

THE DURHAM
SCHOOL
WELCOMES NEW
DIRECTOR

TOP 10 FINISH IN
GLOBAL PANDEMIC
RESPONSE
CHALLENGE

NEBRASKA
AE LIGHTING
COMPETITION
WINNERS

THE DURHAM SCHOOL

HEADLINES

SUMMER/FALL 2021



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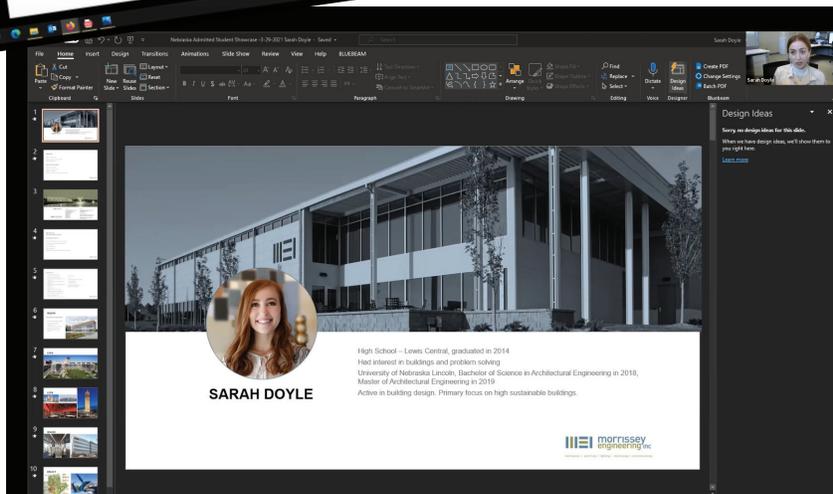
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The Durham School Admitted Student Virtual Showcase - March 29, 2021



Wang named Durham School director; ninth academic appointment at Nebraska since 2000

Excerpts from story written by Kateri Hartman, University Communication



On July 1 Lily Wang became the newest director of the Durham School of Architectural Engineering and Construction. Wang left a previous leadership position in the College of Engineering dean's office to assume The Durham directorship.

Among the reasons Wang sought her new role are the unique opportunities The Durham School offers as the only endowed school within the Nebraska College of Engineering and its dynamic relationship with industry.

"We have an amazing industry here in the state of Nebraska around architectural engineering and construction," she said. "It's impressive the number of hours and industry experience our professional partners bring, working with our students and sharing up-and-coming things that they see while designing and constructing buildings."

Director of The Durham School is Wang's ninth academic appointment since she joined the Nebraska faculty as an assistant professor in architectural engineering in 2000. A nationally recognized expert in acoustics, Wang also has become one of the most senior female leaders in the college, where she was appointed associate dean for faculty and inclusion in 2018.

Wang said she feels drawn to leadership and hopes she can use that trait to benefit The Durham School.

"The school has come a long way since it was founded over a decade ago," she said. "We've made a lot of progress, but I feel there are three areas that I'm very interested in continuing."

The three primary goals Wang has noted moving forward are:

- Tell the school's story in a better way and communicate the great things that are happening both with students and faculty nationally and internationally.
- Continue leading industries, particularly developing innovative technologies with smart buildings, building materials and building operations.
- Improve diversity and inclusion, especially representation within the construction programs; change and lead initiatives to help diversify the field and build more inclusive work environments.

Wang received her doctorate in acoustics from Pennsylvania State University and a bachelor of science in engineering with a certificate in architecture from Princeton University. After serving as a postdoctoral fellow in Denmark, Wang came to Nebraska, where she's been director of The Durham School for just under two months.

READ THE FULL ARTICLE: <https://go.unl.edu/lilywang>

WATCH: <https://go.unl.edu/lilywangvideo>



Kiewit Hall construction underway after March groundbreaking ceremony

A groundbreaking ceremony to celebrate the beginning of construction for the privately funded, \$115 million Kiewit Hall at the University of Nebraska-Lincoln was held June 28. The event was held adjacent to the new building site at 17th and Vine streets at the College of Engineering in Othmer Hall.

“This is a big day for us, the University of Nebraska, for the State of Nebraska and for the field of engineering as we turn ground on the largest academic facilities project in the 152-year history of the university,” said University of Nebraska-Lincoln Chancellor Ronnie Green.

Slated to open in 2023, Kiewit Hall will serve as a premier academic hub for undergraduate engineering education and house Lincoln-based construction management programs. Included will be classrooms, instructional labs, Engineering Student Services, maker spaces for the college’s student organizations and a large outdoor plaza for the university community.

Kiewit Corp. of Omaha announced its major support for the expansion initiative in 2019 and has provided \$25 million to the project. Other lead contributors recognized during the ceremony were the Suzanne & Walter Scott Foundation, Abel Foundation, Peter Kiewit Foundation, Robert B. Daugherty Foundation and Acklie Charitable Foundation.

“As someone who has spent my career at this university, I can’t tell you how gratifying it is to see that kind of investment in the College of Engineering,” said College of Engineering Dean Lance C. Pérez.

“What matters is what’s going to happen in this building. For the first time in over a generation, we will have a facility that is all about teaching engineering. It’s going to be a game-changer for the State of Nebraska and the next generations of students.”

“In our company’s earliest days, Peter Kiewit came to the University of Nebraska to find the engineers that made the company what it is today, and the university has remained incredibly important to us,” said Rick Lanoha, president and chief executive officer of Kiewit Corporation. “When this opportunity came along to build this world-class facility, it was a unanimous vote at our board of directors meeting.”

The facility is being constructed on the east side of UNL’s existing engineering complex. Once completed, Kiewit Hall will connect to Othmer Hall via a skyway, providing an expanded complex that also includes Scott Engineering Center, the Link and Nebraska Hall.

