CREATE A STRONG FUTURE FOR NEBRASKA.

Just like we need your support when we’re on the ice, we need your support for what happens in the classroom. In the lab. Across the University of Nebraska.

We’re inviting you to join the NU Advocates team—a group of people telling the story about how the University makes a difference in our lives. Join us in creating a strong future for Nebraska.

JOIN THE NU ADVOCATES TODAY AT NEBRASKA.EDU/ADVOCATES and get a free window cling to show your support.
For many of us, the year 2020 has served as a beacon — a symbol of what could be possible in the future if we worked together and pursued what I like to call "Big Audacious Goals."

Now that we are here, celebrating the new year and finally reaching that benchmark, there is no better time to reflect on all that we have done and all that we have yet to do.

Last September, I had the extreme privilege of formally being invested as UNO’s chancellor. In my remarks to our campus and community, I identified a number of challenges — and opportunities — that we have as we look toward our new future.

I presented these five audacious goals:

• to focus intensely on learning outcomes rather than on process;
• to build the strongest university-community partnerships;
• to develop lifelong learning models extending education from Pre-K to continuing education in adulthood;
• to effectively blend technology with experiential learning opportunities; and,
• to rethink how we fund and pay for higher education so that it is truly accessible to all without financial barriers.

There is no doubt in my mind that UNO has already made incredible strides in these areas, and I can say without hesitation that our institution is regarded by our peers as a preeminent metropolitan university on the cutting edge of research, service learning, community engagement and student support.

In these last few months, we have led by example with amazing accomplishments being celebrated on our campus. This includes the Department of Biomechanics receiving the largest single research grant in university history just a month before dedicating the newly expanded Biomechanics Research Building. It also includes the formation and implementation of a cross-campus First-Generation Guild program designed to support the nearly 40% of our students who would be the first in their family to earn a four-year degree.

We also joined our partners in the Omaha Public Schools in being recognized nationally for our incredible P-16 Initiative that brings our students together with Pre-K students and local organizations to do public good through experiential learning.

In this issue of UNO Magazine, you will have the opportunity to learn more about the amazing contributions of our campus and our alumni that bring us closer to the world around us — one we often take for granted — through the eyes of those in the animal kingdom.

As we prepare to embark on the amazing path laid before us, I am more confident than ever that our collective Maverick Spirit will ensure we can reach any goals we set for ourselves.

Jeffrey P. Gold, M.D.
UNO Chancellor

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At Methodist, we know your healthcare experience should be based on your individual needs, and we are dedicated to providing you with the care you deserve throughout life. In addition to being the regional leader in birth services, high-risk obstetrics and newborn intensive care, Methodist has a full team of women’s health experts and specialty clinics offering everything from adolescent gynecology to menopause care. Having the most comprehensive options in women’s health demonstrates our commitment to helping you become your best self. And that’s the kind of care you can expect from those of us who wear the Methodist badge. bestcare.org

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UP HIGH
Just picked up a copy. Well done. It’s a fun and visually interesting read. Tell your crew it is top shelf!

Randy Mattley
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IN MEMORY OF ROSCO

I sometimes say I wish my wife would treat me like a dog. And that’s a good thing, because her dog — Sam — gets treated very, very well.

That’s not uncommon, though. Most pet owners consider their dog or other pet part of the family. A pet’s love is mostly unconditional, and it gets returned in kind.

And so losing a pet for many is tragic. I still recall bawling the day my mom told me Roxy, a Lab I’d lived with for most of the first decade of my life, was no longer with us. Roxy came to mind recently — and so did my other dogs who have passed: Feather, Fido and Junior — as I put together this animal-themed issue.

They were even more present to me when Mike Bird, vice president of UNO Advancement for the University of Nebraska Foundation, said goodbye to Rosco, his family’s Silky Terrier of 14 years. That was a hard hit for his wife, UNO graduate Karen Bird, and their family. Most especially their daughter Kacey.

Fortunately, the Birds have two other dogs at home to help with their grief, including Lab puppy Remi, pictured here with Kacey not long after Rosco’s passing.

But the sorrow remains, as you can tell from this letter Kacey wrote her parents. That’s reprinted here with her permission — and it might be the best thing we have for readers this issue.

Enjoy the read,

PS – Yes, I named a dog Fido. Sure, it’s cliché, but do you really know any pooches with that handle? Now you do.
MARTINEZ RECEIVES ALUMNI ASSOCIATION’S HIGHEST HONOR

Mark A. Martinez to UNO.

involvement in business and professional associations, and fidelity
involvement in business and professional associations, and fidelity
to UNO.

Martinez, the 181st graduate to receive the award, was part of the
UNO Goodrich Scholarship Program and has a BS (1982) and MS (1993)
criminal justice. He also was a four-year letterman for the UNO
baseball team, part of the 1979 and 1981 North Central Conference
championship teams and an all-conference selection as senior.

After graduating, Martinez became a crime lab technician for
the Douglas County Sheriff’s Office. Two years later he joined the
Omaha Police Department (OPD), becoming a sergeant then a
lieutenant. He then became the first Latino with OPD to become a
captain, then a deputy chief. His father, Alfred Martinez, had been
the first Latino hired by OPD, in 1956. Martinez concluded his OPD
career in 2009.

In 2010, Martinez became the first Latino United States Marshal
for the District of Nebraska. He concluded his career with the U.S
Marshals Service in 2018.

Martinez has been extensively involved in the community with
volunteer service as a little league baseball coach and for St.
Stanislaus Catholic Church, the Latino Center of the Midlands, and
the Omaha and Nebraska chapters of the National Latino Peace
Officers Association. He was the first Latino elected to the Omaha
Public School Board, in 2002.

He has numerous awards and honors from organizations. Martinez
and his wife of 35 years, Cyndi, have four children.

See more at unoalumni.org/citation

YOUNG. WILLING. ABLE.

The 10th class of the UNO Young Alumni Academy convened
for the first time in October, beginning eight months in the
award-winning professional development program designed for alumni 35 and younger.

Members selected to the academy have unique networking
and professional development opportunities while developing
stronger connections to each other and with UNO.

A big Maverick welcome to these members of the Class of 2020 Academy:

JESSICA (RADKE) BARRY, Conagra Brands; PAMELA ANN
BATTIATO, Signature Performance; MORGAN BIRKEL,
Union Pacific Railroad; HUNTER BOLDING, BOLD Office
Solutions; KATHYA ARELY CARVAJAL, Radical Minds; KODY
CLARK, State of Nebraska; SADIE DENKER, Aureus Medical
Group; Affiliate of C&A Industries; ANNA DI RUOCO,
Covisim; AKELYA DOWDEN, Creighton University; NATHAN
DUNNING, CAE; Steph Freund, BKD; BRIELAND FRIPP, UNO;
ANDREA (SPADER) GAGHAGEN, University of Nebraska-
Lincoln; MARISSA GIGANTELLI, Morrissey Engineering;
LASHA GOODWIN, P.J. Morgan Real Estate; ALEXANDER
HADDAD, Berkshire Hathaway Homestate Companies;
STACY HARTWIG, UNO; GABRIELLA HEZEL, Gettman
& Mills; JONATHAN INGRAM, Caesar’s Entertainment;
DOMINIC JIMERSON, Borsheims; SAMANTHA (MOSLEY)
KAFKA, CHI Foundation; SHANE KALIN, Northwest Bank;
IAN KELLY, Kiewit Technology Group; VICTORIA KIRILLOFF,
Morgan Stanley; JORDAN KOCH, Papillion La Vista
Community Schools; AARON KRYSL, American National Bank;
STEPHANIE (BONNETT) LARSEN, UNO; KATELYN LEHIGh,
Premier Bank; LADY BEVERLY LUMA, UNMC;
ANTHONY MACBRIDE, the Scoular Company; KIKI MCCRAW, UNO;
KALEYE MOLGAARD, Titan Medical Group; MOLLY
NEelsen, Conagra Brands; JUDITH OBODOUGO, Madonna
Rehab Hospital; ZACHARY OGLESBY, Berkshire Hathaway
Homestate Companies; VASU PARikh, DMR; BRIDGET
PARIzek, National Park Services; BRIANNA PARRIOt, Self
Employed; SOPHIA PETROW, Union Pacific Railroad; BALEY
ROSECRANS, Nebraska Courts of Appeals; MADELINE
SULLIVAN, Jet Linx Aviation; ISHMA SULTANIA, CSG
International; MICHAEL WHEELDON, self; SARAH YOUNG,
Baby Blue Eyes Birth Services.

SAVE THE DATE

Alumni Night on the Court Night
Put some bounce in your step Wednesday, Feb.
26, by joining other alumni and their families at
Alumni Night on the Court at Baxter Arena, to
watch the UNO men’s basketball team take on
North Dakota.

6 P.M. PREGAME RECEPTION
featuring snacks and beverages, door prizes,
games and the Maverick Dance Team.

7 P.M. UNO VS. NORTH DAKOTA TIPOFF
Alumni will be seated together in one section.

Hosted by the UNO and UNMC Alumni Associations
For registration details, visit unoalumni.org/nightonthecourt

FEBRUARY 26

$15 per adult
$10 per child
Includes reception fare, game ticket
and a meal voucher for use during the
game at a Baxter
concession stand.
ALUMNI STAFF NEWS

There was lots to celebrate for the University of Nebraska Foundation’s UNO Alumni engagement staff in November.

First, the team welcomed a new member, DAVID STARKWEATHER, who filled a new position as assistant director of UNO Alumni Engagement. A Papillion, Nebraska, native, Starkweather most recently lived in Orlando, Florida, where he worked for the Walt Disney Company and Sodexo. He will focus on student and young alumni programming.

On Nov. 8, Director of Alumni Programming ELIZABETH KRAEMER was honored at a luncheon for her inclusion to the 40 Under 40 list by the Midlands Business Journal. The list celebrates entrepreneurs, executives and professionals under the age of 40 “who are leading the way in the Omaha area.” Kraemer joined the UNO Alumni Association in June 2009. She has been responsible for organizing and producing the Association’s numerous programs and events, including the Golden Circle program for graduates of 45 years ago or longer, the UNO Young Alumni Academy, Mavs on the Move, and other events.

Kraemer was among six UNO alumni named to the 40 Under 40 list. Others named: STEPHANIE DREDGE, Green Hills Area Education Agency and instructor in psychology; JODIE MCGILL, McGill Law, Nebraska Collaborative Center; ANDREA PURDY, Omaha Performing Arts; JEFF SKALBERG, NoteWorthy; SCOTT YAHNKE, Omaha Home for Boys.

ALUMNI ASSOCIATION

ACDC SERVICES FOR ALUMNI EXPAND TO INCLUDE FREE PROFESSIONAL PHOTOS, ONLINE RESUME REVIEW

What looks more tired — your headshot or your resume?

Thanks to the UNO Academic and Career Development Center (ACDC), alumni now can update both for free.

ACDC has launched its Professional Headshot Studio, allowing graduates to have a high-quality photo of themselves taken for use on LinkedIn or other professional organization profiles.

Another new ACDC service is online reviews of resumes. Graduates can upload a current copy and receive quick, constructive feedback from ACDC staff on how to improve it.

Both the studio headshots and online resume review are free to UNO graduates.

To see all ACDC career resources, visit acdc.unomaha.edu. Or, stop by the ACDC office in the Eppley Administration Building, Room 115.

PARTNERSHIPS

INSURANCE

Are you in need of home, life, auto, health or life insurance? The UNO Alumni Association offers graduates insurance for these and other needs at discounted rates thanks to the purchasing power of 110,000 graduates.

See all coverage available at unoalumni.org/insurance.

TRAVEL

The UNO Alumni Association is pleased to offer alumni discounted travel opportunities through a partnership with travel provider Go Next!

See what trips are upcoming at unoalumni.org/travel.

To receive a brochure for any of our trips by mail, call the association toll-free at 800-432-3216.
The UNO Alumni Association has partnered with Access to provide the FREE Maverick Discount Program, which offers savings of up to 50% on top brands, retailers, restaurants, entertainment, travel and more — in your area and nationally! All at no cost to alumni.

To begin, register following these steps:

1. Visit unoalumni.enjoymydeals.com
2. Click the “Register” link and enter Registration Code: MAVERICKS
3. Complete the brief form and that’s it — you’re logged in and ready to start saving

To find deals near you — at home or while you travel — just enter a ZIP Code to see hundreds of offers from local and national vendors.

INCLUDED — 10-50% off hotel and car rentals

With the Maverick Discount Program, UNO alumni also will enjoy access to an exclusive travel booking engine offering savings on more than 400,000 hotel, condo, resort and car rental locations worldwide. Whether planning a local trip, national adventure or heading overseas, users save an average of 10-50% over popular providers like Expedia, Kayak, Travelocity, etc.

As a bonus, we start each UNO alum who registers with a $100 travel voucher credit for free when redeeming the code "MAVERICKS."

To see more about the Maverick Discount Program and to find out how to claim the $100 travel voucher, visit unoalumni.org/maverickdiscountprogram

UNO graduates Tanner Kahler (BA, 2014) and Samantha DuPree (BS, 2013) took time to Show the O during their Maverick reunion in the fall in Milwaukee, Wisconsin. DuPree, who lives in Lenexa, Kansas, where she works at a public library, was visiting Milwaukee for the first time. Kahler is a news producer for the local ABC TV station.

Get your own FREE O flag and post your Show the O photo, all at showtheo.com

UNO Alumni Scholars

The UNO Alumni Association welcomed its 12th class of UNO Alumni Scholars at the start of the fall semester. Three students received UNO Alumni Association Scholarships, awarded to graduating high school seniors who have demonstrated leadership and involvement during high school.

Recipients also must have a minimum ACT composite score of 24 and either rank in the top 25 percent of their class or have a minimum cumulative GPA of 3.5 on a 4.0 scale. The $2,500 annual scholarships are renewable for up to four years.

The association is supporting 12 UNO students with UNO Alumni Association Scholarships.

