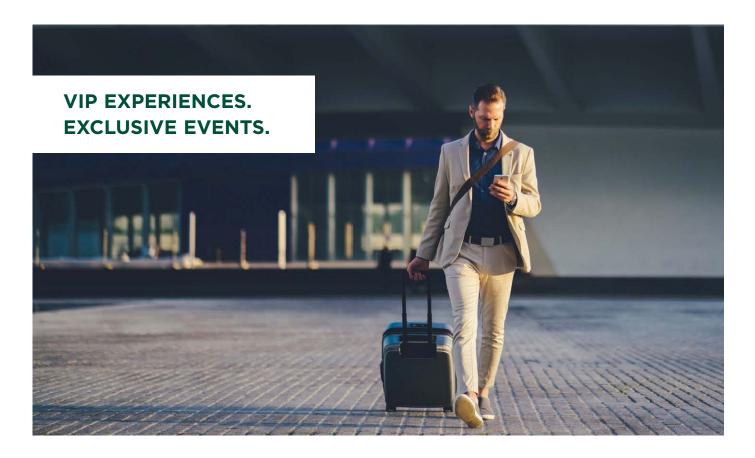


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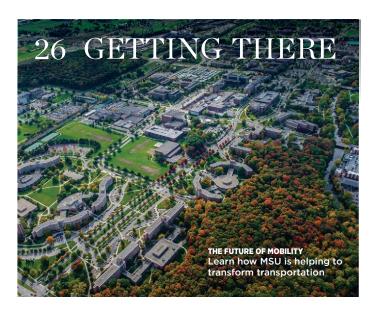
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Spartan WINTER 2020





8 NOT FOR SALE

Michigan State University researchers take on illegal wildlife trafficking through supply chains

49 MSU ALUMNI GRAND AWARD WINNERS





DEPARTMENTS

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ABOUT THE COVER: A sensorgenerated image of MSU's West Circle Drive as it would appear through a virtural reality headset. Photo collage: **MSU and Getty Images.**

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A New Year and a New Decade

It is a new year and a new decade, which is an especially appropriate time for taking stock and making plans for the future. Thank you for your continued interest in and support for Michigan State.

I look forward

to 2020 and

beyond.

ne of the joys of being a university president is spending time with students, faculty, staff and alumni. People are the heart of this university, and I have made it a priority to meet as many as possible in the first months of my administration.

I have met thousands of Spartans and look forward to meeting thousands more. I also have spent time at each of MSU's degree-granting colleges. I have begun to experience the vast scope and scale of Michigan State University.

Special alumni events I attended in Detroit, Grand Rapids and Washington, D.C., were terrific ways to meet alumni. We share photos inside of some of these events. I want to offer my thanks to all who attended, and I look forward to meeting Spartans in other communities at upcoming events.

I also have enjoyed learning how Michigan State's research explores critical areas such as autonomous mobility, which you can read about in this issue. Through such advances, we are working to develop MSU's campus into a live, networked transportation ecosystem to optimize safety and convenience.

It is a new year and a new decade, which is an especially appropriate time for taking stock and making plans for the future. I recently announced two important planning initiatives for the university. The first is a comprehensive strategic planning effort that will help us better define who we are as a university and describe what we wish to become. I want to ensure MSU is prepared for the challenges and opportunities of the next decade in our core areas of education, research and outreach.

The second initiative focuses on diversity, equity and inclusion, which I believe is foundational to all we wish to accomplish. As we seek to be a safer, more respectful and more welcoming campus, a culture of diversity, equity and inclusion will be essential.

Finally, from the start of my presidency, I have made it a priority to address issues related to relationship violence and sexual misconduct. I hope you will read about our progress elsewhere in this issue and on MSU's Our Commitment website.

To learn more about that and my other presidential priorities, please also visit president.msu.edu.

Thank you for your continued interest in and support for Michigan State. I look forward to 2020 and beyond.

Go Green!

Samuel L. Stanley Jr., M.D.

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TOP NOTCH FROM COVER TO COVER

I recently finished reading the fall issue of Spartan and it was a treat. I rarely have the opportunity to sit down and digest a magazine as fully as I would like. Just wanted to reach out and say: well done.

It's a beautiful publication, down to the small details. It's aesthetically delightful and the content is top notch.

Jen Estill, '95
RED HEAD DESIGN STUDIO, LANSING

#METOO

Thank you for including the content on sexual assault in last spring's magazine. It's painful to read as it brings up my own assault (not at MSU). The information on avoidance hit me hard.

I was following the avoidance model and it was wreaking havoc on my health. Thank you for the honesty, vulnerability and mostly the accountability of this content. Every contributing writer involved in the (teal issue) is setting an example for the future. I hope you know it does make a difference. Many, many people are proud of MSU and its efforts.

Post I sum

It makes me proud to be a Spartan.

Best, Lauren

BUILDING INFOGRAPHICS

The fall issue contained a pie chart of MSU graduates by college (pg. 51). As an economist and applied mathematician interested in the communication of quantitative information, I was left to wonder about its purpose. It contained conflicting information.

Best practices in data visualization say 20 pieces of information are too many to present in pie chart. Having the variable-length labels around the perimeter of a circle presents a difficult task to the eye.

The better alternatives to this inefficient pie chart are a simple table (boring as that may seem) and a bar chart like the chart on page 52. I don't know what information the chart was supposed to present, but the chart type was not the best choice.

Thomas Mitchell, '78
CARBONDALE, ILLINOIS

FOUR ELEMENTS OF REPARATION

I will withhold financial contributions to my alma mater until I see hard evidence that it has the leadership capable of running the institution in the wake of its sex abuse scandals.

A proper course of action should include four elements:

First, an apology so loud it drowns out the scandal itself.

Secondly, a commitment to hold all those responsible or complicit in Nassar's years of abuse, with no regard for the blood on the floor.

Third, an admission that this scandal could not have happened without an institutional culture of tolerance of, even willful blindness toward, such crimes so as not to violate any sacred principles of academic freedom.

Finally, of course, fair compensation to all victims not to be impeded by any financial considerations or the insertion of any exculpatory explanation of the university's actions.

Previous administrations made the common mistake of leaders in situations like this. They called in the lawyers to try to protect the university's reputation. But Nassar and his enablers had thoroughly destroyed it.

There was no reputation left to protect, just one to be rebuilt. And that is a PR challenge, pure and simple.

The lawyers can't help.

Mike Morrison, '65, '67
SOUTHPORT, NORTH CAROLINA

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GLOBAL DAY OF SERVICE APRIL 18, 2020

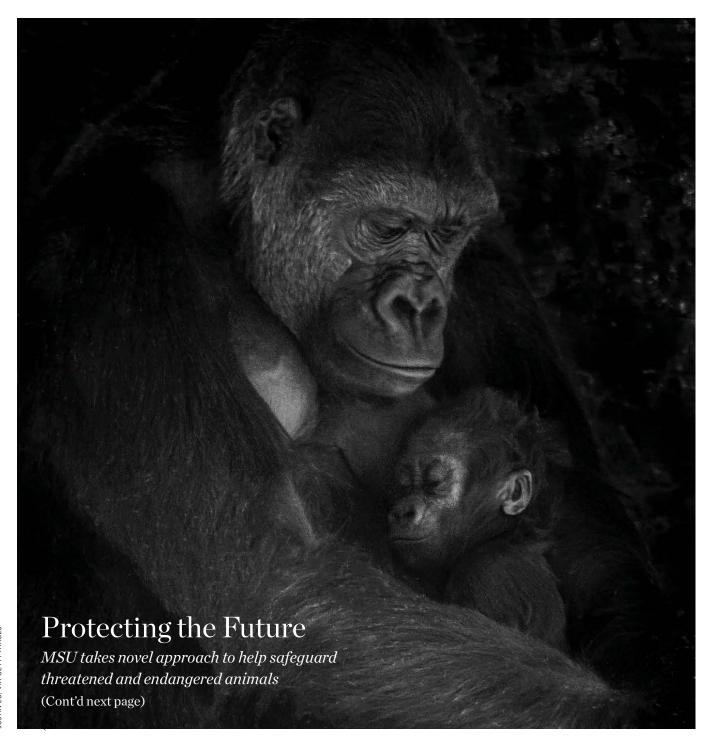
The MSU Global Day of Service exemplifies the extraordinary impact Spartans can make in a single day. This collaborative effort brings Spartans together from across the globe to serve others in their communities while demonstrating the reach and power of the Spartan network.

Spartans and friends are encouraged to volunteer at one of the many service opportunities.

Visit SERVE.MSU.EDU to find an project near you.

BeneaththePines

News & Views from MSU



DISRUPTING ILLEGAL WILDLIFE **TRADE**

A mountain gorilla (right) is observed in Virunga National Park in the Democratic Republic of Congo by an ICCN Congolese Conservation Authority ranger as part of a gorilla census.

This century, war and poaching have been very harmful to the mountain gorilla population. Estimates show total numbers dropping into the mid-hundreds at their lowest ebb.

Conditions have improved somewhat, but gorillas remain an endangered species. Recent surveys indicate about 1,000 mountain gorillas are living in dense forests in Africa.



Not For Sale

Researchers take on illegal wildlife trafficking through supply chains BY CAROLINE BROOKS

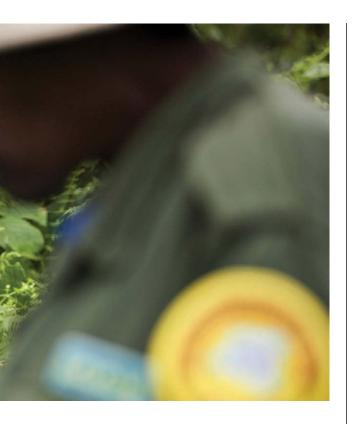
There's big money to be made in the illegal wildlife trade—an estimated \$23 billion a year—making it a difficult problem to stop. The figure comes from the World Economic Forum.

Illicit wildlife trafficking—primarily originating in Africa—is recognized globally as a threat to endangered species, habitats and people. So two MSU faculty members recently formed a team aimed at finding a new approach to disrupt the trade.

"Wildlife trafficking is less understood than drug, small arms or human trafficking, but the illicit networks often share a number of the same supply chain characteristics,"

said Stanley Griffis, the John H. McConnell Professor of Business Administration and project co-lead. MSU conservationist Meredith Gore, an associate professor of fisheries and wildlife, is the project's other co-lead. For the past two years, she's been on the ground in the Democratic Republic of The Congo and the Republic of the Congo, building relationships with local communities and agencies, gathering data, mapping trade routes and learning how goods-illegal and legal-move along their respective supply chains.

Findings are expected to yield a new understanding of how illegal goods are moved



and shipped throughout the African continent and across the world.

"It's a terrible business, but at the end of the day, traffickers are managing a supply chain in ways that are not unlike how legitimate supply chains are managed." Griffis said.

"The team will take what we learn from Gore and local partners, then apply theories and knowledge of supply chains to walk the problem backward to understand similarities and differences in wildlife trafficking," he said in a recent MSU interview.

The National Science Foundation is supporting the project. Operations engineers and computer scientists from the universities of Southern California, Alabama, Colorado State and Harvard fill out the research team.

MORE ON WEB

Learn more snarestowares.org

Snares to Wares

Spartan conservationists find creative solutions for protecting human livelihood while saving wildlife in East Africa

Villagers in Pakwach, Uganda, create wire sculptures of big game animals available for purchase through an MSU nonprofit. The sculptures are created from illegal traps intended to snare elephants, lions, rhinos and smaller animals

in East African National Parks. Front-line conservationists, the villagers are helping animals survive while earning income along the way.

"We are entering the next phase of Snares to Wares as we are teaching the young men how to form the wires into sculptures of the animals that are being snared so people locally and globally can truly help conserve wildlife," MSU Professor Robert Montgomery said. He is an assistant professor in the Department of Fisheries and Wildlife. The ultimate goal of this community-based conservation effort is to change a way of life—and preserve the lives of the animals.

Find sculptures available for sale at: msusurplusstore.com.



Robert Montgomery (left), MSU graduate student Tutilo Mudumba (center) and Sophia Jingo, research assistant, survey Ghana's plains scouting wildlife.

We don't stop when it gets difficult. We keep going because we are resilient, and we can make a difference.

Sexual misconduct experts make impact behind the scenes

BY MELODY KINDRAKA AND CHRIS CHAPMAN

s graduates and friends of Michigan State University, you are familiar with the issues the university has faced regarding relationship violence and sexual misconduct. However, behind the scenes, there is a group of committed experts working to change MSU's organizational structure, policies and procedures to expand prevention and response efforts across campus and within the community.

Based on ongoing feedback received at campus and community meetings, current research and best practices, the Relationship Violence and Sexual Misconduct Expert Advisory Workgroup—a group of 17 expert faculty, administrators, staff and students that engages diverse perspectives and reports directly to the university president—has implemented several key changes that are making a positive impact at MSU.

Since the RVSM workgroup's 2018 founding, additional resources and new positions have been added to the Center for Survivors (formerly the Sexual Assault Program). MSU also has developed a Campus Sexual Assault Response Team, and a Sexual Assault Nurse Examiner Program is scheduled to open in the spring. These collaborative approaches are considered national best practices that enhance care and increase the likelihood of criminal prosecution should a survivor of sexual assault decide to pursue charges.

With funding from MSU, as well as state and federal grants, all services are provided free of charge to MSU students, faculty and staff while ensuring confidentiality.

"We need to create opportunities to share innovative ideas and work together for implementation," said MSU Police Department Lt. Andrea Munford, a nationally recognized authority on trauma-informed investigations, workgroup member and adviser to the president of MSU. "We have many great people here who have great ideas about things to improve the culture at MSU, all starting with the foundation of doing things because they are the right thing to do."

Another of the workgroup's recommended changes was to streamline prevention and response efforts to relationship violence and sexual misconduct under one unit, the Office for Civil Rights and Title IX Education



and Compliance. Tanya Jachimiak recently was announced as the new associate vice president of the office; she will replace Rob Kent, who served in the role in an interim capacity since spring 2018.

This office has become home for the Prevention, Outreach and Education Department (POE), formed in April 2018 to educate the MSU community about relationship violence and sexual misconduct and to empower members to become advocates for a nonviolent community.

To do this, POE developed a training framework that addresses sexual assault and relationship violence, bystander awareness and survivor support that is mandatory for all students and employees. More than 72,000 campus community members received training during the department's first year. In addition, POE offers additional required and targeted training programs for campus groups, including the Athletics Department and fraternities and sororities.

"We keep trying to find new ways to get our message out and impact people's attitudes and beliefs about sexual violence," said Mariah Sloat, a POE prevention specialist. "We don't stop when it gets difficult. We keep going because we are resilient, and we can make a difference."

POE also works closely with student groups and community partners to develop and support peer-topeer activities and events during two It's On Us campaign weeks held in

the fall and spring. Those studentorganized activities mirror the national It's On Us initiative's charge to stand up for and with survivors of sexual assault and to take action to end sexual violence.

It's an important initiative "because it allows students the opportunity to start discussions around sexual violence outside of their required trainings," said Taylor Owens, a master's student in the College of Social Science and graduate assistant with POE.

In addition to creating POE, the workgroup supported the development of the Know More campaign to educate the campus community and raise awareness of RVSM-related information. As a part of this campaign, the university partnered with RTI International to create a survey and collect data on the campus climate.

The results of that survey, coupled with feedback received through discussion forums held around campus through January, will be used to inform the workgroup's focus for 2020.

See updates about RVSM program news at MSU's Our Commitment website: msu.edu/ourcommitment. Updates also are posted on Twitter through @KnowMoreMSU.

72,164

Number of MSU community members who've completed RVSM training to date

SUZY MERCHANT NAMED TO **GOVERNOR'S TASK FORCE ON WOMEN IN SPORTS**

Women's Basketball Head Coach Suzv Merchant is among 16 people selected as advisory members of the new Michigan Task Force on Women in Sports. Gov. Gretchen Whitmer, '93, '98, '19, created the organization in June and appointed Secretary of State Jocelyn Benson as chair. Merchant is entering her 13th season and has nearly 500 career wins. The task force will bring together local and national

> leaders to support and promote opportunities in Michigan for girls and women in sports.





Draymond Green during home basketball game on Dec. 3 as his #23 jersey was retired:

"I want to thank Spartan Nation. I played four great years here in front of the best fans in the world. And the relationship between myself and you guys is still going, and it'll go for the rest of my life. Thank you all, thankful to be here, thankful for this honor. I love you guys. Go Green! He's shown his loyalty to MSU. In 2015, he donated \$3.1 million in support of the men's basketball program, the single largest gift to MSU by an active athlete.

HAPPY ANNIVERSARY, "MR. MARCH"

Tom Izzo, men's basketball coach, celebrates his 25th year at the helm

Tom Izzo, aka "Mr. March," is celebrating his 25th year as head coach of MSU's men's basketball team.

He's led teams to the 2000 NCAA National Championship, nine regular-season Big Ten Championships, six Big Ten Tournament titles, eight Final Four appearances, eight National Coach of the Year awards and a Big Tenrecord 22 straight NCAA Tournament appearances.

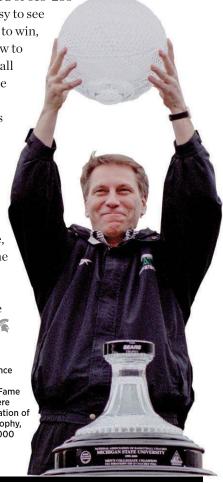
These accomplishments, however, are not what make Izzo one of the best in the game, but rather it is his genuine concern for developing his players as students, athletes and men, as well as his insatiable desire to accomplish more.

With a career record of 615-235 (at press time) it's easy to see that Izzo knows how to win. but he also knows how to win the right way. In all his years directing the Spartan program, 85 percent of his players who completed their eligibility also left with a degree.

In 24 seasons, Izzo has returned Michigan State to national prominence, placed his name in the NCAA record books and has become a leader among college basketball coaches.

TOM IZZO

Basketball head coach at Michigan State University since 1995 and member of the Naismith Basketball Hall of Fame since 2016. He is pictured here holding the National Association of Basketball Coaches' SearsTrophy, given to MSU as the 1999-2000 men's top collegiate team.



IZZO'S TOP FIVE PRINCIPLES



Make the process a priority Organization, discipline the most important traits players and coaches must develop in order to achieve intentions.

Coach for accountability Players write down and character are among their personal goals each season. Izzo holds them to their objectives, often on the sidelines.

Show them you care Don't be afraid to get mad or even crv. Show up for the crucial moments in players lives—on and off the court.

Train for physical and mental toughness

Champions must develop mental and physical toughness to turn in winning performances.

Enjoy the journey Carpe Diem. Try to cherish and savor those times when hard work leads to cherished dreams.