View the Construction Central website: <https://engineering.unl.edu/construction-central>.

FOCUS ON FACULTY

Fischer, Jensen retire after 20 years as faculty, advisors and mentors



Bruce Fischer

Congratulations to **Associate Professor Bruce Fischer** and **Associate Professor Wayne Jensen** for their May 2021 retirements. Both have been with UNL for 20 years and as instructor, advisor and mentor, have impacted the lives of many construction management and construction engineering students.

Fischer was the recipient of 10 teaching and advising awards and has been recognized six times by the Parents Association and the Teaching Council of UNL for his contributions to students. He started his professional career as an architect in 1979 and spent most of the first half of his professional consulting life working on large structures throughout the United States. Joining the university, he brought his expertise and taught such topics as construction communications, materials and specifications, project management and building codes.



Wayne Jensen

Jensen came to the university after a productive career with the Army Corp of Engineers. In addition to teaching courses in materials, sustainable construction and heavy highway, he also supervised and mentored students by chairing several M.S. committees and engaging in research.

Durham School construction programs have much to thank Professor Fischer and Dr. Jensen, for as their impacts will continue to contribute to our legacy.

University Faculty and Friends Award



Associate Professor **Terry Stentz** was given the Family and Friends Award recognizing outstanding support given to students. This university-level award honors faculty and staff who have made a significant difference in students' lives. Nominations are submitted by parents, family and friends of

students. This award is organized by the Office of Student Affairs and co-sponsored by the Teaching Council and the Parents Association.

Modular Building Institute 2021 Fellow

Dr. Kevin Grosskopf received the Modular Building Institute 2021 Fellow award. His areas of research include offsite construction and prefabrication. The Modular Building Institute is the international non-profit trade association serving modular construction and strives to keep up with the latest trends of the modular/offsite construction industry.



PROMOTION

Congratulations to Dr. Michelle Eble-Hankins for her promotion to Associate Professor of Practice, beginning July 2021.

Reddi receives two teaching awards for early to mid-career faculty

Congratulations to Assistant Professor of Practice Vish Reddi, recipient of the **2021 Associated Schools of Construction (ASC) Regional Teaching Award**. This award is given annually to early- to mid-career faculty who have two to six years of teaching experience at an ASC member school. The award recognizes the faculty member's contribution to construction education, excellence in teaching, service to ASC and dedication to the profession.



This year, Reddi also received the **UNL College of Engineering Henry Y. Kleinkauf Family Distinguished New Faculty Teaching Award**. This award is presented to faculty who have demonstrated excellence in teaching, including teaching methods, assessment of teaching and learning, scholarly activities related to teaching improvement and advising and mentoring activities.

AIP panelist to reimagine meetings of the future



Lily Wang, formerly associate dean for faculty and inclusion (now director of the school) and professor of architectural engineering, was chosen to be part of a panel of experts assembled by the American Institute of Physics (AIP) to reimagine meetings of the future to be “more impactful for and valuable to society stakeholders.”

Wang is an internationally renowned expert in acoustics, including the effects of noise and reverberation on human perception and performance. Wang is also a former president of the Acoustical Society of America (ASA).

The panel's report, “The Future of Association Convening: Envisioning for The Sciences (FACETS),” offers ideas and suggestions on how scientific conferences can integrate valuable lessons learned from retooling in-person meetings to virtual formats over the past year while also meeting changing demands of their research communities and the conduct of science.

Podcast features AR Sandboxes



Assistant Professor Jennifer Lather and collaborator Joseph Louis (Oregon State University) were featured in a podcast in March about their work, “Augmented Reality Sandboxes for Civil and Construction Engineering Education.” According to the podcast author, “Having done some work with these kinds of sandboxes in the past, I was fascinated to see how far they had gone with the technology.”

ASC Kiewit Best Paper Award



Assistant Professor of Practice Matt Barrows was recognized at the 2021 ASC International Conference, held virtually on April 7, 2021, for the Kiewit Best Paper Award.

His submission, entitled, “Value of Certifications When Seeking Construction Employment,” will be published in the International Journal of Construction Education and Research.

Construction Management Capstone helps create facility for on-campus ministry, real-world experience for students

THE UNL LUTHERAN CENTER IS THE SECOND OF ITS KIND IN THE UNITED STATES

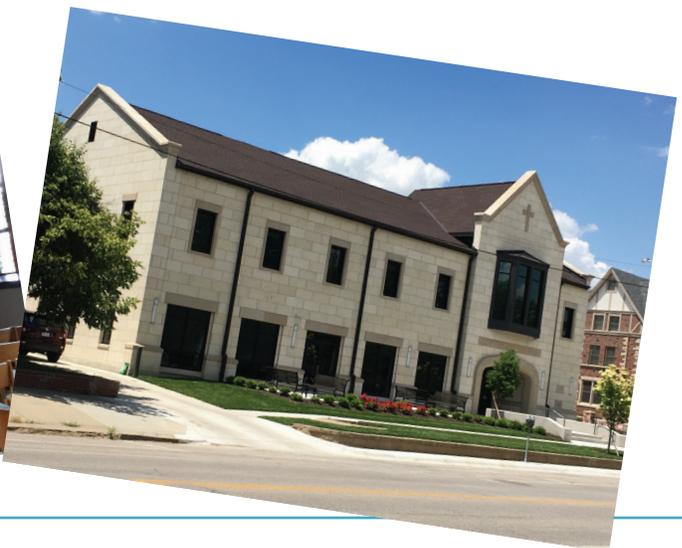
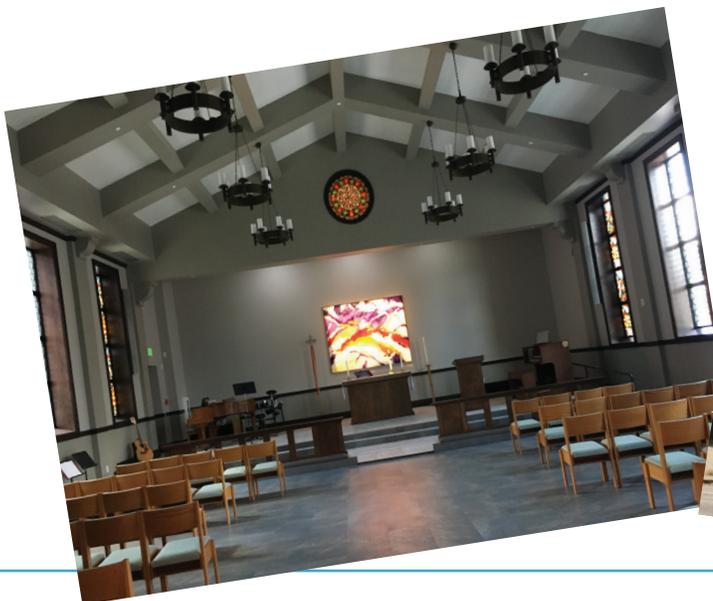
In 2005, when Associate Professor Bruce Fischer, AIA, first started working with the Lutheran Center on the UNL City Campus, he offered a capstone project for CM students to provide real-world experiences helping to plan and develop a new facility for the on-campus ministry. However, the Lutheran Center, first dedicated in 1952, turned out to be much more than a capstone project as they realized it was a much bigger and longer-term project than initially planned.