Pictured (from left) are 2019-20 UNO Alumni Association Scholarship recipients Joslynn Shanahan, Omaha (Millard South); Madeline Boudreau, Marrero, Louisiana (Academy of Our Lady); and, Michael Monico, Omaha (Gross).

Bios of the three recipients and other UNO Alumni Scholars are available at unoalumni.org/alumnischolars
YOU CAN SEE MATH, SHE SAYS, IN ALL THE CIRCLES OF THE EARTH.

IN THE SUN, STARS AND MOON...

IN THE RIVERS, RAIN AND SEA...

IN THE BIRTH, LIFE AND DEATH OF ALL THE CREATURES OF THE EARTH.

“Math is in everything,” says Pteska Hinapa Wi Poor Bear, a fourth-grade teacher in Omaha who grew up on the Pine Ridge Indian Reservation in South Dakota. Hocoka Wakan – that’s a Lakota word that means “the Sacred Circle.”

“The Sacred Circle connects everything. It is continuous, and it just goes and goes and goes,” she says.
UNO + MATH = BIG THINGS AT OMAHA’S HENRY DOORLY ZOO AND AQUARIUM

Poor Bear saw math in everything one night in 2018 at the Henry Doorly Zoo and Aquarium in Omaha as she and other teachers took part in the “Math Teachers Circle – Math in the Aquarium,” a community outreach program sponsored by the University of Nebraska at Omaha and the zoo.

The program, an ongoing series of hands-on events for teachers, is part of the Omaha STEM Ecosystem, a citywide partnership led by UNO and the Henry Doorly Zoo. It connects Omaha-area K-12 teachers with exciting new ways to teach STEM lessons to their students through classes at the zoo. (STEM stands for science, technology, engineering and math; see more Page 18.)

Poor Bear and the other teachers took a behind-the-scenes tour of the aquarium guided by one of the zoo’s marine biologists, who used many STEM words as she talked about the technical side of keeping all the creatures alive.

The fish ...
The turtles ...
The tiger sharks ...
As he talked, the teachers took notes.

CREATURES AS TEACHERS

Poor Bear smiled at the animals swimming in circles in their salt-water tanks. She signed up for the Math Teachers Circle, she says, because she believes kids learn best when they’re given hands-on activities that use fun subjects from the real world, like the creatures of the zoo.

Downstairs in the aquarium’s visitors’ area, Poor Bear leaned her face near the glass of the penguin tank and laughed as she watched the penguins dive from their Antarctica-like perch of beach and boulders and swim right by her and then flop back onto their perch.

A zoo educator asked the teachers to solve some real-life aquarium math problems. At the penguin tank, she gave them the amount of money they had to spend on fish for the penguins to eat and how many pounds of food the penguins eat on an average day. How many days would that cover?

At the corals tank, she asked them to write a linear model of the growth rate for each coral, and then, using their equation, predict how big each coral would be after a certain amount of time.

Inside the clear tunnel that runs below the aquarium, she asked them to form smaller circles to collaborate on a final problem. She gave them data about the diet of the loggerhead turtle over a year. The overall goal was for teachers to notice that between January and February, the turtle had eaten no fish at all.

Why not?
Poor Bear knew.

“I said, ‘It has something to do with mating or migration,’” she recalled the next evening, in a phone interview from her Omaha home. “I just picked up on it right away. Being Native American, and being connected to animals, and knowing that animals have these innate abilities to care for themselves, no matter if they’re in their natural environment or in captivity, it stood out to me right away that those sea turtles were still following the patterns of the other sea turtles who don’t live in captivity.”

MATH IS EVERYTHING

Poor Bear teaches at Liberty Elementary, a school in downtown Omaha. Many of her students are from low-income homes.

Math is in everything.
She tells them that a lot.
She tells them their class is a community — a circle — and that each one of them should help one another.

The entire fourth-grade curriculum in Nebraska public schools, she says, is Nebraska history. The first half focuses on the six Native American tribes that lived on the land long ago, including her Oglala. So each year for that section, she divides her class into six small circles, each named for a tribe. Each circle then studies its tribe. She tells them about how her tribe values community.

It was in hers.
The Pine Ridge Indian Reservation was in the poorest place in the country when she was a kid. Her family was poor. She was one of 14 children. When she was just 4, she was taken far away from her family and enrolled in a Catholic boarding school. She rarely spoke up. Some teachers thought she was stupid.

But her fourth-grade teacher, she says, noticed her love for learning. Especially math.

“She was amazing,” Poor Bear says. “She did everything with us, and everything we did with her was hands-on. She showed us math in every way possible. And so with my students, I’m always trying to connect everything to them — it’s connection, connection, connection. And I’m always trying to show them how math is so fun.

“That’s why I’m so excited about the UNO/Zoo STEM Initiative. Lots of times these kids are taught all this stuff — basic things about math. But where do they apply them in real life? So things like the STEM initiative are vital to empowering students, educators and the community.”

Poor Bear feels so grateful for that community of teachers she met at the zoo. She feels grateful, too, for the people in the community who gave money to support UNO and the zoo. Giving back to people, she tells her students, creates a ripple effect like on the water, and though you might not see it right away, it will come back to you.

LIKE A CIRCLE.

“So everything I embraced yesterday at the zoo — that is going to continue,” she says, “because now I’m going to figure out a way to put it into my students’ lessons and help them embrace that, too, and they’re going to carry that on with them to fifth grade, sixth grade and maybe on to their parents and siblings. …

“So like a circle that goes and goes and goes, that connection won’t stop.”
This academic year, seven students are attending the University of Nebraska at Omaha having received scholarships thanks to the generosity of donors to the UNO Fund. While there are many scholarships at UNO, the UNO Fund for Student Scholarships is the only one that sees hundreds of alumni and community members come together and make gifts – last year ranging from $5 to $5,000 – to give directly back to students.

Here are four of this year’s UNO Fund scholarship recipients:

**JESI GIBBS** came to UNO to study biology and psychology after discovering a passion for animal cognition research. However, working 35 hours a week to support herself and pay tuition, she’s found it challenging to balance her job with her studies. She says she cried when she learned she would receive a UNO Fund scholarship. “It has literally changed my life,” Jesi says. “You’ve made it so I can pursue something I feel has meaning in the world. I am so invested in this. I am going to see this through to the end.”

**KEVIN WARE** joined the U.S. Air Force in 2013 partly because he didn’t have the funds to go to college. In his work in environmental inspection at Offutt Air Force Base, he discovered an interest in the human body. Now a full-time student, he has dreams of becoming a physical therapist and owning his own business. He’s using his UNO Fund scholarship to finish his bachelor’s degree and apply to PT programs. “I was excited because I’ve never gotten any other scholarship before,” Kevin says. “I’m grateful for the opportunity. I’ll be the first one in my immediate family with a four-year degree.”

**REGGIE CROOM JR.** recalls teetering on homelessness after high school before connecting with people and organizations that helped him get back on his feet. These experiences have him pursuing a bachelor’s degree in social work, and the UNO Fund scholarship is making that dream a reality. “I am so grateful that someone saw the potential in me, because I’m determined to make a difference in people’s lives for the better,” Reggie says. “With this funding, I am able to focus on school and making a difference, and by giving to the scholarship, you are contributing to the work I plan on doing.”

**DAVID FESTNER** has spent the last 24 years sharpening his skills – and his blades – as a competitive figure skater. Perhaps this helped spark his interests in athletics and creativity, as he now hopes to become a sports broadcast journalist. UNO offers one of the best programs in the region for this field, and existing partnerships made the process of transferring credits from community college to achieve a four-year degree a smooth transition. “I just want to say thank you very much,” David says, speaking to UNO Fund donors. “You’re helping the students that need it the most avoid loans and debts and those things that make school harder for us.”

**YOU CAN HELP**
Thanks to UNO Fund donors, UNO was able to offer renewable scholarships to these students to cover much of their tuition through graduation. Read more about each student, and others like them, at unofund.org.

The more people who give, the more scholarships we can award to students who need and deserve them. Make your gift of $25, $50 or $100 to the UNO Fund today. Use the envelope enclosed in this magazine or visit the site above to make your donation.
The Webster legacy lives. Will yours?

For 100 years, the Webster family has helped Omaha and its business community. Their positive influence on the city’s students has lasted nearly as long. In 1923, John R. Webster started a fund to help then-University of Omaha students pay for their education. The name of the school has changed, but the impact of his generosity has not. Students at the University of Nebraska at Omaha are benefitting from his fund nearly a century later.

You have the same opportunity to make the same kind of impact. To find out how, visit us online at NUFoundation.org/giftplanning or call a gift planning officer at the University of Nebraska Foundation at 800-432-3216.
FROM RESEARCH PARTNERSHIPS TO EDUCATIONAL EXPERIENCES TO MAVERICK ALUMNI PROVIDING IMPORTANT LEADERSHIP, UNO AND THE OMAHA HENRY DOORLY ZOO AND AQUARIUM ARE INTENSELY INTERTWINED.

DEVELOPING FUTURE EDUCATORS
Each semester, UNO’s teacher education department brings dozens of future educators to Omaha’s Henry Doorly Zoo and Aquarium to meet with zoo experts and students who attend the zoo’s on-site preschool. Among other skills, UNO students learn the power of using observation and inquiry to promote language development and content learning.

“We all learn by experience,” says Susan McWilliams, associate professor of teacher education. “So when our students can learn here at the zoo, they can take that back into their classrooms.”

It’s an experience that benefits zoo staff as well as UNO’s students.

“It’s really nice for preschoolers to get different teachers,” says Brian Priesman, an educator who regularly provides lessons at the zoo. “It’s really cool to see how somebody new is able to bring something out of a child that we haven’t seen.”

GROWING OMAHA’S STEM PIPELINE
STEM is one of the largest growing career fields in the world, yet the number of college graduates earning degrees in science, technology, engineering and mathematics trails the need for highly skilled professionals.

That’s why, in 2016, UNO and Omaha’s Henry Doorly Zoo and Aquarium joined forces to form the Omaha STEM Ecosystem, a citywide partnership to address the shortage of STEM professionals in the greater Omaha area.

“The Omaha STEM Ecosystem is fortunate to have the support of our key community partners to help lead and advocate for assuring Omaha remains a vibrant STEM
The Robert B. Daughtery Education Center serves more than 9,000 student visitors annually.

Maverick students put down fresh mulch in the Hubbard Gorilla Valley Complex during Seven Days of Service.

community and becomes a model for STEM workforce development,” says Julie Sigmon, the ecosystem’s director.

The efforts include the Math Teachers Circle — Math in the Aquarium (see more Page 10).

More information about the Omaha STEM Ecosystem can be found at omahastem.com.

AN ALUM’S MAVERICK VISION FOR SCIENCE EDUCATION

A former high school science teacher, Elizabeth Mulkerrin has spent 20 years developing education programming at Omaha’s Henry Doorly Zoo and Aquarium. During that time, she also pursued her doctorate through UNO’s College of Education, graduating with her Ed.D. in 2012.

Today, Mulkerrin is vice president of education and recently led the effort to establish the Zoo’s Robert B. Daughtery Education Center, which launched in 2018. It serves more than 9,000 student visitors annually, including full-time programming for middle school and kindergarten students and after-school programming for all ages.

“It takes an entire village, it takes everybody in the city of Omaha to grow these kids from cradle to career,” Mulkerrin says. “UNO really leans on the community to have students apply the knowledge they learn in the classroom, and that’s something I’ve really noticed — as a student and now as an alum.”

WILD ABOUT SERVICE LEARNING

Sometimes all it takes is a little nudge for citizen scientists to become career scientists.

For several semesters, UNO has partnered with Northwest High School in the Omaha Public School District and with Omaha’s Henry Doorly Zoo and Aquarium’s Wildlife Safari to collect and analyze soil and water samples used by safari staff to keep the area’s plants and animals safe.

The effort is led by Dana Richter-Egger, assistant professor of chemistry at UNO, and Northwest chemistry teacher Rachel Benzoni.

“If you only learn about science and you never do science you really don’t have a complete understanding, a complete experience of what it’s like,” Richter-Egger says.

Benzoni agrees.

“To actually go there and see how it’s impacting the wildlife and impacting people who go there and the water that they and their own family rely on, that really drives it home for them,” she says.

GETTING EDUCATED ABOUT THE IMPORTANCE OF PLAY

Play is a staple of childhood. It also allows children to gain important life skills, including leadership, problem-solving and communication.

When the Omaha Henry Doorly Zoo and Aquarium opened the Bay Family Children’s Adventure Trails exhibit in 2017, it provided an opportunity for children to learn about nature through play. It also was a research opportunity for UNO faculty members Anne Karabon and Amanda Steiner.

“I think it’s vital for our teacher education students to see the value of going into spaces like the zoo to see what learning through play looks like,” Karabon says.

Their research has helped the zoo train and educate their staff to facilitate play-based learning. Karabon and Steiner hope to continue their partnership with the zoo and expand their research.

“We want to continue to engage in research and investigate if caregivers can recognize the value of play as children engage in this space,” Steiner says. “I think we need to continue to develop our research and to support the need for investment in our children and their development.”

SERVICE AT THE ZOO

Operating a zoo can get ... messy at times. In step — carefully — UNO students who are somewhat regulars at the zoo helping on projects there during the university’s service days.

During UNO’s Seven Days of Service last spring, for instance, Maverick students put down fresh mulch in the Hubbard Gorilla Valley Complex.

— Charley Steed
Associate Editor, University Communications
NUTS ABOUT BLACK SQUIRRELS

EACH SEMESTER, JAMES WILSON, UNO ASSOCIATE PROFESSOR OF BIOLOGY, ASSIGNS FIELD WORK.
THE “FIELD,” THOUGH, ISN’T A PRAIRIE OR BOG, BUT RATHER A JUNGLE.
AN URBAN JUNGLE.

