

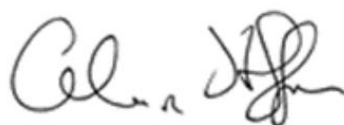
Greetings Science Friends,

I like the term new normal. This past semester has revealed the dawn of what I hope is our new normal.

This past 4 months has been an exciting time in our science department. Highlights include students winning awards at conferences that were attended in-person not virtually, our chemistry program receiving a generous gift from two alumni which allowed us to purchase new instrumentation that will expand our teaching and research capabilities, and the department being awarded a \$750,000 grant from the National Science Foundation to support retention and attraction of STEM students.

A prominent campus administrator who doesn't like being singled out, so let's just call him Bresident Pullock, likes to say, "The Best is Yet to Come!" I believe that because of our dedicated faculty and staff, and our fantastic students that this is also true for the Department of Natural and Applied Sciences. Thanks for all that you have done and will continue to do to make our new normal the best normal yet!

Yours in science,




**Adam R Hoffman**

Professor of  
Environmental Chemistry

DNAS Department Head

[ahoffman@dbq.edu](mailto:ahoffman@dbq.edu)

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★DNAS Student Spotlight

★DNAS Honors Convocation Award Winners

★Funding Received for Open Educational Resources





# Congratulations

## DNAS Graduates!

Lauryn Behrend  
Carlee Benzing  
Hanna Blumhoff  
Madison Bowers  
Kayla Breunig  
Tyler Cernohous  
Zach Elias  
Brenna Emerick  
Aziz Eshtrefl  
Megan Gille  
Dharma Heidenreich  
Hanna Horsfield  
Destinee Longtin  
Kathleen Messino  
Ariana Pizano  
Jeremiah Steed  
Jacob Whitbeck  
Callie Dutton  
Heather Barkhurst  
Nathan Carter  
Allisen Hallahan  
Paige Peterson  
Tyler Ramey  
Max Snowden  
Kyra Stoll

Biology  
Biology  
Biology & Chemistry  
Biology  
Biology & Chemistry  
Biology  
Biology  
Biology  
Biology  
Biology  
Biology  
Biology & Science in Secondary Education  
Biology  
Biology  
Biology  
Biology  
Biology  
Chemistry  
Environmental Science  
Environmental Science  
Environmental Science  
Environmental Science  
Environmental Science  
Environmental Science  
Environmental Science  
Environmental Science

*Class of 2022*



# REFLECTING ON FAVORITE MEMORIES

**Nathan Carter:**

Lake fishing in Sylvania and hiking around New Mexico was a blast. My all-time favorite is Dale Easley and many other teachers helping me to find something I'm truly passionate about.

**Aziz Eshtrefi:**

Helping Dr. Turner with Chemistry Outreach to nearby high schools to engage young individuals with what the field of chemistry has to offer.

**Ariana Pizano:**

Taking part in hosting convocations celebration for the org Latinos Unidos to help celebrate diversity.

**Hanna Blumhoff:**

Going to Sri Lanka and all the amazing things we did there.

**Megan Gille:**

My trips to Spain and Italy with Professor Garfield and doing research over the summers with Dr. G and other students.

**Max Snowden:**

Being a part of the 2021 Butler fellowship who got to be the first group of interns to work on the Wolter Woods and Prairies property and catch the federally endangered Rusty Patch Bumble Bee.

**Allisen Hallahan:**

The times I've spent performing prescribed burns at the Wolter Woods and Prairies. It's always an amazing experience and I feel so lucky to have gotten to assist.

**Zach Elias:**

Walking through campus only to be stopped by professors and peers who respect you as an academic, but also appreciate you as a true friend.

**Tyler Ramey:**

Studying/working hard in the USC lounge area and having the work payoff.

**Jacob Whitbeck:**

Closing down the library with the late-night study sessions that helped me get through many of my classes.

**Dharma Heidenreich:**

Going into Dr.G's office to talk and hear her helpful advice for my future career and life in general.

**Kyra Stoll:**

Getting to play on the UD softball team and being able to spend time on the field with my friends. I'll also miss getting to have Professor Hoffman as my professor and advisor.

