"The Obama family is atypical in that they’re the first family in the White House in recent years to have a grandmother as a caregiver to the grandchildren. Grandmother caregiving is a tradition used across social classes and circumstances in African American communities, yet the common assumption is that something has to be wrong if the grandmother is there. It’s called ‘kinship care’ in the public child welfare system, but another term, ‘grand family,’ is relatively new.”

—Priscilla Gibson, social work professor in the U of M’s College of Education and Human Development and recipient of the Josie R. Johnson Human Rights and Social Justice Award
It isn’t easy to juggle classes, swimming, and other activities, but Gopher swimmer Ben Bravence, ’16, enjoys his busy schedule. “If you’re really passionate about something, you always find the time,” he says. See story on page 18.

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The popular Honeycrisp apple, bred by U of M scientists, was named Minnesota’s state fruit in 2006.

Photo: David Hansen
See story on page 12
Ony Mgbeahurike

Ony Mgbeahurike, who graduated in 2013 with a degree in applied science, is an international success story. Born in Nigeria, he immigrated to Minnesota at age 12. By the time he enrolled at the U, he knew he wanted to focus on manufacturing because, he says, “It is the heart of the American economy.”

He found his academic niche in the College of Continuing Education’s Manufacturing Operations Management Program and became a student leader. The Nolte-Miller Scholarship came at a time when he was deeply involved in professional networking through career fairs and corporate visits—activities that led to his first position at General Mills. “I worried less about funding tuition, so I was able to mentally prepare.”

Now an international logistics operations planner with General Mills, he also volunteers with Partners in Food Solutions (a nonprofit that links the expertise of food companies with food processors and millers in the developing world) and is a supply chain consultant to Tomato Jos, which makes tomato production a sustainable, profitable business for farmers in Nigeria. He’s professional chapter president of the National Society of Black Engineers, Twin Cities.

“My ultimate goal is to be able to make a difference and touch lives through leadership,” says Mgbeahurike.

Meet Travis Crego, ’16

Major:
Communication, media, and rhetoric. “The idea of getting paid to talk rather than to physically work was fascinating to me.”

Best experience at U of M Morris:
The Gateway program, a four-week learning experience that introduces students to college life before classes begin freshman year; later served as a peer mentor for the program

Scholarships:
Shakopee Mdewakanton Sioux Community Endowed Scholarship, Fond du Lac American Indian Scholarship

Clubs and activities:
Anime club, Nordic Ski Club, Big Friend Little Friend, Morris College Success Program, Community Advisors, Dance Ensemble

Favorite class:
Introduction to geology. “Professor James Cotter was as hilarious as he was informative.”

After graduation:
Move to Minneapolis and search for a job involving event planning and/or media

Most rewarding experience at the U?
The human rights and advocacy internships that I had. Every day I was learning something new and working toward helping an individual or a community.

Favorite class?
Human Rights Law. I was so interested in the topic that I read the giant law book for fun sometimes.

How did scholarships help?
Scholarship support allowed me to grasp every opportunity, to be involved on campus and in the community, and to begin my career. It’s an incredible feeling to have that financial and moral support and the opportunity to follow my dreams.

To find out what Madole and other BURST students learned from the program, watch a short video at give.umn.edu/legacy.
RECENT GIFTS

Giving gladly

“Giving back keeps the world moving,” says E. Dennis Zahrbock, ’69 B.A., of the scholarship he and his wife, Sue, ’71 B.A., established at the University of Minnesota Morris (UMM). “If it hadn’t been for UMM, I never would have met Sue, received an education, or gone into forensic services.”

The newly established E. Dennis and Susan A. Zahrbock Scholarship provides financial support to UMM students entering their senior year in business management or elementary education. “We wanted to extend a little boost and help alleviate students’ debt load,” says Sue, who taught nursery school and was a substitute teacher.

This isn’t the first time the Zahrbocks have offered students financial support. In 1980, they gave UMM two insurance policies that are now fully funded. Scholarships are awarded annually from those commitments.

The couple hopes their scholarship recipients will give back to UMM one day, in thanks for the support they’ve received. “Our philosophy is to encourage the spirit of giving,” says Sue.

True calling

Paul Gannon, ’61 M.S., ’71 Ph.D., spent over a year doing general surgery after completing his residency at the Mayo Clinic in the early 1960s, but wanted more. That’s when he discovered his true calling. He did a cardiothoracic surgery fellowship at the University of Minnesota and went on to become a prominent cardiovascular surgeon. He also started both the Twin City Thoracic and Cardiovascular Surgical Society and International Heart Relief.