As part of their coursework, Wilson’s students travel throughout the metro area to count squirrels. Each melanistic squirrel — or black squirrel, as most folks call them — is tallied separately.
The data shows a trend.
“They’re definitely expanding and they’re moving west,” Wilson says.
Well beyond Omaha, in fact.
“Somehow, they’re in Lincoln. They’re in Grand Island. Either the mutation is popping up or someone is bringing them because they’re cute.”

Wilson says he gets why some people go nuts over the black squirrels. He likes them, too, and they’re a focus of his research.
It’s a good time to be curious about black squirrels. In mid-2019, a new academic paper shared the specific genetic code behind the mutation. The discovery made headlines with the Washington Post, BBC News and others.

Wilson wants to know what advantages the mutation might offer. Recently, he and students used remote infrared thermometers to compare the skin temperatures of typical fox squirrels — the reddish-brown kind — and black squirrels. The takeaway: while temperatures are similar when it’s sunny, black squirrels stay warmer in cloudy conditions. Wilson says it’s a slight advantage — especially during cold Midwestern winters.

“If they don’t have to heat themselves as much, that might save energy.”

Collaborative research might offer more answers. Wilson will be working with geneticist Jessica Petersen at the University of Nebraska-Lincoln to see what other genes might be associated with the specific color-change gene mutation. It’s possible genes might make them more... squirrely.

“The urban legend is that the melanistic squirrels, the black squirrels, are more aggressive toward the other squirrels. They’ll defend their food more.”

Another partnership, this one with Nate Hunt (see Page 24), assistant professor in UNO’s biomechanics department, will explore whether black squirrels make different decisions about jumping from branch to branch because of their energy usage.

Finally, Wilson plans to investigate how a metropolitan environment might foster the creatures. After all, you don’t have to look far to find signs of appreciation around the area — in the logos of the Omaha/Council Bluffs Black Squirrel Tattoo shops and the latter’s community Wi-Fi program. Marysville, Kansas, has even adopted the black squirrel as its mascot.

“I wonder if people like them more because they’re cute, if they feed them more,” Hunt says.

Perhaps drivers are more likely to pump the brakes if a black squirrel darts across the road. Wilson says there’s a future study there, too.

As he and other scholars continue to investigate the mysteries of the bushy-tailed critters, Wilson says one thing is certain.

“There is definitely pride in these squirrels.”

— Sam Petto
University Communications
Furry Fashions

Thanks to the UNO Bookstore, pet owners can put the “O” in Fido.
Or, rather, on Fido.
Early in 2019 the bookstore added pet clothing to its expansive list of UNO apparel available on campus and online. From sweaters to leashes, collars and more, now you can buy UNO-branded apparel for your pet.

Amber Dib, assistant manager of general merchandise with the UNO Bookstore, said it’s been fun to see how excited pet parents get when they purchase an item.

“There had been several requests for pet items over the last year,” Dib says, “When I realized more and more people were starting to ask, I started looking around.

I ended up going to a conference where a vendor specialized in pet items, so it worked out perfectly.”

Clothing includes jerseys, t-shirts and hoodies — which average around $30 each. Accessories such as leashes, collars, bandanas and scarves average about $18 each.

Dib says there are plans to expand the pet collection soon.

“The items have been doing way better than I expected,” she says. “I am keeping my eyes open for some different chew toys that can be branded as well.”

Pet parents don’t have to worry about sizing, either. All sized items range between tiny (extra small) all the way up to XXL.

To see the items first-hand, visit the UNO Bookstore in the Milo Bail Student Center or online at unobookstore.com.

— Jessica Hilt
University Communications

HELP FROM THE BEETLES

To find answers to questions about human reproduction and other matters, Associate Professor of Biology Claudia Rauter has turned to beetles.

Among her work is a study of how the characteristics of individual burying beetles influence their reproductive strategies. The size of the female beetle, for example, influences the number and size of her offspring.

Rauter also has found that the age of the female beetle also affects the reproductive pattern — older females have more but slower-developing offspring than younger females.

“These results help us to explain the extraordinary variation we see in nature and how organisms respond to changes in the environment,” Rauter says.
Taming Wildlife Reservations

A local wildlife rescue organization turned to students from the College of Information Science & Technology at UNO to reign in an out-of-control reservation system.

For more than 30 years, Wildlife Encounters, a nonprofit based in Gretna, Nebraska, has rescued exotic animals such as Fennec foxes, bearded dragons, parrots, tarantulas, armadillos and boa constrictors.

The rescue takes some of these critters — “animal ambassadors” — on the road to teach students of all ages about the animal kingdom. Reservations can be made to bring rescued exotic animals to birthday parties, school presentations, corporate events, baseball games and other events.

And that’s where things had gotten a little … wild.

Bookings could be made by phone or email anywhere from a few days to a few months in advance. Kip Smith, director of education at Wildlife Encounters, worked with Magie Hall, assistant professor within UNO’s College of Information Science & Technology, and her class to streamline the booking process.

This experiential learning project essentially transformed Hall’s “Agile Development Methods” class into a consulting firm. She mentored a team comprised of two project managers, two developers, two user interface and experience designers, and two testers. Students collaborated with each other and the staff at Wildlife Encounters to implement a web-based event scheduler while learning and applying project management methods and concepts.

“Initially, it was a little daunting to change our entire process, but it’s become much more efficient,” Smith says. “They listened to every concern we had, adapted the setup to our needs and wants, and we had fun along the way.”

Thanks to this collaborative effort, making a reservation to bring fascinating creatures to parties and events is as simple as completing an online form. Users can choose a date from the calendar to see what time slots are available, request specific animals, and make payments through the web-based application.

Students also worked to seamlessly integrate the web application with staff email, calendars and financial software.

“The entire team was a joy to work with through the entire process,” Smith says. “It was great learning from them and letting them meet some of our animals.”

— Brandon Bartling
University Communications
HOLD THE ONE-TIME RACING MECCA OF THE MIDWEST BECAME A HOME TO MAVERICKS

If you really want to know the O, you need to know horses. Or, more specifically, horse racing.

For what today is a home for Mavericks — Scott Campus — once was a home for ponies — the Ak-Sar-Ben Race Track and Coliseum. Built a century ago in 1919, the track brought fans by the busload from Kansas, Missouri, Iowa, the Dakotas and beyond. Many of them were high-stakes bettors driven by the rush of the wager and of hooves pounding across the finish line. It was one of the top horse racing tracks in the country. In 1978, average attendance topped 16,000 fans. In 1985, the daily mutuel handle — bets made — was nearly $1.8 million.

An adjoining coliseum, built in 1929, was an entertainment mecca for decades, hosting the likes of Frank Sinatra, Elvis Presley, Nirvana and other big-time acts. It also featured an ice rink where the beloved Omaha Knights semipro team and later the Omaha Lancers played. The Omaha Racers pro basketball team also called the coliseum home, and it was the site of livestock shows and even a few UNO commencements.

But then it all went to the dogs.
A year after Ak-Sar-Ben’s highwater mark in 1985, greyhound racing and casino gambling began in nearby Council Bluffs, Iowa, and Keno parlors opened in Nebraska. Ak-Sar-Ben attendance plummeted as seasonal live horse racing in Omaha and nationally struggled to compete with year-round wagering.

In 1992, the Knights of Ak-Sar-Ben sold the track and property to Douglas County for $25 million. The county formed two public corporations to run the facilities: Douglas Racing Corp. to manage the track and racing and Douglas Recreation Corp. to oversee the coliseum and bookings.

Still, the turnstiles stopped turning as they once did. Racing in Omaha continued to limp along until Aug. 7, 1995 — the day of the last race ever held at Ak-Sar-Ben.

In December 1996, the Douglas County Board voted to sell the 140 acres to First Data for $10 million. The remaining land, including the coliseum, remained with the new Ak-Sar-Ben Future Trust. It was a contentious time and featured a petition drive to get expanded gambling and horse racing to return to Ak-Sar-Ben.

As part of its deal, First Data donated more than half the acres it purchased to UNO. On that land, now comprising Scott Campus, UNO built the Peter Kiewit Institute, which houses the College of Information Science & Technology. It opened in 1999.

In the years since, UNO has added Scott Hall, Scott Village, Scott Court, Scott Crossing, Maverick Landing and Mammel Hall. Many of the UNO buildings sit completely inside what once was the Ak-Sar-Ben track’s infield.

Not long after the track made way for FDR and UNO, the coliseum and other facilities of the former Ak-Sar-Ben property were demolished and the land developed into what now is Aksarben Village south of UNO’s Scott Campus.

What once was might be hard for UNO students to imagine, but there are reminders of the glory days — a memorial for Omaha, the Triple Crown winner buried near the grandstands in 1959; a state historical marker that references the area’s even earlier use as a landing field for U.S. Postal Air Mail Service; the area’s name.

Aksarben Village is a thriving and ever-growing area, teeming with Omahans who come for business, dining, entertainment, play and more.

Once upon a time, though, Omahans came in even greater numbers to see the horses run.

— Jessica Hilt, University Communications

LONGTIME NEIGHBORS

Beginning with UNO’s move from its original campus at 24th and Pratt Streets to its present site, one of the university’s biggest neighbors was the Ak-Sar-Ben Racetrack and Coliseum. Following are a few highlights of their shared history.

1929 Omaha University students take part in the Nebraska Diamond Jubilee celebrating 75th anniversary of the entrance of Nebraska territory into the United States. Students took to the Ak-Sar-Ben Field stage for Scene 2 of “The Making of Nebraska.”

1938 University regents consider Ak-Sar-Ben field as the potential site for a municipal football stadium. The plans were scrapped, though, and the university built a stadium at its present site more than 10 years later.

1940 OU student Dorothy Hodges wins the 220 ice skating race at Ak-Sar-Ben Coliseum in the Birthday Ball fundraiser for the infantile paralysis (polio) relief drive. Fellow OU students Alice Egner and Margery Stewart finished second and third, respectively.

1955 President Milo Bail becomes first educator to rule mythical realm of Quivera when crowned King Ak-Sar-Ben LXI, 1955. Chancellor Del Weber was named king in 1989.

1960 Four-year Aksarben Scholarships established for OU students, 16 provided each year.

1968 Intramural curling held at Coliseum.

1971 University begins offering remote parking at Aksarben, shuttling students from there to campus.

1973 While artificial turf was being installed at the university, the UNO football team practiced for several months on Aksarben grounds.

UNO hockey club begins playing on Aksarben ice.
HEAVENLY WIND AMONG SAINTS AND SINNERS

UNO GEOLOGY PROFESSOR GEORGE ENGELMANN DISCOVERED A FOSSILIZED TREASURE TROVE — AND A FIRST-OF-ITS-KIND RELATIVE TO THE DINOSAURS

by Kent Walton
About 210 million years ago, a flying lizard that was a close cousin to the dinosaurs soared above the vast desert that once covered the Western United States.

At some point, this creature—a pterosaur—flapped its massive wings one last time and died on the banks of a long-gone oasis in what is now Western Utah. There, shifting sands covered the pterosaur’s bones, fossilizing it and preserving it for eons.

Fast-forward—lots—to 2008 and that same bank, now stands UNO geology and paleontology Professor George Engelmann. He’s with a team conducting research at Dinosaur National Monument in Southwest Utah, scouting for possible dig sites outside the park. There, right beneath his feet, he makes an historic discovery.

“We started looking around, and sure enough we found little bits where bones were exposed on the surface,” Engelmann says. “We had something like 72 exposed bones scattered over maybe a 100-square-foot area.”

With the help of another paleontologist from nearby Brigham Young University, Engelmann and a crew began the slow, laborious process of excavating the site. Over the next several years, the team would unearth a treasure-trove of bones, many of which were perfectly preserved skeletons.

Known today as the Saints and Sinners Quarry, the site has relinquished thousands of fossilized bones dating to the late Triassic period, about 210 million years ago.

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WE’VE REMOVED FROM THE QUARRY SINCE 2008 IN THE ORDER OF 25,000 BONES. MOST ARE DINOSAUR.

“We’ve removed from the quarry since 2008 in the order of 25,000 bones,” Engelmann says. “Most are dinosaur.

“As we got down to a certain layer of the quarry, we started finding smaller vertebrates preserved as complete skeletons.”

WIND OF DISCOVERY

Along with discovering an entirely new genus of drepanosaur, a peculiar rat-sized relative to the dinosaurs, the team excavated the fully articulated skeletons of a long-legged predecessor to modern crocodiles—all important discoveries.

But it wasn’t until 2014 that the massive, 300-pound limestone blocks cut from the quarry and hauled to a lab at Brigham Young University revealed something even more noteworthy—the well-preserved bones of a pterosaur, the first of its kind found in North America from the late Triassic era.

Only about 30 fossils of pterosaurs from that era are known to exist. Most are just fragments of bone.

“The only specimen from late Triassic known before this is from Greenland,” Engelmann says. “Our specimen is the farthest west Pterosaur of that age.”

Because the specimen is significantly larger than those unearthed in Europe, some experts originally doubted it was a pterosaur. But additional study revealed it to be a previously undiscovered genus that, in 2018, was officially named Caelestiventus hanseni, Latin for “Heavenly Wind.”

“It’s relatively large for an early pterosaur,” Engelmann says. “Early pterosaurs are usually pretty small, like robin-sized or something like that. Ours has just under a 2-meter wingspan. We do have most of the skull and jaws and do have a piece of a wing element.”

The well-preserved skull has 110 teeth, including four one-inch fangs and air spaces around the braincase, much like those found in birds. It’s believed its skin was covered in course fibers that looked much like stiff hair.

MORE FROM SAINTS AND SINNERS

While Saints and Sinners still has much more to reveal, the team has removed enough massive sandstone blocks from the quarry to keep them busy in the lab for many years to come.

Discovering a previously undiscovered genus is always an achievement worth celebrating. But finding a site with as many specimens from that era as the Saints and Sinners quarry is significantly more exciting, Engelmann says.

“You almost expect to find new species in a locality like we have,” he says. “The amazing thing was finding the locality at all because this an interval geologic time, the late Triassic. It’s not terribly well known anywhere.”