The UNL Lutheran Center is located in a unique space in the middle of the UNL campus. Without a permanent congregation, the Center has always been a mixed group of short-term congregants joining services during their time at UNL. With a small monthly budget, pastor Adam White and community members sought to rebuild a facility debt-free, adding much-needed meeting and office spaces and providing a new dimension to on-campus ministry services. The goals were to create a new type of student housing facility to support students who may become future leaders in the church and also to generate enough annual income to support the facility into the future without taking on any new debt.

Fundraising from three main sources—alumni donations, grants, and contributions from other Nebraska Evangelical Lutheran Churches in America (ELCAs)—generated roughly \$6 million covered the costs of design and construction without taking on any additional debt. The new facility offers space for community meetings, a worship area, offices for staff on the first floor and an on-campus living option on the second floor.

Known as The Upper Room, the second floor accommodates 10 students and one house parent. The students have private sleeping areas but share common bathrooms, kitchen and dining space and laundry facilities. While the Center may become student-approved housing through UNL, current students who live on-site can still take advantage of UNL's amenities including meal plans and student parking.

Construction started in fall 2019 and was completed in December 2020. Fischer worked with Clark Architects Collaborative 3 and Cheever Construction Co. to complete the design and construction work. UNL's Lutheran Center is the second of its kind in the U.S.





Above: Dan Piatkowski, Alison Freifeld, Fadi Alsaleem and Basheer Qolomany. Photos by UNL, UNMC and UNK. Story published March 8, 2021; written by Karl Vogel, Engineering Communications.

Alsaleem-led research team finishes in Top 10 of global Pandemic Response Challenge

A team of researchers from three University of Nebraska institutions was among the finalists in a global competition to develop an artificial intelligence-driven model to advise policymakers on how best to handle the COVID-19 pandemic.

In the early phase of the competition, the Nebraska team had one of the most accurate models and was well within range of the \$500,000 top prize.

In December, after Phase 1 of the \$500K Pandemic Response Challenge run by XPRIZE, which designs and operates incentive competitions to solve the world's grand challenges, and sponsored by Cognizant, the Nebraska team was among the 48 teams from 17 countries chosen to advance to the final phase.

University of Nebraska-Lincoln assistant professor Fadi Alsaleem put together a team nearly a year ago to tackle another pandemic-related project in which data gathered from Kinsa thermometers equipped with Bluetooth technology was gathered from various communities in Nebraska and used to help predict outbreaks across the state. The Nebraska team includes:

Fadi Alsaleem - assistant professor of architectural engineering at UNL with expertise in big data

Alison Freifeld - professor of internal medicine at the University of Nebraska Medical Center and an infectious diseases expert

Basheer Qolomany - assistant professor of computer science at the University of Nebraska-Kearney and an expert in cyber systems

Dan Piatkowski - assistant professor of community and regional planning in the UNL College of Architecture

NSF research planning grant received for Smart and Connected Communities

In 2020, two architectural engineering faculty members at The Durham School were awarded a research planning grant through the Smart and Connected Communities program at the National Science Foundation (NSF).

Associate Professor **Erica Ryherd** and Assistant Professor **Iason Konstantzos** are part of an interdisciplinary team collaborating with UNMC College of Public Health Early Childhood Development, UNO Health and Kinesiology, UNL Electrical and Computer Engineering, UNL Child, Youth, and Family Studies, and the Buffett Early Childhood Institute faculty. The overarching goal of this grant is to develop a system to measure characteristics of the physical/social environment within the childcare setting. Results will bring new insight into childcare settings with an integrated feedback loop using technology to provide data (acoustics, lighting, thermal conditions) to childcare providers, helping to influence how best to interact with children within their learning and play environment to improve outcomes such as language and physical activity.

To reveal variables to consider during the project's next phase, focus groups composed of local childcare providers, parents, and state licensing experts offer feedback that provides important details about security and privacy needs, sensory input, staffing, parents and any ethical concerns. Next steps include a second NSF grant application for a study of up to four years evaluate solutions and implementation at childcare settings, followed up by more feedback and research data to be used to develop a system that can be implemented in other childcare settings.



Grant Funds Testing of Composite Insulated Concrete Sandwich Panels



Faculty in The Durham School often apply for and receive federal, state or private-foundation grants, allowing them to explore new research or further develop specific methodologies within their field. **Marc Maguire**, assistant professor in the construction program, has several concurrent grants. Highlights from a current grant focuses on the structural building process for insulated/tilt-up walls.