Now retired from surgery, Gannon, 87, continues to share his expertise through consulting work. In 2013, he published a book, Minnesota’s Contribution to Open Heart Surgery.

Gannon is now being celebrated through an annual Lillehei Heart Institute lectureship established by his son, James, ’81 B.S., ’86 M.D., and daughter-in-law, Tracy, ’83 B.S., ’87 M.D., with a gift to the University of Minnesota Morris. “My dad was big on education,” says Andreas. “Giving back keeps the world moving,” says E. Dennis Zahrbock, ’69 B.A., of the scholarship he and his wife, Sue, ’71 B.A., established at the University of Minnesota Morris (UMM). “If it hadn’t been for UMM, I never would have met Sue, received an education, or gone into forensic services.”

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Paul Gannon

Support for the arts

Andreas and Elisabeth Rosenberg inspired scores of students during their long and storied academic careers. Though Elisabeth passed away at age 86 this past September, the couple’s passion for education will continue to burn bright in the lives of those they’ve supported.

The couple met and married in Sweden in 1954, after Andreas fled his native Estonia to escape the Russians during World War II. They moved to Minnesota in 1964. Andreas was a distinguished researcher and professor of laboratory medicine, pathology, biochemistry, and biophysics at the University of Minnesota for 36 years. Elisabeth taught English as a second language at Normandale Community College. After retiring in 2000, both went on to captureivate members of the U’s Other Lifelong Learning Institute with their engaging courses.

In addition to giving generously of their time, the Rosenbergs created new learning opportunities with gifts and pledges of more than $95,000 to the University for theatre and dance scholarships and programs.

“We love how language, literature, and the arts open the mind and wanted our gifts to support that,” says Andreas.

State-of-the-art storage

When it comes to the arts, Susan and Rob White are equal opportunity enthusiasts. Both are involved in the Walker Art Center, where Susan is a trustee. Susan has also served as president of the Print and Drawing Curatorial Council at the Minneapolis Institute of Arts and as a board member of the Midwest Art Conservation Center.

So when Susan and Rob, ’77 M.B.A., learned the Weisman Art Museum (WAM) needed a way to store its considerable assets, they acted swiftly—twice. When WAM opened in 1993, they provided all of the art storage shelving through Rob’s company, Steel King Industries Inc. In 2015, they repeated that gift for WAM’s new offsite storage area. Both projects received expert planning from Richard Fox of RMH Systems, a Steel King Industries distributor. This is in addition to the generous support the couple has provided for WAM’s annual fund and capital campaigns, as well as gifts of artwork.

On a mission

A passion for education and service has always propelled Norma Baker, ’50 M.Ed. She taught middle and high school for 20 years, led cohorts of students around the globe through the People to People Student Ambassador Program, earned a graduate degree, and started doing missionary work through her church, all while raising two daughters with her husband, Roy.

Now retired, Baker has made numerous trips to Africa, Central America, and Haiti, many with Roy, and more in the offing. “I’m a hands-on person,” she says.

Baker credits her mother, also a University of Minnesota graduate, for instilling a love of learning and pursuing dreams. After she died, the Bakers started in the U’s lab,” says Andreas.

“Future geotechnical engineers need the same—a place to do soils lab renovation. “My career provided geotechnical services for so many U facilities that it’s easier to say which ones I haven’t worked on.” In fact, some at the U have encouraged Heuer to write a book about soils on campus after he retires.

State-of-the-art storage

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...
For the Zachs and the Karens
U researchers identify potential proteins to target in bone cancer treatment

For Masonic Cancer Center scientists Branden Moriarity and David Largaespada, it’s about the Wyckoffs, the Sobiechs, and thousands of other families who are all too familiar with osteosarcoma and its devastating effects.

These families fuel the researchers’ passion to cure this often deadly form of bone cancer. And they recently got a little closer to that goal.

A new mouse model developed at the Masonic Cancer Center has revealed the genes and pathways that, when altered, can cause osteosarcoma. The information could be used to improve treatments for future patients.

Their discoveries were published in the respected journal Nature Genetics in May.

“Human osteosarcoma tumors are so genetically disordered that it’s nearly impossible to utilize the usual methods to identify the genes associated with them,” says Moriarity, an assistant professor in the University Department of Pediatrics. “This model offers the first opportunity to identify and understand the genetic drivers of osteosarcoma on a broad scale.”