Since the discovery, Engelmann has incorporated some of the findings from the Utah digs and the subsequent lab work at BYU into coursework for his undergraduate vertebrate paleontology courses. Over the past 10 years, many UNO geology students have also taken their education outside the classroom and journeyed with Engelmann to participate in field studies in Utah, primarily focusing on preserved dinosaur tracks.

Engelmann, who has taught at UNO since 1980, traces his passion for dinosaurs back to his childhood in Chicago, where he remembers marveling at depictions of prehistoric beasts in National Geographic magazine and at local museums. He later earned his bachelor’s degree at Principia College and his master’s and doctorate degrees from Columbia University. Today, he specializes in vertebrate paleontology, evolutionary biology, mammalian evolution, paleoecology, mesozoic stratigraphy of western North America, and geology of Dinosaur National Monument.

Engelmann knows he and his fellow researchers have only scratched the surface of what the Saints and Sinners quarry has to offer, and he looks forward to discovering more history hidden in the stone and sharing his findings.

“At this point, we have 25,000 bones,” he says. “A lot of this is new material and so our research agenda is to get this stuff written up and published because that’s the understanding in science when you find stuff out, you’ve got to share it.”
WALK
THIS
UNO Biomechanics staff turn to squirrels, pigs, cockroaches and other insects and animals for insights that better human mobility and health

Nate Hunt can’t help himself. He finds that whenever he spots a fox squirrel on the move he must stop, watch and wonder.

“I tend to nerd out and stare,” the UNO biomechanics assistant professor says.

Hunt finds himself thinking about the interaction between their cognitive and movement control capabilities. He studies the way their bodies are built — the interaction between their neural control and morphology. He postulates how those capabilities interact to allow the fox squirrel to move as it does.

Basically, he marvels at how the fox squirrel glides through complex, three-dimensional canopies – his word for trees – with such proficiency. His attention then turns to what humans can learn from fox squirrels to improve the way they get about and, most important, get about without falling.

Hunt’s investigation of how the fox squirrel’s leaps, lunges and safe landings translate to better human mobility is one example of why UNO’s biomechanics faculty attract national attention and earn widespread funding support, says Nick Stergiou, founding biomechanics department chair. “We have some very smart people working here.”

“Here” is the recently expanded Biomechanics Research Building, which anchors the southeast corner of UNO’s main campus. Inside, 13 faculty members, along with staff, postdoctoral, graduate and undergraduate students, conduct their research, which often includes animals. Some of those animals – including Hunt’s cockroaches (the other focus of his work) are kept at the research building; others are kept elsewhere or studied in their natural environment.

“Studying animal behavior, we can massively improve the way humans would engage their environment,” Stergiou says. “Animals, many times, are way better than we are.”

PIGS & STENTS

When Alexey Kamenskiy went looking to create an animal model to better understand how human tissues interact with surgical devices, he chose pigs.

“The best animal for cardiovascular research is probably a pig,” says Kamenskiy, who joined the biomechanics department earlier this year. A pig’s cardiovascular system, he explains, is similar to that of humans. Pigs respond similarly to surgical treatments. Their vessel size is compatible with most of the devices used in surgery with humans.
He dispels some common misperceptions people have of pigs, saying they’re smart and clean. “They’re fun to work with,” Kamenskiy says.

Nebraska is a good place for large-animal research, he says, pointing out that the pig population in Nebraska (3 million) exceeds its number of humans (1.92 million).

Kamenskiy studied human tissues while earning his doctoral degree in engineering mechanics at UNL. That led to him creating a computational model to understand how these tissues interact with surgical devices. Next came creating an animal model to test the peripheral stents he is working to perfect.

Mice, a standard suggestion for a research subject, aren’t an option, he says, because their blood vessels are too small. His research animals are kept at nearby UNMC.

Kamenskiy’s work began with a five-year grant from the National Institutes of Health to determine which commercially made surgical devices resulted in the best patient outcomes. “The outcome is there are some a little better, some are worse,” he says. “Bottom line is, none of them are good.”

His current task — funded through an additional five-year grant – is to develop a device to encourage better flow through blood vessels. The typical approach through surgery is a bypass graft around the blockage. A stent is placed inside the blood vessel, pushing plaque to the side. Blood then can flow through the wound.

Such interventions don’t work well in leg injuries, though, and one-third to one-half of patients have recurring symptoms that require further intervention. The stent sometimes breaks or rubs on the vessel in a way that causes the vessel to try to repair itself. Sometimes, the vessel is compromised.

Along the way, Kamenskiy says, his study of human tissues provided insight into how vessels are affected when a person smokes or has diabetes.

Another research focus is how to buy time for those who suffer tears in a major artery or a severe chest injury to get medical care. Kamenskiy and UNMC vascular surgeon Jason MacTaggart are developing a device to be inserted through the injured person’s groin, with multiple balloons connected by a shunt that can isolate the wound but allow blood to continue to flow to vital organs.

The goal is to train non-clinicians, for use in such places as battlefields, to insert the device. “What’s the best animal to use for training? Pigs.”

**THE FOX SQUIRREL SAYS …**

Hunt’s research subject of choice is the fox squirrel because of the strong muscles on its hind legs and large, sharp claws.

“These things allow them to do huge leaping jumps, land and maintain attachment,” Hunt says.

In order to use those capabilities, he says, the fox squirrel must have neural capabilities to allow it to learn and make decisions affecting their movement control.

His next preference is the cockroach. His intrigue stems from how the insect – colloquially known as the water bug – can travel along canopies (in this case, his word for bushes) at such a fast clip. The American cockroach is potentially the fastest animal on earth relative to its body size, able to take 45 steps in one second.

His experiments focus on how American cockroaches run across branches with different diameters and slopes. He’s especially interested in how they change their locomotor patterns as they move across these branches.

Hunt, who earned his doctorate at the University of California Berkeley, typically has a colony of 100 to 200 cockroaches in his lab ready to run. He entices fox squirrels to participate in his outdoor experiments with peanuts. He films them with drones at high speed as they maneuver through his obstacle courses, then breaks down their movements and responses for closer study.

Experiments using animals are monitored through the Institutional Animal Care and Use Committee – a joint UNO-UNMC committee, Stergiou says.

Hunt says he has two current lines of research – the first involves animals indirectly and the second directly:

- **Balance in adults, especially what causes people to slip.** So he causes people to slip then studies their reaction. “There are good and bad responses.” How animals move and stabilize themselves can provide direction.

- **Movement along terrain.** This is where studying fox squirrels and American cockroaches applies. Squirrels make long leaps relative to their body size. What happens when their leap is not accurate? “Do you try to stick the landing or rather grab on with legs or arms and try to recover? Do you try to reduce the consequences of the coming fall? Put your arms down and brace for impact?” Responses must occur in milliseconds to be effective. Research suggests that our neural responses are plastic, meaning they can change.

Hunt’s research on how animals move through their terrains extends beyond humans and into robotics. “We want robots to navigate the kinds of environments we do,” he says.

Only better. Truth be told, Hunt says, humans aren’t the best subject. “In terms of high performance and to be mobile in a variety of terrains, I would not consider humans to be the model organism for these endeavors.” Thus for Hunt, fox squirrels and American cockroaches.

More recently, Hunt finds himself intrigued with dragon flies and the way they can change directions on a dime. He’s yet to determine how the dragon fly might be part of a future study. “Dragon flies often are compared to jet fighter planes. That interests me. And the fact they can mate on the fly. Humans can’t do anything near that.”
Nate Hunt’s cockroaches have room to roam in UNO’s recently expanded Biomechanics Research Building.

Not that they have free rein in the building. But Hunt, assistant professor of biomechanics, wants to see how humans can improve their mobility by studying the way cockroaches move about.

Space in the recently expanded 53,000-square-foot research building already is in demand, says Nicholas Stergiou, director of biomechanics at UNO. The 30,000-square-foot addition, dedicated in October, already is full of activity, he says.

Credit the additional space for giving Stergiou and his colleagues some wiggle room. The added space translates to eight additional research labs, a data processing center and work space for the 13 faculty members, 35 undergraduate students and 25 graduate students.

And people are noticing their handiwork. Four biotechnology companies wish to locate in the Biomechanics Research Building. “They want to work side-by-side with our people, shouldering in research greatness,” Stergiou says.

And they are intrigued by what’s inside the Biomechanics Research Building. Stergiou described some highlights, which all are geared toward the study of the mechanical laws relating to the movement or structure of living organisms:

- A second virtual reality laboratory. This one comes with a treadmill that has 6 degrees of freedom of movement. “Not only up and down, but sideways as well. Just imagine something like that.”
- A machine shop large enough for people to drive their vehicles inside. Not to have their oil changed, Stergiou says, but to have sensors installed that will assist scientists to study how we drive when we get older.” Scientists can, for example, track acceleration time for older motorists and the types of abrupt reactions they make while driving, Stergiou says, which will determine who should drive and who shouldn’t.
- An underwater treadmill that allows scientists to test the effects of gravity at different levels other than the earth’s 9.8g. Scientists can study, for example, how buoyancy and subsequently decreased gravity could help rehabilitate injuries by determining how much weight the joint can bear.

Finally, the research building has a laboratory that houses Jorge Zuniga’s 3-D printing capabilities, which the associate professor uses to build prostheses for children with congenital deformities. He’s studying how congenital deformities create an imbalance in a person’s brain. “But what if I give you this prosthesis? Does this affect again the way the brain works?” The laboratory also houses a 3-D printer that, instead of plastic, creates in metal.

Stergiou says he wants Nebraskans to know that the Biomechanics Dept. is paying its own way through private donors and research funding. The department recently received a National Institutes of Health $10.3 million grant – the largest in university history – which allows the department to establish three new research cores: the Movement Analysis Core, the Nonlinear Analysis Core, and the Machining and Prototyping Core.

In 2013, the biomechanics building housed Stergiou’s research group. Six years later, the Biomechanics Research Building houses a department (biomechanics), a center (for Research in Human Movement Variability) and a division (for biomechanics and research development).

Stergiou says the department isn’t finished growing — a theme he repeated at the building addition’s dedication.

“If anyone thinks we are finished, I beg to differ.”
THE NEXT TIME YOU STOP TO PET YOUR NEIGHBOR’S LABRADOODLE OR CUDDLE ON THE COUCH WITH YOUR OWN, SAY, GOLDEN RETRIEVER OR ENGLISH BULLDOG, CONSIDER THIS:

THAT COMFORT WE DERIVE FROM THE DOGS IN OUR LIVES ISN’T JUST PART OF A ONE-WAY RELATIONSHIP: DOGS, TOO, PICK UP ON THE EMOTIONS WE’RE FEELING — POSITIVE AND NEGATIVE.

Exactly when that happened in the evolution of dogs is a bit fuzzy. Traditionally, it was thought that domestication happened between 40,000 and 20,000 years ago. About three years ago, though, a research team narrowed it down more precisely. According to these scientists’ data, domestic dogs originated in two places — Eastern Eurasia and Western Eurasia. The analysis pinpointed a “domestication event” with Asian wolves at least 12,500 years ago and with European wolves, at least 15,000 years ago.

Additional science suggests that the wolf-to-dog transition happened as wolves became hip to the fact that if they were friendly they would be spared by humans.

Funny things started happening. The wolves developed floppy ears, wagging tails and softer coats.

And here’s the really compelling bit — their psychology started changing, too. As they evolved, they gained an ability to “read” human gestures.

That unique ability further strengthened their relationship with humans and along the way helped dogs achieve best-friend status.
HORMONAL SYNCHRONIZATION

But is there something happening physiologically between people and pooches that makes this bond so close?

In 2014, a team of UNO researchers was one of the first to observe a connection between species — formally, a hormonal synchronization — when an acute stressor was involved.

Led by doctoral student Alicia Phillips Buttner, the group also included neuroscience and psychology student Breanna Thompson; Rosemary Strasser, director of the neuroscience and behavior graduate program; and Jonathan Santo, an associate professor of psychology and expert in structural equation modeling (SEM).

Buttner says she wanted to see if there was a synchronization between owners or handlers and their dogs, and if it was dependent on their performance or on the behaviors the humans were engaging in with their dogs.

The study followed 58 handlers and 58 dogs through a series of dog agility competitions. Each human and dog provided saliva samples before and after; both groups’ samples were later measured for cortisol.

These competitions are inherently stressful and designed to be completed quickly without mistakes. Each handler used cues to guide their dog through the course, then assessed their dog’s personality and rated their performance.

Applying SEM, an interesting finding emerged: Elevations in the handlers’ cortisol levels were associated with increases in their dogs’ cortisol levels.

“Some kind of stimulus was being conveyed to the animal about the emotional state of their owner,” whether that was stress or arousal, Strasser says.

“Based on the findings, we don’t necessarily think that it’s one directional. It’s not just us influencing our dogs, but their behavior could be influencing us as well.”

It’s not unlike the relationship between a mother and an infant, she says.

“Because they’re living together and spending time together, a bonded pair or mated pair will do the same thing.”

SENSING STRESS

The study’s findings, originally published in the journal of Physiology and Behavior, continue to generate interest, says Santo.

“We’re still getting calls regarding interviews about this paper and the follow-up papers that have been done replicating these findings.”

One such follow-up appeared in Scientific Reports in June 2019. A study by Swedish researchers confirmed what the UNO team had found — that a dog mirrors its owner’s stress level.
They took it a step further to look at personality traits of the owner. The study looked at cortisol levels in saliva and studied hair cortisol levels in humans and dogs, giving them a long-term, six-month picture of what’s going on physiologically.

For the UNO team — all dog owners and dog lovers themselves — their study results reinforce what they instinctually knew.

Thompson, who received her bachelor’s degree in 2013, says the findings have made her more aware of her stress levels around her dog, Saber, whom she adopted from the Midwest Dog Rescue Network.

“If I need Saber to be in a calm state of mind I know I need to be in a calm state of mind. It’s really made me more mindful of the energy I project into the world.”