Flying High

Allyssah Fitterer is attacking life with zeal

BY ALEX GILLESPIE, '17

partan Allyssah Fitterer is like a Swiss Army knife. She's an athlete, an artist and an inspirational leader. Volleyball is her sport. And it's whisked her from her native Canada to MSU, to Hawaii and back. The rigors of athletics shaped her in many ways. Recently, she reflected on her sports career in an email exchange.

On MSU: My journey was kind of a fairytale. In eighth grade, MSU's then-associate head coach, Russ Carney, discovered me at a volleyball tournament. I was a six-foot tall string-bean of a human. To my surprise, shortly after, MSU asked me to sign a letter of intent. Even though I received other offers, I already felt connected to MSU.

Playing career after graduation:

I wanted to go pro. But I had just rehabbed from shoulder surgery. Meanwhile, NCAA-level beach volleyball teams were reaching out to graduating seniors about using their final year of eligibility. So, I started looking at graduate programs. The University of Hawaii was No. 3 in the

standings at the time. I contacted the coaching staff there, sent a game video and within two weeks, Hawaii offered me a scholarship to play beach volleyball. I studied intercultural communications on one of the most diverse campuses in our country.

Moving from indoor courts to the beach: I can't stress how different indoor and beach volleyball are. The skills and technique differ. The environmental factors change how the ball moves. But the essential details remain the same. During the first couple of weeks playing on sand, I couldn't breathe. Imagine sprinting in sand for two hours, then add jumping and heat-wave-worthy temperatures. I was a fifth-year senior and I was asking freshmen players for tips. It was humbling.

How collegiate sports shaped me:

Busy days became the norm. Pushing myself past what I thought was my breaking point is empowering. Failing and continuing to strive for improvement becomes how you operate. The challenge is moving from a mandatory structure and organizing your own

routine. I find if things aren't contributing to my goals, I have trouble justifying them. Sometimes I wish I could just "be" a little more often. I'm increasingly learning how to do more of that.

Life after college sports: Volleyball will always be a big part of my personal growth. But it doesn't define me. When you commit to playing a sport at an elevated level, you sacrifice other things. You learn to function in a whole new world, which is exciting and challenging. Now, for the first time I can try things I avoided for fear they'd affect my performance. So, I'm going on challenging hikes, climbing, skiing, taking boxing classes and staying up late to talk on the phone with my sister. I'm eating chocolate cake. I'm not worried about how high I can jump or how fast I can move in the gym and I can focus on working out to be healthy and happy. I don't have to play through injuries, and I can do yoga when I'm sore. The only pressure I feel to perform athletically is the pressure I put on myself, and it's oddly freeing.



Ticker Tape Tales

Library installs kiosk that dispenses free stories, poems and prose

In an age of ephemeral digital content, the library is introducing visitors to the power of words on paper. How? By installing a new kiosk that spits outs stories and poems like candy from a vending machine.

The kiosk offers free short-to-medium length stories, poems and prose. They're all dispensed on environmentally sound paper slightly wider than a typical gas station receipt.

The idea is to offer an amusing reading option for library users while serving as a new publishing venue for students, faculty and staff.

"The kiosk gives us a new way to encourage creativity and showcase a diverse range of voices across the MSU community," said Joseph Salem, MSU Libraries Dean.

"This is the first installation in Michigan, and we're delighted to introduce it to promote storytelling and reading," he added. The dispenser was purchased from Short Edition, a publisher of short literature that offers more than 80,000 short stories for users. The program was launched in Grenoble, France, in 2015.

Interest in the technology grew in the United States after film director Francis Ford Coppola installed a dispenser in his San Francisco café.

The kiosk is one of four purchased by the MSU Libraries and shared in the community. Other locations include the Dairy Store, the Capital Region International Airport and the East Lansing Public Library.

Can't make it back to your alma mater? Enjoy an online version of the experience on the website below.

~CINDY HUNTER MORGAN



Experience it online msu.short-edition.com

SPARKING EXCITEMENT & SUBMISSIONS

MSU Librarian Michael Rodriguez, who helped oversee the installation of the kiosk and now leads the project, said he's witnessed how the dispenser can spark conversations about literature.

"I've seen people trade the stories and I've heard people talk about the stories," Rodriguez said. "The kiosk is a treasure trunk full of free prizes—stories and poems that people can put in their pockets or read right here."

Stories and poems may be submitted through the Library's Short Edition website. All work will be reviewed by a team of editors and considered for publication.

Number of years since the Graduate School was founded

STEVIE WONDER WALL

Dustin Hunt, '07, is the tour de force behind some new Instagram-able street art. The co-organizer of Lansing's Below the Stacks festival, he invited 11 internationally recognized muralists last fall to splash their vivid paintings around town. Hunt's contribution is a massive creation in Old Town honoring Stevie Wonder, who grew up here. Some of the artists had never before heard of Lansing. Its abundant blank buildings tantalized them. Check out belowthestacks.com and #belowthestacks to glimpse all the murals.





ELI & EDYTHE BROAD ART MUSEUM'S NEW LEAD EXHIBITION

JAN. 25 - AUG. 23

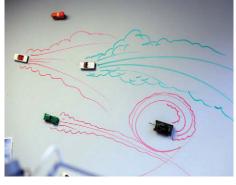
Never Spoken Again: Rogue Stories of Science and Collections is a traveling exhibition that reflects on the birth of modern collections, the institutions that sustain them and their contingent origin stories. Revealing a universe of erasures, violence and chance occurrences, the exhibition considers how such collections produce knowledge and perpetuate historical narratives. To do so, it brings together an international roster of artists whose works critically examine material culture, iconography and political ecologies.

6,000

Total annual part-time student jobs in Residential & Housing Services

Sharing Some Gude Stuff

In the first of a new photo series, we will peek into a few professors' offices for evidence of what they hold near and dear. Karl Gude kicks things off with a detailed annotation of items in his office, in the College of Communication Arts and Sciences. Shortly before he officially taught his last class, he agreed to share pictures and stories of his favorite objects. A former director of news graphics for Newsweek and the Associated Press, he even designed this inaugural piece.



I was having a rough time seeing my little cars on the shelf behind me, so I super-glued them to the wall and drew vrooom marks to give them movement.



I like to get my Monet on and paint with oils on canvas outdoors. This is a painting I made of the Student Organic Farm, which I'm donating to the enterprise.

I love lion

statues. A

full-size pair adorns

the entrance to the

Corcoran Gallery of

Art in Washington,

D.C. FYI: Love NYC's

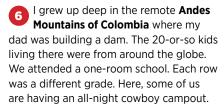
Chrysler Building, too.

















news graphics for AP, I got to go to the '92 Olympics where everyone exchanged pins. The hat sits atop my second Mac computer.



camera to practice.









I got the mug back when I was news graphics director at Newsweek for 10 years. The building miniatures were created for a board game that never took off.



10 I had a large painting at the last Artprize in Grand Rapids. It's on display at the Tech Innovation Center on Grand River Avenue.





Big Daddy Roth's Rat Fink was cool in '66 (when I was at a California middle school) and he still is! So is the little devil, Red Hot.



These action figures are from the Tintin (and Snowy) graphic novels. There was no TV or much to read in the Andes, but we had these booklets-in Spanish.



This heavy metal **Apache** Attack Helicopter was for a Newsweek magazine infographic that visually explained urban warfare. The name plate is from my old Newsweek office. The farewell plaque is from my wonderful '80s Associated Press staff.







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The Documentarians

In making "Break the Chain," Laura Swanson and Kirk Mason hope to inspire greater awareness and change by bringing human trafficking into the light by daniel P. Smith

he more Laura Swanson learned about the tortured existence of human trafficking victims around her, the more she knew she had to act.

So the native Kansan picked up the phone in 2014 and called Kirk Mason.

The pair had met as MSU undergraduates in an advanced documentary film course and later collaborated on a sexual assaultfocused documentary titled "Every Two Minutes" that earned national attention, and an appearance on the "Dr. Phil" show.

Seeing human trafficking as a complex issue riddled with misconceptions and misinformation, Swanson pitched Mason on a new project examining the realities of human trafficking in Michigan and exposing its deepening penetration into American communities.

"Would you be interested?" asked Swanson, a filmmaker who favors

research-rich topics.

"I was all in," said Mason, a Bath native. "Laura wanted to share the truth so people could better understand human trafficking and the connections we all have to this issue."

Thus began a nearly three-year effort to produce "Break the Chain," a feature-length documentary chronicling human trafficking's troubling vet often overlooked, and often sensationalized, presence in Michigan and across the United States.

The 64-minute film centers on two trafficking victims—one enslaved into labor for nearly five years alongside three other minors in a Habitat for Humanity-supplied Ypsilanti home and another who was sold for sex around metro Detroit as a teen. Paired with nearly 20 interviews of law enforcement officers, legislators, nonprofit leaders and survivor advocates, and one particularly compelling jailhouse interview with a convicted human trafficker, "Break the Chain" delivers an unblemished look at a fast-growing and increasKirk Mason, '14, Residential College in the Arts and Laura Swanson, '15, **College of Communication Arts**

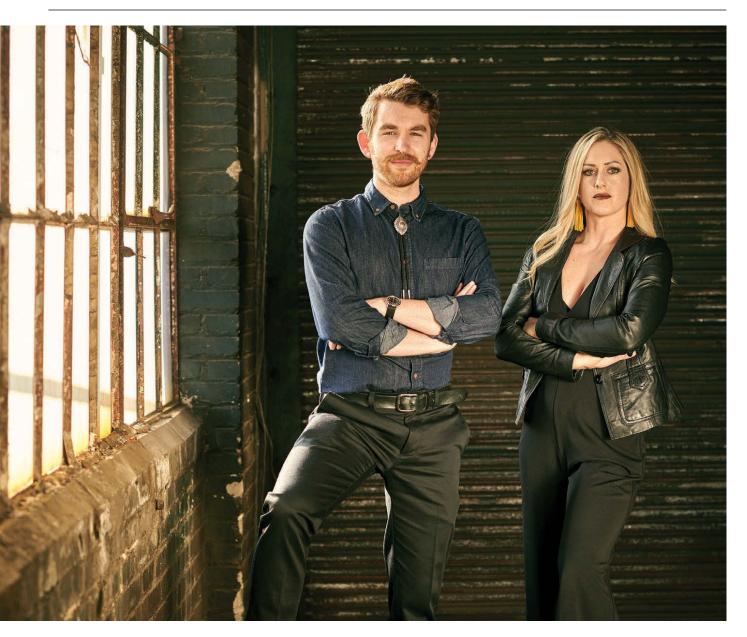
ingly lucrative criminal practice that accepts humans as tradable, usable commodities.

"We wanted to help people understand how corrupt and manipulative this can be, but in an honest, accurate way that was not sensationalized or fueled by agendas," Swanson said.

Quite intentionally, "Break the Chain" eschews the dramatized portraits of sex trafficking victims shackled together in dark basements in favor of the human trafficking activities occurring amid the day's



66 We wanted to help people understand how corrupt and manipulative this can be, but in an honest, accurate way that was not sensationalized.



sunshine-forced labor in front yards, intense stares that foreshadow coming abuse, and girls ushered into motel rooms on main thoroughfares. The film provides an awakening look at how slavery survives in a society that trumpets personal freedoms, reminding viewers that neither the Civil War nor a Constitutional amendment extinguished slavery in the U.S.

"Sex trafficking captures attention, but this happens all around

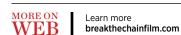
us in different ways each and every day," Swanson said.

Since its 2017 release, "Break the Chain" has highlighted the prevalence and toll of human trafficking to everyday Americans through screenings across the country, while notfor-profits, law enforcement agencies, and health care organizations have used the film as a training resource.

While Swanson hopes the film inspires empathy for victims, she and Mason ultimately hope viewers recognize human trafficking's vast

existence and the importance of conscious consumerism.

"If people watch the film and leave more informed, more willing to have conversations with others about human trafficking, and with a better understanding that they can have an impact on human trafficking, then we've accomplished something really powerful," Swanson said.



Ensuring the Friendly Skies

Jamie Rhee has built a career out of making government agencies work for the people they serve. Now she oversees the Chicago area's two airports, helping millions of travelers move safely on their way each year by daniel P. Smith

amie Rhee can't tell you the last time she had a vacation. But to be fair, Rhee, the commissioner of the Chicago Department of Aviation (CDA), isn't that interested in escaping in a world packed with so much action, so much energy, so much movement.

A native of Geneseo, Illinois, a one-stoplight town about 150 miles west of Chicago, Rhee now guides one of the world's foremost air transportation hubs, a municipal enterprise that includes O'Hare International Airport—one of the globe's busiest airports—and its urban sister, Midway International Airport. Together, the two facilities cater to 105 million passengers each year, including 83 million at O'Hare alone.

"Every day, we move the equivalent of Cincinnati's population through O'Hare," Rhee beamed.

A 25-year veteran of Chicago government, Rhee credits MSU sociology professor Carl Taylor with introducing her to a potential career in government-through a

project investigating Detroit's street gangs-and late MSU criminal justice professor Zolton Ferency for helping her see a path to meaningful public sector work.

"I wanted to have an impact and government seemed a great place to do that," Rhee said.

At Ferency's suggestion, Rhee pursued a law degree at night while spending her days in a customer service role at O'Hare, where she leveraged her proficiency in French, Spanish and Japanese to assist travelers and support immigration and customs officials.

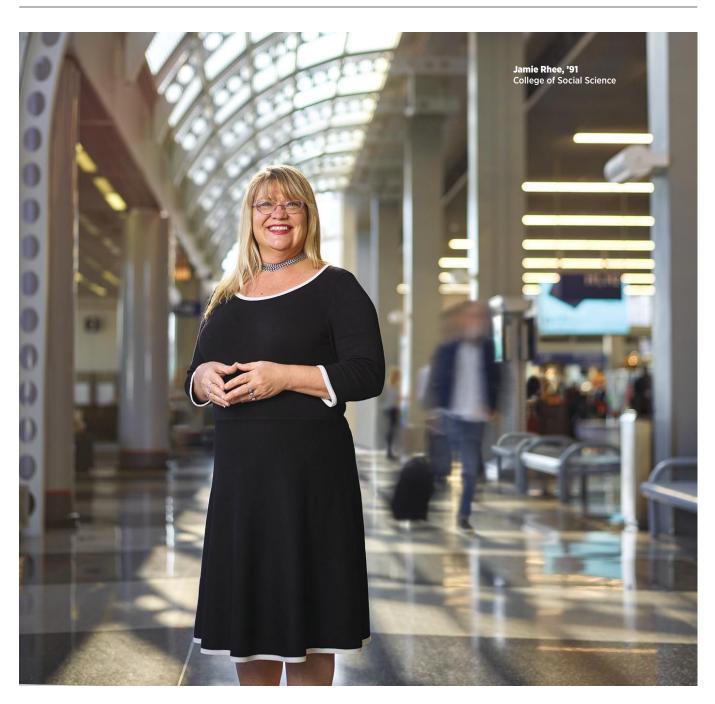
After earning her law degree from DePaul University in 2000, Rhee wove her way through Chicago's civic labyrinth. She worked in the CDA press office and the city's Department of Planning and Development, then returned to O'Hare to serve as general counsel for the \$15 billion O'Hare Modernization Program before becoming deputy chief of staff in the mayor's office. The work invigorated her.

"Working for the government has given me direct access to people and the ability to make changes

66 Every day, we move the equivalent of Cincinnati's population through O'Hare. Annually, that means more than 83 million passengers. travel through O'Hare airport alone.

that can improve lives," said Rhee, who certified thousands of minority-owned, women-owned and disadvantaged-business enterprises as the city's chief procurement officer. "That gave people across Chicago the tools and resources to earn work with the city."

In July 2018, Rhee's public sector career again circled back to its starting place when then-Mayor Rahm Emanuel appointed her CDA commissioner. Today, she navigates complex issues in aviation and



government in a city known for its municipal complexities.

Whether it's holding town hall meetings with O'Hare staff, visiting third-shift motor truck drivers at Midway, or connecting with elected officials, airline partners or agencies at the federal or local level, Rhee is committed to keeping travelers safe, elevating CDA's performance and

maintaining the city's airports with an employee army some 1,600 strong.

"Right down to cleaning the bathrooms, we do it all," Rhee said.

She is currently shepherding the \$8.5 billion O'Hare 21 expansion project headlined by a new international terminal; directing a \$400 million modernization effort at Midway; and ensuring that the CDA

Code of Conduct she implemented spurs intended improvements in diversity, accountability and transparency. "I take pride in getting things done," Rhee said, "and we're making things happen here."

The good news for Rhee: When she does decide to take that vacation, she'll know her way around the airport. 🌋

Deep Connections

As an award-winning biographer of Frederick Douglass and a professor of history at Yale, David Blight sees the long roots of the United States' present circumstances reaching back to the history of the Reconstruction period

BY ANNE M. HAMILTON

avid W. Blight is an academic supernova, a historian who won both the Pulitzer Prize and the Bancroft Prize in 2019 for "Frederick Douglass, Prophet of Freedom," his definitive biography of the nineteenth-century intellectual and abolitionist.

Blight, who grew up in Flint and is now the Sterling Professor of History at Yale University, recently recalled how MSU fostered his metamorphosis from working-class kid to professor. "That's where I confirmed that I wanted to be a history teacher," he said from his book-strewn office.

Though Blight has lived in the East for nearly three decades, his roots are still in Michigan. As he tells undergrads in his Civil War and Reconstruction course, "We are all where we are from."

Growing up in a trailer park "on the wrong side of the tracks," Blight decided early on not to follow his father into factory work. Neither of his parents attended college, but his older brother was enrolled. "He was somewhat of a model for me," he said.

MSU was nearby and affordable—barely. It cost \$250 a term when he enrolled in 1967. Two events during his years there marked turning points in his life. In his junior year, the baseball coach abruptly cut him from his pitching position. He was devastated, but soon decided to get serious about his studies. Being cut turned out to be one of the "lucky breaks" in his life, he said.

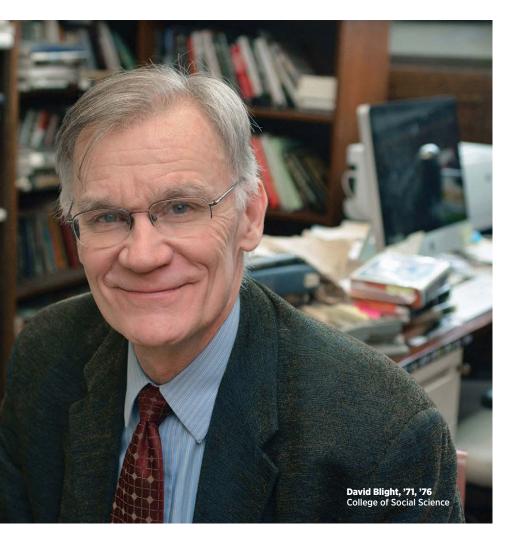
Current events also played a formative role. "I came of age with huge issues. Race and civil rights and the Vietnam War were transforming society," Blight said. He joined the anti-war movement, and confirmed his choice of vocation. "I thought being a history teacher was the coolest thing in the world."