The research was funded by the Karen Wyckoff Rein in Sarcoma Foundation and the Zach Sobiec Osteosarcoma Fund of the Children’s Cancer Research Fund, as well as the National Cancer Institute and American Cancer Society.

“Philanthropy played a major role in helping us to establish the mouse model we used,” says Largaespada, a professor in the Department of Genetics, Cell Biology, and Development. “Moreover, we used philanthropy to study specific osteosarcoma genes further. Without these funds, we could not have gone as fast or as far in this work, perhaps delaying delivery of new cures to patients.”

The scientists’ genomic analysis uncovered several osteosarcoma genes that make proteins that could be targets for therapies in the future. They found that the genes SEMA4D and SEMA6D were expressed at high levels in more than half of all human osteosarcomas.

“SEMA4D seems to cause many human osteosarcomas to grow out of control,” says Largaespada. Inhibiting the expression of that gene could help stop the growth of osteosarcoma.

The U of M team’s progress brings hope to many who have seen this “horrible, ugly disease” firsthand, says Laura Sobiech, whose son Zach died of osteosarcoma in 2013.

“They are the superstars that nobody knows,” she says of the researchers. “They are in this for reasons that go so far beyond just recognition. They truly care about these kids. I have hope now, and it’s because of that team.”

Pete Wyckoff, whose daughter, Karen, died of sarcoma in 2001, agrees that it’s easy to support this team of “bright, committed researchers” who have their hearts in the right place.

“We’re very proud that we were in on the ground floor to help make this idea happen,” he says. —Nicole Endres

Northrop organ comes home
Thanks to an estate gift, one of the University’s hidden treasures will get a second life

Back in 2011, in preparation for the renovation of Northrop, a team of experts arrived on campus to preserve one of the University’s hidden treasures: its magnificent pipe organ. They removed and packed all 7,068 pipes (ranging from metal pipes the size of a pencil to 32-foot-long wooden pipes) and loaded them into four semi-trailers for their journey to local climate-controlled storage.

Now, thanks to an estate gift from alumnus Roger E. Anderson (see sidebar) and $600,000 raised by the Friends of the Northrop Organ, the instrument is being prepared for its homecoming in 2018.

Generations of alumni remember the organ console rising from the orchestra pit at commencement. Most were unaware of the thousands of pipes hidden above the stage, and few knew that the organ—funded by alumni and built for the University by Aeolian-Skinner Company in 1932—was (and is) one of only a few of its kind at U.S. universities.

Early on, the organ was played at concerts, convocations, baccalaureates, and other ceremonies. In the 1960s, however, elimination of many such ceremonies, changing musical tastes, and an auditorium renovation that affected the organ’s sound led to less frequent use.

Dean Billmeyer, University organist and professor, describes the organ’s sound as velvety, voluptuous, silky, and very grand. “Even though the acoustics of the old auditorium were kind of muffled, you could still hear those qualities.”

The recent building renovation included acoustic improvements and the addition of an air room to deliver air through 5,000 feet of galvanized steel ductwork to the pipes.

After a 30-month renovation in Connecticut, each pipe will be tuned on-site. Beginning in fall 2018, visitors will once again hear the organ in concerts by the University orchestra, student ensembles, and visiting artists.

The Minnesota Orchestra hopes to present several organ-centric concerts at Northrop each year. —Kara Rose

Enriching our quality of life
This spring, U of M President Eric Kaler announced a $4 million estate gift from the late Roger Anderson, ’47 B.S., ’52 M.D., whose previous gifts to the U included two endowed professorships to advance research related to veterans and combat medics.

In addition to funding the renovation of Northrop’s organ, the current gift will support construction of the new Bell Museum on the St. Paul campus. It will also allow the U’s Weisman Art Museum to endow a director of creative collaboration for the Target Studio.

“The University is central to preparing the talent force and infrastructure for our state’s arts and cultural communities,” said Kaler in announcing the gift. “Those who love the arts and natural history understand our role, and their engagement via philanthropy is key to the future of the University.”
Work matters

A University professor asks what makes us happy in our jobs—and comes up with some surprising answers

Would the best job ever leave you plenty of time to do some online shopping and see what friends are posting on Facebook?

If you’re thinking, “Yes!” you may be wrong. In fact, says Theresa Glomb, a professor of organizational behavior in the U of M’s Carlson School of Management, when people are asked what makes them feel good about their jobs, they resoundingly report that they’re happier at work when they are productive and making meaningful progress on tasks.