Construction of tilt-up walls—sandwich panels with an inner/outer wythe of concrete with a layer of insulation made of foam—has changed over time. There are, however, still areas for development regarding the efficiency and thermal sustainability of walls for all purposes (e.g., commercial, family homes, offices), helping to avoid hot/cold spots or condensation problems with walls.

The development of tilt-up walls has had many different design iterations (e.g., air gap, steel connections, fiber reinforced plastic) over time. These changes have led to some explication with the engineering/design of walls. Over time, the structures have become more efficient with improved thermal design measures. Mathematical models could help develop a common design guide that would deliver more guidance and consistency across the design process.

Maguire's grant focuses on documenting specific design codes for the construction process of walls. In collaboration with Tilt-up Concrete Association (TCA), he is conducting large-scale field testing with the goal to construct a method that produces a thinner wall design that better predicts composite behavior under specific resistance and pressure/strength load strains. The testing is now complete, and the next steps are to propose design guidelines to the TCA and the American Concrete Institute (ACI) building code.



Pocket Science features a glimpse at recent research from Husker scientists and engineers – for those who want to learn the **“What,” “So what”** and **“Now what”** of Husker research.

What?

Each year, more than 50 million K-12 students spend upward of 1,000 hours in U.S. classrooms. Even before the coronavirus pandemic, research was establishing suggestive links between academic performance and classroom air quality, possibly due to the latter affecting student concentration and illness-related absences.

But those prior studies examined student performance only relative to carbon dioxide concentrations and the rate at which ventilation removed that CO₂ from classrooms.



So what?

Durham School Associate Professor **Josephine Lau** and colleagues decided to investigate other facets of air quality and ventilation along with their potential effects on student achievement. Over a two-year span, the team surveyed and analyzed 216 classrooms from 39 schools in the Midwest. The study revealed links between the type of ventilation system installed at a school and student performance on year-end math and reading tests.

Even when controlling for other variables, students in classrooms with a single-zone unit ventilator—which is attached to an external wall and draws in outdoor air directly from the device—generally had lower scores in math and reading when compared to schools with centralized systems that serve multiple classrooms.

Other recent research has suggested that multi-zone systems provide more outdoor air, remove larger proportions of particulates and run quieter than their single-zone counterparts. And the team did find that more rapid air exchange in particula corresponded with higher reading scores.

Now what?

The team expects its findings to spur experimental studies that can discern whether the ventilation-related factors are actually driving the measurable differences in student performance and how they might be influenced by demographics and seasons.

School districts should begin considering the results of air-quality research when selecting ventilation and filtration systems for their buildings, the researchers said.

MATTHEW BARROWS

What do you like best about working for the university?

Two numbers: 9/12. I love having a career that lets me travel. Since starting at UNL in fall 2017, I have visited 18 different countries and spent 15 weeks living out of a backpack. With many other careers you would be forced to wait for retirement or have to settle for a less lucrative career. I get to do these things NOW! I am looking forward to traveling overseas next summer!

What aspect of working in an educational setting do you enjoy the most?

I would have to say that I truly enjoy the meetings and all things administrative. Honestly, I enjoy getting students prepared to enter the construction industry. I have been there. I know exactly what they are going to face and I know isn't easy. There is nothing more impactful than when a previous student comes back and truly thanks me for what I have taught them. I also enjoy watching the students mature from their sophomore to senior year. Quite a few of them complain about the workload of my classes when they are sophomores. However, these are the same students that thank me for challenging them as I am shaking their hand during the senior sendoff celebration.

What is a talent you have that you don't use in your career?

I am an award-winning BBQ competitor. I was part of a team that won 4th place out of 168 teams for pork ribs at the Great American BBQ Festival in Kansas City in 2012.



How would your family/friends describe you?

Intense. Funny. Serious. Laidback. Anxious. Calm. Work hard, play hard. I feel there is a time to "get after it" and there is a time to appreciate what you have done. When I am working I want to work and when I am playing I want to play. I don't often mix these worlds.

What is your favorite thing to do on a day off?

I enjoy spending time outside participating in non-competitive activities. If I am in Nebraska you will find me at one of the parks, on the bike, or meandering around the disc golf course (not keeping score). Ever since the start of COVID, I have tried to spend at least 45 minutes each day outside and it has been very helpful. Even though we might not have the mountains I am used to, Nebraska has some really amazing scenery.

Favorite restaurant?

Does Code Brewing count?!? (There is a pork chop in every beer!) If Code doesn't count then I would have to say Muchachos in Lincoln. Tacos El Ray, Grey Whale Poke Bowl, and Super Taco are top notch as well. Katie and I find those places to be better than the "fancy" places in town. Tie Leaty's is also good, but Josh took that one!

MICHELLE EBLE-HANKINS



What do you like best about working for the university?

I enjoy seeing students get excited about what they are learning. It's very rewarding for me when I see them "get it."

What aspect of working in an educational setting do you enjoy the most?

I enjoy getting to bring real world issues into the classroom. I get to teach students the fundamental concepts, then show them how those fundamentals are applied on real projects.

What is a talent you have that you don't use in your career?

I very much enjoy technical editing. I get to use it some when I give feedback to students on their writing. But I would like to do more of it. I like to sing. There's not much need for singing in the classroom, so I don't get to do that very often.

How would your family/friends describe you?

Loud. Assertive. Good listener. Passionate.

What is your favorite thing to do on a day off?

Watch my two boys play baseball. Or, do an escape room (I'm addicted to them!). Or, just veg out on the couch with my puppies and watch a good movie. We just got a third dog - he's an 11-week-old English Cream Golden Retriever.

Favorite restaurant? The Melting Pot

BRANDON KREILING

What aspect of working in an educational setting do you enjoy the most?