**Paige Peterson:**

Spending hours conducting independent research on the Aegla crab project, coffee hour with Dr. Easley, outreach programs with Dr. Hoffman, and bird watching with Dr. Zuercher.

**Tyler Cernohous:**

Doing labs in class and partaking in independent research



UNIVERSITY *of* DUBUQUE  
**Faculty Hall of Fame**  
for Excellence in Teaching and Advising

*Congratulations!*

**DR. MARK  
SINTON**

UD Faculty Hall of Fame Inductee  
2022



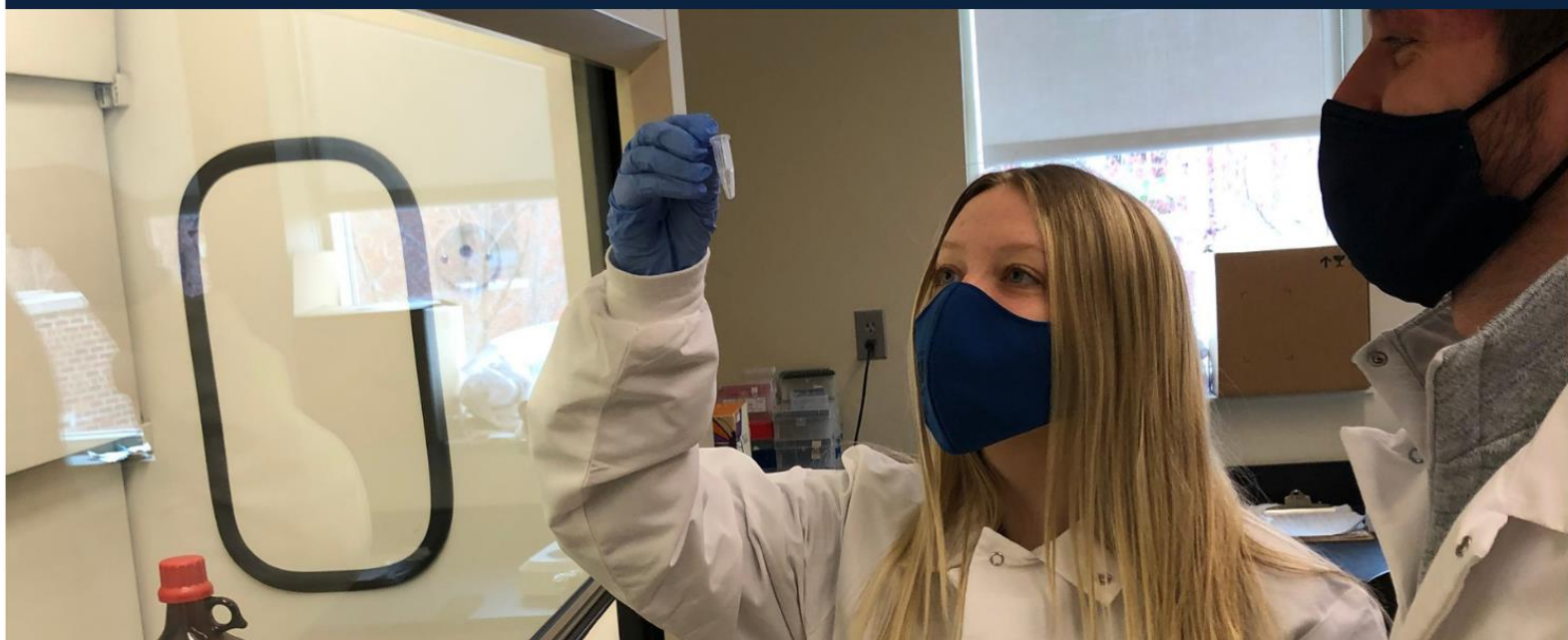
"It's an honor to induct Professor Sinton and Professor Romagna into the Faculty Hall of Fame for Excellence in Teaching and Advising," said Rev. Jeffrey F. Bullock, PhD, president of the University of Dubuque. "Professor Sinton is a valuable member of the DNAS and a demanding professor who meets those demands with equal amounts of support and encouragement..."