Glomb, who holds a newly endowed chair funded by The Toro Company—David M. Lilly Chair to honor longtime Toro CEO David Lilly, has spent two decades studying what it takes to create a positive experience at work. During her research, workers’ moods several times a day in her research. To make work better, people need to reorient their thinking to also focus on the positive things that happen on the job.

Doing that is easier than it might seem. Glomb’s studies have shown that small mental shifts can make a big difference. “While at work, give yourself a break from interruptions and doing, doing, doing and just be fully present,” she suggests. “Walk calmly to a meeting or take a minute to reflect on what’s next.”

At the end of the day, take a few minutes to pause and reflect on three good things that happened—for example, a good conversation, a compliment, or the completion of a project.

“People want to feel good about work,” Glomb says, “and I tell them, ‘You’re probably always thinking about getting a good job. But have you ever thought about making your job good?’”

“In our research, workers always say what makes people feel satisfied at their jobs, they want to feel like they’re getting something back,” says Glomb, who tests negative stuff,” says Glomb, who tests the worker’s perspective,” says Glomb.

Among the many things Glomb has learned, the most consistent finding has been that as much as everyone likes to bash work, people are mostly in good moods on the job. “A lot of good things happen to us when we’re at work, but we tend to remember the negative stuff,” Glomb.

To watch Glomb’s recent TEDx talk, visit give.umn.edu/legacy

There’s an app for that, too

New technology helps kids and families prepare for their time at U of M Masonic Children’s Hospital

It happened more often than you would think, say University of Minnesota Masonic Children’s Hospital Child-Family Life staff members Amy Feeder and Aimee Nelson. They’d sit down with children who’d arrived at the hospital for surgery that day, but the children didn’t know why they were there.

There was usually a simple explanation. “Parents often don’t know what to say,” Nelson says. They’re not sure how to talk with their kids about the sensitive topic, and they don’t want to scare the children.

On the contrary, some kids really benefit from mentally preparing for their hospital experience, says Feeder, and they worry less when they know what to expect. “They come through that door, and anxiety is already high,” she says. “How can we better prepare kids for what they’re going to experience? What tools can we put in the hands of our parents and caregivers to help them prepare children?”

That’s when Nelson saw the light bulb. What if there were an app that could help children and families become familiar with the hospital before they arrived and provide practical, age-appropriate information about what they’d experience there?

In March, the Child-Family Life team, led by Nelson and Feeder, launched the Passport to UMMC, designed to do just that. It includes virtual tours of every space in the hospital, from patient rooms to the cafeteria and gift shop; kid-friendly descriptions of nine common procedures; a list of what to bring to the hospital; and, most important, language for parents to use to help their children understand what they’ll be going through.

So far the free app, which is available in five languages, has been downloaded more than 350 times and used about 1,200 times. Feeder and Nelson say they’ve had a lot of positive feedback from kids, families, and caregivers alike. But the most enthusiastic are the parents.

“They’re usually just blown away,” Feeder says.

Philanthropy, along with perseverance, made it all happen. The project was funded by proceeds from 2013’s Wine Women & Shoes event, donated expertise from app consultant Ackmann & Dickinson and Jim Bovin Photography, and other gifts.

Feeder and Nelson are already working on the next phase of the app, which will incorporate an interactive scavenger hunt into the virtual tours of each hospital floor.

“It’s a really cool way for us to involve physical therapy and get kids out of bed,” says Nelson. “So it’s therapeutic as well.”

From left: Toro chairman and CEO Michael J. Hoffman, The Toro Company-David M. Lilly Chair Theresa Glomb, Carlson School dean Sri Zaheer, U of M president Eric Kaler

chip Family Life specialists Aimee Nelson and Amy Feeder

PHOTOS: COURTESY CARLSON SCHOOL OF MANAGEMENT (LEFT), JIM BOVIN (RIGHT)

Nicole Endres
Gifts at work: Itasca Biological Station and Laboratories

Just a short canoe paddle away from the headwaters of the Mississippi River in northern Minnesota, the U of M’s Itasca Biological Station and Laboratories has served as an outdoor classroom for faculty, students, and visiting scientists for more than a century. This year, thanks to $4.1 million from the Minnesota Legislature and $1.6 million from donors, the station began a new era of education and research with the construction of a 12,000-square-foot campus center.

Robin Wright, senior associate dean for undergraduate initiatives in the College of Biological Sciences, heads up Nature of Life, an immersion program for incoming freshmen. Gifts from donors help fund equipment and supplies.