Buttner graduated in 2017 with her Ph.D. in psychology neuroscience and behavior. Today, she’s the director of animal behavior at the Nebraska Humane Society.

For her, the most important takeaway is there’s something in the human-dog connection that dogs can sense.

“It’s either very subtle behaviors that we might not even be picking up on or even things that we’re transmitting through our body chemistry,” she says.

At the Humane Society, Buttner has incorporated these results into staff and volunteer training.

“It’s being aware that there is this bidirectional exchange of emotions,” she says. “We want to be more confident and relaxed when working with the dogs.

“We want to be picking up on their body language and adjusting our approach based on that, while still being mindful of how they’re feeling.”

Dog mom to a 12-year-old Shetland sheepdog, 4-year-old Bassett hound and a 1-year-old wirehair dachshund, Buttner also has applied the study’s findings at home.

“Between what I do here at work and my background in this research, I’m much more mindful of if I’m feeling stressed I need to be more proactive with spending quality positive time with them, relaxing with them and doing things that are fun for them.”

LEARNING THE LANGUAGE OF DOG

Dog language and behavior isn’t intuitive, says Alicia Phillips Buttner, director of animal behavior at the Nebraska Humane Society. “We know so much about everything else that we deal with in our daily life, probably much more than we actually know about our dogs,” she adds.

Buttner, who has three UNO degrees, including a Ph.D., offers this advice to better understand what’s happening that your dog can’t put into words:

• Take the time to learn what works. Two ways you can actually impact your dog is by studying their body language and learning how to train your dog using positive methods.

• Use positive reinforcement to make them feel more comfortable.

• Go for a walk. Or spend time just cuddling. Those things can reduce stress by releasing oxytocin, the hormone that’s released with positive social interactions.

• Focus less on things you can’t control — there’s a lot out there that you can. Everyone benefits by understanding more about dogs, our relationship with them and how they learn.

• Looking for helpful tips about how to better communicate with your canine? Check out ispeakdog.org.
UNO GRADUATE HELPS DOGS IN NEPAL

In Angeela Shrestha’s hometown of Kathmandu, Nepal, it’s common to see stray dogs roaming the streets in this city of a million people.

But Shrestha (above, far left) was concerned about the stereotypes associated with these animals.

“Here in the city, it’s not like people don’t like dogs,” she says, but many people consider them dangerous, a source of rabies, and a threat to public safety.

She moved to Omaha in 2013 to pursue her master’s degree in communication studies and research. Her first semester, she saw a disturbing video of police killing a stray dog back home.

The image left an imprint on her — also presented an opportunity to change the mindset of the people of Kathmandu about the dog population by focusing on educating young people.

Shrestha founded Project Humane Nepal in 2014, running it remotely from Omaha. The organization provides educational workshops and school visits for students ages 6 to 16.

Today, her team also delivers services that include community outreach, rescue and treatment, vaccination programs, and spaying and neutering.

“We’ve seen a lot of differences in the kids’ attitudes before and after” they take part in the program, she says. Before they begin, the team asks the students to write their perceptions about stray dogs.

“The majority of the notes are very negative. You can tell a lot of the kids are very scared of the dogs. But afterward, the notes show they feel very motivated and empowered to do something for the dogs in their neighborhood, if not for every dog out there on the street.”

See more at projecthumanenepal.org

GIVING SHELTER DOGS A LEG UP

Blackburn Alternative High School students also have joined students from UNO Professor Rosemary Strasser’s Laboratory in Psychology course to participate in the P-16 service learning project “Reality Bites.”

Students met at the Nebraska Humane Society to train dogs using conditioning behavior modification techniques. Students trained adoptable dogs to be calm and quiet when potential families came through the kennels.

The positive reinforcement the dogs get for showing desirable behaviors benefits them, Strasser says. “It helps them physiologically be able to cope with the stressor of being in the shelter and also makes them more desirable for people who are visiting the shelter and seeing the dogs.”

The project, she adds, also benefits the Blackburn and UNO students because they witness how positive reinforcement can significantly change behavior and emotional state.

UNO began the project in 2011, and it’s got bite — many of the dogs involved in the project have been adopted.

PUTTING SOME BITE INTO THE WOLFPACK

Did you know that in 1965, “Peanuts” illustrator Charles Schulz approved ROTC’s use of Snoopy as official mascot of Earl S. Hoag Squadron, Arnold Air Society, Detachment 470, aka, “The Wolfpack?”

Charles M. Schulz art
NBDC HELPS BUSINESSES REACH PET LOVERS

Plenty of dog-related endeavors have found their footing with help from the Nebraska Business Development Center.

The program provides a variety of assistance to all types of businesses, all at no charge. Services include market research, identifying industry trends and financial benchmarks, and finding funding.

NBDC consultants work with animal-related businesses ranging from dog daycare, grooming and vet clinics to supplies, food and unique products. Here’s a look at three Nebraska businesses NBDC has assisted:

DOGonGEAR LLC
Dawn Howell’s family business sells unique canine protective hunting vest and dog diaper wraps. She originally marketed her dog products on Amazon, as well as her own website. As she continues to grow the market, she’s also added sales on Etsy. dogongear.com

The Green Spot
Co-founders Jennifer Haines and Jessica Ellis run this Omaha-based retailer that sells natural, holistic and eco-friendly foods, treats and toys for dogs and cats, and provides advice on nutritional needs. They also offer a grooming service and a self-serve dog wash. In 2013, The Green Spot added online sales and a pet food delivery truck dubbed “Off the Chain!” greenspotomaha.com

Paws-a-Palooza
In North Platte, Dawn Brosius operates this dog daycare, overnight boarding and “Pup Tart” treat business. facebook.com/NPPawsAPalooza

Looking to start, or grow, your dog-or-animal-related business? NBDC consultants are available in 10 locations across Nebraska. To find the office nearest you and request a meeting, go to unomaha.edu/nebraska-business-development-center/about/locations

POOCHES AT THE PITCH
It was the dog days of ... September again at Al Caniglia Field as UNO held the second annual Pooches at the Pitch. Maverick fans got to take in a men’s soccer match right next to their best friend with reserved seating on the berm overlooking the pitch. Those who showed received an Omaha-branded travel water bowl.

GRUMPY ON THE GRAM
UNO graduate Kirby Kaufman (2012) is social media manager for Infogroup in Papillion, but the biggest account he manages is his dog's.

Kaufman and his Shiba Inu Chester have developed a robust following on Instagram with the latter’s account @grumpysheeb. As of early November it had more than 22,000 followers who take in Chester’s antics.

“He looks naturally pissed off, but he does smile, too,” Kaufman told the Gateway newspaper, adding that the Nebraska Humane Society rescue’s “got a ton of behavioral problems.”

FIRST DOWN ... AND TEN TO GO
Thanks to “First Down,” a brown female terrier owned by then-student Tippy Tyler, the Omaha University football team won big in 1935. First Down made its debut as the team mascot in a 19-6 win over Wayne sporting a white jersey with scarlet and black stripes – previously one of player Leo Pearey’s football socks. He attended all games that year, helping OU, then known as the Cardinals, to the Nebraska Conference championship. “She has been taught to bite only opposing players and to remain quiet while being smuggled into buses, trains and hotels,” went a Gateway article. Later, First Down gave birth to five puppies — each taken by an OU player. Among the pups was “Ten to Go.”
UNO FELINE RESEARCH TAKES AIM AT LEARNING MORE ABOUT A COMMON PARASITIC INFECTION

Herding cats is an unenviable task.
UNO researchers, however, are hoping the trouble they go through wrangling finicky felines might produce insights into a parasitic infection that runs rampant through the U.S. population.
The herding is done in the cat behavior laboratory in UNO’s Allwine Hall. There, cats are studied for their role in a parasite — Toxoplasma gondii — that infects somewhere between 20% to 80% of all cats in the United States — and between 17% and 29% of humans. The researchers are striving to learn how infection affects the behavior of cats, and to address misconceptions about the single-celled parasite.
To do so, UNO biology Professor Bruce Chase and psychology graduate student Mohammad Alyetama enlist the support of area cat owners.

“It really is different than the typical lab approach,” Chase says. “It really is a humane approach. We ask the cat owners to be citizen-scientists and fully participate.”
Research on Toxoplasma gondii is nothing new at UNO. In the university’s Molecular Parasitology Lab, studies have focused on the molecular pathogenesis of the parasite. Those researchers hope to learn more about the development of brain...
cysts associated with toxoplasmosis at the molecular and genetic level. They also see the parasite as useful in studying anti-malarial compounds.

But focusing on cats is a unique tact.

“It’s a hard question,” Chase says. “No one has looked at how it affects the behavior of cats.”

HEALTH CONSEQUENCES

Finding answers is critically important. The U.S. Centers for Disease Control and Prevention named toxoplasmosis one of five parasitic infections targeted for more public health action. The parasite is found in cat feces, but it is most commonly spread from contact with uncooked meats.

Infection with the parasite causes a disease called toxoplasmosis. In pregnant women or people with compromised immune systems, it can lead to mild flu symptoms, or brain and eye damage in more serious cases.

The CDC estimates that up to 40 million Americans may be infected. Most people carry the parasite for years and remain healthy with no ill effects.

“Adults with strong immune systems don’t even know they have it,” Alyetama says.

One fascinating aspect of toxoplasmosis is its link to risk-taking behavior. Infected mice are known to become more impulsive and display a fatal attraction to cat urine, which makes them an easier mark for predators. This risk-aversion aspect also could impact humans infected with toxoplasmosis.

“Different people have different risk aversion,” Chase says. “The main harm is to people who are immuno-compromised.”

He and Alyetama, though, are only focused on whether the parasite alters the behavior of cats. It’s already known that felines are
central to toxoplasmosis and its spread because the parasite only reproduces in the intestines of cats.

The two researchers stress that they do not infect cats as part of the research project. A small amount of blood is drawn to see if a cat is infected, but the study otherwise involves behavior observation. The cat owner completes a survey and participates in some of the tests in an animal room at the cat behavior lab. Other research is conducted with the owner watching a live video feed as the cat responds to different stimuli and smells.

In addition, UNO researchers continue to track the behavior of indoor-outdoor cats. Some cat owners record follow-up assessments at home to test a cat’s memory and to monitor its litter box behavior and level of vigilance.

“It lets us get a spectrum of behaviors for animals that are living in the real world,” Chase says. “They’re not living in a lab environment.”

Nearly 200 cats have participated in laboratory behavioral observation at UNO, in-home assessments, personality testing or outdoor tracking. The latter is done with lightweight GPS tracking devices.

About 12 percent of cats in the study tested positive for the parasite, though that number includes indoor-only cats that are less likely to carry Toxoplasma gondii.

“We get people from all around Omaha,” Alyetama says. “We even had people driving from Lincoln with their cats. They find the process to be exciting.”

CAT PERSONALITY

UNO student Kristen Cunningham brought her two cats for study at the behavior lab. She found it especially interesting because she is pursuing a psychology doctorate in neuroscience and behavior, which means she’s already familiar with conducting academic research.

“It was kind of a role reversal,” she says. “I’m usually on the other side. It was really neat, the way they had it set up. I learned different things. I had a fun time. I hope my cats did, also.”

What the university calls the Toxo Project doesn’t just seek to answer scientific questions about Toxoplasma gondii, its spread and its effects. It also gives cat owners like Cunningham insight into the personality and behavior of their pets.

For those who participate, it’s one of the rewarding aspects of the research. “These animals are wonderful,” Chase says. “They’re pets. They have their own personalities.”

Cunningham learned that her cats, Forrest and Savannah, didn’t act the way she expected inside the behavior lab.

“I have one who was a little more standoffish at home. He might be considered a shy cat,” Cunningham says. “He was very independent and outgoing. He seemed very comfortable with me not being there. It was interesting to see that their behavior almost flipped.”

Such observations could yield fruit.

“We are trying to glean differences between infected and non-infected cats,” Chase says. “Our goal is really to improve understanding of the parasite and improve our understanding of what it is doing.”

Findings might influence the development of early-prevention programs that veterinarians can use to help infected pets. It also could help reduce any behavioral consequences associated with toxoplasmosis in cats.

In addition, Chase and Alyetama hope to increase general understanding of a parasite that scares some people away from having cats. Their work could dispel myths about the parasite’s spread and ultimately make cats more adoptable.

“If someone gets pregnant, should we get rid of the cats?” asks Alyetama. “We talked to vets. They get that question all the time.”

But, he adds: “People don’t necessarily get infected from cats.”

To reduce the parasite’s spread, the CDC recommends freezing and cooking meats as well as washing fruits, vegetables and cutting boards. Gloves should be worn while gardening.

Chase and Alyetama feel a sense of accomplishment given how many non-scientists have become active participants in this research. So far, nearly 900 data contributors have contributed to the work.

“People get a better understanding of the process,” Chase says. “They get insights into their own cat’s behavior. They participate in the study itself. The main thing the owner gets out of it is they understand their cat better.”

And, hopefully, a better understanding of Toxoplasma gondii.

ABOUT THE CAT BEHAVIOR LAB

UNO’s cat-behavior research is conducted in collaboration with North Carolina State University and the Max Planck Institute of Animal Behavior in Germany. Up to 12 UNO undergraduates are working on the study. Research currently is entering the data analysis phase.

To learn more, visit toxoproject.com. The site features a 13-question survey for cat owners and non-owners, fun at-home experiments to conduct on cats, and an online cat personality test.
MORE COLLABORATIVE THAN A BARREL OF MONKEYS

IN ITS FOURTH DECADE, UNO’S CALLITRICHID RESEARCH CENTER IS STRENGTHENING RESEARCH COLLABORATIONS AND EXPLORING NEW QUESTIONS ABOUT WHAT MARMOSETS CAN TELL US ABOUT OURSELVES

Tucked behind an unassuming door in Allwine Hall, a small team of researchers and about 20 student volunteers care for, watch and learn from a colony of more than 80 marmoset monkeys.