Watching the students grow over their four years at the university.

What is a talent you have that you don't use in your career?

I like working with metal (welding, lathe, mill, etc.).

How would your family/friends describe you?

Easy going

What is your favorite thing to do on a day off?

I enjoy working on old trucks and tractors.

Favorite restaurant?

La Mesa



VISH REDDI



What aspect of working in an educational setting do you enjoy the most?

The students are absolutely the best part of working in an educational setting. I enjoy interacting with them and exploring topics with them.

What is a talent you have that you don't use in your career?

This is a tough one! This career in academia uses all of my talents!

How would your family/friends describe you?

Calm, determined and reliable.

Favorite restaurant?

The Oven

STUDENT SUCCESS



Congratulations to our Spring 2021 Durham School graduates.

< Architectural Engineering
(Scott Campus)



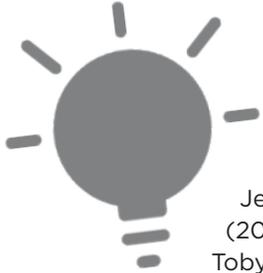
< Construction
(Scott Campus)



< Construction
(City Campus)

Nebraska Architectural Engineering - Lighting Awards

Besal Lighting Education Fund Scholarship (36 awards)



Izzy Brown (2021-22), Garrett Quinn (2021-22), Makayla Thompson (2021-22), Addie Devney (2020-21, 21-22), Aaron Adams (2020-21), Dalton Rabe (2018-19), Samantha Anderson (2017-18), Nick Garaycochea (2017-18), Matt Healy (2017-18), Riley Johnson (2017-18, 18-19), Jordan Blayney (2016-17), Maggie Findall (2016-17), Kevin Seton, (2016-17), Arpan Guha (2015-16, 16-17, 17-18, 18-19), Nathan Ritta (2015-16), Geoffrey Wright (2015-16), Yulia Tyukhova (2014-15), Patrick MacBride (2013-14), William Schmit (2013-14), Eric Rushenberg (2010-11), Katie Bohling (2008-09, 09-10), Jeffrey Hargens (2007-08), Brian Isley (2007-08), Andrea Wilkerson (2007-08), Sam Haberman (2005-06), Chrysanthi Mishek (2005-06), Andrew Wilson (2005-06), Brent Protzman (2003-04), Toby Samuelson (2002-03), Melissa Jones Thomsen (2002-03)

Illuminating Engineering Society (IES) Howard Brandston Student Lighting Design Education Grant

(7 grants and 3 honorable mentions in 11 years); 1 given each year, international competition

- 2019 - Andi Walter and Ryon Sommerer
- 2018 - Riley Johnson and Jeff Thompson
- 2016 - Justin Moench, Michael Kuhlenengel, Nicholas Garaycochea (Honorable Mention)
- 2015 - Sean Poulicek and Nathan Ritta
- 2014 - Justin Boyd and Geof Wright (Honorable Mention)
- 2013 - Patrick MacBride and Sameena Khan
- 2011 - Abby Breuer and Jordan Webb; Yulia Tyukhova and Roger Sandhoefner (Honorable Mention)
- 2010 - Heidi Kuchta and Andrew Wiese
- 2009 - Steve Gollehon and Scott Lindgren

IES Emerging and Young Professionals Scholarship (22 awards):

Andi Walter, Ryon Sommerer, Jeff Thompson, Riley Johnson, Luke Dolezal, Mark Niechwiadowicz, Michael Kuhlenengel, David Repair - 2019 IES Annual Conference, Louisville, KY; Jeff Thompson, Riley Johnson, Luke Dolezal - 2018 IES Annual Conference, Boston, MA; Justin Moench, Michael Kuhlenengel, Nicholas Garaycochea - 2016 IES Annual Conference, Orlando, FL; David Repair, Nathan Ritta and Yulia Tyukhova - 2015 IES Annual Conference, Indianapolis, IN; Geoffrey Wright - 2014 IES Annual Conference, Pittsburg, PA; Patrick MacBride and Yulia Tyukhova - 2013 IES Annual Conference, Huntington Beach, CA; Yulia Tyukhova - 2012 IES Annual Conference, Minneapolis, MN; Andrea Wilkerson (UNL MAE 2009) and Yulia Tyukhova - 2011 IES Annual Conference, Austin, TX; Chrysanthi Mishek (UNL MAE 2007) and Andrea Wilkerson - 2009 IES Annual Conference, Seattle, WA

IES LD+A Future Leaders: Next Generation Lighting Luminaries (3 awards)

2013 Yulia Tyukhova (UNL MSAE 2012 and AE PhD 2015); 2010 Chrysanthi Mishek (UNL MAE 2007) and Andrea Wilkerson (UNL MAE 2009)

International Association of Lighting Designers (IALD) Education Trust Scholarship (8 student awards)

Ryon Sommerer (2020) Thomas M. Lemons Scholarship
Andi Walter (2020) Thomas M. Lemons Scholarship
Geoffrey Wright (2015) Thomas M. Lemons Scholarship
William Schmit (2013 and 2014) Thomas M. Lemons Scholarship
Andrea Wilkerson (2009) Thomas M. Lemons Scholarship
Amy Pelkner (2009), Lisa Friehe (2008), Brent Protzman (2004)

IALD Education Trust Subsidy Award (20 awards)