"To be honest, I am stunned. I never thought that I would receive a teaching award since most students shy away from chemistry. That said, it feels really good, like it's a validation of the work I've been doing professionally for almost 30 years now," Sinton said, adding. "What I enjoy most about working at UD is mentoring students, both in and out of class. It's very satisfying to help and watch students mature and grow in their professional skills, then leave the University to begin their careers. I am humbled that I get to be a part of their journeys and help them reach their goals."

**Read Full  
Story Here**



# University of Dubuque Receives National Science Foundation Grant for New CREATE Program



**C**onnecting  
**R**esearch,  
**E**xperiences, &  
**A**pplication  
**T**o  
**E**ngagement

*A scholarship for FAFSA - eligible students majoring in Bio, Chem, or EVS to participate in a month of summer research for three consecutive summers; building skills for future success in vocation or graduate programs!*



The University of Dubuque has received a \$748,450 grant from the National Science Foundation to support building a sense of belonging for students in science, technology, engineering, and mathematics (STEM) through research, networking, and community engagement.

Funded through the foundation's Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM) program, the six-year grant supports the creation of the program at UD.

"It will provide opportunities to people who potentially want to do science but don't have the means to do it," said Adam Hoffman, PhD, head of the Department of Natural and Applied Sciences and professor of environmental chemistry.

CREATE is designed to provide scholarships for 24 students, building four cohorts of six students over the six years of support. Scholars will be selected during their first academic year and will be financially supported with a yearly award of \$6,500 throughout the three remaining years of their undergraduate education. Scholars will carry out team-based, student-driven research projects under the mentorship of faculty members to build their skills and confidence in the area of STEM.

 [Read Full Article](#)

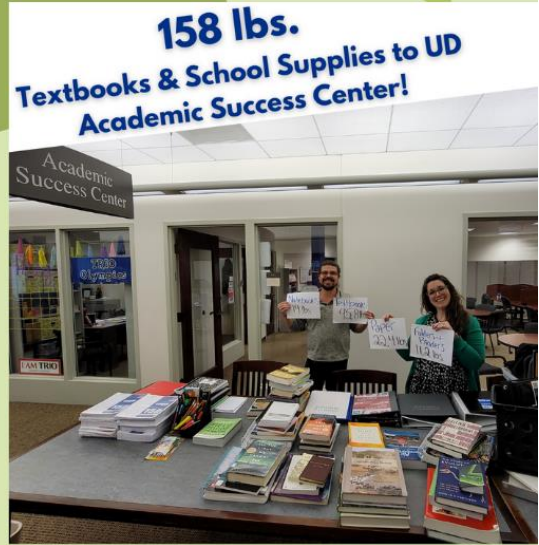


# DONATE!

don't  
DUMP

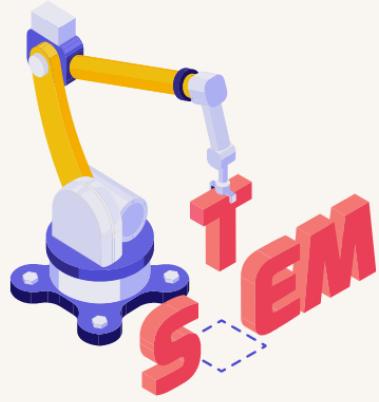


Spring Move-Out  
Donation Drive  
Results!



Learn More About  
The Program





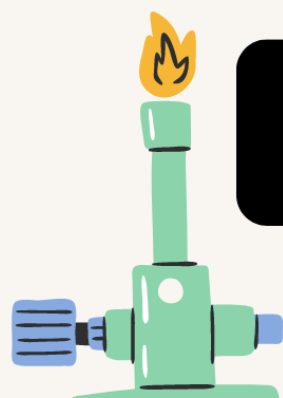
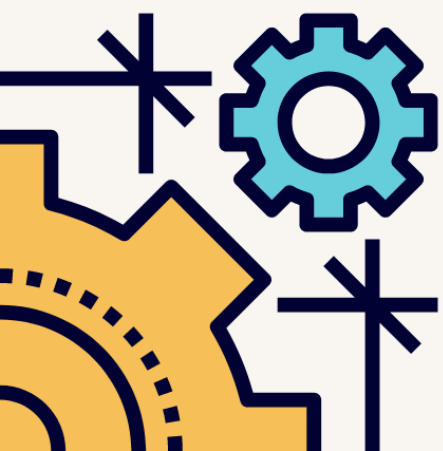
# ILED UPDATE

The Iowa Leadership in Engineering Design (ILED) project became a part of the Iowa STEM Council Scale-Up program for 2022-2023!

