to attend a specific session. In biology, student participants assisted in solving a fictitious cold case murder. They utilized the analysis of skeletal material, DNA, blood evidence, hair and fiber examinations and botanical knowledge to determine the cause of death. In chemistry and biochemistry, students were provided with simple spectrometers, made from cereal boxes and CDs provided by our department's astrochemist, Dr. Sebree. The spectrometers were used to examine the differences

in perceived color of visible light during emission, transmission and reflectance events. All three types of spectroscopy are used to get remote information about elemental compositions from other celestial objects.

Those who visited Computer Science learned of the curriculum as a part of the computer science major and about the career opportunities available in the computer science field. In the earth science department, students were able to examine the crystalline structure of minerals with petrographic microscopes, examine fossils and learn the various aspects of water quality analysis.

Multiple faculty were involved in hosting students in the Math Department. One group played a game that involved algebraic generalization strategies. The students worked to develop a winning strategy and then worked to extrapolate that strategy to

various initial conditions. In a second session, students consider the following problem: Is it possible to hang a picture on the wall using TWO nails, so that by wrapping the wire around the nails in an interesting way, if either nail is removed the picture will fall down? Students played with ribbon to get started, but eventually turned the problem into one about curves on a plane avoiding two points, and then the group transformed it into a kind of algebra. The students found a way to solve the problem, and then started considering related problems. The third session in math involved the students in three chess-related activities that lead to combinatorics and number theory problems.

In Physics, the students attended a 30-minute presentation on career possibilities for physics graduates, after which they toured the research laboratories in the Physics Department. Among the labs visited were the Raman Spectroscopy Lab, the Magnetic

Materials Lab and the Surface Physics Lab. Cindi Boyd, faculty member at Hawkeye Community College, emailed as soon as the event was over stating "thanks for another fabulous day! It was much enjoyed by all. All of the UNI faculty exuded hospitality and enthusiasm for their area of research and that was inspiring. Please don't hesitate to ask me if there is any way I can help to promote STEM at UNI and collaboration between UNI and Hawkeye Community College. As an alumni of UNI I have a special fondness and respect for UNI."

The STEM Day event at UNI continues to grow and plans are again being made to host the event next fall. The STEM Day is supported by UNI Admissions Office and the UNI Community College Relations Office.

Written by Dr. David Saunders

STUDENT AUDITIONS

School of Music Hosted the National Association of Teachers of Singing

November was a month of music. The UNI School of Music hosted the National Association of Teachers of Singing audition at the Gallagher Performing Arts Center in November. Musicians and students from around the state participated in the event.

UNI, with the help of over 90 student and community volunteers and the direction of the School of Music's voice division faculty hosted the NATS district student audition annual event.

The event began on Nov. 8., hosting 250 students, 40 adjudicators and 45 pianists from various educational institutions across Iowa. The great turnout

rate and professionalism of the students at the event was impressive, says Dr. Korey Barrett, professor of vocal coaching and collaborative piano at UNI.

"Our students acted as professional and courteous hosts, and those that sang represented our School of Music well," Barrett said.

The UNI School of Music not only hosted this event, but had students participate in it. At the end of the auditions, several UNI students walked away with awards.

Cutler, a first place winner in the Division II category said that the event was a personal and professional challenge. "The event

was definitely a challenge. I had never given a solo performance before so it was nerve-wracking, to say the least," he said.

"I would also say that each round put more and more pressure on me to do even better than the last, but that ended up being a blessing in disguise," Cutler said.

Despite the challenges that Cutler and other students faced, 11 UNI students won honors at the auditions, five of which were first place honors.

"I would say the success of the School of Music really speaks for itself. We are very blessed to have such talented and knowledgeable

staff who are eager to teach their students how to become the best they can be at their craft," Cutler remarked.