Ryon Sommerer (2020) - LIGHTFAIR International; Andi Walter (2020) - LIGHTFAIR International; Nicholas Garaycochea, Michael Kuhlengel, Kevin Seton, Justin Moench, Matt Capoun, Mark Niechwiadowicz, Marissa Gigantelli, Cody Largent (2017) - Independent Activity Stipend - Travel to Salina, KS Lamp Manufacturer and Kansas City Lighting Designers, Arpan Guha (2016) - LIGHTFAIR International - San Diego, CA, USA; Geoffrey Wright (2015) - Independent Activity Stipend - Nebraska AE Lighting Celebration, Geoffrey Wright (2015) - Independent Activity Stipend - Travel to Salina, KS Lamp Manufacturer and Kansas City Lighting Designers, Clarence Waters (2014) - LIGHTFAIR International - Las Vegas, NV, USA (faculty award); Geoffrey Wright (2014) - LIGHTFAIR International - Las Vegas, NV, USA; Yulia Tyukhova (2012) - Enlighten Americas - Vancouver, BC, Canada; Caitlin Brow, Giang Nguyen and Yulia Tyukhova (2011) - LIGHTFAIR International - Philadelphia, PA, USA; Caitlin Brow (2011) - Enlighten Americas - New Orleans, LA, USA; Yulia Tyukhova and Andrew Wiese (2010) - Enlighten Americas - Denver, CO, USA; Stephen Gollehon (2009) - Enlighten Americas - Sonoma County, CA USA; Amy Pelkner (2009) - LIGHTFAIR International - New York, NY USA; Lisa Friehe and Steve Gollehon (2008) - Enlighten Americas in Cancun, Mexico; Seth Goeken (2007) - Enlighten Americas in Montreal, Canada; John McCart (2006) - Enlighten Americas in San Diego, CA USA

Litecontrol Scholarship (4 student awards)

Lisa Friehe (2008), Chrysanthi Mishek (2005), Brent Protzman (2003), Xin Guo (2003)

Nuckolls Fund for Lighting Education (9 awards, \$105,000)

- Andi Walter (2019) Jonas Bellovin Scholar Achievement Award, \$5,000: <https://nuckollsfund.org/jonas-bellouin/>
- Riley Johnson (2018) Designers Lighting Forum of New York Student Achievement Award, \$5,000
- Michael Kuhlengel (2017) Designers Lighting Forum of New York Student Achievement Award, \$5,000
- Arpan Guha (2015) Jules Horton International Student Achievement Award, \$5,000
- Yulia Tyukhova (2014) Jonas Bellovin Scholar, \$5,000
- Nuckolls Fund Grant (2010-12) Kathy Ankerson (UNL Arch when awarded), Neal Hubbell, Betsy Gabb (UNL Arch), Lindsey Ellsworth-Bahe (UNL Arch), Tim Hesath (UNL Arch, DSAEC courtesy appointment), Clarence Waters (UNL AE, DSAEC), Nate Krug (UNL Arch), Mary Ben Bonham (Miami of Ohio University), Scott Johnson, and Nancy Kwallek (UT Austin), To develop and deliver a project called "Lighting Across the [Design] Curriculum," which is a series of teaching modules and methodologies from both teaching and learning perspectives that are purposeful in the development of curricula across the disciplines within the building industries at the University of Nebraska, Miami University, Kansas State University and the University of Texas at Austin. \$50,000
- Giang Nguyen (2010) Jules Horton International Student Achievement Award, \$5,000
- Lisa Friehe (2008) Jonas Bellovin Scholar, \$5,000
- Nuckolls Fund Grant (2000) Kevin Houser, Dale Tiller and Clarence Waters - Development of the design component of its architectural engineering program in lighting. \$20,000.

Excellence in Lighting Education

Students and alumni from The Durham School frequently compete for and win awards, grants and scholarships from entities within the lighting design industry. Durham School students typically apply for the following awards each year:

The **Howard Brandston Student Lighting Design Education Grant** helps encourage and recognize up-and-coming students within the field who show great promise. Students must present a unique and innovative solution to a design problem with their submission. In the past, students in the lighting design course have received seven grants and three honorable mentions.

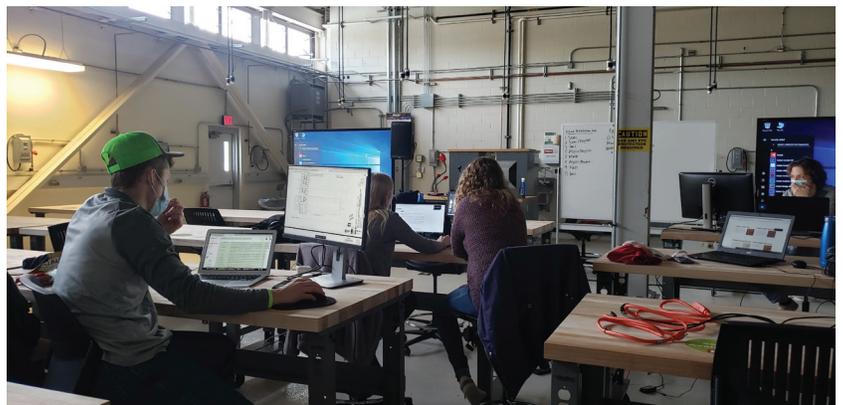
The **Besal Lighting Education Fund** is a memorial fund recognizing the late Robert J. Besal, who was Vice President for Lithonia Lighting. Both undergraduate and graduate students can apply by submitting essays (undergraduates) or lighting-design projects (graduates). The fund hopes to encourage young leaders into a career within the lighting field. Throughout the years, 36 Durham School students have received these awards.

Durham School alumni are also active in groups that promote the lighting design field. For example, many leaders and committee chairs within the local Illuminating Engineering Society (IES) are Durham School graduates. The society is dedicated to aspects pertaining to the art and science of illumination.

IES offers an awards program recognizing local projects and leaders for their contributions within the lighting industry. IES has recognized several alumni with the Award of Excellence as well as numerous others who received Awards of Merit acknowledgement.

ASC Student Competition

Five undergraduate students in the Durham School participated in the virtual ASC Region 6-7 Competition in Reno, Nevada in February 2021. They developed their problem-solving skills, focused on teamwork and enhanced their technical knowledge of the construction industry.