A six-volume set of rare books by explorer Henry Schoolcraft is a gift from former WCCO news anchor Don Shelby. Schoolcraft is best known for his 1832 discovery of the Mississippi River headwaters with the help of an Ojibwe guide.

Thanks to the Denneth and Joan Dvergsten Itasca Summer Award, senior Libby Schmidtman took a summer class at Itasca in which she studied ants, observed red-winged blackbirds from a canoe, and looked for mammals in the woods.

“We have a very devoted group of people who look into the future and want to protect this planet,” says David Biesboer, Itasca director for the past 15 years, about donors who supported the new campus center.

With a library and a computer lab, the light-filled Robert and Roberta Megard Thinking and Writing Room (on the other side of this window) is a comfortable spot for visitors to reflect on their Itasca experience.

“It’s expensive to be here and get this experience,” says junior Ellen Wiederhoeft. The Itasca Directors Scholarship allowed her to spend part of the summer studying whether brain parasites make fathead minnows roam further.

See an interactive version of this photo at give.umn.edu.
From the Haralson’s release in 1922 to the Honeycrisp hybrids of recent years, University of Minnesota apples are hand-picked for success

By Eve Daniels

Next time you take a bite of an apple, pay attention to the eating experience. For most of us, just a few words—crisp, juicy, sweet, tart—capture the gist of it. But for Jim Luby, those descriptors are only skin deep.

“When we evaluate a new apple, we consider about 30 or 40 different traits,” says Luby, the horticulture professor who runs the University of Minnesota’s fruit breeding program. “First, it has to have the right texture and flavor. Then there’s the appearance—the color, whether the skin might russet or crack. We’re also looking at its resistance to disease, its productivity, how well it stores…”

The list goes on, so when an apple meets all the criteria, it’s nothing short of a phenomenon.

“We’ve selected close to a dozen this year already, and most likely none of them will make it,” says Luby. “But every once in a while you get one and you think, ‘Wow, this one has a really good chance.’”

Worth the wait
Since the fruit-breeding program’s inception in 1908, the U of M has commercialized 26 apple varieties. That number might sound modest, but not when you consider that each one took about 15 years to develop.

The process starts with crossbreeding in the spring, when University researchers act as human bees, hand-pollinating 10,000 to 12,000 flowers to get 3,000 to 6,000 seeds from the resulting fruit. Over the winter, they start those seeds in greenhouses, then plant the seedlings in the orchards the next spring. They wait about five to eight years for the young trees to flower.

From mid-August through mid-October, Luby and his fellow research scientist, David Bedford, taste thousands of apples. Of those, they select just one in every 200 seedlings for further testing. They clone, grow, and test these selections for another three to five years.

Finally, the chosen few are commercialized and licensed to growers across the globe, including orchards in Canada, Chile, France, New Zealand, and South Africa.

The newest arrival
This fall, growers began ordering trees for the University’s newest apple, dubbed “MN55” until it gets a more appealing name.

Luby says the apple naming process is a bit like naming a baby, except harder: “Usually you have several people sitting around the table, and someone says, ‘This apple is sweet and tart, how about SweeTart? Oh wait, that’s a candy.’ When you have a kid, it’s OK to give them the same name as someone else. But in a supermarket, it has to have a unique name that doesn’t infringe on other trademarks.”

Following the wildly popular Honeycrisp, declared the Minnesota State Fruit in 2006, other recent University varieties like SnowSweet, SweeTango, and Frostone are growing in popularity. And each cold-hardy apple adds some much-needed crunch to the produce aisle.

A cross between Honeycrisp and a native Arkansas apple, MN55 will pack the same flavorful crunch as the Honeycrisp but can be harvested a month earlier, around late August.

Apple futures
Generous donors, along with grants and royalties, are helping secure a bright future for the program. Most recently, the University established the Luby Family Honeycrisp Chair for Fruit Crop Innovation, thanks to a generous pledge from Luby’s parents, Margaret and Patrick.

The gift reflects the family’s shared interests in food and agriculture. Luby’s mom is a retired dietician, and his dad a retired agricultural economist, and his wife, Emily Hoover, a fellow horticulture professor at the University.

“We have been blessed in many ways, and we wanted to share,” says Margaret. “This seemed like a natural place to do it because of the University’s history in this field and Jim’s involvement.”

Today, Luby estimates that Minnesota apple growers produce about half a million bushels of apples each year, with an average value of $40 per bushel. That’s around $20 million generated from the crop itself, plus related tourism and product revenue. And, of course, there are plenty of health benefits.