Since 1983, the Callitrichid Research Center (CRC) has made significant contributions to the fields of behavioral neuroendocrinology — how hormones influence social behavior — and primate conservation. Initially, work was done with Golden Lion Tamarin monkeys (sidebar) under the direction of CRC founder Professor Jeff French. French is nearing retirement, but he’s leaving the lab and the marmosets in good hands with a team building on his work while investigating new questions about how what we eat impacts how we feel and act.

“For example, if you’re stressed, do you have a different microbiome structure than if you’re not stressed?” asks Assistant Professor Jonathan Clayton.

Clayton joined UNO in 2018 in a role shared between UNO’s biology department and the Nebraska Food for Health Center in Lincoln. Through partnerships with University of Nebraska-Lincoln and University of Nebraska Medical Center faculty, he’s investigating microbiomes — the bacteria, viruses, fungi and more that live in our guts.

Because marmoset behavior and anatomy are so similar to that of humans, the UNO colony offers answers about how microbiomes impact behavior. It’s a natural fit for the work the CRC has done to date, says Aaryn Mustoe, a postdoctoral research associate who has worked in the lab for a decade.
"Anything that can improve social quality of life is a topic that is of a lot of interest because it is so ingrained in a lot of health outcomes," Mustoe says. "We know diet, social company and antibiotics can influence your microbiomes, but we are just beginning to understand the consequences."

**BEYOND THE STOMACH**

Other studies of marmosets are yielding insights that could help humans beyond their stomach. French, for instance, has explored the tie between aging and reproduction. Like human males, marmoset males show age-related declines in testosterone.

To identify changes in the body responsible for the decline, French conducted an experiment in which he treated older male marmosets by releasing hormones normally produced in the brain. Significant elevations in testosterone resulted.

“This suggests that the pituitary and the testes in aging male marmosets work just fine in testosterone production, and that the decline in testosterone is attributable to changes in brain regulation of sex hormones,” French said in a 2011 UNO Magazine article. “These findings have important implications because they suggest treatments that target low testosterone in men may not have to involve the administration of synthetic steroid hormones, but that the body’s natural hormone circuits might be used to increase the production of normal testosterone.”

Social anxiety among marmosets also has come under review. French and then-graduate student Jon-Ryan Cavanaugh found that when marmosets experienced an increase in oxytocin, a hormone identified for its role in recognizing social cues, affection given by the marmosets’ partners also increased.

“[It’s] something really subtle,” Cavanaugh said in the spring 2016 UNO Magazine. “They’re letting their partner know to come interact with them more.”

French said current research indicates all mammals similarly regulate oxytocin. Given marmosets’ similarities to humans, pharmaceutical companies soon may be able to use this information to identify treatments for disorders such as autism or schizophrenia.

Such work is among the reasons the CRC has so often attracted grants from the likes of the National Institute of Health and the National Science Foundation.

Such impressive research takes a team. Mustoe and Clayton say they couldn’t do the primarily observational research without Animal Care Coordinator Stephanie Womack, postdoc fellow Shiv Hayer, doctoral student Sarah Carp, and master’s student Haley Hassenstab, as well as student volunteers.

The group says there is strong cohesion between the original focus of the lab and new microbiome questions. One reason: relationships can impact microbiomes and vice versa. Because marmosets are typically monogamous, they provide a translational model that might eventually lead to, say, a yogurt that reduces stress.

“You can look on Amazon and see mood probiotics,” Clayton says. “This already exists, but there’s not a lot of data on it.”

Long term, the team hopes findings could lead to therapeutic approaches using microbiomes that treat neuropsychiatric disorders. They expect a future brain imaging partnership with UNMC and ongoing Food for Health Center collaborations will contribute toward that goal.

The team says they’re energized by the relationships they’re growing across the University of Nebraska system.

“One of our goals is to build this collaboration network, because we’re sitting on this really valuable resource,” Mustoe says. “We appreciate the people who help us out and in return, we want to help them out.”

by Sam Petto

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**MONKEY MATTERS**

UNO’s Marmosets weren’t the first primates to call Allwine Hall Home. The roots of the university’s Callitrichid Research Center (CRC) date to 1983 and an effort to help save the Golden Lion Tamarin monkey species.

At the time, fewer than 500 tamarins were alive, about 350 of those in captivity. That number dropped to 200 at one point but now has increased to about 2,500 in the wild. About a third of those are descendants of golden lion tamarins raised in human care. They remain an endangered species, though.

UNO initially had six pairs of the monkeys that sport a reddish-gold coat and a long, backswept mane. The 12 tamarins had been among those kept at Omaha’s Henry Doorly Zoo. They were top breeders, and because of that were no longer needed for that purpose for fear that their genes would be overrepresented in the tamarin population.

UNO Professor Jeff French requested the 12 be housed at UNO for study of their fertility and eating habits.
Leo wasn’t about to let Anna Di Ruocco go back to sleep. Good thing, too, for if she had, Anna might never have woken.

It was 1 a.m. when Leo first jumped on her. Di Ruocco’s blood sugar levels were skyrocketing and her pH levels plummeting, building ketone acids in her bloodstream to deadly levels. A Type I Brittle diabetic, Di Ruocco is susceptible to wide swings in blood glucose, from too high (hyperglycemia) to too low (hypoglycemia).

Leo barked. He licked Di Ruocco’s face. Finally, she woke, took a dose of insulin ... then went back to bed.

“I just wanted to sleep,” she says.

But the insulin wasn’t enough. Her blood sugar level was higher than her glucose meter could accurately register. She was falling closer and closer to DKA — diabetic ketoacidosis, a severe and life-threatening state.

Leo kept alerting Di Ruocco. All night.

“Leo knew,” she says. “Leo is trained to alert to changes, and this means he alerts to the initial rise. But he knew something else was wrong.”

By the time morning came, he was still at it. The ketones continued to build in Di Ruocco. She began to vomit. Finally, she decided to heed Leo’s warnings and had her roommate drive her to the hospital. She was admitted to the ICU.

“If he wouldn’t have all night continued to keep me up, I might have fallen comatose,” Di Ruocco says. “They told me I was very close to the point where I should have died.”

As it was, the 2018 UNO graduate spent more than a week in ICU.

That was nearly four years ago. Di Ruocco recovered.

And Leo remains by her side.
AT WORK

Leo goes everywhere with Di Ruocco as an indispensable part of her life. Such a sight is now common in the public sphere. According to the U.S. Department of State’s ShareAmerica, there are approximately 500,000 service dogs in the United States.

Service Dogs, as USA Service Dogs notes, are trained to perform a specific task to help a person with a disability that could include mobility problems, blindness, paralysis, epilepsy, panic attacks, deafness, speech problems, and PTSD. Under the 1990 Americans with Disabilities Act (ADA), they can go wherever their owners go. That’s not the case with Emotional Support or Therapy Dogs, which typically are not required to be trained for specific tasks. Nor are they afforded the same protections under the ADA as service dogs.

Rather, their role in general is to provide companionship, affection and comfort to their owner or others. Common conditions requiring emotional support dogs include anxiety disorders, panic attacks, stress, social phobia, PTSD, and chronic depression.

A service dog can be indispensable to its owner for everyday tasks, such as bringing items to a person in a wheelchair or guiding a person with a visual impairment. Or, they might alert a person to a coming seizure or low blood glucose.

Leo, for instance, frees Anna from having to frequently prick her finger in order to check her blood sugar levels — especially at night. “For three years, I basically didn’t sleep at night because I didn’t know if I would wake up the next day,” says Di Ruocco, who got Leo in October 2014. “When I got Leo, I was actually able to sleep heavily again because I knew he was there.”

Service animals also can provide support for those with mental and emotional struggles.

FLYING WITH FLIRTY

UNO graduate Abrea Hensley suffered from PTSD-induced panic attacks and dissociative episodes that would strike in public, rendering her unable to accomplish everyday tasks.

“That changed in 2017 when she adopted a miniature service horse, Flirty. Sure, a dog would have been an easier choice. But Hensley is allergic to them. And miniature horses, like dogs, are ADA-protected.

Leaving her with Flirty. The 7-year-old horse “completely changed” her life. “Since I started working with her, I can actually go out and do things,” Hensley says. “I can pretty much go back to having a normal life. Obviously, toting around a horse isn’t exactly normal, but it’s as close to normal as I can be.”

“Her most helpful thing she does is that she will alert me before I have an anxiety attack,” Hensley says. “She can warn me when my heart rate and my cortisol levels are starting to go up. That way, I can go ahead and do some of the exercises I’ve learned in therapy to help avert the pain. Or I can take my medication if that’s necessary.”

The gray mare wears a rope on her harness that Hensley can grab when she begins to dissociate, a psychological phenomenon that detaches a person from their physical and emotional surroundings.

“Whenever I dissociate, I don’t know where the ground is,” Hensley says. “And I can hold onto her and know where I am.”

Flirty also reminds Hensley to take her medicine and is trained in blocking, meaning she can stand between Hensley and other individuals so they do not get too close in public.

Hensley and Flirty became a social media sensation in 2019 when news outlets reported on their travels with American Airlines on a trip to Chicago. That resulted in an Instagram account for Flirty (@flirty.the.mini.service.horse), which at last count had more than 13,000 followers.

“It was really empowering to fly and know that I could do that,” Hensley says. “Flirty handled everything like a pro, but it’s always the question of how others are going to react. It’s also a small space for her, so I think I’ll reserve flying for emergency circumstances.”

PLEASE PET THE DOG…OR CATS, DOGS, AND HORSES ARE MOST COMMON BUT THE LIST INCLUDES LLAMAS, MINIATURE PIGS, FERRETS AND EVEN BEES THAT SCATTER JOY ACRES, A LOCAL ORGANIZATION, USES TO HELP VETERANS WITH PTSD.
The attention Hensley received included criticisms. Some questioned the need — or Hensley’s right — to have Flirty at her side.

Hensley said she often has to bring up the Department of Justice website to show businesses she is allowed to have Flirty. Service dogs can legally go everywhere their handler goes, regardless of what the pet policy may be, including airplanes, schools, ubers, restaurants etc. That said, Hensley says she has been kicked out of public shopping centers.

“I get that she’s unusual,” Hensley says. “But what I’d like people to realize is that these animals are what allows us [people with disabilities] to live fairly normal and functional lives. These animals aren’t fashion accessories. They are necessary medical systems.”

Others see a person with a service animal and begin to ask questions. Or, as was the case with Hensley one day at a coffee shop, take a photo with Flirty without asking permission. Something Hensley refers to as “an invasion of privacy.”

Service dogs typically wear vests that often include “Do Not Pet” indicators. But that’s sometimes not enough to deter people from trying to pet or talk to a service dog. That keeps them from working.

“It’s difficult for people not to want to pet a dog when they see one because it’s human nature to want to interact with the dog because dogs aren’t always something you see in all social situations,” says Jen Papproth, director of UNO Accessibility Services Center.

Papproth explains the service animal as an extension of the person. And just as you wouldn’t invade the personal bubble of someone you don’t know by going up and petting their arm, you afford a service dog — or miniature horse — those same boundaries. The service dog’s job requires their undivided attention. Approaching them without permission may distract the dog and cause serious consequences for the individual who needs that animal. In Nebraska, interfering with a service dog is a Class III misdemeanor.

Training therapy or emotional support animals is not a quick and easy process, as indicated by UNO graduate Tracy Zitnik, owner of Zow Dog.

“When training a dog to not react to loud, crazy or unusual noises, you slowly introduce them to these types of stimuli and habituate them to different environments,” Zitnik says. “To train a dog to go into a hospital or a place where there is a lot of people, I invite people over to my house and have them be loud and occasionally scream while the dog lays down and I feed and praise them.”

Zitnik also does recall exercises into different rooms and obedience exercises like down, sit and go to place. Once the dog masters Zitnik’s home environment, she takes it outdoors or to someone else’s house and has others exhibit various behaviors while she trains the dog.

In addition to basic obedience and environment acclimation, service dogs are taught specific tasks and complex commands related to helping someone with a life-limiting disability. They must focus on their work while perhaps dealing with large crowds or adverse weather, for example.

Training a service dog typically takes six months to a year, sometimes even several years depending on the work they do. Most service dogs are German shepherds, golden retrievers or labs, but any dog can be a service dog, or therapy dog for that matter, as long they master the necessary skills and are willing to serve.

More so than therapy dogs, a service dog has a demanding job where they must be able to handle complex commands and maintain focus on their work without being going off-task because of large crowds of people, loud noises, adverse weather conditions, or other potential distractions.

The ADA does not require service dogs to be professionally trained. Owners themselves can train a service dog, though the American Kennel Club encourages people to work with professional training organizations and individuals. That’s available through nonprofit and for-profit organizations. Service dog training costs between $10,000 and $25,000, that covering expense for the animal, training and registration. Some organizations provide service dogs for free or offer financial aid.

An animal’s temperament and tolerance for human contact are critical; they must be gentle, confident and respond positively to stimuli.

Therapy animals require certification to prove they can tolerate human interaction in a variety of settings. Many organizations offer therapy dog certification, with varying training requirements. In general, basic obedience is taught — to sit, lie down and walk correctly on a leash — and they must have a temperament that adapts easily to unfamiliar places and startling noises without aggression toward people and other dogs.

Unlike service animals, therapy animals are not protected under the ADA and have no legal right to enter public places unless they are invited.
HELEN MABREY (BS) on Sept. 30 celebrated her 100th birthday.

BRUCE MOSLEY (BA) writes, “since graduating in 1954, I spent the next 30 years on the go with the USAF. Squeezed in a master’s from St. Louis. Loved flying and found my dream wife (Polly) in Missouri and we raised two wonderful children. Didn’t like Thule, Greenland, served in Sacramento, California, as base commander at Mather AFB; liked California and retired from Air Force in Sacramento and went to work for Sacramento Airport as deputy director and retired in 2000, after serving two years as acting director. Polly and I travel very little, enjoy our home, children living close, one in Sacramento the other in Carmel. Still play my favorite sport, handball, three times a week and have long walks with Polly. I have been blessed indeed and thank U of Omaha for the good start they gave me and Polly, who brought it all together.”