Growing up with a picture of Franklin D. Roosevelt on the dining room wall and a mother who was a "dyed-in-the-wool liberal" provided the foundation of his political philosophy, Blight said. "It was Vietnam, civil rights and my mother."



After graduation, he returned to Flint to teach high school while taking night classes at MSU toward his master's degree. He later turned his early interest in Douglass into his doctoral thesis. Of the more than a dozen books he's written or edited, five focus on Douglass.

"Almost any issue we are living through now—race, the Constitution, what it means to be an American can be seen through his life," said Blight, who spent six months promoting his new book and still travels



66 Almost any issue we are living through now-race, the Constitution, what it means to be an American can be seen through the life of Frederick Douglass.

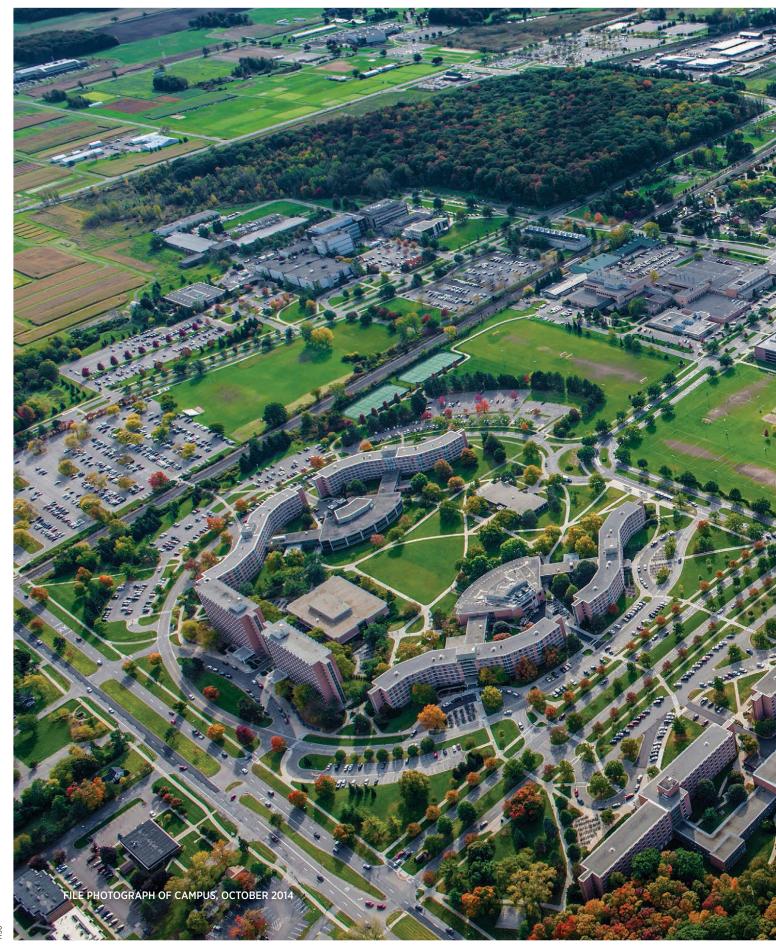
nearly weekly to give talks.

"He lived all these issues. He's also possibly the most profound example we've ever had of someone who was led by words. He was a genius with language."

Blight's lifelong interest in Douglass was rekindled when he gave a lecture in Savannah, Georgia, and learned of a local man's collection of materials on the last third of Douglass' life. The biography sparked when Blight realized some of the information had never been

made public. The book comes amid renewed interest in the Reconstruction, from 1865 to 1877, when President Andrew Johnson clashed with the post-Civil War Congress, which had passed laws granting equal rights to African-Americans.

"It was happening before Trump but he has enhanced it, because the issues are still alive," he said. "The issues of Reconstruction have never gone away, whether they are about race or about federalism, the Constitution or the nature of our politics."





"We are excited to showcase this holistic approach and invite partners to join us as we work to revolutionize the way people and goods move throughout the world," said Satish Udpa, an engineering professor who recently returned to the lab after serving as MSU's acting president.

The university's innovative, interdisciplinary research will help shape how people live and move in a hyperconnected world. And you don't have to be a gearhead to realize that the field is evolving faster than you can say "automated emergency braking."

MSU is investigating mobility on two concurrent paths. The academic side is inventing, testing and deploying smart cars and the smart infrastructure necessary to guide them safely and securely, as well as considering the social implications of such a major change to our daily lives. On the campus operations level, experts are collaborating to assess and address the day-to-day mobility needs at MSU now and in the future.

Here's a look at some of the core undertakings, starting on the technical side.

The CANVAS initiative, the acronym for research on Connected and Autonomous Networked Vehicles for Active Safety, is based in the College of Engineering. One faction of its scientists is developing hardware and software-for vehicles and infrastructure-that will need to be in place before fleets of autonomous cars can safely hit the road.

CANVAS engineers are working to perfect the selfdriving vehicles of the future. They are looking down the road to a day when vehicles communicate with each other, sharing vital information with other connected vehicles in proximity.

Signals generated by radar, lidar, infrared and traditional cameras and virtual 3D maps will be monitored by self-driving cars. The cars' on-board computers will be on the receiving end, interpreting and making informed decisions about how to proceed.

A second set of engineers is striving to enable one car's rich data to be shared with another in close proximity. Because the cars' perspectives will be unique to their position and virtual vision, both will benefit from the

additional data. This requires transmission of a great deal of data between vehicles, infrastructure and the cloud. This transmission can use many different wireless means, including standard WiFi, dedicated short-range communications (DSRC) and mobile phone technologies such as 3G, 4G and soon 5G.

These communications demands are not just for more data and speed, but also to reduce the response time or latency. For real-time communications such as emergency braking to avoid a multicar pile-up, response time is crucial, and it's delivered at modest scale by DSRC with a promise of larger scaling by 5G. MSU is also home to WKAR, a public broadcasting entity which has sidebands capable of transmitting (but not receiving) data at far lower costs than other mechanisms, which might be good for downloading maps and updates overnight.



We are excited to showcase this holistic approach and invite partners to join us as we work to revolutionize the way people and goods move throughout the world.

The ability to test this diverse set of communications protocols to optimize throughput, speed and cost in many urban situations is an exciting opportunity for MSU.

The goal: imbue autonomous vehicles with **superhuman perception** and accurate decision-making abilities—all in real time. Scientists are creating hardware and software necessary for data to be sent from traffic signals, radar, lidar, 3D maps and high-frequency radio waves. Methods through which to fuse all of this data are also being studied.

But let's back up for a minute (beep, beep, beep, beep).

We can't initially expect autonomous vehicles to know everything we need them to, or do everything we need them to do. Does the ball rolling into the road have a child running after it? Is the person at the crosswalk nodding for me to go first or to thank me for waiting? Is the shifting load in the truck ahead about to fall out?

MSU MOBILITY STUDIO

An integrated system of communication and control for autonomous vehicles and their environment

CANVAS

CONNECTED & NETWORKED AUTONOMOUS VEHICLES FOR ACTIVE SAFETY

THE CANVAS BRAIN: (JOINT) DEEP LEARNING:

Vehicles will rely on object detection, recognition and motion forecast, using deep learning and other machine learning and artificial intelligence algorithms to maneuver in environments requiring situational awareness, joint deep learning, localization and mapping, optimal fusion, mobility services and data. This will not only enable enhanced safety, but can provide data to the traffic grid.

BENEFITS:

- Safety
- Security
- Emissions reduction
- Traffic throughput
- Improved fuel efficiency
- Event/ emergency management
- · Public health
- Pedestrian, vehicle arbitration

MOBILITY AND CONNECTIVITY INTEGRATION

CANVAS focuses on integrating systems controlling autonomous vehicles from the ground up-and from the inside out. A networked. integrated system of sensors within individual and connected communicating vehicles, and the infrastructure itself (roadbeds, traffic signals, etc.) will not only enable enhanced safety, but can provide data to the traffic grid to influence signals, improve traffic flow, reduce fuel consumption and help municipalities mitigate air quality concerns.



Lidar is a laser radar that sends

pulses of invisible light out into the

world and times how long they take

to come back. This gives it a black

and red image of the world in low

resolution, but with the exact

distance to every pixel.

LIDAR

Radar, lidar, vision and multispectral sensing are used to develop a 3-D map of the area in which the car is driving, for maneuverability improvement, as well as to develop advanced algorithms that will assist in navigating a particular environment.

BIOMETRICS & OCCUPANT SENSING & MONITORING

On-board computers will monitor human-vehicle interaction and human sensing, including biometrics for safety and security, as well as health and well-being, monitoring emotive and cognitive state, and estimating age of occupants. And they will be able to evaluate whether a human is capable and ready to take over in the event of a problem. If a vehicle occupant is unable to drive, the technology can detect that and pull the car over to the side of the road.



TOP
Professor Hayder Radha
(left) is leading one of
MSU's autonomous
vehicle teams.

RIGHT, TOP AND CENTER

Lidar detection technology captures a precise 3D representation of MSU's West Circle Drive. To the eye, West Circle Drive looks like this from the air.

RIGHT, BOTTOM

Nizar Lajnef is leading a team of researchers placing sensors on Michigan's Mackinac Bridge.

But researchers are sure that these vehicles can learn.

Humans will program them to identify, classify and safely react to all of the streaming information they'll receive from multiple sources.

"One of the challenges with these sensors is they each have weaknesses, particular conditions in which they don't work as well. So you have to be able to coordinate data from multiple sensors," said John Verboncoeur,

associate dean for research and graduate studies in the College of Engineering.

"Think of it like having two or three different viewpoints of the same scene, and from each of those viewpoints you see a different perspective you couldn't see from the other position," he said.

Consequently, the autonomous car would sense a cyclist in the adjacent bike lane, a maintenance worker slowly driving a lawn mower through the crosswalk and a student skateboarding around the corner hidden from one vehicle by a building or another vehicle. Connectivity will allow vehicles and infrastructure to warn each other of potential hazards, sharing their collective view of the mobility scene.

To help make that happen at MSU, plans are nearly complete to re-purpose the sparsely populated Spartan Village for use as a mobility test site, said Hayder Radha, professor of electrical and computer engineering and director of the CANVAS program.

The new Spartan Mobility Village encompasses buildings, roads and parking lots. And there's no better place to test automated vehicle technologies than in the







Radar, when fused with other sensing modalities, could achieve not only a human level of perception, but a *superhuman* level of perception.

— Hayder Radha

Mitten State, known both for its auto production and its four distinct seasons.

"It's a representation of a real city. The unoccupied buildings will be used as a background for sensing technologies, including radar clutter simulating the urban and suburban environments," Radha said.

"You've got signals bouncing all over the place with reflections and everything. We've got to deal with (all the variables) and that gives MSU a competitive advantage" over some of the other testing sites, he added.

MSU is also a leader in infrastructure sensor technology and just last year deployed 200 tiny sensors on the Mackinac Bridge. The coinsized sensors—supported by MDOT and built in partnership with Washington University in St. Louis, Missouri—are powered by traffic vibrations. They're inexpensive to make and provide critical data about the condition of the bridge's structural components. Installing these sensors on roadways will be a major step toward creating another component of smart infrastructure.

In addition, the sensors can be installed on roadways to monitor traffic loads and keep track of wear and tear, as well as mark the edges of lanes obscured by snow, leaves, sand, heavy rain, debris and other elements. Especially important is fact that the sensors do not need access to the electrical power grid, harvesting their power from the vibrations of passing vehicles. This enables their use on the vast majority of roadways off the grid, as well as dramatically reducing installation costs.

WEB

MSU's Devon Barrett, '11, provided (tons) of information to this report. Check out her mobility story, too, at: go.msu.edu/mobility



The idea is to monitor infrastructure and roads accurately, easily and in a costeffective manner.

Building the Feedback Loop

MSU engineers helped create tiny wireless sensors used to monitor the Mackinac Bridge. Now they'll test them to see whether they could one day assist self-driving vehicles BY PAULA M. DAVENPORT

here are 10,654 bridges in Michigan, Among them is the longest suspension bridge in the Western Hemisphere. Yes, it's our graceful Mackinac Bridge, with a length of nearly five miles—suspended over the shimmering and often ice-packed Straits of Mackinac.

Last year, more than 4 million vehicles traveled the 62-year-old Historic Civil Engineering Landmark, affectionately known as "The Mighty Mac."

Overseeing the bridge's health and welfare is the Mackinac Bridge Authority, which has teamed up with engineers from MSU and Washington University in St. Louis, Missouri, to continuously monitor the structure.

In 2016, the engineers installed the first of 200 self-charging, wireless sensors and tiny recording devices beneath the bridge. Vehicle vibrations charge the low-cost sensors, which collect information that is stored in the cloud.

"The idea is to monitor infrastructure and roads accurately, easily and in a cost-effective manner," said Nizar Lajnef, an MSU associate professor of civil and environmental engineering.

"It's a long-term plan for the next 20 to 50 years. We'll be able to see how the bridge is behaving every single day. As soon as there's a tiny change in the bridge, we can fix it at a very low cost. It's like preventive health care," he said.

Down the road, such sensors could be commonplace, not only to monitor bridges but as part of the smart infrastructure needed to support autonomous vehicles. They'll be installed in MSU's new Spartan Mobility Village as engineers work to test and fine-tune the technology.

Lajnef said he's heard that some European countries might be interested in the patented technology.

At present, other sensors cost about \$500 apiece. "If our sensors are mass produced, we're looking at a cost of less than \$10 each. That's a huge cost saving for conditionbased maintenance."







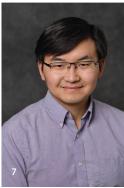
Some of MSU's Mobility Researchers







Engineers, urban planners, business experts, social scientists and legal scholars are bringing their respective expertise to bear on the certain changes self-driving vehicles are sure to spark







1: JOHN VERBONCOUER

College of Engineering Associate Dean for Research and Graduate Studies Campus mobility champion

2: NIZAR LAJNEF

College of Engineering Associate Professor, civil and environmental engineering Team lead of bridge/road sensors

3: HAYDER RADHA

College of Engineering Professor, electrical and computer engineering Director of CANVAS

4: MARK WILSON

School of Planning, Design and Construction Professor, urban and regional planning Director, planning, design and construction doctoral program

5: SHELIA COTTEN

College of Communication Arts and Sciences Department of Media and Information Professor and medical sociologist Research interest: Technology's impacts on quality of life

6: PETER SAVOLAINEN

College of Engineering
Department of civil and environmental
engineering
MSU Foundation Professor/Associate
Chair Graduate Studies
Research interest: The nature of road user
behaviors

7: XIAOMING LIU

College of Engineering Associate Professor, computer science and engineering Research interest: mobility data

8: DANIEL MORRIS

College of Engineering Associate Professor, electrical and computer engineering Adviser, student autonomous vehicle team

9: VAIBHAV SRIVASTAVA

College of Engineering Assistant Professor, computer engineering Research interest: mobility, humanmachine autonomy

10: NICHOLAS WITTNER

Professor in Residence College of Law Research interest: autonomous vehicle liability and safety regulations

URTESY OF NURO

Making It

Video game character ignites an alumnus' career in autonomous vehicle robotics by paula M. Davenport



MSU Alumnus
Marshall Mendoza,
'10, College of
Engineering,
mechanical
engineering.
He's an electrical
engineer at Nuro, an
American robotics
company developing
self-driving vehicles

How did you get interested in creating robotics?

From an early age, I was interested in the video game character Mega Man, otherwise known as RockMan in Japan. I dabbled in robotics every now and again; however when I moved to San Francisco in 2010 and I began looking for jobs. I was particularly interested in robotics companies. All the companies I was interested in were developing robots and cutting-edge technology. Working for a robotics company is incredible because it turns the fictional robots in video games and cartoons into reality. Today, I'm an electrical engineer here at Nuro and I design embedded hardware for our autonomous vehicles.

Recent headlines show Nuro is well ahead of its competitors. Is the company planning to partner with private industry?

We launched our first partnership with Kroger, the world's largest grocer, in August 2018. We are helping the company create more convenient grocery experiences by making the on-demand economy more accessible and bringing groceries to customers quickly, safely and affordably. Recently, we also announced our latest partnership with Domino's, the world's largest pizza retailer. We hope to continue to partner with even more retailers in the future.

Why do you believe people should embrace the coming revolution of self-driving vehicles and smart infrastructure?

Change is inevitable, and the people who are working on these technologies aren't going to rest until they have made a significant, positive impact on society. Every new, useful technology will go through a similar set of doubt, fear and proof testing. Our mission is to accelerate the benefits of robotics for everyday life and through our technology and partnerships and by working with cities, we aim to meet this goal.

What's the best part of your job?

Without a doubt, it's the amazing and incredibly intelligent people I work with every day. Not only do I hold everyone I work with in high regard, they also enrich my life well beyond work.

What advice would you give to undergrads/grad students who want to work in this field?

Make sure you learn your fundamentals in school, and not just for the exam. Stay up to date on this field, as it is constantly and rapidly evolving. Read everything and learn everything you can. Research all the concepts you didn't know. Challenge yourself! Always remain vigilant with your own skill set. Being agile and willing to learn or improve is extremely important if you want to work with the most exciting technologies. And APPLY—we're hiring at nuro.ai/careers.



NEW TO THE NEIGHBORHOOD: NURO'S SELF-DRIVING VEHICLE FOR DELIVERING LOCAL GOODS.

OK. Gotta ask. How did MSU prepare you for your job?

I participated in MSU Formula SAE. This was just like working at a startup where you have a lot of responsibility, aggressive timelines and a limited budget. Now, keep in mind, too, I majored in mechanical engineering. However, I'm an electrical engineer in practice. That's another long story:-).

Anything you'd like readers to know about how you and your colleagues view the future related to technology?

Make a note of when products and technologies start to come to market and take some time to remember them as you get older. My lifetime alone has seen the start of personal computers, the internet, smartphones, artificial intelli-



66 Being agile and willing to learn or improve is extremely important if you want to work with the most exciting technologies.

gence and The Standard Model of (Particle) Physics. All these things are going to lead to more amazing advances and luckily, I think I'll be around to see a lot of cool stuff. Taking the time to remember it all is a great way to give yourself some appreciation for the good things that are still going on in our world.

Shaping the Future

Self-driving vehicles have potential

They stand poised to remake urban spaces, expand mobility choices and save lives

If you thought the internet changed the world, try to imagine the impact autonomous vehicles are going to make.