“Kale is very good for you, but let’s face it, most people don’t enjoy eating the raw foliage,” says Luby. “With an apple, you have that instant delight factor, and you don’t have to dress it up.”

Eve Daniels is a Minneapolis-based writer, editor, and video producer.

To learn more about U of M apples, visit apples.umn.edu.

A cold-hardy toast
On its own, the humble wine grape isn’t worth too much. But turn it into a nice bottle of red or white, and you have a real return on investment.

The wine industry contributed nearly $60 million to Minnesota’s economy in 2011. On a national level, the impact of the cold-climate wine industry exceeds $400 million.

The force behind these numbers is the University of Minnesota, home to one of the top wine grape programs in the country, complete with a high-tech enology lab and research winery. On the whole, cold-climate grape growing is based primarily on four varietals developed at the University—Frontenac, Frontenac Gris, La Crescent, and Marquette.

These hardy grapes grow in places where winter temperatures regularly drop below 20°F. So if you get a chance to enjoy some local wine this holiday season, be sure to raise a glass to the U.
Carol Cardona knows that if you want to get answers to the most vexing problems in bird health, you can’t be afraid to get dirty. When a deadly avian influenza virus infected and killed millions of chickens and turkeys at more than 100 commercial farms in Minnesota this spring, Cardona, the University of Minnesota’s Pomeroy Chair in Avian Health, headed straight to the farms experiencing the problems.

She and other researchers collected water samples, swabbed dust from fan blades and mouse bait stations, and even gathered the litter that stuck to the cloth booties they wore into the barns. They then took these samples back to the lab and tested them to find clues about the way the virus was spreading. “For example, finding the virus on the fan blades might mean it came in through air vents, while finding it near bait stations might mean mice were involved,” she says.

In this case, the answer was more complicated: the cases were so spread out geographically that they seemed unrelated. In the end, Cardona and other researchers found no single smoking gun, though some speculate the disease was carried in the feces of wild waterfowl as they migrated north.

What Cardona did know was that the virus’ miniscule “infectious dose” meant that any tiny weakness that the virus was able to exploit—heavy winds that blew dust and debris into the barns, for example—could lead to the infection of the birds, with a brutal 100 percent mortality rate.

But thanks to the work of industry and experts, the outbreak was ultimately brought under control, and a new case hasn’t been seen nationwide since June. Cardona and her colleagues have also learned key lessons that are helping them prepare for the fall season, when avian influenza picks up again. “For a long time, we have believed that the most important thing was to prevent infection spreading from your neighbor,” she says. “That’s still important, but it’s also important to stop primary introductions of the disease—which we used to think were very rare.”

Cardona and her colleagues have worked with government and industry partners, including Minnesota’s Board of Animal Health and Department of Agriculture, to develop better systems to react quickly to prevent major outbreaks like this again.

“The University of Minnesota isn’t a response agency, but we helped pull people together who needed to talk, made sure we had a good strategy, and supported good science,” she says. Cardona was also a go-to source for local media during the white-hot center of the crisis.

For Cardona, support through an endowed chair allows her to focus on doing her best work: pursuing both traditional fieldwork and unconventional ideas that may help prevent or control future outbreaks. “Because of this funding, I don’t have to do the work of seeking grants to support my own salary,” she says.

The support has also made it easier for Cardona to hire graduate researchers—she currently has two—to assist her with her own work and pursue new ideas. Cassie (Xi) Guo, a Ph.D. candidate, for example, has been working with turkey company veterinarians to study how weather patterns affect the spring introductions of avian influenza in Minnesota turkeys. Guo, a recipient of the Pomeroy Legacy Scholarship, says she’s grateful for the funding. “It provides me the opportunity to do research without worrying about the financial burden,” she says.

While this spring’s avian influenza outbreak was stressful and financially difficult for poultry producers, the good news is that there is no correlation between the strength of one season’s virus and the next—so for now, Thanksgiving lovers don’t need to worry about their traditional turkey feast being affected. “I can’t speculate for the whole country,” says Cardona, “but I would say that I’m definitely planning to have my turkey for Thanksgiving, and I’m planning to have a big one.”

Erin Peterson is a freelance writer in Minneapolis.

Learn more about avian influenza at extension.umn.edu/agriculture/poultry.
When Wendy Wells met University of Minnesota psychiatry professor Kelvin O. Lim at an event in 2007, she had never invested in mental health research and wasn’t quite sure how it would work. But as she listened to Lim describe his project—using magnetic resonance imaging to look at addicts’ brains—she got excited.

