

Kettering

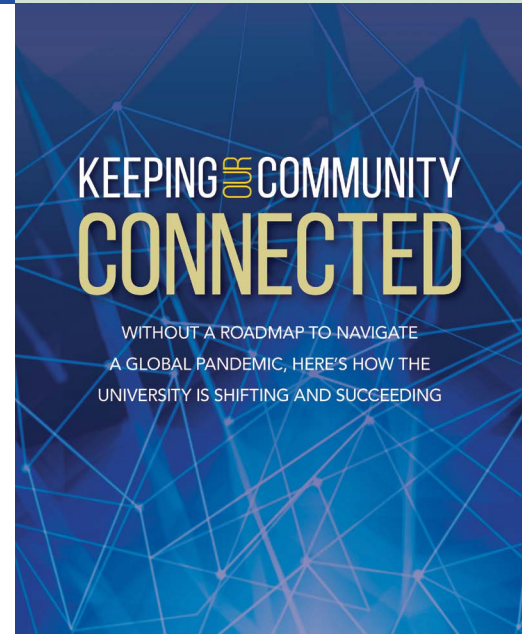
SPRING 2020

MAGAZINE

KEEPING COMMUNITY CONNECTED

WITHOUT A ROADMAP TO NAVIGATE
A GLOBAL PANDEMIC, HERE'S HOW THE
UNIVERSITY IS SHIFTING AND SUCCEEDING

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STEP INTO THE
NEXT CENTURY

Kettering
UNIVERSITY

**These limited-edition
socks will only be
available through
June 30, 2020.**

Make a gift of \$40 or more to the Kettering Gift Fund (or other area of your choice) and receive an exclusive pair of the new Bulldog socks. Your generous support to the Kettering Gift Fund allows the University to capitalize on opportunities throughout the year. It also is the foundation for student scholarships, enhanced labs and learning facilities, and achieving our mission of building future leaders.

Visit build.kettering.edu/bulldogpride to preview the design and make your gift to support current students.

Dear Alumni, Faculty, Students, Staff, and Friends,

In these uncertain times, the Kettering community's strength and support for each other is something that will not waiver. What makes us special and different as a university also makes us unique in how we approach decisions that impact our students and their academic success.

Due to the impact of COVID-19, we have taken many substantial actions over the past weeks — a transition to virtual learning, remote working for staff, cancellation or postponement of events. Undoubtedly, there will be more decisions we will need to take as the situation evolves.

In response to the COVID-19 situation, we have changed the focus of the Spring 2020 Kettering Magazine to share our decision-making process with you. Our cover story will give you a look inside how we have managed this crisis and have taken action with respect for our institution and its value to our students and graduates, with a focus on the safety of our community and the goal of being gracious in our appreciation and caring for each other.

We highlight how members of the Kettering community have responded to the current situation.

You will read about Kettering University's donations of much needed 3M800 N95 masks, hand sanitizer, and protective goggles to Flint medical facilities.

Alumnus Will Sommerville '05 is working with several other alums and co-op students to pioneer an Augmented Reality work-from-home effort to make cloth face masks. And William Berry '81 and his company Die-Tech & Engineering Inc. is making parts for a company that produces ventilators. Normally it takes up to eight weeks to make them, but in order to help save lives, they have fast-tracked the process.

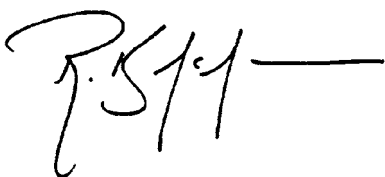
Students, like chemical engineering major Caleb Carter, who is giving out free clothes, canned food, toiletries and more through the nonprofit Food not Bombs Flint because as he says, "There's a strong urge to help the community."

Our original cover story was a follow-up to what was a momentous and historic year for Kettering as it celebrated 100 years of educating the future. You'll find that article inside, along with photos and memories of our Founders' Week festivities that included hundreds of the Kettering family and friends who, like us, were humbled by our past, yet excited about our future. The future is still a great one for Kettering. One with the launch of eSports as a new varsity sport, reimagined and forward-thinking degree programs aligning our talented students' skills with STEM industry, and co-op partner needs.

Also inside this issue you'll find uplifting stories about our faculty, students and graduates. Faculty who find it easy to be GREEN, a business-owning student who aims to inspire women in STEM, an alumni duo changing the face of transportation and a graduate honoring his own heritage by fighting for STEM opportunities for Native American students.

It's in our DNA to design, engineer, innovate, build and do the extraordinary; so important in these times and something that will define our next 100 years. I hope these stories reinforce your pride in being #KetteringBuilt. There's no better preparation for addressing today's uncertainties.

As we all continue to look for light at the end of this, Kettering will continue to strive to provide that for our community. Be safe, be well, and know we are thinking of you and your families.



Dr. Robert K. McMahan, *Kettering University President*



Homsher, McCune Assume New Roles



While transitioning toward retirement, Vice President of Student Life Betsy Homsher has moved to the Office of the President as a Special Assistant. Effective October 2019, she continues to oversee accreditation and serve as Title IX coordinator. In her nearly 18 years at Kettering University, she has served as Director of Women Student Affairs, Associate Dean for Student Affairs and was the University's Chief Judicial Officer before being named Vice President of Student Life and Dean of Students in 2008.