But don't panic. There's a lot to get excited about. After all, even Matthew McConaughey and NFL stars in TV commercials are selling the convenience of assisted parking, collision avoidance and lane control—precursors to fully autonomous vehicles.

In the coming years, self-driving vehicles may be delivering groceries and perhaps even whisking us off to our doctor appointments.

They'll bring other advantages, too. Most importantly, they'll be safer for everyone. Last year, there were more than 36,000 deaths from vehicle crashes and over 6,000 pedestrian deaths, according to the National Highway Traffic Safety Administration.

Smart cars and smart infrastructure are expected to reduce crashes caused by human error. They will also expand mobility options for those unable to drive due to age, illness or disabilities, boosting one's independence and quality of life.

For commuters, imagine how much less stressful riding in an autonomous vehicle would be. You could use your commute for everything from making calls and reading emails to working online or perhaps just sipping coffee and working on a crossword puzzle.

Urban planners will also welcome some of the technology's advances, especially if autonomous vehicles use a ridehailing model that could remove a vast number of vehicles from the road and free up parking lots and road space for new development.

Think of Lansing, for example. Its downtown is laden with metered parking spots and parking decks—a "crater" city in urban planning parlance.

But when autonomous vehicles become commonplace, cities will be able to transform many parking lots into mixed-use development, apartments, entertainment venues, commercial buildings and even parks.

BY MARK WILSON, MSU SCHOOL OF PLANNING, DESIGN & CONSTRUCTION



Autonomous vehicles are going to be game changers in every aspect of our daily lives.

However, the advent of selfdriving vehicles may have a downside. It will be expensive to install all the high-tech devices on infrastructure and vehicles. It's also conceivable people will drive even more than they do now, once the hassles of navigation diminish. That might lead to greater housing sprawl ever farther from cities and suburban centers.

What's more, the future technology may not be readily expanded into deprived areas as has been seen in a dearth of internet and wireless connectivity in rural areas and disadvantaged neighborhoods.

Nevertheless, autonomous vehicles offer exciting potential and MSU is playing an important role. Its Sociomobility Initiative is harnessing multidisciplinary experts in such fields as engineering, the social sciences, communications, business and law to conduct research, prompt discussions and plan how driverless vehicles can and should serve our current and future needs.

The ultimate outcome depends on how we as individuals and communities choose to shape the city of the future.

GOTCHA SCOOTERS

LAST FALL, MSU SIGNED AN **EXCLUSIVE PARTNERSHIP** WITH GOTCHA TO PROVIDE SCOOTERS FOR USE ON CAMPUS. THE ZIPPY TWO-WHEELERS ARE CURRENTLY IN STORAGE, BUT WHEN SPRING WEATHER ARRIVES, GOTCHA WILL ROLL THEM OUT AGAIN. THE SCOOTERS COLLECT ANONYMOUS INFORMATION— LIKE WHEN, WHERE AND FOR HOW LONG THEY'RE USED. **GOTCHA WILL SHARE THE INFORMATION WITH OUR** MOBILITY RESEARCHERS, IT'S ONE MORE PIECE OF THE



The knowledge and real-world experiences students absorb prepare them for success in a world that's rapidly evolving.



Getting down and dirty

Four student organizations fabricate future success by designing vehicles that excel on tracks, streets and over dunes

If you grew up coveting your friend's go-cart, you'll be blown away by the incredible driving machines our college students are building, adapting, refining and racing.

Four separate student groups are working with four distinctly different vehicles, each with its own respective parameters and purposes. These young motorheads are using the latest technologies in design, performance testing, alternative fuel use, composite materials and data fusion. Corporate partners are providing some of the innovative tools necessary to excel in today's automotive environments.

Here's a look under the hood of the four student-run endeavors:

The Formula Racing Team designs and builds small formula cars, which are open-wheeled, single-seat vehicles. It competes annually with cars built by peer teams from universities worldwide. Vehicles are judged on racing performance, vehicle marketing, design, manufacturing, cost and several areas of dynamic performance. The competitions are organized by the Society of Automotive Engineers (SAE) International. Currently, MSU's team has created the fastest formula car

created the fastest formula car in the program's 30-year history.

Automotive companies consistently hire alumni of our programs.



66 We create team environments where technical excellence, accountability, open collaboration and community engagement are all held in the highest regard. In doing so, we hope to further the causes of sustainable innovation, technical education and good, old-fashioned teamwork.





The Student Organized Autonomy **Research (SOAR)** group is working on a Chevy Volt donated by General Motors Corp. SOAR students and seven groups of their university peers were invited to design fully autonomous vehicles built on the Volt platform. The SAE International Collegiate Design Series is overseeing it all. Its three-year AutoDrive Challenge culminates this spring. That's when competing teams will demonstrate their cars' autonomous driving skills. Getting this far has been no easy feat. Students must master real-world sensing technologies, computing platforms and software design programs. Their car will need to rely on computer vision, machine learning, artificial intelligence, data fusion and autonomous vehicle controls.

The Baja Racing team

annually designs, builds and races an off-road vehicle entered in the SAE Baja events. Entries are judged on cost reports and sales presentations and they must pass a technical inspection. Time trials are followed by a four-hour endurance race during which all participating teams race their buggies at the same time on the same track. Luna is the newest addition to the MSU Baja family. It's the lightest vehicle the group has built to date. Buggies must be powered by 10HP Briggs and Stratton engines, which cannot be modified or altered. Luna boasts the most custom components of the team's creations thus far.

MSU Solar Racing Team

fabricates solar cars. The team regularly competes across the U.S. in track and long-distance races alongside other collegiate cars. Five cars have been produced since the MSU group's 2010 founding. Its current vehicle, Aurora, features twopassenger seating, trunk space and an infotainment display. The electric engine is powered by a solar array and custom lithium ion battery pack. Ultimately, the team's mission is to further the causes of sustainable innovation and technical education.

MOBILITY'S FUTURE: CAMPUS IMPROVEMENTS



The Guide Map App

Phone app puts a virtual tour guide in your pocket

MSU Guide is an iPhone app to help users navigate around campus. It's interactive and provides real-time location-aware information about campus landmarks and is accessible and useful to all. Designed at the Resource Center for Persons with Disabilities, it is especially helpful for those with visual, spatial and mobility disabilities.

Here are its three core tools:

WAND: Point your phone at any building on campus to discover its name and more information, including wheelchair-accessible entrances.

MAP: A map that lets you view campus landmarks. Tap to drop a pin, then click on it to view a compass that locks on to the closest landmark under the pin.

SEARCH: Use the iOS home screen search function

(Spotlight) to locate any campus building by name. Once you search and identify your building, simply select it and Guide locks onto it so you can always check where it is relative to where you are without needing a map. You can even use navigation from Spotlight results to view detailed directions to a landmark.

For more information and to download Guide, check out iTunes.

A MOVEABLE FEAST

CAMPUS AS A LIVING, BREATHING TEST BED

MSU is always working on new ways to improve campus safety and access for pedestrians, bicyclists, moped riders, scooter enthusiasts and countless vehicles.

Here are some of the extensive ideas campus planners are either implementing or have on their drawing boards:

- Creating networked smart signals that work with vehicle and pedestrian sensors
- Optimizing class schedules and locations with vehicle density in mind
- Establishing predictive signals and routing assistance sent to mobile devices
- Collecting data for decision support and virtual testing before implementation
- Producing a sensor-driven on-campus parking app
- Synchronizing services with MSU Police and East Lansing emergency services for rapid and safe on-campus responses and potential traffic management
- Establishing signal controls to ease inbound/outbound traffic to athletic and other major events on campus
- Studying redesign of parking locations like opening a lot on the edge of campus and deploying e-van rides to MSU's core
- Considering creation of a high-frequency e-van service between the Shaw complex and the Life Sciences areas
- Exploring whether to reroute roadways, and improving efficiency and safety at entrances and campus exits, in collaboration with the city of East Lansing



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Shifting the Focus to Imminent Change



MSU's Sociomobility Research Group is anticipating the potential needs and impacts autonomous vehicles (AV) may have on jobs, cities, traffic laws, insurance companies, supply chains, security of information and especially on people.

Its ever-evolving body of research is delving into questions about:

- The public's perception of autonomous vehicles and safety
- The type of workforce that will be required to build and service technological components associated with smart vehicles and wired infrastructure
- The insurance and legal ramifications should self-driving vehicles experience or cause a collision
- Economic issues, such as a likely population flight to the suburbs accompanied by a drop in urban housing values and property tax revenues
- Declining income from parking fees, refueling station taxes, traffic tickets and more
- How new systems can be adapted to serve people with disabilities, elderly people and underserved populations

Mark Wilson is a professor of urban and regional planning and is one of the sociomobility group's researchers. He compares the dawn of autonomous vehicles to the dawn of another disruptive innovation—the internet.

"Today some of the biggest issues on the internet aren't about engineering or the technology at all. They're social. They're related to the internet's impact on interaction and engagement, retailing, freedom of speech and expression," he said.

There was no infrastructure or precedent for dealing with the social issues that came with the internet because nobody was thinking that far into the future. So MSU is thinking now about the potential concerns self-driving vehicles might foster.

"We want to provide a service to the public," Wilson said. "We must be mindful that citizens will be making decisions and we want them to be informed.

"Our engineers want to say, 'Here's the technology,' and we want to say, 'Here's how we talk to communities and work through scenarios to make decisions about how that technology is used."



mobility.msu.edu



MSU honors its top annual donors in recognition levels, which are renewable annually.

LEADERSHIP CIRCLE

Spartan STRONG gifts of \$1,000-\$2,499/year Spartan GREAT gifts of \$2,500-\$4,999/year Spartan BOLD gifts of \$5,000-\$9,999/year Spartan INSPIRED gifts of \$10,000-\$19,999/year Spartan EXTRAORDINARY gifts of \$20,000+/year

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SPREADING SPARTAN NEWS **AND SPIRIT**

New president embraces his role on campus and within greater community

ver the course of his first five months, MSU's new president Samuel L. Stanley Jr., M.D., has immersed himself in the university and its people and traveled to meet alumni across the country.

He'll be the first to tell you MSU is an institution in need of healing. Students, faculty and staff expect him to implement transparent processes aimed at continuous improvements across the university.

Last fall, he attended several meetings with survivors of sexual assault, creating the first confidential group sessions of their kind with an MSU president. When scores of minority students and supporters staged a sit-in outside his office, he spoke to them, accepted their list of recommendations and agreed to future meetings to hear more about their equity concerns.

To communicate with MSU's constituents, Stanley is: making visits, writing letters, sending emails, posting campus-wide progress reports on MSU websites and appearing in short videos detailing the process for developing a new strategic plan aimed at ensuring the university is on positive trajectory.

We've curated this collection of snaps to give you a glimpse of some of the president's activities.



- President Stanley and students share a moment on the football field with Spartan Susan Packard, a special homecoming guest.
- Kinitra Dechaun Brooks receives her medallion from the president at the fall Investiture for Endowed Faculty ceremony.
- Stanley joins dignitaries at a groundbreaking for renovations to the Munn Ice Arena.
- Stanley joins alumna Susan Goldberg for a Q&A at an alumni event in the National Geographic Society building. Goldberg is editor of the society's editorial platforms.
- MSU deans and a faculty member talk shop with the new

















Clockwise from top left:

- 1. Fresh from his own move-in day, Stanley helped students settle into their residence halls last August.
- 2. Stanley steps in for a student's selfie.
- 3. Guests meet Stanley at a faculty and staff donor luncheon.
- 4. Edward Minskoff, (left) Stanley and Clifton Wharton, president emeritus, pause for a photograph at a New York City gathering.
- 5. Stanley joins MSU podcaster Russ White after recording a Q&A last fall. To listen: http://go.msu.edu/xkP
- 6. Stanley popped up at Lansing's Potter Park Zoo during a meet and greet with a great horned owl and its handler.





Clockwise from top left:

- From left: Dean Sanjay Gupta, Edward Minskoff, Eli Broad and President Samuel L. Stanley Jr., M.D., open the Minskoff Pavilion at the Eli Broad College of Business.
- Surrounded by students on the Formula One racing team, Stanley looks ready to roll at Sparticipation, a fall student welcome event.
- Stanley joins Lance Cpl. Jack Kivi, '22, who received the Commandant's Trophy for finishing at the top of his class in Officer Candidates School last summer.



One of the joys of being a university president is spending time with students, faculty, staff and alumni. I have made it a priority to meet as many as possible in the first months of my administration. I have already met thousands of Spartans and look forward to meeting many thousands more in the years ahead.



We're proud to partner with MSU Alumni Office. To learn more about Liberty Mutual auto and home insurance, please call us at 1-800-469-6720, or visit www.libertymutual.com/msuaa.

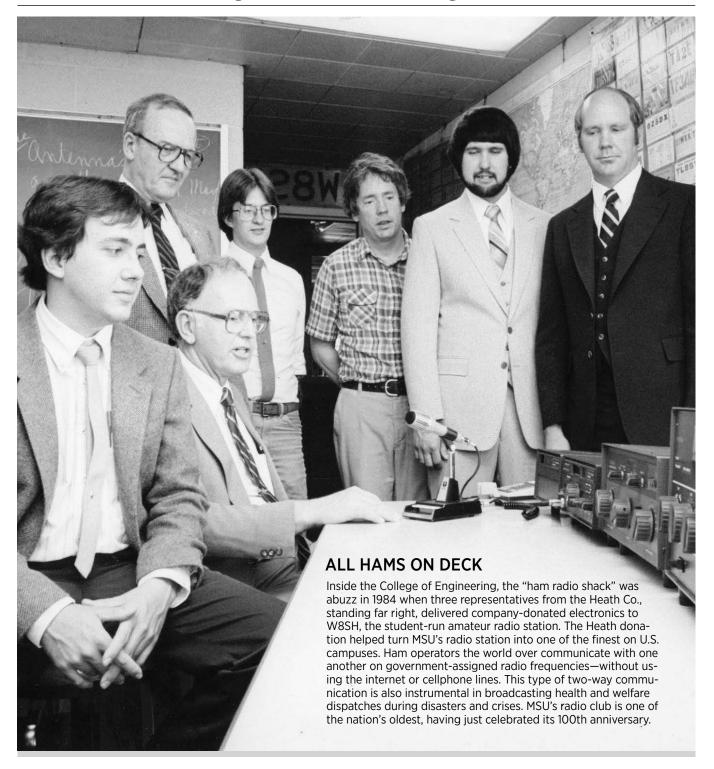




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Spartans Connect and Inspire





Awards Honor 13 Who Embody Spartan Values

Alumni gala celebrates those who are making the world a better place through their achievements in science, business technology, the arts and beyond



partans Will. As an MSU alumnus, I've heard that statement thousands of times referencing the amazing work Spartans do. You won't find many people who are doing more to make a positive impact than this year's Alumni Grand Award recipients.

Their stories have a common theme: helping others. Julie Clark has spent years advocating for the education and safety

of the smallest among us. Mark Kay has helped to find solutions for the children most medically vulnerable and taught an army of doctors to do the same. The generosity of Lural Baltimore, Shashikant and Margaret Gupta, Charles Webb, Michael Lamach and Michael Pruente helped make it possible for hundreds of students to attend MSU. Ellen Williams, Kenneth Nobis, Dhaval Bhanusali, Carlo Riolo and Katherine Niksich have created meaningful experiential learning opportunities in higher education.

Collectively, these stories exemplify a network of support and opportunity. The positive impact of this group cannot be underestimated—whole generations of people will benefit from their efforts, changing society in extraordinary ways. Congratulations to this year's outstanding Alumni Grand Award recipients.

Nick McLaren, '99

EXECUTIVE DIRECTOR, MSU ALUMNI OFFICE

DISTINGUISHED **ALUMNI AWARD**

Recipients include alumni who have differentiated themselves by achieving the highest level of professional accomplishment.

ALUMNI SERVICE AWARD

Recipients include alumni who have demonstrated service to MSU and/or commendable public service on a local, state, national or international level.

YOUNG ALUMNI AWARD

Recipients include alumni under age 40 who have distinguished themselves through a high level of professional accomplishment.

HONORARY ALUMNI AWARD

Recipients include non-alumni candidates who have made an outstanding impact on behalf of MSU.

PHILANTHROPISTS AWARD

Recipients include those individuals, families, associations, corporations or foundations that have generously demonstrated ongoing financial support and leadership to MSU.



Julie Aigner Clark

B.A. in English Literature and Secondary Education, 1998, College of Arts & Letters, Michigan State University



I believe every child is a little opportunity waiting to happen. Impacting the next generation has been the theme for each of my companies and something I learned the importance of during my time at Michigan State University. I am so appreciative for the education and values MSU instilled within me.



She's chief executive officer of WeeSchool, founder of Baby Einstein and a two-time cancer survivor. Inspired by her children and a passion for the arts, Aigner Clark used her liberal arts education to embark on an entrepreneurial journey. It began with founding Baby Einstein, a multimedia infant entertainment company. Disney purchased the international brand for \$25 million and markets the service worldwide. She has since created the Emmy Award-winning "Safe Side," a child safety video. And she's drawn on her experience as a cancer survivor in her picture book for cancer-coping families. Her work developing the engaged-parenting phone app WeeSchool continues her legacy of supporting millions of children worldwide. In 2003, she received the College of Arts & Letters Distinguished Alumni Award. In 2007, she was recognized by President George W. Bush during his State of the Union address.

Mark Kay

B.S. in Physical Sciences, 1980, Lyman Briggs College, Michigan State University Ph.D. in Developmental Genetics, 1987, and M.D., 1987, both Case Western Reserve University



My Lyman Briggs experience immersed me in the culture of innovation and science, which created an environment that really helped me thrive. The philosophy of science class helped me realize that as scientists, we need to educate others if we want to be leaders who make a difference in the world.



He's a professor of pediatrics and genetics at Stanford University School of Medicine and is an internationally known pediatric gene therapy researcher. Dr. Kay leads the Division of Human Gene Therapy and is the Dennis Farrey Family Professor in the Departments of Pediatrics and Genetics at Stanford University. His research on gene therapy, genome editing and noncoding RNAs led him to co-found LogicBio Therapeutics. The company's mission is to develop the next generation of genetic medicine by developing lasting cures for rare, life-threatening genetic diseases affecting children. He was a founding board member of The American Society of Gene and Cell Therapy and has published more than 250 papers in such leading journals as Science, Cell, Nature and The New England Journal of Medicine.

Michael Lamach

B.S. in Engineering, 1985, College of Engineering, Michigan State University M.B.A., 2016, Duke University



I firmly believe that our students -along with the rest of their generation will push us to higher levels of sustainable practices and world citizenship. There's something special about our Spartan spirit that you can't find anywhere else.