“I come from a family that, through four generations, has battled mental illness and addiction,” says Wells. “I’ve always felt this was an area that’s underfunded, and the illnesses still suffer so much stigma. So I knew it was time to pitch in.”

Wells, whose two siblings died from addiction-related causes, is now “all in” on supporting mental health research. Through the Wells Family Fund at the Minneapolis Foundation and her own nonprofit organization, the Isora Foundation, she devotes both time and dollars to the cause.

“I come from a family that, like Wells is also critical to success, says Lim. “Making connections with people who are able to stay abstinent? The drum-roll moment came just this past summer, when Lim was notified that his successful pilot study—which had earned him a $2.6 million grant from the National Institute on Drug Abuse (NIDA) to delve deeper.

When I was informed this summer that our initial donation funded work that led to this multimillion dollar grant, I was literally jumping up and down,” says Wells. “It was so thrilling!”

Inside the addict’s brain
Lim, who holds the Drs. T.J. and Ella M. Arneson Land-Grant Chair in Human Behavior, is an engaging, high-energy investigator with a knack for explaining complex neuroscience in simple terms.

“Using the University’s imaging capabilities,” he says, “we wanted to measure the strength of the signal that runs between the brain’s reward center, which is the part that gives addicts such a sense of pleasure, and the prefrontal cortex, the part that says, ‘Hey, slow down, we have to think about this.’”

Lim and his team learned that the stronger the signal was between those two brain centers, the more likely the addict was to remain abstinent; a weaker signal indicated a higher likelihood of relapsing quickly.

Now, with the NIDA grant in hand, Lim is embarking on a five-year study, in partnership with the Hazelden Betty Ford Foundation, that will look at 120 people ages 18 to 45 who are addicted to stimulants like cocaine or methamphetamine. He’ll take images of each person’s brain three times, at five, nine, and 13 weeks into their abstinence.

He’s looking for that marker, that elusive signal, that could allow doctors to one day predict which people in recovery are likely to have the most trouble staying sober.

“That’s the kind of personalized medicine we’re working toward,” says Lim. “If we can predict relapse, then our next step is developing strategies that actually strengthen that brain signal.”

International imaging expertise
One reason Lim came to Minnesota—he joined the faculty in 2001—was the U’s world-renowned Center for Magnetic Resonance Research (CMRR), which uses high-powered magnets to take extremely detailed images of the body. While a typical MRI (magnetic resonance imaging) machine in hospitals uses a magnet in the 1.5 to 3 Tesla range, the CMRR has research-dedicated magnets up to 10.5 Tesla. Using this machine, Lim can see and measure the brain signals that flash between the reward center and the prefrontal cortex.

“This is cutting-edge equipment, the best in the world, that allows us to do this kind of research,” he says.

Advancing the science
Making connections with people like Wells is also critical to success, Lim says.

“The fact that seed money from Wendy and Norm grew into this $2.6 million grant tells a powerful story. We really couldn’t move the science along without these philanthropic donations.”

“None of us just wants to write a check, right?” she asks. “We want to know that the money will ultimately help families and kids, that we’re moving the dial. And, honestly, I can say that the money I gave to Dr. Lim might be the best investment I ever made.”

Barbara Knox is a Twin Cities freelance writer.
All-star athletes
Many Gopher greats go beyond classes and sports to engage in diverse pursuits
By Suzy Frisch

Student athletes at the University of Minnesota are plenty busy, thanks to coursework, practices, and games, both in town and across the country. But many don’t stop there. Whether it’s getting involved in the community, pursuing creative passions, or taking on leadership roles, many Gopher competitors spend their limited free time on diverse activities. Here are three standouts.

**Jessika Mozia, tennis**
Annette McNamara & Carol Skanse Scholarship
Scholarship seating gifts (donations associated with season tickets)

Jessika Mozia is a hard-driving tennis player, a walk-on team member who earned a full scholarship after an outstanding freshman season. She still plays regularly, though she doesn’t compete now. “It’s a nice getaway. I enjoy the challenging part, I enjoy the creativity in the music, and I love performing,” she says. “It’s fun to tap into another side of myself.”

She also writes regularly, penning poetry and short stories. Two of her poems and a short story have been published in collections and her hometown newspaper. “Sometimes sports can be stressful, and it’s nice to get your feelings out on paper,” she says. “Writing really clears my mind.”