ILED embraces the need to empower Iowa educators in the use and creation of engineering design activities. Through a total of three days of workshop, educators will experience an innovative, grade-level banded kit of engineering design activities as well as create activities that are unique to their classrooms, curriculums, schools and communities. ILED leadership (Ken Turner - Director, Jeff Haverland UD, Jesse Wilcox UNI, Brenda Kaufmann North Tama, and Anne Turner North Tama) will provide the kits, the instruction, and the support for the workshops which will be held at University of Dubuque (Aug 1-2) and across Iowa into the spring of 2023.

Engineering design is the most difficult part of the Next Generation Science Standards, but it can also be the pathway to engage underrepresented groups and disinterested students. Engineering design allows you to present authentic problems that resonate with students.

The grade-banded educator kits, workshop fees, hotel, meals, and travel costs are provided for each educator because of the sponsorship of the Iowa STEM Council - roughly \$1800/educator!





# DNAS STUDENT SPOTLIGHT



## Mark Brodersen

Class of 1971

### Tell us a little about yourself.

I am Mark Brodersen, a member of the UD Board of Trustees and a retired orthopedic surgeon who practiced at the Mayo Clinic in Florida for the last 30 years of my career. The first 10 years were spent at the McFarland Clinic in Ames where I was one of the Iowa State team physicians. I have been married for almost 50 years to a nice lady that I met in the chemistry lab at UD!

### What are your goals?

My goals now are to catch more chinook as you see in the picture and to enjoy my grandchildren.

### Why UD?

I grew up in a very small town, Clarence, Iowa with no school football team. Of course, the only thing that I wanted to do in college was to play football and the coach at the time let me try out. I figured out quickly that I was never going to make a living with sports and so I became a chemistry major.

### How has education shaped the person you are?

Dr. Osuch let me work with him for a summer doing research on bicyclic olefins. This experience allowed me to obtain a summer internship at Oak Ridge National Lab working on thiouridenes in tRNA. I think this background allowed me to be accepted at the UI med school and the rest is history.

### What is one book you would recommend to everyone to read?

If I were to recommend one book, it would be "The Conservative Sensibility" by George Will. Mr. Will was a Wendt speaker here at UD and was well received.



## Ahrend Raab

Class of 2023

### Tell us a little about yourself.

I grew up in Warren, Illinois, a rural farm town where I played many sports and would regularly ride four wheelers, fish, hunt, and enjoy the outdoors. In my later years of high school, I found a passion for guitar in which I still actively play today!

### What are your future plans?

After taking Neurology, I knew I wanted to do something within the neurological field and senior year I decided on the medical field. This spring I will be earning my Bachelors of Biology; however, I am returning for a fifth year to earn my minor in chemistry, gain more research and shadowing experience, and to become a teaching assistant. In medical school, I plan to become a Neurologist or an Emergency Medicine Doctor.

### Why UD?

My freshman year I attended college near Tampa Bay, Florida. However, I knew it wasn't the right fit. A close friend suggested UD and after a tour, I knew it was the one. A few weeks later, I enrolled full time and it was the best thing I could have done for my academic career!

### How has education shaped you?

Prior to college I was never interested in how things actually work. The biology program allowed me to come to the realization of how complex everything is. I find myself wanting to learn more and I feel as if education is a step to allow me to become a life-long learner.

### What is one book you recommend to everyone?

The 12 Rules of Life by Jordan Peterson. This book really makes you re-evaluate your life and what path you are on for the better.



## Jaelyn Blakemore

Class of 2026

### Tell us a little about yourself.

My name is Jaelyn Blakemore and I am a senior at Streator Township High School in Streator, Illinois. Some of my hobbies include playing softball, working out, listening to music, and spending time with friends.

### What are your future plans?

Next year I will be continuing my academic and softball career at UD. I am going to major in biology, then work towards my doctorate degree in physical therapy. Helping others is the greatest feeling, and that is exactly how I want to spend my future!