DAVID WESTERFIELD LOZIER (BSBA) writes, “My life has been filled with blessings and opportunities. I have been married to Elaine (Adkins) Lozier since 1958. Together we built Lozier Homes in Bellevue, Washington. We have two daughters, 13 grandchildren, and eight greats. The past decade we have pastored a church in Bellingham and have just retired, at age 82. My dear wife thought I needed a dog in my life. His name is Shiloh and he is a love.”

KATHLEEN ANN MCGUIRE (BS) is no longer twirling the baton at football games as she once did at Omaha University, but she recently sang under the baton of conductor Joseph Martin at Carnegie Hall. She also has traveled extensively, recently to Croatia, Bosnia, Montenegro, Slovenia, Serbia and Albania. Vietnam was on her December travel docket, and in 2020 she will reach her goal of having visited all seven continents when she visits Australia (then New Zealand). McGuire writes, “I continue to be so grateful for my Omaha U. education. It has served me well.” mcguireka@peoplepc.com

MIKE MORAN (BS) was inducted into Marquis Who’s Who. Moran most recently was senior media consultant with the Colorado Springs Sports Corporation, that coming after being chief spokesperson for the United States Olympic Committee from 1979 to 2003. Prior to that he was sports information director at the University of Colorado (1968-1978) and Omaha University (1966-1967) and a sports reporter and photographer for KMTV (1963-1966). Previously, Moran received the General Douglas MacArthur Award from the United States Olympic Committee and is an inductee in the Colorado Springs Sports Hall of Fame, the Omaha Westside High Hall of Fame, and the College Sports Information Directors Hall of Fame.
moran1942@msn.com

JAKE E. PRENTISS (BS) retired from full-time work after 32 years in water and wastewater operations for part-time oversight of his company, Clear Creek O/M in the Fort Collins, Colorado area. He has received several awards in his career, including an EPA Award in 1996 while working in Spearfish, South Dakota.
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MICHAEL ENGELMANN (BS) recently retired from Farm Bureau Insurance. He lives in Andover, Kansas.
mengelmann@sbcglobal.net

BERNIE BROWN (BSBA; MA-1977) published her first novel “I Never Told You” with Moonshine Cove Publishing. She writes, “Classmate Bud Cassidy (1973) painted the gorgeous cover. More about my writing here: berniebrownwriter.com bablossom@aol.com

KRISTIN GRADY GILGER (BA; MS-1982) is co-author of a new book, “There’s No Crying in Newsrooms: What Women Have Learned About What It Takes to Lead.” She was on a book tour in Nebraska in October. Gilger had a 20-year career in newspapers before joining the faculty of the Walter Cronkite School of Journalism and Mass Communication at Arizona State University, where she is now senior associate dean.
kristin.gilger@asu.edu

JOHN FLESNER (BA) is open to emails at the address below.
oldblindjohn@centurylink.net
HUGH REILLY (BA) is director of the UNO School of Communication. He writes, “In the late 1970s, my father began research for a book on the ‘Social History of the Irish Pub.’ A book he never finished. The last year of his life he spoke to me about helping him complete it, but he died before we could begin our collaboration. After the funeral I began looking through the boxes of research he had compiled. There in the boxes, I stumbled upon a hidden treasure. Traveling across Ireland in the spring of 1980, he kept a journal in several notebooks. There in his inimitable scrawl he described the pubs he visited and the people he met along the way. Sometimes the descriptions were brief and perfunctory, but often he told a story about the people he had met, painting a rich portrait of Ireland in 1980. While I had no desire to write, ‘The Social History of the Irish Pub,’ another idea began to form: What if I went back to some of these pubs he had visited in 1980 to see if they still existed and if they had changed? I could contrast his visit in 1980 with my visit more than 30 years later. Readers would get an intimate glimpse of Ireland yesterday and today. Rambling through 23 counties and 125 pubs, ‘Drinking with My Father’s Ghost: A Journey through Ireland’s Pubs,’ takes the reader through the back roads and byways of Ireland. Along with the story of Ireland and her people, the book is also a story of the relationship between a father and son and how their shared experience helped them to better understand one another.” It is currently available in paperback and e-book formats at Amazon.

MARI HENRY (BS) lives in Dallas, Texas, with her family, from left, Max, Gracie; Mari, David and Beretta mhenry@wdgarch.com

MARK SCHWIETZ (BS) recently received his master’s degree in thanatology from Marian University. Thanatology is the study of death and the practices associated with it, including the study of the needs of the terminally ill and their families. He lives in Tempe, Arizona, and has been owner of Mark’s Barrel Company for nearly 20 years. The company recycles and reconditions industrial containers for reuse. Schwietz writes, “We enjoy swimming, playing games, and having regular sleepovers with the grandkids.” markschwietz@gmail.com

CARROLL BRUCE DAVIS (CERTIFICATE IN GERONTOLOGY) lives in Abilene, Texas, and writes in memory of his American Bulldog, Jazzy, who died in August protecting him from the strike of a four-foot Diamondback Rattlesnake that was about to bite him. “She was a faithful and loyal friend of eight years. brucedavis@suddenlink.net

DEAN THOMAS OLSON (BS) in July published “Evil Desire: Recollections of a Sex Crimes Detective,” with Genius Book Publishing. It covers his 30-year criminal justice career in Omaha.
TRACY ZITNIK (BA) recently moved back to Omaha after 17 years in Seattle. Zitnik attended the Michael Ellis School for Dog Trainers and has been training dogs in Seattle for three years. Tracy now owns ZOW DOG and is currently a dog trainer in Omaha. During the four months prior to moving to Omaha, Zitnik traveled from the Pacific Northwest to the Southwest to experience living in different towns before settling at home. Zitnik writes: “My favorite place along the way was Tillamook on the Oregon Coast. I stayed with a friend and her son for two months. We visited the Tillamook Creamery regularly because they have amazing ice cream and cheese. I have three dogs: Baby is a 15-year-old Chiweenie; Maizy (pictured) is a 2-year-old mix Black Mouth Cur-American Bulldog (a guess because she is a rescue. I fostered the mom and litter for a rescue group); Diego is a 6-month-old black Labrador Retriever. tracy.zitnik@gmail.com

MICHAEL WOLFE (BFA) lives in Plattsmouth, Nebraska, and writes that after more than 30 years in ministry at two Berean churches in Nebraska, one of which they planted, he and his wife, Connie, were given a three-month sabbatical in 2018. During that time, they traveled to Oregon, England, Israel, Frisco and Colorado. “One accomplishment during the sabbatical was writing and publishing my book, ‘A Real Human Life: The Life of Jesus Christ IN You.’ The book is available through Amazon, Barnes & Noble, and WestBow Press, among others.

DAVID WAYNE WHITE (BA) in May relaunched his internet radio venture Whitester Radio on Live365.com after a three-year absence. White only has Whitester Radio-the 60s broadcasting for now. Have a listen at whitester-radio.com.

THOMAS H. WARREN SR. (MS) is president and CEO of the Urban League of Nebraska recently was elected to serve on the University of Nebraska Foundation board of directors. He received a master’s degree from the University of Nebraska at Omaha in criminal justice in 1989. He joined the Omaha Police Department in 1983 and served as chief of police from 2003 to 2008.

JULIANNE M. CROTTY-GUILE (MA) as an Omaha Music Teachers Association board members helped prepare for the Nebraska Music Teachers State Conference sponsored by UNO in October. She also is a teacher of voice and piano at Noteworthy Music. “Thank you, UNO, for sponsoring this October classical music event. Aren’t we fortunate to have a symphony in our town? Other cities do not. I still remember when Van Cliburn first performed with our symphony. He inspired and humbled me when my mother invited our friends and family to first hear him play piano in the late ’60s. Thank you for the music and thank you to those who offer this gift of learning music for a lifetime.”

ROB RANDELS (BSBA) was honored as one of the top financial advisors with Northwestern Mutual.

ANGELA ATHY (MA) is vice president of business training solutions at Farm Credit Services of America/Frontier Farm Credit. Athy writes, “I am thrilled to be working for this great organization! I can’t believe I have a high school senior, Max Athy, who is looking to attend UNO and major in computer science.” angelaathy@gmail.com

CRYSTALLE MICHELLE COTTON (BS) was accepted as a member of Black Women in Computing in August. Crystalle.cotton@gmail.com

DUSTIN DISTEFANO (BS) and JEROD EVANICH (2007, BSBA) in 2012 founded A Place At Home, a home care agency. The company began

Documenting one of the worst disasters in Nebraska history.

WATCH NOW netNebraska.org/floods
franchising in 2017 and in October opened a 10th location nationwide. A Place At Home offers a range of customized senior-focused care services, including: in-home care, care coordination and assistance in identifying and transitioning to senior living alternatives. The company is dedicated to preserving the quality of life for seniors by giving them the support they need to stay as independent as possible for as long as possible. Distefano and Evanich this year also launched the First Annual Franchise Convention. "The growth we’ve seen since 2017, and hosting our first annual franchise convention, is a significant turning point for our brand,” Evanich says. Added Distefano: “We’ve gone nationwide and are in discussion with a prospect to potentially go international in order to reach more seniors in need of our services.”

MARSHALL E. CRAWFORD JR. (MPA) lives in Nashville, Tennessee, and is CEO of Nashville Community Land Trust, a nonprofit that partners with Metro government and private builders to develop affordable housing. mecrawfordjr@yahoo.com

Quinn Texmo (BS) is the business development manager for Turner Construction in Omaha responsible for building client relationships and securing profitable work for the firm. Texmo was recently recognized at the Commercial Real Estate Women Network Convention and Marketplace in Orlando, Florida, where she received the CREW Career Advancement for Women Impact award for consistently exemplifying the organization’s commitment to elevating the status of women in commercial real estate by working to advance the careers of other women.

IN MEMORIAM

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<td>Laura A. Kincaid</td>
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<td>Kerry E. Taylor</td>
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<td>2009</td>
<td>April D. Underwood</td>
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VICTORIA CUNNINGHAM (BA, MA-2015) in September celebrated 10 years of marriage to fellow UNO graduate MITCH CUNNINGHAM (BS, 2009). The two met at UNO.

KRISTIN RYBA (BS) became inbound marketing manager at Quantum Workplace last summer. Ryba writes, “It’s been a really exciting chapter in my career so far. Making the transition from the nonprofit world to a rapidly growing tech company has been just the challenge I needed. And the talent here is exceptional. Can’t wait to see what’s next!” kristin.ryba@quantumworkplace.com

RACHEL COHEN (BS; MPA-2018) graduated in December 2018 and moved to Sioux City, Iowa, in January 2019 after accepting a position with the Nebraska Department of Health and Human Services as a child and family services specialist. Good news to her cat, Underfoot.

CERI SHREVE (BA) writes, “UNO was the most incredible experience of my life! The small campus feel in the city allowed me to learn and grow both mentally and socially. I graduated from a small town in western Nebraska with a class of 28 and was very nervous moving to Omaha. I left college with lifelong friends, my spouse and a position of director at a large, assisted living facility immediately after graduation!” cerishreve@yahoo.com

STEFANIE NICOLE KELLOGG (BA) graduated with a doctor of pharmacy degree from the University of Nebraska Medical Center. She works as a pharmacist at CVS inside Target. “The dream of higher education started with my mother, Christine Hoffman, who has worked in the Academic Affairs office in the Eppley Administration building for the past 30 years. Having grown up with the UNO community, the experience inspired me from a young age to continue my education of pursing my dreams at UNO and UNMC. I couldn’t have made it this far without my husband and family by my side through it all. They pushed me to be the best I can be and I finally made it, thank you!” Stefkellogg91@gmail.com

**SEND US A CLASS NOTE**

**WHAT HAVE YOU BEEN DOING SINCE GRADUATING?**

**SEND US AN UPDATE**

- Online at unoalumni.org/unoclassnote
- Write to UNO Magazine Class Notes
  6705 Dodge St.,
  Omaha, NE 68182-0010
- Fax 402-554-3787

INCLUDE:

- NAME ________________________________
- CLASS YEAR __________________________
- DEGREE ______________________________
- PHONE ________________________________
- ADDRESS ______________________________
- EMAIL ________________________________

**HIRING**

Part-Time Teacher Assistants

For more information call the UNO Child Care Center at 402.554.3398
ERIC SCHLEPPENBACH (BSBA) has been promoted four times since going to work for an online brokerage shortly after graduation. Schleppenbach now is working in his desired job as a senior financial consultant in his dream city of San Diego. He writes, “Without a doubt my education at UNO helped me get to where I am today.”