A senior majoring in psychology, Mozia plans to become a clinical psychologist. In the meantime, she’ll continue putting her all into tennis. She says the University of Minnesota has been a fantastic place to pursue her varied interests.

“I love competition and I love challenges, and it’s a great feeling when your teammates and coaches and friends and the University rally behind you,” says Mozia. “I get the best of both worlds—great academics and great athletics.”

*Ben Bravence, swimming and diving*
William Heusner Endowed Scholarship
Scholarship seating gifts (donations associated with season tickets)

Gopher swimmer Ben Bravence noticed that most career fairs at the University happened when student athletes were at practices or competitions. He got frustrated, and then he did something about it. Bravence developed the concept of a job fair for student athletes, convinced administrators to back it, and helped make Pro Day happen in October 2014.

It was held on a Monday night, a time when athletes typically don’t have practices or competitions, and attracted nearly 600 student athletes and 45 employers.

A senior and Kansas City native majoring in finance, Bravence says he felt Pro Day would be mutually beneficial for companies and athletes. “Athletes have transferrable skills—things they learn at sports that they can apply on the job,” he says. “I’ve seen student athletes get to the end of their sport and then ask, ‘What do I do next?’ I wanted to do something so students can see there is a world outside of sports, and they have many opportunities to begin their careers.”

**Lee Stecklein, hockey**
Kathleen C. and Robert B. Ridder Endowed Scholarship for Women’s Hockey

Lee Stecklein, who grew up in Roseville, Minnesota, where she was a 16-time letter winner in academics, hockey, tennis, lacrosse, and soccer, has a full plate while pursuing an honors double major in marketing and entrepreneurial management. A senior, she has two more years of Gopher hockey eligibility because she took a year off to compete at the 2014 Olympics in Russia, earning a silver medal. Stecklein aims to compete again at the 2018 Olympics in South Korea.

As a member of MAGIC, Stecklein helps organize other volunteer efforts and spends time working with kids—her favorite way to give back. “They get so excited to see you. They know you’re a student-athlete at the University of Minnesota and it puts it on such a different level for them,” she says. “I feel like I’m doing something right.”

Suzy Frisch is a Twin Cities freelance writer.
In accepting the Hubert H. Humphrey Public Leadership Award this past spring, Walter Mondale, ’51 B.A., ’56 J.D., described Minnesota as a “utopia.” He was joking—but only partly. “We have values. We care. And we have a broader vision—we’re international,” Mondale told Legacy recently. “I enjoy watching how Minnesota shows up again and again on what I consider to be the positive side of history.”

Mondale has been a big part of both Minnesota and U.S. history in his four decades of public service as Minnesota attorney general, U.S. senator, U.S. vice president, presidential candidate, and ambassador to Japan. In recent years, he’s been a strong advocate for the University of Minnesota and the importance of making higher education more affordable and accessible.

This year, the U’s Humphrey School of Public Affairs—named after his friend and mentor Hubert H. Humphrey—is recognizing Mondale’s contributions with a series of events, the naming of the school’s atrium in his honor, and a $2.2 million fundraising campaign for the Walter F. Mondale Fellowship to support Humphrey students.

**What do you remember from your time at the U?**

When I was on campus, there were people like Hubert Humphrey and others around, and the idea of public service just clicked for me. I started my public life there and haven’t stopped.

There were some professors at the University at the time who were part of the Humphrey tradition. I listened and took notes and tried to be a part of what they were telling me. At the Law School, I learned about the Constitution and the idea of justice and human rights, and that’s been at the center of my public life ever since.

**Was paying for college tough?**

We started out with no money at all. That brings you down to earth. Even though I didn’t have any money, I could work in the summer and pay my bills, and when I got my degree, I was free to go out and save the world. I wish young people could always do that—that when they finish school they could start working on their dreams and becoming involved in things that thrill them, where they can make a difference.

One of the big challenges and heartaches of modern life is the cost of higher education. Today, most students have to go to work immediately to start paying bills with high interest rates. We have to put this right up front as a key problem of this generation: how can we restore the opportunity of what my generation had? We went to college, developed our skills, and built our dreams. I know the president of the University, the governor, and others are working on how we can get the cost of higher education down—it’s not easy, but they’re working on it.

**What’s your advice for students going into public service?**

Take advantage of these friends you’re making, and learn from them. I always tell young people to go with their heart. If they have the enthusiasm of doing what they really believe in and what they really want to do, they’re going to do better.