He is chairman and CEO of Ingersoll Rand and a champion of sustainable business practices. Lamach became chairman and CEO of Ingersoll Rand in 2010. He joined the company in 2004 as president of its Security Technologies sector, led the Trane Commercial business and then served as president and chief operating officer. Under Lamach's leadership, Ingersoll Rand has consistently outperformed both the S&P 500 and the S&P Industrial Index. With a business strategy centered on sustainability, the company has reduced global greenhouse gas emissions from its operations by 45% and from its products by nearly 50%. This year, Ingersoll Rand and leading brands Trane and Thermo King announced commitments to achieve carbon-neutral operations by 2030 and to reduce emissions from products by 1 billion metric tons—or one gigaton. Ingersoll Rand also has industry-leading levels of employee engagement and was the first industrial company to join Paradigm for Parity, a coalition of businesses committed to addressing the gender gap in corporate leadership.

Ellen Williams

B.S. in Chemistry, 1976, College of Natural Science, Michigan State University Ph.D. in Chemistry, 1981, California Institute of Technology | Honorary Doctor of Science, 2016, Michigan State University



Today's innovators are pushing the boundaries of what is possible with energy. But we as scientists must provide policymakers with options that are both technically and economically feasible. I believe it's fundamental for the future of our civilization.



She's a distinguished professor of physics at the University of Maryland, former chief scientist of BP and director of the ARPA-E. An accomplished surface properties and nanotechnology researcher, Williams joined the University of Maryland in 1981. In 1991 she founded the University of Maryland Materials Research Science and Engineering Center. Her work focuses on the impacts of science, and she has published over 200 articles that have been cited over 8,000 times. She was elected to the American Academy of Arts and Sciences in 2003 and the National Academy of Sciences in 2005. In 2009, Williams chaired a special committee of the National Research Council to review issues related to the Comprehensive Nuclear-Test-Ban Treaty. In 2010, she was recruited to be chief scientist at BP. In 2014, she received Senate confirmation to lead the Advanced Research Projects Agency-Energy. Williams served on the International Security Advisory Board of the U.S. Department of State and was also a member of the NAS Policy and Global Affairs Committee.

ALUMNI SERVICE AWARD

Lural Baltimore

B.A. in Latin, 1971, College of Arts & Letters, Michigan State University M.A. in Counseling, 1973, College of Education, Michigan State University



Through education, we learn the fundamental skills for living and we can obtain the necessary tools for solving life's problems. My motivation to encourage students to understand the importance of lifelong education comes from having benefited from my world-class education at MSU.



She is a former area administrator for the Michigan Disability Determination Services, where she was the first African-American woman tapped as a regional district manager. Over her 38-year career, she has launched several statewide programs with annual budgets upward of \$63 million. Baltimore received two of her field's most prestigious national awards: the Social Security Administration's Commissioners Citation and its Associate Commissioner Citation for Outstanding Leadership. In addition, she is a recipient of the National Leadership Award from the Institute for Educational Leadership. She served on the Michigan Interagency Task Force on Disability and the Michigan Council on Developmental Disabilities. A former fellow in the Michigan Leadership Program and the Institute for Educational Leadership, Baltimore also co-founded the MSU Black Alumni Club. She has been instrumental in developing and growing the group's scholarship endowments, which now exceed \$2.5 million. To date, some 675 MSU students have been beneficiaries of the scholarship program.

ALUMNI SERVICE AWARD

Charles Webb

B.A. in Social Science, 1969, Spring Arbor University | M.A. in Counseling and Student Personnel, 1973, Western Michigan University | Ph.D. in Administration in Higher Education, 1982, College of Education, Michigan State University



Michigan State University is nurturing others through education, providing students the necessary set of tools and then propelling them to do great things. The hallmark of any great university is the accomplishments of its alumni. I'm proud to be one of them.



He is president emeritus of Spring Arbor University and MSU vice president emeritus for University Advancement. During his distinguished 34-year career at MSU, he served 12 years as the Alumni Association's executive director. He was also president of the MSU Foundation for 10 years and vice president of University Advancement for 12 years. Under his leadership, *The Campaign for MSU* raised \$1.4 billion, surpassing its \$1.2 billion goal 15 months ahead of schedule. Webb served as president of Spring Arbor University for five years until his retirement in 2013. He previously worked for three years as assistant vice chancellor for development and alumni relations for the State University of New York System, with 64 campuses and one million alumni. He and his wife have made gifts to MSU through an endowment to support students with disabilities pursuing degrees in elementary or secondary education.

YOUNG ALUMNI AWARD

Dhaval Bhanusali

B.S. in Human Physiology, 2005, College of Natural Science (Honors College), Michigan State University | M.D., 2010, College of Human Medicine, Michigan State University



Staying innovative and utilizing technology the right way is so important in our health care system today. Doctors need to think about ways they can positively impact a group beyond their local community. I want to use my talents and skills to find solutions to problems that will have a broader impact.



He's a leading dermatologist and laser surgeon in New York and Miami, faculty member of Mount Sinai and digital-health entrepreneur. Bhanusali, M.D. FAAD, is owner of and dermatologist for Hudson Dermatology and Laser Surgery in New York. As a member of the MSU Medical Scholars Program, Bhanusali was admitted into medical school at the age of 17 and completed his residency at Mount Sinai. He is regularly featured in media outlets, including ABC, Fox, NBC, US Weekly and The New York Times. In 2016, Bhanusali was featured nationally and internationally for his pro-bono work on a slashing victim's scars. Bhanusali recently launched Fast Beauty Co, the first skincare line offered through Amazon's new in-house accelerator program. His pharma-tech company, Skin Medicinals, was recently featured in Business Insider for its success in lowering drug prices and improving access to patient medication. An active entrepreneur and investor, he has founded several other companies, including Health Digital, HairStim and AIRE Health.

YOUNG ALUMNI AWARD

Michael Pruente

B.A. in Supply Chain Management, 2007, Eli Broad College of Business, Michigan State University



I got involved with Broad College of Business Alumni Board to stay connected to MSU and to have a direct impact helping students. Being a Spartan, to me, is being part of a large family that helps each other.



He's a leader in total talent management, workforce transformations and supply chain optimization. With over 10 years of industry experience, Pruente worked for Shell and ConocoPhillips before joining WG Consulting in 2015. He led numerous transformation projects during his career for major multinational companies who see fast-changing labor markets, cost pressures, changing work habits and fluid regulations as opportunities for improving operational effectiveness and managing risk. He has led large-scale projects at Molina Healthcare, USACS, Shell Oil, BHP Billiton and ConocoPhillips. An engaged and philanthropic alumnus, Pruente has established two MSU scholarships—including the Sandra Pruente Memorial Scholarship to honor his mother and And he named a team room in the Minskoff Pavilion. Pruente was an Eli Broad College of Business Young Alumni representative and an Alumni Advisory Board member and is a former president of the Houston Spartans.

YOUNG ALUMNI AWARD

Carlo Riolo & Katherine Niksich

Riolo: B.S. in Veterinary Sciences, 2004, College of Veterinary Medicine, Michigan State University D.V.M., 2006, College of Veterinary Medicine, Michigan State University

Niksich: B.S. in Biology, 2002, College of Biological Studies, University of Minnesota D.V.M., 2007, College Veterinary Medicine, Michigan State University | M.P.H. Veterinary Public Health, 2009, University of Minnesota



Our fire burns for those who come after us, and we yearn to create a process that supports individuals we will never meet. If it all goes according to plan, we'll have become the driving force for change in the veterinary industry. We'll become the beacon for hope.



They are co-owners of PAW Health Network, west-central Wisconsin's only 24-hour animal care center, and are partners in revolutionizing the veterinary industry. The married couple is developing programs aimed at creating balanced and healthy work environments in their own clinic as well as for other veterinary professionals and MSU veterinary medicine students. Parents of three children, they live on a 30-acre hobby farm. Through their five-year financial pledge to MSU and their PAW Health Mentorship Program, they are bolstering students' experiences and postgraduate training. Riolo has offered after-hours and emergency veterinary medicine care since 2006. Niksich has worked as a veterinarian since 2007.

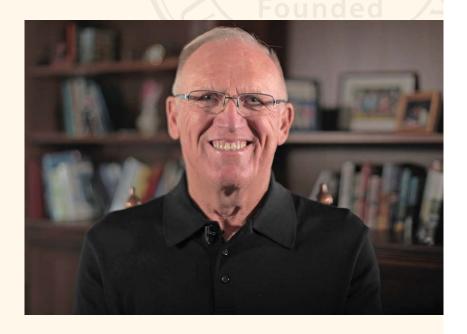
HONORARY ALUMNI AWARD

Kenneth Nobis

B.S. in General Agriculture, 1968, Western Michigan University



The Spartan community's 'can-do' attitude sets it apart. Working with MSU researchers and numerous students on our farm through the years has illustrated that the Spartan community is innovative and willing to build effective learning opportunities for its students.



He owns Nobis Dairy Farms, is a U.S. Army veteran and is a leader in statewide and national dairy industry organizations. Nobis has supported MSU's Department of Animal Science and MSU Extension teaching and research for over 40 years. More than 60 MSU students have practiced their professional skills at Nobis Farms. Nobis Farms owns a herd of 1,100 dairy cattle. In addition, he is a senior policy adviser for the Michigan Milk Producers Association, having served 12 years as president before moving into his current role. When he learned about milk's ability to help alleviate the effects of lead poisoning in children and adults, he joined the state dairy association and Kroger Co. to donate 12,000 gallons of milk to people living in Flint following the city's drinking water crisis.

PHILANTHROPIST AWARD

Shashikant & Margaret Gupta

Shashikant Gupta: M.B.A. in Hospitality, 1975, Eli Broad College of Business, Michigan State University | Ph.D. in Economics, 1980, College of Social Science, Michigan State University

Margaret Gupta: B.A. in Political Science, 1980, University of Texas at San Antonio | M.A. in Political Science, 1982, University of Michigan



The reason we got into business to begin with is because we believe that business should be a force for good. Promoting those values and finding people who are interested in living by them has really driven this scholarship program.



They are co-founders and leaders of Apex CoVantage as well as social activists and international philanthropists. Shashikant Gupta is CEO of their company, which he co-founded in 1988. Margaret Gupta is its chief operating officer, overseeing the company's global operations. Additionally, she is president of the Gupta Family Foundation, a private foundation that supports organizations around the globe dedicated to helping disadvantaged people become self-reliant. The couple created the Gupta Values Scholars Program at MSU in 2016 with a gift of \$2.5 million. There are currently 21 MSU Gupta Scholars. The scholarship program aligns with the couple's business model and core values—integrity, human dignity and excellence. Each year, scholars have an opportunity to spend time with the Guptas and visit the couple's company headquarters and social organizations the Guptas have supported through their foundation.





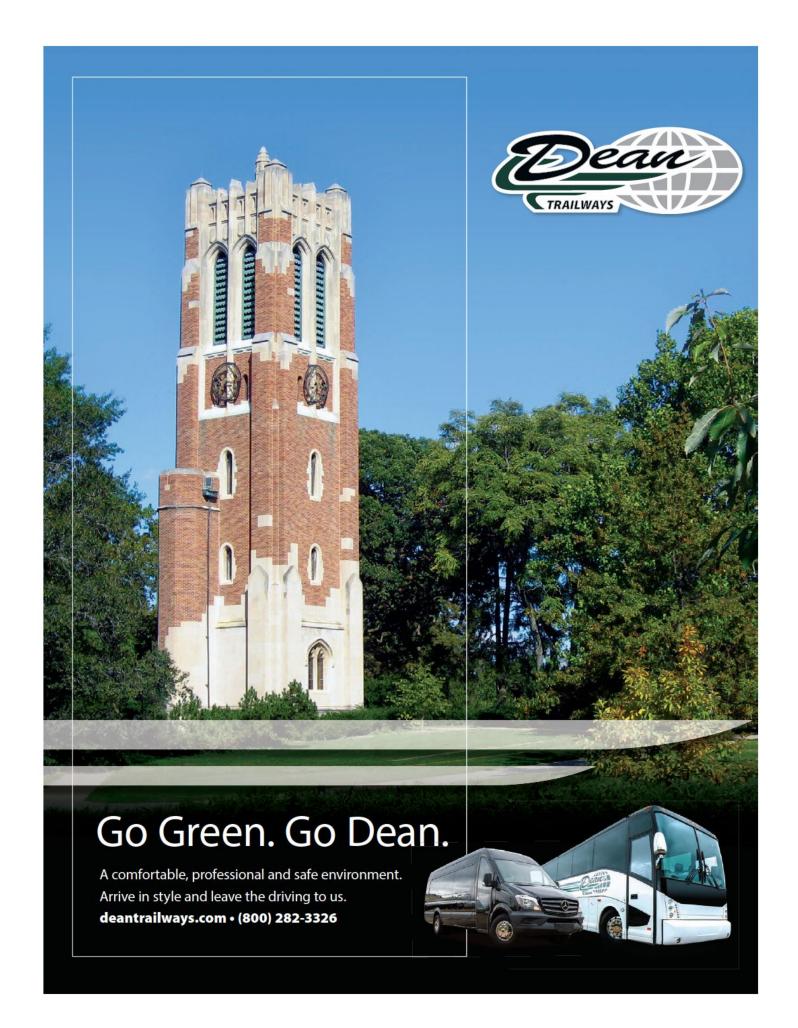




HIGHLIGHTS FROM ALUMNI EVENTS

Clockwise, from top left: 1. Alumni show their pride during the Majestic Vistas: Venice to Rome tour last fall. 2. The annual Thanks for Giving luncheon recognized MSU supporters and included a visit from our new MSU President Samuel L. Stanley Jr., M.D. 3. Newly minted alumni pulled together during their May tour, which included whitewater rafting in Europe. 4. Young scientists-to-be and their grandparents performed an experiment and enjoyed numerous other activities on campus during Grandparents University last summer. 5. Even Sparty showed up to encourage new students settling into Wilson Hall at the semester's start.





Class Notes

News from Spartans Around the World



REELING IT IN A staff person examines magnetic tape on an early MSU computer system.

1950s

PAMELA FRUCCI, '54 (Education), produced a musical based on her self-published children's book written with her granddaughter Emily "A Visit to my Great Great Grandpa," The musical and book are about the early life of Sheridan Howard, a selfeducated musician and painter who played string bass in Michigan Agricultural College's first orchestra and was the official painter for M.A.C. in the 1920s.

JEAN WONSER, '58 (Social Science), M.A. '65 (Education), has published her memoir "Ain't No Use Cry'n: Abusive Childhood Recovery," detailing how she worked to cultivate a loving personality despite her childhood trauma.

JOHN MCCALLY, '59 (Social Science), was awarded the Albert Nelson Marquis Lifetime Achievement Award by Marquis "Who's Who" in recognition of his career as a health care executive.

BERNARD G. NIEHAUS, '59 (Agriculture and Natural

Resources), has retired as CEO of Niehaus Lumber following a 60-year career. Bernard's three sons: Butch, David and Eric, and two daughters: Anne and Catherine, will continue to run the family business. In 2015, Niehaus published "Splinters I & II, The Story of a Lumber Company, a Loving Family, a Living Church, a Loyal Community," chronicling the growth of Niehaus Lumber and the tools that MSU provided him with to build a legacy.

1960s

ELLWYN R. STODDARD, Ph.D. '61 (Social Science), was awarded the Albert Nelson Marquis Lifetime Achievement Award by Marquis "Who's Who" in recognition of his legacy and contributions to the fields of sociology and anthropology.

JIM SARGENT, M.A. '68, Ph.D. '72 (Both in Social Science), has published "The Long Pursuit," the second novel in his Mickey Matthews mystery series.

1970s

PHILIP HART, M.A. '70, Ph.D. '74 (Both in Social Science) and TANYA HART, '71 (Communication Arts and Sciences), were recently awarded the Bessie Coleman Aerospace Legacy Award by the Organization of Black Aerospace Professionals. The Harts produced "Flyers in Search of a Dream," a 1987 Public Broadcasting Service documentary film about the challenges pioneering black aviators faced. Philip Hart is the author of several books including: "Flying Free: America's First Black Aviators" and "Up in the Air: The Story of Bessie Coleman." Tanya is an Emmy-award winning television presenter and syndicated radio host and producer. She has hosted entertainment programs such as "Live from LA with Tanya Hart" for BET and the "Gossip Show" for E!.

ELIZABETH GOLDSMITH, M.A. '72, Ph.D. '77 (Both in Social

Science), served as a Fulbright specialist on the island of Malta, consulting on conservation and sustainability.

WILLIAM E. BARRICK, Ph.D. '76 (Agriculture and Natural Resources), was awarded the 2019 American Public Gardens Association's Service Award, in recognition of his selfless service to the organization. Barrick recently retired as executive director of the Bellingrath Gardens and Home, a 65-acre historic estate in Theodore, Alabama, which has become a major tourist

attraction on the Gulf Coast,

year, under his leadership.

attracting 110,000 visitors each

JOHN BARSON, '76 (Social Science), was awarded the Harry G. Moselev Award by the Aerospace Medical Association in recognition of his contributions to the safety of flight during a 35-year career in aerospace medicine.

ANDREW HUGINE, JR., Ph.D. '77 (Education), was awarded Male President of the Year by "HBCU Digest" in recognition of his success as president of Alabama A&M University. In his 10 years leading AAMU, President Hugine Jr. has made strides in fiscal stability, fundraising and the expansion of AAMU's academic programs.

SUSAN PACKARD, '77, M.A. '79 (Both in Communication Arts and Sciences), served as the grand marshal for MSU's 2019 Homecoming celebrations and concluded her book tour promoting "Fully Human," a self-help guide to developing emotional fitness in work, leadership and life.

HILLARY A. FROST, '78 (Social Science, Honors College), retired as a faculty member from the University of Illinois-

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CLASS NOTES

Class Notes cont'd

Springfield. Since 2007, she served as associate professor and director of the global studies program, where she developed and taught introductory and capstone courses.

JODI HARPSTEAD, '78, MBA '80 (Both in Business), was appointed the commissioner for the Minnesota Department of Human Services by Governor Tim Walz.

1980s

ROGER MARTIN, '81 (Communication Arts and Sciences), and ELIZABETH **BATTISTE, '12 (Communication Arts** and Sciences), were part of the Martin Waymire team that won the nation's top award for public relations excellence-the Silver Anvil. The firm's work on "Voters Not Politicians, Yes on Proposal 2," a nonpartisan campaign to end partisan gerrymandering in Michigan, secured what is considered the Oscar of the public relations profession.

TINA LONSKI, M.A. '85 (Communication Arts and Sciences),

has published a new book, "As My Dad Used to Say," which shares personal anecdotes from the life of Ralph Young, MSU's longest-serving athletic director. The book, a collaboration between Young's daughter, Janet Young Hines, and Lonski, chronicles the impact Young had on the university.