MICHAEL WHEELDON (BS) writes, “When I saw that the next issue of UNO Magazine had a theme of animals, I just absolutely had to send my class note in, especially since I spent lots of time around animals and researching behavior in my neuroscience and philosophy undergraduate programs. In my senior year, I had the amazing privilege to start research through a service learning project for my Animal Behavior and Lab coursework. Some fellow undergrads and I got to research the Borean Orangutan (Pongo Pygmaeus) and Siamang (Symphalangus Syndactylus) in captivity at Omaha’s Henry Doorly Zoo & Aquarium. After I became fascinated with the apes and monkeys, I volunteered as an intern at the Omaha Henry Doorly Zoo & Aquarium and picked up poop for free. Caring for the apes and learning about the workforce gave me valuable lessons for the rest of my life: show up, work hard and amazing things will happen. People who work at zoos are not recognized enough for all the hard work that they do behind the scenes. After I finished my time interning, I started working as a lab technician at Phibro Animal Health Corporation; at the time it was called MVP Laboratories (founded by 1976 UNO graduate Mary Lou Chapek). It was a small business that made quality veterinary vaccine products. Doing this work provided farmers with vaccines that protected their herds from an outbreak of certain diseases. It was incredible to see and learn the science and the creative process behind vaccine development. It’s my goal in life to keep learning about the human mind and try to figure out consciousness, research and care for animals as well as our fellow humans, and inspire people all over to create a world that people actually want to live in and care for. For now, this planet and the creatures on it, are all we have.” mwheeldon@unomaha.edu

JUDITH OBODOUGO (BGS) recently published “God’s Got Your Back.” She writes, “If you think your world has ended or that God has abandoned you, think again. No matter your predicament, there’s always a way out. The 10 steps outlined in this book, help you find a way out of difficult situations.” jobodougo@unomaha.edu

CHRISTINA CANIGLIA-NELSON (BGS) writes, “I work at the Rose Blumkin Jewish Home as their activity coordinator. It’s such a rewarding career of creating experiences for our residents. I’m also working towards my master’s degree in gerontology; it’s a very exciting time for this field! My pets are my hens — I’ve been a backyard chicken farmer for five years. They produce the best eggs for my family and they are fun to watch roaming around our yard.” caniglianelson@gmail.com

JESSICA YRKOSKI HILT (BS) writes, “My husband, ADAM HILT (2013) and I are both UNO grads, both from the College of Communication, Fine Arts & Media. We got married in October 2018 and we also both work at UNO. He works in the School of Music and I work in University Communications. Both of Adam’s parents have worked at UNO; his Dad is still here as CFAM dean. You can say Mavericks definitely run in the family! We are the proud parents of a cat we lovingly call ‘Kitty’ and a Chihuahua/rat-terrier mix whose name is ‘Burrito.’ jyrkoski@unomaha.edu

PHILIP WIER (BS) and JULIO GUERRERO (BS) are in the same class of the EuroNato Joint Jet Pilot Training program at Sheppard AFB in Texas. By October they were halfway toward earning their wings in March 2020. Both earned degrees in aviation at UNO.

LEAH HARMS (MS) is a provisionally licensed mental health practitioner and alcohol and drug counselor. Harms has accepted a therapist position at Midwest Regional Health Services in Omaha after working at CenterPointe in the Adult Residential treatment program. Harms writes, “I’m excited to grow roots in Omaha!” lharms@unomaha.edu
SARAH ALE桑ANDRA O’BRIEN (MFA) writes, “My debut poetry book, ‘Shapeshifter,’ is out now! Thank you to the UNO MFA program!” sarahalesandraobrien@gmail.com

EMILY PALESTINO (BSBA) adopted a new member of the family, Bud, a 2-year old Siamese cat “whose hobbies include darting around the house at all hours of the day, digging up plants, and going on walks. I love this perfect kitty, cross-eyes and all.” epalestino@unomaha.edu

TAYLOR GEHRINGER (PH. D.) is an organizational effectiveness consultant working alongside fellow UNO alumni at Category One Consulting. She cheers on the Mavs with three wild animals: her husband, Joel (campus director of marketing and annual campaigns for the University of Nebraska Foundation), Newman, and Stevie (counterclockwise from top left).

JACY SPARANO (BS) writes, “I got placed at Bellevue East High School as my final clinical rotation of my undergrad career during the fall of 2018. After completing my time at Bellevue East I asked to stay for my internship, which my preceptor so kindly agreed to. After passing my boards I bypassed a grad assistant position in Kansas in hopes of being hired at the high school I fell in love with. As of Sept. 25, I can proudly say I work at Bellevue East High School as the assistant athletic trainer. Currently, I’m not planning on going to grad school, although I have looked into either getting my teaching certificate or my EMT-P in the near future. The photo is of myself and my Lab and American Bull dog mix, Waylon, also known as Whales, who I rescued this past July after he was rescued from an abusive household. He brings so much joy into my life and has helped with the struggle of losing my grandmother. I hope all is well with everyone, Go Mavs!” jacysparano@unomah.edu

CHARLOTTE REILLY (BS) was accepted into the Peace Corps and is now working in Zambia, where she will live and work for two years with the local people. Reilly will work in cooperation with the local people and partner organizations on sustainable, community-based development projects. She joins 38 Nebraska residents currently serving in the Peace Corps and more than 1,478 Nebraska residents who have served in the Peace Corps since 1961. Prior to joining the Peace Corps, she volunteered with Habitat for Humanity, the Hitchcock Nature Center, and St. Philip Neri Parish. She is the daughter of UNO School of Communication Director Hugh (1978) and Deanna Reilly.
Since 1991, the UNO Alumni Association has given more than 2,000 free shirts and bibs to the children and grandchildren of UNO graduates.

Get YOUR child a new O BABY! shirt today — submit a birth announcement within 1 year of birth. Complete the form at unoalumni.org/futurealums.

Henry Robert Hassenstab, son of Emily (staff) and BRENT (‘12; ‘14) HASSENSTAB of Omaha and grandson of ROBERT HARDT (‘75) of Overland Park, Kansas
Jetson David Talmadge, son of Justin and KATIE (LIEBMANN, ’05) Talmadge of Stoughton, Wisconsin
Elijah Michael Curry, grandson of CATHERINE (ENOVISO, ’11) CURRY of Bellevue, Nebraska.
Emilia Grace Wyler, daughter of Eric and LINDSY (’12, ’15) WYLER of Omaha.
Ryley Elias Rogaczewski, grandson of DAWN SCHUMACHER (’06) of Bellevue, Nebraska
Luke Steven Theisen, son of Rachel and MARK S. (’17) THEISEN of Omaha
Beckett Ryker Duncan, son of Josh and SHELBY (CHARF, ’17) DUNCAN of Omaha.
LouAnn Jooska Nikole Beito, granddaughter of RANAE ASPEN (’91) of Moorhead, Minnesota
Brooklyn Rae Baxter, daughter of Janet (Baude, ’13) and MATTHEW (’10) BAXTER of Denver, Colorado
Edison Taylor Kipp, son of Elliott and JENNIFER (’07) KOPANIC of Spring Lake, North Carolina.
Samson Bernard Asche, son of WHITNEY (SCHNOES, ’09) and JUSTIN (’08) ASCHE of West Point, Nebraska
Mara Joy Roberts, daughter of SARAH (ALMQUIST, ’06; ’16) and GORDON (’13) ROBERTS of Nebraska City, Nebraska
Miles William Rozmajzl, son of KATHERINE (LIEBENTRITT, ’99) and TIMOTHY (’97) ROZMAJZL of Omaha
Miles Joseph Johnsen, son of MANDY (ZITTRITSCH, ’11) and NATE (’11) JOHNSON of Omaha
Wren Olivia Carter, daughter of PENNY AND ANDREW (’07) CARTER of Superior, Nebraska
Simon Boesch, son of Brandon Boesch and MICHAELA SCHENKELBERG (’11) of Omaha
Rory Declan McQuillan, son of Cara and RYAN (’09) MCQUILLAN of Omaha
Reagan Finley Pontiero, daughter of Elace and ANTHONY (’12) PONTIERO of Omaha
Willow Estelle Forrest, daughter of Sunny (Mihlan, ’06) and KEVIN (’07) FORREST of Grand Island, Nebraska and granddaughter of CHARLES FORREST (’71) of Omaha.
William Jacob Forrest, son of Rachel and ERIC (’06; ’13) FORREST of Omaha and grandson of CHARLES FORREST (’71) of Omaha.
Maren Elizabeth Sheeley, daughter of Wesley and ELIZABETH (BElew, ’08) SHEELEY of Elkhorn, Nebraska
Sloane Elizabeth Nieland, daughter of KELLYN (KRAMOLISCH, ’07) and GRANT (’09) NIELAND of Omaha
Mason Thomas Osterloh, son of ELIZABETH (MACH, ’13) and CHRISTOPHER (’12) OSTERLOH of Omaha
Everett Matthew Prothman, son of STEPHANIE (PITHART, ’06; ’08) and SCOTT (’07) PROTHMAN of Aurora, Colorado
Coraline Bugjo and Grayson Bugjo, daughter and son of Aaron and KELSEY (ARCHER, ’04;’18) BUGJO of Omaha
Samuel Zachary Bass, son of ERIN (LONGFIELD, ’06; ’10) and Zach (’02) Bass of Papillion, Nebraska
Dellah Jean Mucha, daughter of Stephen and REBECCA (BLOEMER, ’19) MUCHA of Council Bluffs, Iowa
Gwyndolen Josephine Weir, daughter of SARAH (HURT, ’06) and JOSHUA (’03) Weir of Omaha and granddaughter of ELIZABETH (BREEDING, ’71) HURT and FRANK HURT (’72; deceased) of Bellevue, Nebraska.
Kellan Emric Cole, son of Amber and MATT (’03) COLE of Fort Calhoun, Nebraska
Finnian Adam Birlney, son of Adam and SUZANNE (CLABAUGH, ’04;’07) BIRNLEY of Council Bluffs, Iowa.
Maxwell Jerome Larsen, son of DALE (FACULTY) and STEPHANIE (BONNETT, ’10) LARSEN of Underwood, Iowa.
Noah Christopher Schuler, son of Christopher and ELIZABETH (KEenan, ’13;’14) SCHULER of Omaha
Darin Lee Brooks, son of Kayla and DEREK (’15; ’16) BROOKS of Omaha
Wyatt Newcomer, son of Russ and DIANE (’14) NEWCOMER of Omaha
Isabel Rose Parvanehgoohar, daughter of MARIA (MORAGUES, ’15) and ARRASH (’17) PARVAKEHGOAH of Omaha and granddaughter of KATHY (KNOX, ’85) and DWIGHT (’92) WININGER of Peoria, Arizona
Charlotte Sue Groeneweg, daughter of Craig and JESSICA (VAN VUREN, ’15) GROENEWEG of Omaha.
A LOOK AT HAPPENINGS ON AND OFF CAMPUS

WAVING THE FLAG IN D.C.

HITTING THE STREETS
Maverick Pride was on display throughout UNO’s Scott Campus and adjoining Aksarben Village during yet another successful homecoming parade in mid-October. The event included a strong alumni presence, the Marching Mavericks, homecoming royalty, campus groups and others taking to the streets.

SISTER TO SISTER
UNO celebrated the 40th anniversary of its sister university partnership with Shizuoka University, gathering alumni for a reception in Tokyo in late October. UNO Chancellor Jeffrey P. Gold, M.D., led a contingent of UNO representatives hosting the event. Guests included Justin Romsa, a 2006 alum from Grand Island who has lived and worked in Japan for nearly a decade and who leads a development team for Amazon in Osaka, Japan. He spent a year abroad in Shizuoka through UNO’s exchange program. See more about the reception at unoalumni.org/japanvisit

THAT EXPERIENCE WAS A REALLY BIG TURNING POINT IN MY LIFE BECAUSE IT MADE ME REALIZE THAT I REALLY ENJOYED ADAPTING TO OTHER CULTURES AND MIXING WITH OTHER PEOPLE
JUSTIN ROMSA (2006)
MAHA AND MAVERICKS

There were plenty of sights and sounds in August as UNO partnered again with the Maha Music Festival, a two-day nonprofit event held in Aksarben Village’s Stinson Park. The stage featured national, regional and local indie artists with plenty of Mavericks in attendance.

ALL A-GLO

Even in the dark, Mavericks shine brightly — at least they did the first week of the fall semester when students came to the Pepbowl for #GLOatUNO featuring glow paint and a live DJ pumping tunes.

GETTING OVER THE HUMP

A camel — and the Maverick statue — helped students get over the hump that is the end of summer and the start of the fall semester during Durango Days, UNO’s official welcome week.

CHANCELLOR INVESTITURE

Among the dignitaries on hand for the Sept. 5 investiture of Chancellor Jeffrey P. Gold, M.D., were Susan Fritz, interim president of the University of Nebraska, and alum Chuck Hagel, former U.S. Secretary of Defense and U.S. senator.

WE ARE A CAMPUS OF MAVERICKS: INDEPENDENT THINKERS WHO ARE WILLING TO CHALLENGE THE STATUS QUO. SIMPLY PUT, OUR UNIVERSITY ISN’T LIKE ANYWHERE ELSE

CHANCELLOR GOLD
Test your brainpower with these puzzles created by UNO graduate Terry Stickels ('76). An author, speaker and puzzle maker, Stickels’ FRAME GAMES is published by USA Weekend magazine and in 600 newspapers.

For more information on Stickels, or to order any of his books, visit www.terrystickels.com

**LANGUAGE - 98**

You may know that dogs are often referred to as canines, cows as bovines and cats as felines ... but almost all animals have similar type classifications to describe them. See if you can match the animals on the left with their respective animal adjective on the right.

| 1) Fox       | a) delphine |
| 2) Moose     | b) leporine |
| 3) Rabbit    | c) lupine   |
| 4) Wolf      | d) vulpine  |
| 5) Dolphin   | e) ovine    |
| 6) Leopard   | f) pardine  |
| 7) Sheep     | g) cervine  |

**KNOWLEDGE - 169**

Finding group names of animals and insects can prove to be fun because of some of the strange names associated with animals. Most have heard of a pride of lions and a plague of locusts. Now test your knowledge with the following by matching the animals on the left with their respective group name.

| 1) Coyotes    | a) Shiver    |
| 2) Eagles     | b) Rhumba    |
| 3) Rattlesnakes| c) Ambush    |
| 4) Sharks     | d) Band      |
| 5) Tigers     | e) Float     |
| 6) Crocodiles | f) Convocation|
| 7) Turtles    | g) Bale      |

**ANSWERS**

1-d; 2-g; 3-b; 4-c; 5-a; 6-f; 7-e
TODAY IS THE DAY I GIVE MYSELF THE ADVANTAGE.

**Everett Levison, Graduate**  
Critical & Creative Thinking, MA  
University of Nebraska at Omaha

My today started when I discovered a program that not only fit into my lifestyle but also offered me the opportunity to have a concentration in my field of interest while still offering an interdisciplinary experience. The Master of Arts in Critical and Creative Thinking program offered by the University of Nebraska at Omaha has enabled me to focus on the environment and health but still draw and conduct research from a broad range of fields. One of the biggest advantages for me has been that I can do all of this while still working and traveling abroad because of the completely online format.

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