Student team wins top prize at AEI international competition

A team of University of Nebraska-Lincoln architectural engineering students took the top prize again at the 2021 American Society of Civil Engineers (ASCE) Architectural Engineering Institute (AEI) International Student Design Competition on April 9.

Team Artemis, made up of students in The Durham School of Architectural Engineering and Construction, won in the Building Integration category for the overall design and also received first place in Mechanical Systems.

Additionally, the Nebraska students took two awards for Outstanding Achievement in Innovation—one for Building Performance and one for Water Retention, Harvesting and Re-Utilization.

The students who took AE 8030/8040 Team Design with Professor Clarence Waters were:

Mechanical Team: Ashley Everitt, Jennifer Mack and Mitchael Sieh

Electrical Team: Gage Gibney (Team Leader), Aaron Adams, Allie Huffman, Matt Huntwork and Andrew Martinez

Structural Team: Raiyan Al Hashmi and James Andrus.

Teams were tasked with designing a new school building for Georgetown Day School in Washington, D.C., to consolidate its lower/middle school and high school campuses into a single campus. The structure includes a gymnasium, classrooms, teaching pods, a 35,000-square foot parking facility, a 500-seat black box theater and a synthetic turf playing field on the roof.

Each year, the AEI International Student Design Competition attracts top architectural engineering undergraduate and graduate students from leading academic institutions worldwide. The annual competition provides a unique venue for students to showcase their architectural engineering knowledge and skills by encouraging



collaboration, research, innovation and peer review by practitioners.

This year's conference and competition awards ceremony were held virtually due to CDC pandemic guidelines, though they are typically held in-person.

2021 ACEC Scholar of the Year

Congratulations to **Alex Dukart**, who was selected by the Fellows Committee of the American Council of Engineering Companies (ACEC) to receive the 2021 ACEC Scholar of the Year scholarship of \$10,000.



Dukart earned his B.S. AE in spring 2021 and started the M.A.E. program in the summer of 2021.

Highlights for MCA-Omaha student group include back-to-back MCAA Chapter of the Year



The UNL student chapter of the Mechanical Contractors Association of America (MCAA) were named Chapter of the Year for 2019 and 2020.

This award was presented by MCAA's Career Development Committee for the continuous outstanding achievement as a student organization.

Students in this organization plan for careers in the mechanical construction industry. The University of Nebraska Student Chapter is sponsored by MCA of Omaha, and Durham Professor of Practice Vish Reddi serves as the faculty advisor.

Additionally, three students—Luke Bennett, Jakob Cimino and Masen Dinklage—were awarded MCAA scholarships.

Sigma Lambda Chi inductees for 2021

Congratulations to our spring 2021 Durham School Sigma Lambda Chi inductees: Aidan Colyer (Treasurer), Alyssa Haas (Vice President), Mike Horn (Secretary), Antony Kodsy, Dixon Loeffler and Bryan Ramirez Hernandez (President).



AGC student chapter announces new officers for 2021-22

In April, the UNL Student Chapter of Associated General Contractors (AGC) conducted their annual officer elections virtually.

The 2021-22 officers are Nyawa Allieu (recruitment and social chair), Mario Esquivel (vice president), Alexis Fuller (secretary), Jared Riebock (treasurer), and Ryan Zimmerman (president).



Nebraska Masonry Alliance sponsors design competition

Durham School students recently competed in a Nebraska Masonry Alliance-sponsored design competition for \$1000 in scholarship money. The assignment, designed by Professor and Associate Director of Architectural Engineering Ece Erdogmus, was part of the Masonry and Timber Design class.

Four student teams of 2-3 students presented their final projects to design a firehouse, recreation center and storm shelter in response to the 2014 tornado in Pilger, Nebraska, though it should be noted that Pilger, nor any other governmental entity, was involved in this competition.

Jenna Irwin and Ben Schnatz formed the winning team, with each receiving \$500 in scholarship money from NMA for designing a 2500sf storm shelter to host the residents of Pilger during an emergency.

Flanking the shelter on one side is a fire station apparatus bay with an arched skylight supported by laterally braced timber gambrel trusses.

Flanking the shelter on the other side was a recreation center with three 6ft wide by 3ft deep masonry arches, creating additional gathering space on the side of the recreation center. The storm shelter contained bearing walls to support the weight of the helipad/helicopter and the concrete slab roof.

The Durham School sends thanks to the Nebraska Masonry Alliance for sponsoring two scholarships for this project. In addition to the scholarships, the Masonry Alliance provides codebooks for students.

Below is the final design presented to the class from the "Schirwin Engineers" team.



ALUMNI ACCOLADES

Fulbright Scholar focused on reconstruction of Afghanistan



The Fulbright Visiting Scholar Program provides distinctive opportunities for international scholars to lecture and complete research in the United States. The program enhances and expands international experiences for both the scholar and their participating universities.

The Durham School will welcome the next Fulbright Scholar, from Panama, in spring 2022. The following highlights one of the **most recent Durham School Fulbright Scholars, Hakmatullah Hamidi.**

Hakmatullah Hamidi, from Afghanistan, joined UNL as a Fulbright Scholar in fall 2017, graduating with an M.S. CEMT and a minor in business by fall 2018. Hakmatullah's M.S. focused on physical workload capacity enhancement through the use of a non-powered, wearable exoskeleton.

Following his long-term goals, Hakmatullah returned to Afghanistan to contribute to its reconstruction. After his return, Hakmatullah managed several infrastructure projects for the Afghan government and worked as director of the Project Management Office (PMO) of the Capital Region Development Authority. Currently, Hakmatullah is considering various international Ph.D. programs.

Bridges on CIEF NEXT board

Kristoffer Bridges, a 2017 construction management graduate, is serving on the CIEF NEXT Young Professionals Advisory Board.