JOSEPH T. SPANIOLA, '85, M.M. '87 (Both in Music), has released "Escapade," his first album with Big Round Records. The album showcases his versatility as a composer, developed through leading bands, chamber ensembles and orchestras.

LIZ YOKUBISON, '88, MBA '91 (Both in Business), has published "They're Ready. Are You? A Parent's Guide to Surviving the College Transition," a guide for parents sending their children off to college.

RALPH HEIBUTZKI, '89 (Communication Arts and Sciences),

has co-written "We Are The Clash: Reagan, Thatcher & The Last Stand of a Band That Mattered," a book examining the legacy and context of the English punk band during a tumultuous political period.

SCOTT SPENCER, '90 (Agriculture and Natural Resources), has joined **Huntington Construction** Company as a project manager.

SCOTT WEST. '91 (Communication Arts and Sciences), has been promoted to president and chief operating officer of Program Productions and XLT Management Services, a leading provider of live event production support and labor management

JEFFREY J. BROWN, '92

services.

(Engineering), has been promoted to senior vice president of Fishbeck, Thompson, Carr & Huber's Lansing office. FTC&H is a civil engineering firm headquartered in Grand Rapids.

STEVEN J. ENWRIGHT, '93

(Business), has been named a partner at Lippitt O'Keefe Gornbein, PLLC, a full-service law firm in Birmingham, Michigan.

CONCETTA LEWIS, '93 (Education),

was named executive director of special education of Rochester Community Schools in Rochester.

CLASS NOTES

ALICIA SCHEHR, '94 (Arts and Letters), a partner at Jaffe Raitt Heuer & Weiss, P.C., a Michiganbased business law firm, was named practice group leader of the firm's financial services practice group.

MONICA DUNCAN, '95 (Music),

published her debut novel "Twine," the story of a young woman stuggling to fulfill her potential as an artist in rural Gobles, Michigan.

NOEL MARSDEN, '95 (Engineering, Honors College), has joined CareCloud as chief financial officer. CareCloud is a provider of cloud-based health care solutions. Based in Miami, Florida, it. manages more than \$4.5 billion in annualized accounts receivable through its integrated clinical and

STEPHANIE PALMER, '95, M.S. '96 (Both in Engineering), was awarded the 2019 Michigan Department of Transportation Director's Award-the department's highest employee honor for outstanding service.

financial platform.

DAVID WONG, '95, D.V.M. '97 (Both in Veterinary Medicine), was named department head for large animal clinical services at Virginia Tech.

PATRICIA HANNON, '96 (Education,

Music), a reading specialist at Hohenfels Elementary School in Germany, was one of five recipients of the 2020 Horace Mann Award for Teaching Excellence. As such, she is now a finalist for the National Education Association Member Benefits Award for Teaching Excellence which is presented each year by the NEA Foundation to recognize an outstanding public school educator. Hannon is the first Federal Education Association (FEA) member and first DoDEA

employee selected as a finalist for the award.

ROGER C. VELIQUETTE, '96 (Arts and Letters), was awarded a Master of Divinity degree from Louisville Presbyterian Theological Seminary in Louisville, Kentucky.

BRIAN DOUBLES, '97

(Engineering), has been promoted to president of Synchrony, a premier consumer financial services company. Doubles, a 21-year veteran of Synchrony, will continue to focus on accelerating key growth initiatives for the company.

ANTHONY YOUN, M.D. '98 (Human Medicine), has published "Playing God: The Evolution of a Modern Surgeon," a memoir recounting his path from surgery resident to successful plastic surgeon.

CELESTE FUCHS, '99 (Communication Arts and $\mbox{\bf Sciences),}$ has joined Corcoran Exhibitions as an exhibit manager. Corcoran Exhibitions is one of the nation's largest independent trade show organizers, having produced more than 800 trade shows in 100 cities over the past 29 years.

ANGELA TOTTEN, '02 (Education), received the 2019 Educator Excellence Award from Air Zoo-a Kalamazoo aerospace museum-during its annual Science Innovation Hall of Fame Awards event.

RACHEL MANDRELLE, '03 (Education), was featured by Honored-a nonprofit that celebrates educators for their impacts on students-for her







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compassion and efforts in connecting with elementary students who have experienced trauma.

JEFFREY NEWTON, '04, M.S. '05 (Both in Business), was recently named vice president of audit and finance of Delta Dental of Tennessee.

AMANDA TOY, '05 (Business), has joined the Michigan Restaurant & Lodging Association as vice president of operations and membership.

PETER FEZZEY, '06 (Communication Arts and

Sciences). has joined Skidmore Studio's leadership team, where he will direct business development efforts. Skidmore Studio is a strategic creative studio founded in Detroit over 60 years ago.

SARA JO SHIPLEY, '06 (Social Science), has joined ASTI Environmental's brownfield redevelopment group as a redevelopment associate.

ANGELA MINICUCI, '09 (Communication Arts and Sciences), has joined Martin Waymire, a Lansing-based, full-service public relations and digital marketing firm, as a

senior account executive.

JUSTIN THOMAS, '09 (Lyman Briggs), D.O. '14 (Osteopathic Medicine), has started a charity dedicated to providing humanitarian brain and spine surgery to children and adults in Africa: The Neuroscience Foundation for Africa. The foundation launched its inaugural program in August 2019 in Kibera, Kenya, one of the poorest communities in East Africa.

2010s

KYLE CORCORAN, '10 (Business, Honors College), has been promoted to exhibit manager at Corcoran Exhibitions. Corcoran Exhibitions is one of the nation's largest independent trade show organizers, having produced more than 800 trade shows in 100 cities over the past 29 years.

JAZMIN BAILEY, '11 (Communication Arts and Sciences), received the 25 Under 35 award from her high school alma mater, Saint Joseph Academy in Cleveland, Ohio.

MIKE HOFFSHIRE, M.A. '11 (Education)

has published a case study "It's the Intersections That Get Sticky: Navigating Ethnic and Sexual Identities" in the textbook "Case Studies for Student Development Theory, Advancing Social Justice and Inclusion in Higher Education."

YEKATERINA AFONINA, '12 (Social

Science), received her Doctor of Osteopathic Medicine degree from Philadelphia College of Osteopathic Medicine in Suwanee, Georgia.

SONIA ROBLES, Ph.D. '12 (Social Science), recently published "Mexican Waves," an examination of Spanish-language radio along Mexico's northern border from 1930 to 1950.

SHAY BERMAN, '13 (Communication Arts and Sciences), has established Digital Resource-a digital marketing agency-located in West Palm, Florida. It was chosen as one of Inc. Magazine's Fastest-Growing Private Companies.

ANDREW G. FULLETT, '13 (James Madison), has joined Chuhak & Tecson, P.C. as a banking and employment attorney.

ALEXANDRA BREKKE, '14 (Communication Arts and Sciences) and BRIANNA KRUS, '16 (Business), have been selected from over

300 applicants to join Ford Motor Company's 2019 Thirty Under 30 program. The program pairs employees with nonprofits to address challenging social issues.

KIRK MASON, '14 (Residential College in the Arts and Humanities) and LAURA SWANSON, '15

(Communication Arts and Sciences), directed and produced an awardwinning documentary film "Break the Chain," that exposes the dark underbelly of human trafficking insidious to Michigan communities and the United States. The film chronicles the experiences of two survivors, who were trafficked in Ypsilanti and Detroit.

ALEX A. PILKINGTON, M.S.

'18 (Business), was recently named chief strategy officer of Three Six Zero Leadership, a service-disabled veteranowned leadership development company located in Philadelphia.

DEZHA WILLOUGHBY, '18 (Social Science), has been selected to participate in Challenge Detroit, a leadership and professional development program that cultivates community-minded leaders through partnerships with nonprofits, Detroitbased companies and cultural institutions.

Correction:

We apologize for an error in a class note that appeared in the previous issue. It listed the wrong home town. It should have read:

SHANNON MULLALLY, '00 (Social Science, Honors College), has authored a new book, "The Second Detective," through Anvil Press. She is a writer living in Grand Haven.

Submit a Class Note SEND E-MAIL TO ALEX GILLESPIE: gille115@msu.edu

ON THE WEB:

myalumni.msu.edu/classnotes



Last year, **8,922**SPARTANS joined the Leadership Circle by giving **\$1,000** or more to SUPPORT STUDENTS.

Shokhari Tate, '20, a kinesiology major is inspired to pursue a career in public health after his scholarship enabled a study abroad experience to help refugees in Greece.

"I know for sure that I wouldn't be able to say, 'I'm a senior at Michigan State with a nice, high GPA and about to graduate,' if it wasn't for the scholarships I received in my time here."

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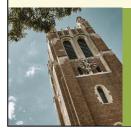


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In Memoriam

When Twilight Silence Falls

1930s

MIRIAM M. (GEBOO) SCHAEFER, '39, of Flint, Jun. 8, age 101

1940s



ELEANOR M. (WELTON)
BECKERT, '40, of Boulder City,
NV, Apr. 29, age 101

EMILY (TELFORD) HENDERSON, '40, of Haslett, Apr. 14, age 100

ELIZABETH W. (WAGNER) ROOK, '40, of Rochester, NY, Jun. 9, age 101

RALPH P. FIEBACH, '41, of Wichita, KS, Jul. 25, age 101

JACOBA M. BAKER, '43, of Groton, NY, May 11, age 98

MAXINE L. (MOONE) HANNERT, '43, of Milford, CT

CLEMENT E. MINER, '44, of Owosso, May 1, age 97

JEANE I. (BLANDFORD) SWART, '45, of Grand Rapids, May 4, age 95

MAX L. BOTTOMLEY, '46, of Midland, Apr. 25, age 96

HELEN M. (MILLER) HOXIE, '46, of Dallas, TX, Jun. 15, age 95

CARL E. BLEIL, '47, of Rochester Hills, Jul. 2, age 95

MARJORIE G. (SHARP) BRAINERD, '47, of Naples, FL, Apr. 20, age 92

PATRICIA J. (MURPHY) GOULD, '47, of Fenton, May 23, age 93

PATRICIA C. (STANFORD) NORTON, '47, of Milwaukee, WI, Jul. 14, age 94

MARCELLA M. (LEWANDOWSKI) VANCE, '47, of Sebring, FL, Jul. 16,

JOAN E. (BOWMAN) WENDT, '47, of Alma, May 19, age 94

DOUGLAS J. BACHAND, '48, of Raleigh, NC, Jun. 5, age 97

ELAINE L. (LANTTA) BEARDSLEE, '48, of Traverse City, May 24, age 93

PATRICIA J. (HOLLINGER) BURNETT, '48, of Chelsea, May 19, age 93

E. SUZANNE (WILSON) CLOGG, '48, of West Bloomfield, May 1, age 93

RODNEY C. DICKINSON, '48, of DeWitt, Apr. 16, age 95

MARGERY M. (VANALLSBURG)
DUTCHESS, '48, of Grand Rapids,
May 20, age 93

ROBERT E. GERNAND, '48, of Huntington, IN, May 26, age 92

GRAYDONNA M. (SCOTT) GRAHAM, '48, of Aztec, NM, Jul. 16, age 92

LYLE B. HAWKINS, '48, of Sarasota, FL, Jun. 26, age 92

CERNYW K. KLINE, '48, of Eaton Rapids, May 16, age 97

ANNE C. (CHURCH) LAWRASON, '48, of Merchantville. NJ. Jun. 14

ANITA L. MILLER, '48, of Lady Lake, FL, Jul. 17, age 92

WILLIAM G. PIRRONELLO, '48, of San Marcos, CA, Feb. 28, age 94

DONALD E. SIEFERT, '48, of New Berlin, WI, Apr. 26, age 94

DILLON SNELL, '48, of Boerne, TX, Jun. 3, age 94

GLORIA E. STEPHENS, '48, of Grand Ledge, May 12, age 93

MARGARET L. (NEWTON) STEPHENS, '48, of Aurora, CO, May 24, age 94

MARY ANN (LENOSKY) TROJANEK, '48, of Carrollton, TX, Jun. 27, age 93

LAWRENCE E. ARNETT, '49, of Grosse Pointe Woods, Apr. 19, age 96

NORENE L. (JANSON) BIEFELD, '49, of Newark, OH, May 6, age 92

JUNE M. (BAKER) BIELEFELDT, '49, of Stuart, FL, Jul. 15, age 92

JAMES L. BRITTON, '49, of Holt, Jul. 12, age 94

THOMAS D. CRANFIELD, '49, of Jemison, AL, Jun. 26, age 94

MARY A. (LEPEL) LAGONI, '49, of Marco Island, FL, May 17, age 91

SHELDON B. LEE, '49, of Cary, NC, Apr. 25, age 93

WARNE B. MCCLELLAND, '49, of Hilton Head, SC, May 16, age 93

PATRICIA (BECHTOLD) RADEMACHER, '49, of Grand Rapids, Apr. 28, age 91

JACK C. ROSENAU, '49, of Tallahassee, FL, Apr. 20, age 99

NORMAN W. STERN, '49, of Southfield, Feb. 19, age 94

1950s

ROBERT R. BARNITT, '50, of Mercer Island, WA, Jul. 4, age 92

JANE H. (HATCH) BAUMLER, '50, of Redding, CT, Jun. 24, age 91

DUANE P. BONE, '50, of St. Johns, Jul. 15, age 89

iDELLA L. (GRAVES) CHINO, '50, of Chicago, IL, May 21, age 90

MARILYN A. (PAULSON)
COLBURN, '50, of Norton Shores,
Jul. 19, age 91

MARY (COUTURE) CORRIVEAU, '50, of Anacortes, WA, Jul. 11

FRANCIS L. DONOHUE, '50, of Lansing, Jun. 6, age 92

AILEEN V. (SNELL) EICK, '50, of Mankato, MN, Jul. 2, age 91

JAMES G. HOUSE, '50, of Sun City West, AZ, Apr. 24, age 93

STANLEY J. JOHNSTON, '50, of Melbourne, FL, Jun. 20, age 95

WILLIAM G. KELL, '50, of Union, SC, Jun. 24, age 94

DOROTHY (THOMAS) KIRKPATRICK, '50, of Northville, Oct. 1, age 90

MARIALYCE (STUTZ) LEER, '50, of Sturgis, May 22, age 91

WILLIAM E. LEIMBACH, '50, of Lansing, Jul. 14, age 90

BOURKE E. LODEWYK, '50, of Bay City, Apr. 21, age 90

FLORENCE E. (FREIHEIT) LOSTUZZI, '50, of Lansing, Oct. 27, age 89

PAUL MILLIMAN, '50, of Lansing, Oct. 4, age 94

HAROLD E. NORD, '50, of Melbourne, FL, Jul. 20, age 90

HERMAN B. OMNESS, '50, of Zephyrhills, FL, Oct. 8, age 93

MARY J. (SIMPSON) PARK, '50, of Grand Haven, Jun. 27, age 91

ALVIN R. PIEGOLS, '50, of Bryans Road, MD, Apr. 19, age 96

SUZANNE (ARMENTROUT)
RUSSELL, '50, of Fife Lake, May 7, age 90

PAUL A. COLGATE, '51, of Los Angeles, CA, Jul. 8, age 92

ROSALIE J. (RANDALL) CORSON, '51, of San Francisco, CA, Dec. 1, age 88

DAVID R. CREGO, '51, of Lansing, Jul. 11, age 90

AUDREY H. ENGSTROM, '51, of Portage, May 25, age 88

STANLEY D. MACKEY, '51, of Flushing, Apr. 16, age 93

GEORGE E. MASTERS, '51, of Lansing, Jun. 10, age 89

ARTHUR P. RONAN, '51, of Plymouth, Apr. 21, age 89

PATRICIA N. (MCKEOWN) TODD, '51, of Rockford, May 28, age 90

JAMES M. WESTBY, '51, of Tracys Landing, MD, Apr. 28, age 93



IN MEMORIAM



ALFRED J. ZEITS, '51, of Roseville, CA, May 19, age 91

KENNETH D. FEIGHNER, '52, of Charlotte, Jun. 24, age 92

WILSON A. GAY, '52, of Midland, Apr. 29, age 90

WALTER F. KUHTA, '52, of Toledo, OH, Jun. 23, age 91

CHARLES M. MCDERMID, '52, of Wilton Manors, FL, Jul. 21, age 91

JOHN R. PEFFER, '52, of Verona, PA, Apr. 22, age 90

MARY O. (LEMMER) RYNO, '52, of Escanaba, Apr. 29, age 89

MILDRED E. SWART, '52, of Southfield, Jun. 18, age 88

BARBARA E. (STEARNS) SWARTHOUT, '52, of Paris, IL, May 23, age 88

ALBERT H. VANSICKLE, '52, of Marysville, May 10, age 89

DAVID F. WITHERSPOON, '52, of CA, Apr. 25, age 95

ANN (CROSSLEY) DAVIS, '53, of Dallas, TX, Jun. 29, age 88

MARY A. (LANGIUS) DELANEY, '53, of Jacksonville, FL, Jul. 1, age 88

BARBARA DOVE, '53, of Indianapolis, IN, Apr. 25, age 87

MARY (PANGBORN) LINDQUIST, '53, of Fort Myers, FL, Jan. 4, age 87

ROSALIE A. MANZ, '53, of Springville, TN, May 7, age 93

ALMA J. (JONES) ROMBOUTS, '53, of Traverse City, Apr. 24, age 89

JEAN E. (PETTIT) ROWELL, '53, of Wichita, KS, May 1, age 95

RUBEN B. SHEHIGIAN, '53, of Hammond, IN, Apr. 21, age 88

ROBERT H. WILKINSON, '53, of Quincy, May 4, age 87

WILLIAM R. BRINK, '54, of Moraga, CA, Apr. 24, age 88

MARK M. BUCKMAN, '54, of Gladstone, Apr. 26, age 87 CALVIN J. FOSTER, '54, of Spring Lake, Jun. 10, age 90