### Why UD?

After my visit at UD, I instantly fell in love. The campus is beautiful and everyone is so kind. It immediately felt like home and I felt so welcomed. The softball coaches and softball players that I met were extremely nice and I knew that UD was the place for me.

### How has education shaped you?

My education has led me to become a critical thinker. If at first I do not understand something, I continue to work harder until I can comprehend the material. Lessons like this have shaped me into a hardworking and determined individual.

### What is one book you would recommend to everyone to read?

A book that everyone should read is "The Great Gatsby" by F. Scott Fitzgerald. This story expresses that the "American Dream" is ultimately unattainable, and nobody should change their personality to become somebody they are not.



# DEPARTMENT OF NATURAL & APPLIED SCIENCES

AWARD WINNERS

2022

THE WILLIAM N. BERG AWARD FOR EXCELLENCE  
IN STUDENT ENVIRONMENTAL RESEARCH

Kayla Breunig

ENVIRONMENTAL SCIENCE STUDENT

LEADERSHIP AWARD

Allisen Hallahan

THE ROBERT M. MILLER AWARD FOR EXCELLENCE  
IN BIOLOGY/ ENVIRONMENTAL SCIENCE

Paige Peterson

THE DR. RICHARD E. COWART AWARD  
FOREXCELLENCE IN BIOLOGY

Megan Gille

AWARD FOR EXCELLENCE IN STUDENT  
BIOLOGICAL RESEARCH

Lauryn Behrend & Hanna Blumhoff

AWARD FOR EXCELLENCE IN STUDENT  
CHEMISTRY RESEARCH

Luke Bullock

WILLIAM C. AND MARY HELEN NEUMEISTER  
SCHOLARSHIP

Jenna Bidlingmaier

DR. CARLOSUCH SCIENCE SCHOLARSHIP

Alex Staver

The seal of the University of Dubuque is a circular emblem. It features a central shield with a cross and a book, surrounded by the Latin motto "VERUM ET GABENI UNDIENIG". The outer ring of the seal contains the text "UNIVERSITY OF DUBUQUE - DUBUQUE IOWA" at the top and "A.D. 1852" at the bottom.

**HONORS  
CONVOCATION**

TUESDAY, APRIL 12, 2022 | 9:00 A.M.

John and Alice Butler Hall, Heritage Center



# University of Dubuque Faculty Receive Funds to Implement Open Educational Resources



Sierra Hartmann worked on a project this semester at the University of Dubuque unlike any she has done before. The senior biology major and her environmental toxicology classmates collaborated to create a chapter about landscape ecotoxicology for submission and possible inclusion in the free, online textbook they had been using in class.

Adam Hoffman, PhD, head of the Department of Natural and Applied Sciences and professor of environmental chemistry, was one of five UD professors to receive \$27,000 total to integrate open educational resources (OER) in their courses. Funds were provided by the Iowa Private Academic Libraries (IPAL), which received \$254,000 from the Governor's Emergency Education Relief Fund to coordinate a multi-institutional OER project for 19 participating institutions.

Over the summer, Hoffman redesigned his environmental toxicology course around the Environmental Toxicology OER and supplemented the online textbook with multimedia content from research articles, podcasts, videos, and more.

"... This grant really allowed us to do a full switch," Hoffman said.

"Open educational resources are resources that are freely available. They don't cost students money, which is one of the main fantastic things, but also from a pedagogy and teaching standpoint it's really fantastic because you can create your own OER that can be broadly disseminated and used," Hoffman said.

As part of the course redesign, Hoffman asked his students to create content for a chapter listed as "in preparation" in Environmental Toxicology. He said regardless if the students' content is adopted to the book, the students will learn about their topic. Dylan Link, a junior environmental science major, said it was interesting to create content for an OER that others might be able to use.

"This was just like the perfect storm. I get to work with fantastic people, help student learning, and it costs the students less and they're more engaged in class," Hoffman said.

 [Read Full Article](#)





**Left:** A. Arora, J. Chamberland, A. Kleinschmit, D. Easley, K. Turner, G. Zuercher, R. Smith

**Right:** R. Mudalige- Jayawickrama, L. Jayawickrama, M. Zuercher, K. Grussendorf, M. Sinton, D. Koch, A. Hoffman

# UNIVERSITY of DUBUQUE

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