Bridges is a project engineer with MarketOne Builders in Sacramento, California. He previously worked for Hensel Phelps in Sacramento and was an estimating intern for Kiewit prior to graduating from UNL.

On the CIEF website, Bridges notes that being on the board, "will be a great opportunity to develop relationships with other industry professionals and learn from each other's experiences. This board is a platform that encourages collaboration and development of less seasoned participants."

Regarding what inspires him in his daily life, he wrote, "Continued learning opportunities and creating spaces for youth to see how many opportunities are within the Construction Industry. Leaving behind a tangible legacy after projects are completed are what motivate me every day to keep growing in my profession."



Knobbe promoted at Miller Electric



Roger Knobbe, who earned a degree in architectural engineering from Nebraska in 2001, began serving as executive vice president of Miller Electric in January 2021. Previously, he was VP-Senior PM for the company for about 14 years.

He is involved in multiple aspects of daily operations and supervises a variety of electrical projects and accounts.

Prior to joining Miller Electric in 2006, Knobbe worked as an electrical engineer for HDR and Farris Engineering. This well-rounded experience allows him to approach the job site with a balanced perspective and an open mind, helping ensure optimal project outcomes. He maintains his professional engineering (PE) license in Nebraska as well as his contractor license in multiple states.

Congratulations ...

Midland Business Journal “40 Under 40” recognition

Brandon Rich, P.E., LEED AP BD+C, WELL AP, Fitwel Ambassador, has been named one of the Midlands Business Journal’s 2020 “40 Under 40.”

He received his B.S. AE in 2006 and his M.A.E. in 2007.

Rich is currently associate principal and electrical engineer at Alvine Engineering.



Promotion, AE Outstanding Alumni Award for 2021

Double congratulations are in order for **James Wingert, SE, LEED AP BD+C**, structural engineer at HDR.

Following his promotion to structural studio lead, James also received the 2021 AE Outstanding Alumni Award from The Durham School. This award recognizes alumni with exceptional career

experience, industry leadership, community service and service and outreach to The Durham School.

Wingert earned his B.S. AE in 2006 and his M.A.E. in 2007.



VIRTUAL EVENTS

Virtual events continued in the spring, including the school's new Durham Days for high school students and the 16th Annual AE Awards & Recognition Ceremony.

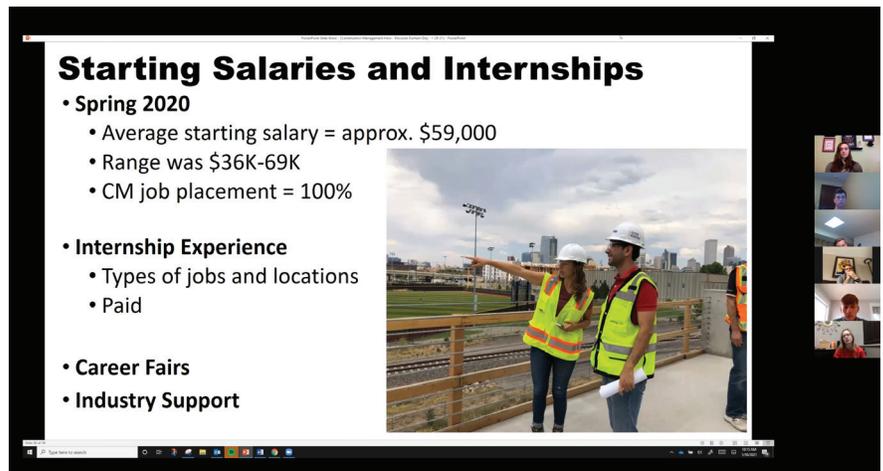
The first **Durham Days** event was held virtually on January 30. More than 30 prospective students registered and had the opportunity to interact with faculty, current students, alumni and industry professionals and discover why the Durham School is so special. Attendees were from Nebraska, Colorado, California and Illinois.

The **16th Annual AE Awards & Recognition Celebration** was held virtually on March 4. Congratulations to all of the 2021 award recipients.

- *Outstanding Faculty Award:* David Yuill
- *Outstanding MAE Industry Mentor:* Adam Christensen
- *Outstanding MAE Student:* Gage Gibney
- *Outstanding Alumni:* James Wingert

Two companies also took home awards for their Outstanding Alumni Projects.

- *Interdisciplinary:* Alvine Engineering - 600 Canal Place
- *Discipline-Specific:* Specialized Engineering Solutions - UNMC Munroe-Meyer Institute



Durham Days debuted virtually in January, offering prospective students the opportunity to learn more about degree programs in construction and architectural engineering.



The Spring AE Awards and Recognition Celebration was a success even remotely, with four individuals and two companies receiving accolades.

Durham School Merchandise

Gear up with Durham School online merchandise available within the College of Engineering's online store.

VISIT THE ONLINE STORE:
nebraskaengineeringstore.com/dsaec



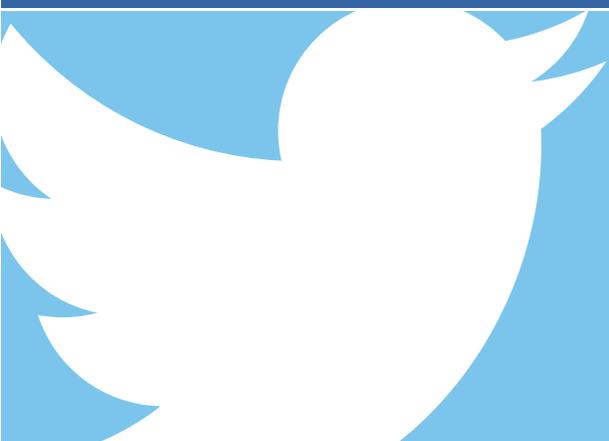


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