RALPH J. FRAHM, '54, of Frankenmuth, Jun. 28, age 86

JOHN B. KEMMERLING, '54, of Buffalo, MN, Jun. 16, age 86



NICK J. LABEDZ, '54, of Capo Beach, CA, May 29, age 87

FRANCIS A. PETERSON, '54, of Urbandale, IA, Jun. 10, age 87

JACK J. PREISS, '54, of Durham, NC, Apr. 14, age 99

THOMAS J. STEEL, '54, of Grand Rapids, Jun. 13, age 87

RICHARD A. WALLIN, '54, of Monroe, Apr. 19, age 88

TERRY J. BERGSTROM, '55, of Ann Arbor, Jun. 23, age 85

WILLARD H. BLANCHARD, '55, of Lancaster, PA, Jun. 3, age 86

BARBARA J. (JOHNSON) BURMEISTER, '55, of Sparta, Jun. 23, age 93

GEORGE B. DANENBERG, '55, of Lafayette, LA, Jul. 5, age 90

JOHN E. EKEROTH, '55, of Cincinnati, OH, Jun. 1, age 87

LAWRENCE D. GUILE, '55, of Saint Louis, MO, May 4, age 86

KAYE S. MACDONALD, '55, of Irons, Jul. 14, age 87

HAROLD W. MARKEY, '55, of Fort Wayne, IN, Jun. 1, age 87

JOHN A. NESBITT, '55, of Iowa City, IA, May 20, age 86

CARL D. PEPPER, '55, of Jamestown, NC, Oct. 7, age 85

PHYLLIS G. (MIOTTI) SABLICH, '55, of Big Bend, WI, Apr. 22, age 91



OLIVER P. SCHENDEL, '55, of Benzonia, Nov. 21, age 90

FRANCIS L. SCHMITT, '55, of Avon Park, FL, Dec. 31, age 85 **ELANORE M. THOMPSON, '55,** of Fremont, May 8, age 90

ERNEST H. WALLICK, '55, of Lansing, Jun. 4, age 91

JOHN R. WEDDING, '55, of Lansing, Jun. 10, age 90

DONALD D. ARNOTT, '56, of South Haven, Jun. 24, age 91

JAMES H. BROWN, '56, of Hull, MA, Apr. 24

RONALD E. BROWN, '56, of St. Clair Shores, May 5, age 85

JOSEPH J. COLUCCI, '56, of Bloomfield Hills, Jun. 21, age 84

BEVERLY A. (HUTCHINS) DEAN, '56, of Tucson, AZ, Sep. 24, age 84

CHESTER G. DEJONGH, '56, of Cornell, WI, Jul. 5, age 85

CAROL A. FERRARA, '56, of State College, PA, Apr. 27, age 88

JOSEPH W. GOODSIR, '56, of Okemos, Jan. 27, age 89

JAMES T. PEARLMAN, '56, of San Antonio, TX, Jul. 12, age 85

ROSS D. SCOTT, '56, of CA, May 1, age 86

IRENE SIDOR SMITH, '56, of Ann Arbor, May 11, age 84

JOHN H. TANTON, '56, of Petoskey, Jul. 16, age 85

MARY I. (MCROBBIE) THIEL, '56, of Lansing, Jul. 8, age 90

HARRY E. TOMASCHKE, '56, of Lockport, NY, Apr. 19, age 89

WILLIAM R. ADAMS, '57, of Hayward, CA, Aug. 31, age 86

SYLVIA L. (DESTEIGER) COLE, '57, of Fenton, May 25, age 84

BARBARA A. (HUDSON) CONLEY, '57, of North Platte, NE, Apr. 14, age 83

LYNN S. CRESSLER, '57, of South Lyon, Dec. 17, age 91

DONALD P. GRENDA, '57, of Hurley, WI, Jun. 24, age 89

FRANK B. HILL, '57, of Tarpon Springs, FL, Jun. 11, age 84 **DAVID P. JOHN, '57,** of Loudon, TN, Jul. 3, age 83

HAROLD R. KEMP, '57, of Salinas, CA, May 5, age 87

DONALD E. LEAS, '57, of Mayport, PA, Apr. 25, age 84

MARCIA E. (FOLEY) MURPHY, '57, of Denver, CO, May 16, age 83

STEPHEN O. STUBBS, '57, of Troy, Apr. 22, age 84

THOMAS J. BEYER, '58, of Cheboygan, May 19, age 82

GERALD D. BOYNTON, '58, of Bryan, OH, Jun. 28, age 82

JAMES H. COTHERN, '58, of Davis, CA, Jun. 16, age 85

C. JAMES CURRAN, '58, of Marco Island, FL, Jun. 20, age 88

THOMAS F. LOBKOVICH, '58, of Crest Hill, IL, Jun. 10, age 86

RICHARD L. MCBANE, '58, of Lilburn, GA, May 7, age 83

RICHARD L. ROGGENBUCK, '58, of San Jose, CA, May 11, age 84

PRUDENCE A. (ROMINE) SHELDON, '58, of Lebanon, OH, May 4, age 82

PATRICIA N. (NASH) SIMS, '58, of Paragould, AR, May 25, age 82

WILLEM A. VAN ECK, '58, of Cary, NC, May 9, age 90

JAMES H. WERNIG, '58, of Charlevoix, May 15, age 85

DORIS M. DOWNS, '59, of Urbana, IL, May 2, age 89

JOHN E. FORTE, '59, of Sylvania, OH, May 31, age 81

JOYCE A. (NORMAN) HANLON, '59, of Jenison, Apr. 26, age 81

CAROLE G. (SCHLINKERT) KENYON, '59, of Punta Gorda, FL, Apr. 29, age 81

GERALD N. LAUGHLIN, '59, of Elmira,

NY, Jun. 1, age 85

ALGER H. PALMER, '59, of Onalaska, WI, May 28, age 83

ALICE (MATTERS) PEGRAM, '59, of Deland, FL, Jan. 26, age 108

TED PLATT, '59, of Hillsdale, Jun. 25, age 85

JEAN F. (TANSEY) PORTER, '59, of East Lansing, Jun. 17, age 99

JAMES M. TISDALE, '59, of CA, Jun. 23, age 83

BENJAMIN F. ZIMMERMAN, '59, of Roscommon, Jul. 2, age 81

1960s

JAMES M. CONLEY, '60, of North Platte, NE, Jun. 29, age 81

ARLON E. ELSER, '60, of Ruskin, FL, Jun. 21, age 83

ANN S. (DRILLING) ENOS, '60, of Denton, TX, Apr. 7, age 83

DOROTHY FRAYER, '60, of Charlottesville, VA, Aug. 25, age 80

MILTON LUTCHANSKY, '60, of Ledgewood, NJ, Jun. 17, age 87

KEITH L. MCGEHEE, '60, of Beulah, May 4, age 84

GEORGE E. MOFFAT. '60. of Middleburg, VA, Apr. 16, age 84

NANCY S. OWEN, '60, of Kalamazoo, Jun. 28

JOHN L. PHILLIPS, '60, of Chicago, IL,

FRANZ W. STEVENS, '60, of Warren, May 8, age 82

May 9, age 80

DAWN M. (HARNETT) TREW, '60, of Lansing, Jun. 5, age 81

WILMA L. (SHEPARD) WORKMAN, '60, of Candler, NC, Apr. 20, age 87

S. JOHN ARCHER, '61, of Dublin, CA, Jun. 6, age 80

WADE P. CORY, '61, of Haskell, NJ, Jun. 25, age 79

NED A. DAUGHERTY, '61, of Fort Collins, CO, Jun. 25, age 84

JAMES G. FIEDLER, '61, of Charlevoix, Apr. 26, age 87

JUDITH C. HARPOLD, '61, of Grand Rapids, May 27, age 90

JAMES J. HUSA, '61, of Lawrence, May 15, age 94

JAMES M. IRELAND, '61, of Mason, May 10, age 81

NELSON J. JACOBS, '61, of Highlands Ranch, CO, Jul. 16, age 86

RONALD M. KAST, '61, of Grand Rapids, Jun. 4, age 80

FRANK W. KEARNS, '61, of Eagle Mountain, UT, May 11, age 92

DIANNE P. RALPH, '61, of Athens, GA, Jul. 10, age 80



JANET C. (DEPEW) SHARON, '61, of

Stevensville, Jun. 1, age 80

ROGER C. THWEATT, '61, of Fruita, CO, Jun. 4, age 89

D. EUGENE WAMPLER, '61, of Harleysville, PA, Apr. 24, age 83

CHARLES J. WATSON, '61, of Williamsburg, May 4, age 85

DONNA M. (LAFAIVE) AMBS, '62, of Jackson, Jun. 13, age 78

GARY S. ANTHONY, '62, of Romeo, Sep. 22, age 79

RICHARD J. BONIER, '62, of Lawrence, MA, May 27, age 86

BURTON A. GAVITT, '62, of Milford, Jul. 13, age 87

DELPHINE GAY, '62, of Needham, MA. Apr. 19. age 83

HERMAN GEERS, '62, of Grand Ledge, Jul. 11, age 85

FLOYD HERALD, '62, of Cotati, CA, Apr. 19, age 80

RODNEY A. HOWELL, '62, of Hudson, WI, May 5, age 79

DEAN KELLEY II, '62, of Kalamazoo, Oct. 29, age 78

PATRICIA E. (TURNER) MULDOON, '62, of Pembroke, VA, Jul. 20, age 79

GRACE POSTHUMA. '62. of Coopersville, May 16, age 98

RICHARD T. SADLER, '62, of Battle Creek, May 6, age 82

LEE H. SMALLEY, '62, of Menomonie, WI, Jun. 28, age 92

MARILYN R. (SMITH) TAYLOR, '62, of Williamsburg, VA, Jul. 3, age 78

OWEN C. AHERN, '63, of Auburn Hills, Jul. 15, age 78

 $\textbf{GEORGE BOGOSIAN, '63,} \ of Arcadia,$ CA, May 30, age 88

KATHLEEN M. CRACKEL, '63, of Fort Gratiot, Jul. 19, age 94

JOSEPH E. DROLETT, '63, of Lansing, Jun. 2, age 81

CHARLES C. HOLLEN, '63, of Southfield, May 3, age 79

ELTON C. JASON, '63, of Carson City, Jul. 8, age 78

LARRY E. MARTIN, '63, of Ovid, Jun. 23, age 84

EUGENE C. POTTER, '63, of Goshen, IN, Nov. 3, age 94

JUDITH POXSON FAWKES, '63, of Portland, OR, Jun. 28, age 77

VINCENT J. COFFEY, '64, of New York, NY, Jan. 16, age 76

ROBERT H. FARGHER, '64, of Annapolis, MD, Apr. 23, age 81

ARDEN S. FLATEN, '64, of Hastings, MN, May 4, age 82

RICHARD M. FULTON, '64, of Hudsonville, Jun. 9, age 81

ALEXANDER E. HARRIS, '64, of Little Rock, AR, Jul. 6, age 77

EDWARD A. KOCH, '64, of Tonawanda, NY, Nov. 28, age 76

MALCOLM L. ORME, '64, of Ontario,

Canada, Jul. 12, age 78 NANCY E. STEIN, '64, of Huntington

GWENDOLYN T. WARD, '64, of Grand Rapids, Jul. 26, age 94

Woods, May 7, age 77

SHARON A. ARBANAS, '65, of Lees Summit, MO, Jul. 9, age 79

KAREN A. (SCHAEDLER) ASHMAN, '65, of Blissfield, Jun. 9, age 76

D. DEAN ASKELAND, '65, of Olathe, KS, Jun. 29, age 85

CHRIS BABLER, '65, of Westland, Dec. 14, age 86

JOHN R. BOWKER, '65, of Lima, OH, May 16, age 81

JAMES C. COOK, '65, of Ocala, FL, Jun. 12, age 76

MARGARET E. DOUD, '65, of Portland, OR, May 24, age 80

DUANE J. FERRY, '65, of Chesaning, Jul. 26, age 82

FLORENCE M. GARRISON, '65, of Altoona, WI, Jun. 1, age 87

JAMES I. HOFFMAN, '65, of Spokane, WA, May 16, age 77



JAMES L. LITWIN, '65, Bowling Green, OH, May 16, age 75

DAVID L. MAHONEY. '65. of Battle Creek, Jun. 28, age 77

CHARLES D. MCCLURE, '65, ofGladwin, Jun. 15, age 75

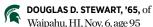
JACK L. MORSE, '65, of Harrison, Apr. 19, age 76

STEVAN V. NIKOLOFF, '65, of East Lansing, May 12, age 76

SHARON P. (STICKLE) RUMON, '65, of Caro, Apr. 25, age 75

THOMAS C. SANGLIER, '65, of Flint, May 3, age 87

ALICE A. (ANDERSON) SMITH, '65, of Coopersville, Jul. 22, age 76



NORMAN L. SWENDER, '65, of Marshall, Jun. 7, age 79

JERRY B. WATERS, '65, of Midlothian, VA, Jun. 12, age 86

JUDITH K. (MARTIN) WHORLEY, '65, of Kokomo, IN, May 24, age 80

JOHN N. WOLCOTT, '65, of Scottsdale, AZ, May 29, age 83

SHARON K. (JEX) YUHASZ, '65, of Marysville, May 30, age 76

DAROLD D. BRIGGS, '66, of Holt, Jun. 18, age 88

JOANN C. (MIKOLUSKY) CARLSON. '66, of Peoria, AZ, Jun. 10, age 75



IN MEMORIAM

MARY K. (REYNOLDS) CASE, '66, of Portage, Apr. 12, age 75

CHARLES J. CLAYTON, '66, of Marne, Apr. 25, age 74

WAYNE A. COBB, '66, of Cary, NC, May 13, age 77

FRANCIS E. CODDENS, '66, of Poughquag, NY, Apr. 14, age 76

JEANNE E. DUPREE, '66, of Mt. Pleasant, SC, Jul. 24, age 74

MICHAEL G. GABRIDGE, '66, of Holland, Jun. 29, age 76

LAWRENCE D. HAFNER, '66, of Spring Lake, Jul. 19, age 77

THOMAS M. O'SHEA, '66, of Fayetteville, NY, May 2, age 76

DANIEL R. SNYDER, '66, of St. Clair Shores, Jun. 18, age 77

LOUISE G. (TITSWORTH) SOMERLOT, '66, of Owosso, Jun. 21, age 84

SUSAN A. (NIELSEN) THALHAMMER, '66, of Swartz Creek, May 15, age 75

FREDRICK G. BRISCOE, '67, of Jenison, May 15, age 82

RALPH V. HUDSON, '67, of Lancaster, OH, Apr. 26, age 83

RONALD N. LORENZ, '67, of Escondido, CA, Jul. 17, age 74

LYNN E. MAITLAND, '67, of Kenosha, WI, Mar. 31, age 73

MARIE E. MASSU, '67, of Clinton Twp, Jun. 15, age 74

DIANE C. (STEFFENS) STUECHELI, '67, of Bloomfield Hills, May 6, age 74

MARY J. VANKAMPEN, '67, of Rockford, Jul. 10

WARD W. VERSEPUT, '67, of Spring Lake, Jul. 9, age 75

LILLIAN I. ADOLPHS, '68, of Petoskey, May 12, age 98

LARRY C. BARTON, '68, of Athens, Jul. 8, age 75

BRUCE B. BENSON, '68, of Osprey, FL, Jan. 6, age 81

IUE "LOU" CHUNG CHO, '68, of San Diego, CA, Jan. 22, age 76 JOSEPH C. GOSS, '68, of Holden, MA, Apr. 17, age 72

JOHN W. HARDEN, '68, of Albion, Jun. 15, age 73

JAMES R. MELTON, '68, of College Station, TX, Jun. 30, age 78

VIRGINIA E. (SUDMEIER)
PAVLOVICH, '68, of Appleton, WI,
May 27, age 94

DALE A. PETTERSON, '68, of Holland, Jul. 16, age 78

RUTH A. (MILLER) REINOEHL, '68, of DeWitt, Jul. 13, age 91

GLORIA L. (MOOI) RICHTER, '68, of Spokane, WA, May 16, age 75

SUSAN M. (WORDEN) RYAN-DEANER, '68, of Northville, Jun. 29, age 72

RICHARD C. SCHNEIDER, '68, of Prescott, AZ, Jun. 3, age 72



DUDLEY T. SMITH, '68, of College Station, TX, Jun. 8, age 79

GENEVA K. STEPP, '68, of Jacksonville, FL, May 21, age 88

MARYLOU STEWART, '68, of Citrus Heights, CA, Jun. 17, age 93

CONSTANCE M. (MULHOLLAND)
WALL-MCEWAN, '68, of
Birmingham, Apr. 19, age 73

MARY G. WARNSHUIS, '68, of Parkland, FL, Jun. 21, age 73

MARY E. (KITTI) ABELL, '69, of Youngstown, OH, Jun. 1, age 71

THOMAS L. BERG, '69, of Oxford, Aug. 29, age 86

GEORGE F. BISHOP, '69, of Cincinnati, OH, Jun. 25, age 76

 $\label{eq:mattheww.burns,'69,} \textbf{ of Destin,} \\ FL, May 27, age 72$

JANE E. COOK, '69, of Escanaba, May 9, age 89



KATHERINE F.
' (PIETRUSINSKI) FORTIER,
'69, of Burton, Apr. 10, age 77

JERRY L. GILLETT, '69, of Grand Ledge, Jun. 22, age 72 NO CITY MERRITT G. GILLILLAND, '69, of Eaton Rapids, Jun. 13, age 76

WILLIAM O. HAMES, '69, of Bloomfield Hills, Jun. 12, age 71

JACK A. KECK, '69, of Cheboygan, Jun. 23, age 85

 $\label{eq:frank d. Lehnen, '69, of Newaygo, Jun. 7, age 80} \label{eq:frank d. Lehnen, '69, of Newaygo, Jun. 7, age 80}$

WILLIAM H. NEWTON, '69, of Cotuit, MA, Apr. 3, age 80

RICHARD D. PALMER, '69, of Marshall, Apr. 25, age 83

JOHN L. SCICLUNA, '69, of Livonia, May 25, age 87

JOHN M. SPAIN, '69, of Hudson, FL, Apr. 26, age 72

WILLIAM M. TINKER, '69, of Yellow Springs, OH, Jul. 8, age 73

MARY J. TRIPP, '69, of Phoenix, AZ, Oct. 27, age 97

BARRY WHENAL, '69, of Salisbury, NC, May 29, age 72

ALFRED J. WIER, '69, of Wyoming, Jun. 1, age 94

JAMES H. WILL, '69, of Ponce Inlet, FL, Jun. 2, age 72

1970s

EDWARD L. ANDERSON, '70, of St. Petersburg, FL, May 17, age 86

WILLIAM V. COY, '70, of Denver, CO, May 18, age 74

MICHAEL P. CROLL, '70, of Crystal Lake, IL, Jun. 17, age 72

SUZANNE B. DUPONT, '70, of Caledonia, May 16, age 81

EMILY R. (TEICHMAN) FOSTER, '70, of Niles, Jun. 27, age 90

JAMES C. FOY, '70, of Lewes, DE, Jul. 9, age 70

JUDITH A. (KLEIN) FRANK, '70, of Scottsdale, AZ, May 20, age 74

MARIE K. GLEASON, '70, of Ontario, Canada, May 3, age 94 **DAVID L. JENSEN, '70,** of Jackson, Jul. 14, age 72

CURTIS J. MCCARTY, '70, of San Diego, CA, Jun. 17, age 82

JANICE E. (ROBINSON) NELSON, '70, of Cadillac, May 29, age 76

MARY K. PRINCE, '70, of Grand Rapids, Jun. 6, age 96

ARTHUR A. RASHER, '70, of Tulsa, OK, Jun. 15, age 71

WENDELL L. RYDER, '70, of Dubuque, IA, Apr. 20, age 95

ARTHUR O. SHEFFEY, '70, of Lansing, Jul. 7, age 85

THOMAS E. TATEM, '70, of Wayne, NJ, May 11, age 74

LAMARR . **THOMAS**, '**70**, of Markham, IL, Apr. 21, age 70

PATRICIA M. (MEYER) AGRES, '71, of Colorado Springs, CO, May 22, age 70

PAUL J. ALVES, '71, of Florence, MA, Jun. 21, age 72

DAVID H. DEAN, '71, of Las Vegas, NV, Jun. 12, age 85

JOHN W. ETTNER, '71, of Philadelphia, PA, Jun. 21, age 69

LAWRENCE J. EVANS, '71, of New York, NY, May 6, age 69

DAVID A. GROTH, '71, of Centennial, CO, Jun. 17, age 79

JAMES JAGER, '71, of Jenison, Jul. 11, age 94

FRANK E. LETHERBY, '71, of Ada, Apr. 29, age 81

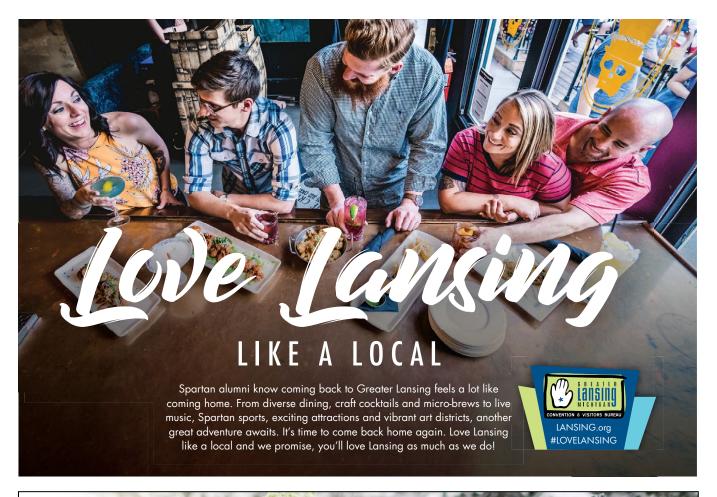
GENEVA I. (ANDREWS) MATEER, '71, of Marco Island, FL, Apr. 27, age 89

PATRICK MCELMURRY, '71, of The Villages, FL, Aug. 6, age 72

KENNETH R. PILLOW, '71, of Niles, May 20, age 71

LARRY B. SIMPSON, '71, of Mobile, AL, May 12, age 74

JANE F. (FREMOUW) SWANSON, '71, of Traverse City, Apr. 23, age 76





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IN MEMORIAM

WILLIAM R. THOREEN, '71, of Dowagiac, May 19, age 72

ROBERT ZMIKLY, '71, of Indianapolis, IN, Jul. 14, age 70

KARAN R. BAKER, '72, of Rutherford, NJ, Jun. 19, age 72

BRYAN D. BULLER, '72, of Carmel, IN, Jul. 7, age 70

STUART H. GAGE, '72, of Cheboygan, Jun. 19, age 77

DAVID K. GUSTAFSON, '72, of Hilliard, OH, Apr. 26, age 81

SUZANNE L. (KISSEL) LYKE, '72, of Mikado, May 1, age 71

ALANA M. (MACK) NEAL. '72. of Lake Orion, Jun. 7, age 68

MARY E. PFLUG, '72, of Otterbein, IN, Jul. 11, age 91

LOULEASE G. (GRAHAM) SELLERS, **'72,** of Battle Creek, Jul. 20, age 92

CAROL O. SHUCK, '72, of Jarrell, TX, Jun. 20, age 68

PAULANNE CHELF, '73, of Fitchburg, WI, May 6, age 67

THEODORE DELEON, '73, of Lansing, Apr. 21, age 71

ERIK L. FITZPATRICK, '73, of Las Vegas, NV, May 18, age 68

JOHN W. MEHL, '73, of San Mateo, CA, May 4, age 76

STEVEN F. POLITOWSKI, '73, ofEast Lansing, May 13, age 72

ROBERT F. POTVIN, '73, of Suttons Bay, May 5, age 71

EARLE L. ROBINSON, '73, of East Lansing, May 11, age 71

ROBERT C. THIESING, '73, ofSchenectady, NY, Jul. 19, age 73

SETON C. BOVEE, '74, of Coldwater, Jul. 22, age 88

VICTOR L. CORTS, '74, of Arlington, TX, Jun. 9, age 67

JOHN E. COTTRILL, '74, of Greenfield, MA, May 12, age 73

ROSE M. ELY, '74, of Jackson, May 22, age 82

DAVID W. GANDER, '74, of Lansing, Jun. 29, age 69

TONY A. KELLOGG. '74. of Jensen Beach, FL, Apr. 13, age 70

MARK A. KRAJENKA, '74, of Lansing, Jun. 7, age 66

MYRNA P. (PINCON) NEIN, '74, of Lynchburg, VA, Jun. 1, age 79

BARBARA J. (BARRETT) RECKELL, **'74,** of Muskegon, Jun. 11, age 84

JOYCE L. SHARPE, '74, of Detroit, May 2, age 66

CHRISTINA J. TEER, '74, of Gainesville, GA, Jul. 6, age 67

JOAN L. (BOSTIC) THOMPKINS, '74, of Kalamazoo, Jun. 26, age 71

CURTIS W. BABB, '75, of Menomonee Falls, WI, Jul. 16, age 67

ERNEST W. BURKEEN, '75, of Southfield, Dec. 2, age 70

RONALD K. FERRIS, '75, of Grandville, Apr. 30, age 83

SHIRLEY J. HANSEN. '75. of Woodford, VA, Jun. 11, age 91

NORMA A. (TROEGER) LANE, '75, of Grand Rapids, May 14, age 87

STEPHEN B. MARSTON, '75, of Edina, MN, Jun. 12, age 65

RONALD M. PLETCHER, '75, of Edwardsburg, Jun. 1, age 76

HARRY A. REED, '75, of Boulder, CO, May 11, age 84

RAYMOND J. DAMAS, '76, ofGrand Ledge, May 22, age 66

DENNIS A. DUNSMORE, '76, of Draper, UT, Jul. 2, age 65

MARIANITA ROXAS LACHICA, '76, of Corona, CA, Apr. 30, age 89

JEAN E. MUFFITT, '76, of Hillsdale, Jul. 13, age 94

KAY E. NISSEN, '76, of Bradenton, FL, Jun. 4, age 72

GREGORY F. OKASINSKI, '76, of Wadsworth, IL, Jun. 15, age 72

JANET M. PATRICK, '76, of Lansing, May 1, age 72

EUGENE C. PERSOHN, '76, of Green Bay, WI, Apr. 24, age 70

SUSAN J. VANGEE, '76, of Canton, GA, Apr. 16, age 73

BARBARA H. ANDERSEN, '77, of Holland, Jun. 4, age 83

KRISTI S. (SHAW) BROWN, '77, ofKenilworth, IL, Jun. 29, age 64

PATRICK J. BRUETSCH, '77, of Marietta, GA, Mar. 17

JEROME F. HALVERSON, '77, of Saint Paul, MN, Apr. 15, age 78

WILLIAM C. HUJSAK, '77, of ${\operatorname{Mason}}$, Jun. 15, age 70

DIANE A. (HOUSEKNECHT) KINGSLEY, 77, of Hillsdale, May 17, age 68

KATHERINE L. LEE, '77, of Mc Bain, May 28, age 63

JACK A. BAJEMA, '78, of Gregory, May 4, age 75

NATHALIE M. (ALEX) DUTCH, '78, of East Lansing, Jun. 5, age 89

SHIRLEY A. GENTGES, '78, of Dimondale, May 15, age 83

CAROL M. HAUPT, '78, of Englewood, FL, Dec. 15, age 75

ROBERT A. NICOLS, '78, of Lakeville, MN, Jul. 12, age 63

WILLIAM F. POTTER, '78, ofBoca Raton, FL, Jun. 18, age 63

JOHN C. TINGEY, '78, of Laramie, WY, Jul. 4, age 68

DAVID P. VONDIELINGEN, '78, of Garber, OK, May 7, age 71

GERY A. BEACHNAU, '79, of Portland, May 27, age 63

JAMES R. BENDER, '79, of Port Charlotte, FL, Jul. 4, age 62

KATHLEEN M. (GLESS) JACKSON, '79, of Caledonia, May 9, age 64

CHARLES E. KLOHS, '79, of Solon, IA, Jun. 25, age 70

RONALD F. KOENIGSKNECHT, '79, of Brighton, May 29, age 69

JULIE A. (ROSENBERG) RICH, '79, of Birmingham, May 1, age 62

1980s

CONRAD W. BAAS, '80, of White Lake, May 22, age 64

JOHN J. BAYLIS, '80, of Lansing, Jul. 20, age 81

LAWRENCE J. KINGSBURY, '80, of Haslett, May 18, age 68

JOHN F. VANDER VEEN, '80, ofWillowbrook, IL, Jun. 3, age 60

JOSEPH A. OLSON, '81, of Peoria, IL, May 31, age 60

MATIANNE L. (KURTZ) ROBERTS, **'81,** of Grand Blanc, Jul. 10, age 60



MARY VOLAKAKIS, '81, of East Lansing, May 17, age 85

HOWARD M. CAMFIELD, '82, of Ypsilanti, Apr. 16, age 61

TIMOTHY P. DETINE, '83, ofLittleton, CO, May 11, age 57

LINDA D. (JURD) PEAKE, '83, of Flint, Jun. 26, age 72

ANDRA L. (SCOTT) PRICE, '83, ofDimondale, May 12, age 75

JAMES D. AYERS, '84, of San Francisco, CA, Apr. 24, age 57

MARLON B. EVANS, '84, of Detroit, Jun. 12, age 56

ELIZABETH (JONES) GRIMSHAW, '84, of Leslie, May 26, age 59

SUSAN M. (BOLS) MANVILLE, '84, of Whitmore Lake, Jun. 24, age 59

ERIC MARSCHNER, '84, of Minneapolis, MN, May 26, age 57

CAROLYN M. (TROSKY) DAS, '85, of Farmington, Mar. 21, age 55

GWENDOLYN M. (SESSIONS) DONAHUE, '85, of Ammon, ID, Jul. 24, age 57

CYNTHIA L. GOUDZWAARD, '85, of Grand Rapids, Apr. 28, age 63

STANLEY J. URBAN. '85. of Commerce Township, Jul. 1, age 68

DORIS J. BRICKMAN, '86, of East Lansing, Jun. 15, age 80

BETTY J. MORTLAND. '86. of Lansing, Jan. 30, age 83

MARTHA A. SCHWARK, '86, of Jackson, Jun. 1, age 56

EUNICE A. BELL, '87, of Saratoga Springs, NY, May 25, age 90

RONALD L. HANES, '87, of Charlotte, Jun. 4, age 57

MARY M. HENRY, '87, of Winchester, VA, May 19, age 54

RICK L. LAUKKANEN, '87, of Seattle, WA, May 6, age 53

JAMES H. SHANK, '87, of Bitely, Jun. 7, age 54

JILL R. (BARKER) JEMISON, '88, of Myrtle Beach, SC, May 14, age 53

JEFFREY A. KOCH, '88, of Livermore, CA, May 2, age 54

1990s

YVETTE M. BRACY, '90, of Canton, May 6, age 52

JEAN C. GORMAN, '90, of Grand Rapids, May 5, age 83

SEAN N. HAGERMAN, '90, of Holt , Feb. 24, age 60

CHRISTINE E. MCKINNON, '90, ofHaslett, May 10, age 68

PATRICIA PILLSBURY, '90, of West Bloomfield, Jul. 23, age 57

KATHARINE E. (LARSEN) BENNETT, '92, of Grand Rapids, Apr. 28, age 49

MICHAEL A. HOLDERMAN, '92, of Elkhart, IN, Jun. 29, age 50

TERRI L. (MILLER) SCHLEE, '92, of Lansing, Jun. 4, age 49

MICHAEL E. DAVID, '93, of Lathrup Village, Jun. 10, age 49

MICHAEL G. RAE, '93, of St. Petersburg, FL, May 6, age 48

CARIE E. (KANISZEWSKI) LAFOND, '97, of Freeland, Jun., age 46

LYN K. ZAKRZEWSKI, '97, of Fort Gratiot, Apr. 24, age 71

JUDITH E. (PARSONS) BRADY, '98, of

Ann Arbor, May 6, age 59 REBECCA S. EVEN, '98, of Fenton,

May 21, age 46

PATRICIA A. KENNEDY, '98, of Erie, PA, May 26, age 64

CHRISTINA T. MORGAN, '98, of Kalamazoo, Jun. 28, age 43

CELESTE A. (STEINHELPER) WOOD, '98, of Clarkston, Jul. 20, age 46

JEFFREY T. BUCHOLZ. '99. of

Phoenix, AZ, Jun. 7, age 45

GREGORY T. BUSH, '99, ofSpring Lake, Jul. 14, age 44

NWAMAKA N. DALLAH-KELLY, '99, of Euclid, OH, Jul. 7, age 42

2000s

JASON G. CHEN, '02, of Turner, May 25, age 40

ANDREW S. MEEK, '03, of Fort Myers, FL, Apr. 29, age 41

SOFIA M. SYED, '06, of Troy, May 16, age 39

2010s

GAGE R. RAJALA, '13, of Mancelona, Jun. 26, age 28

Faculty/

HOWARD P. ANDERSON, of Okemos, Jun. 16, age 86

CHERIE L. BLONDE, of Lansing, Jul. 24, age 87

NANCY R. BOHNET, of Okemos, Jun. 12, age 79

ROBERT L. BRENT, of East Lansing, May 24, age 77

REMITIA BROWN, of Lansing, Apr. 21, age 91

DARYL F. BURROWS, of DeWitt, Jul. 2, age 86

F. WILLIAM CAMBRAY, of Okemos, Jun. 2, age 82

MARY R. DAVIDSON, of Princeton, NJ, May 27, age 103

NORBERT B. ENZER, of East Lansing, Jun. 2, age 88

RICHARD B. FETTERS, ofIndianapolis, IN, Jun. 1, age 98

IRINEO HERRERA, of Lansing, Jun. 12, age 83

LAWRENCE R. KRUPKA, of

East Lansing, Jul. 14, age 86

EDMUND OUTSLAY, of East Lansing, May 20, age 67

MICHAEL A. RHYNDRESS, of Ovid, Jul. 26, age 45

WILLIAM H. ROSENTHAL, ofEast Lansing, May 16, age 84

MARY LU SANDERSON, of Canton, Jun. 15, age 81

KURT W. SCHILD, of East Lansing, Jul. 23, age 86

CAROL L. SHAULIS, of Williamston, Apr. 3, age 72

CARL W. SODMAN, of Perry, May 16, age 71

BARBARA M. STUART, of East Lansing, Jun. 12, age 91

ANNE C. THOMAS, of Johnstown, PA, Jul. 26, age 57

DONALD W. TWOHY, of East Lansing, May 3, age 94

DONALD J. WEINSHANK, of East Lansing, May 4, age 82

DORA L. WILLIAMS, of Laingsburg, May 7, age 82

Submit an Obituary

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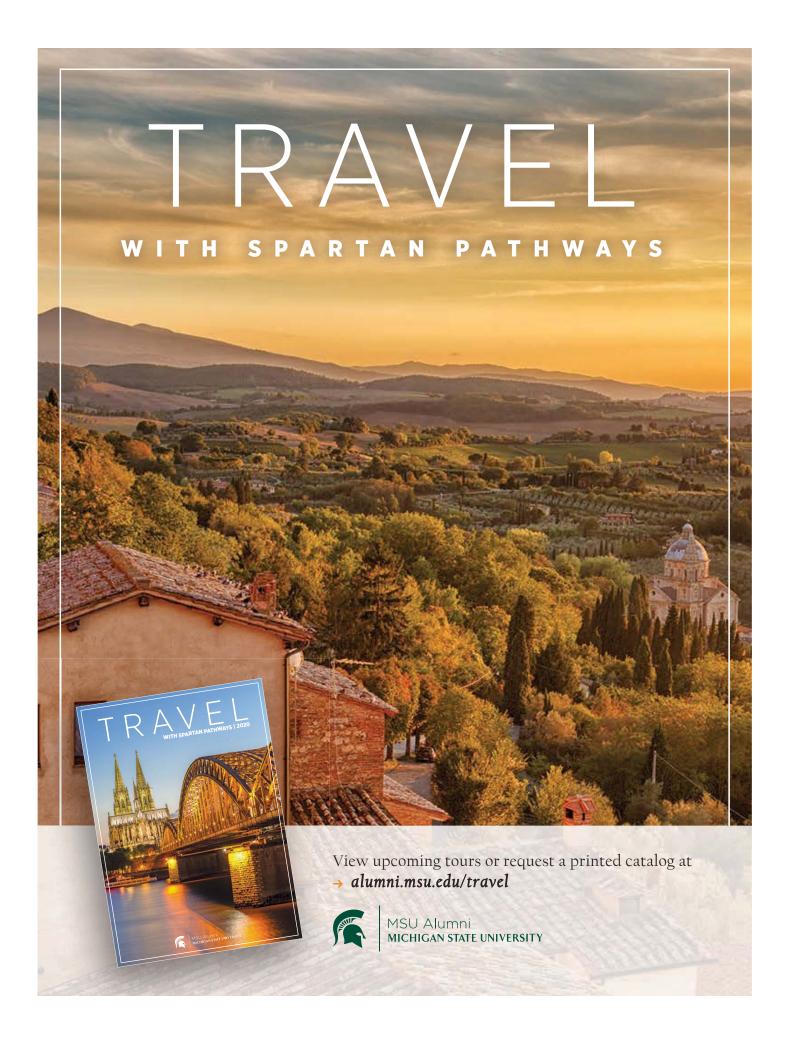
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MARCH 13 - 22, 2020

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APRIL 10 - 19, 2020







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MAN'S BEST FRIENDS

Led by his rambunctious dogs Roxy and Remi, Josh Butler waves farewell to fans on Spartan Football's Senior Day

Josh Butler's parents passed away too soon to greet him on the home football field last November. So coaches and staff welcomed the cornerback's request to bring his faithful companions, Roxy and Remi, to the last regular football game of the season. Butler recently earned a master's degree in media and information. And he's created a social media presence for himself and his playful canines at: @joshbutlertv and @roxy_remi_thedogstv.



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