Dr. LB McCune has assumed the role of Dean of Students and Vice President of Student Life. His responsibilities include oversight of Co-Curricular Programs and Activities; Office of Multi-Cultural Student Initiatives, the Wellness Center, Student Life Initiatives, Residence Life, Greek Life, Community Service and Recreational Services.



Other jobs Dr. McCune has held at the University since joining in 2000 include Director of the Office of Multicultural Student Initiatives, Associate Dean of Students and Chief Judicial Officer for the University. His previous employment includes serving as Academic Dean of Students at Detroit College of Business and Davenport University, as well as serving as adjunct faculty at Baker College. He holds a bachelor's degree from Roberts Wesleyan College, a master's degree from the University of Michigan and a Ed.D. from Nova Southeastern University.

Student Researchers Aim to Reduce Noise, Vibration in Cars With GM Grant

A recent grant from General Motors (GM) will afford a Kettering University team of undergraduate and graduate students the opportunity to develop a technique that significantly reduces noise and vibration impact and improves the ride quality in future automobile design and industry standards.

Led by Dr. Javad Baqersad, Assistant Professor of Mechanical Engineering and Director of the Noise Vibration Harshness (NVH) & Experimental Mechanics Laboratory, the team is tasked with providing GM design engineers with a robust and accurate tool for virtual testing and prototyping of mechanical joints as part of a \$180,000 research grant.

This type of research usually lasts longer than 18 months, however, GM set a deadline of June 2020. The team, which includes undergraduates Evan Wolfert, Jackson Hicks and Sage Goodall; graduate students Nitin Edla, Sandesh Prabhu, Prashant Jadhav; and postdoc student Khalil Alipour, is working in four different phases. As each phase is completed, the team presents it to GM for review.

Baqersad noted the primary challenges are in multiaxial testing and modeling of nonlinear elastomer joints and meeting the specific deadlines, given the amount of time such an in-depth project typically requires.

College of Engineering Dean Honored for Empowering Women in Auto Industry



Kettering University's Dr. Craig Hoff's career-long commitment to empowering women in the automotive industry and efforts to increase female faculty representation

within the College of Engineering recently earned him the 2019 Automotive Women's Alliance Foundation's (AWAF) Change Champion Award.

At a Dec. 5 ceremony in West Bloomfield, the nationally recognized expert in sustainable energy systems and advanced automotive powertrains received the organization's inaugural award.

Named Dean of the College of Engineering in 2016, Dr. Hoff joined Kettering University in 1999 as a faculty member. Previously, he served in teaching and administrative roles at Lawrence Technological University. In his current role as dean at Kettering,

he has been responsible for hiring 14 new faculty members with 50 percent of them being women. Throughout his nearly three decades at Kettering, he has been an active supporter of the student section of the Society of Women Engineers and mentor to numerous female engineering students.

"He is a leader who demonstrates – through both action and word – his fierce commitment to the success of not only his female students but his female colleagues as well," said Kettering University President Robert K. McMahan. "While I am immensely proud of the honor he received, I am not at all surprised – because I see him in action every day."

Kettering's Mechanical Engineering program consistently is ranked among the top programs in the country, according to *U.S. News and World Report*. In the 2020 *U.S. News and World Report Best Colleges* edition, Kettering University was

ranked 13th nationally in non-Ph.D. engineering programs.

"I'm very flattered to receive this award from AWAF. As an educator I hope to have a positive influence on my students' lives," said Dr. Hoff, who in addition to his role as dean is a professor and Society of Automotive Engineers adviser. "But there is a lot more work to be done to encourage and support women entering STEM disciplines. I'm thankful that organizations such as AWAF are helping to make that happen."

Based in Troy, Michigan, AWAF is a network of more than 230 members within the automotive industry at all career levels. With a mission to advance and empower women working in the industry and to help create and sustain a diverse automotive industry, the foundation has awarded \$434,500 in scholarships to 175 women, including students from Kettering University.

Study Says Kettering Degrees Offer Best Bang for Your Buck in Michigan



Graduates with Kettering University degrees can count on the highest lifetime return on investment (ROI) in the state of Michigan and among the highest in the nation, according to a Georgetown University analysis of federal data ranking 4,500 schools nationwide.

As presented in an article – “Choice of Michigan college can make a (million-dollar) difference” – by Bridge, a Michigan nonprofit news source, the study results showed Kettering was No. 1 in Michigan among private and public colleges and placed 32nd in the nation – above Princeton and Notre Dame.

“Kettering University is a jewel in American higher education,” said Kettering University President Robert K. McMahan. “We have been referred to as the West Point of industry, and our alumni are some of the most successful corporate leaders in the country.”

The analysis, based on the Department of Education’s College Scorecard, examined ROI among private and public institutions and included community college as well as four-year university information. It focused on the financial payoff of college degrees and earning differentials among schools over 10-, 20-, 30- and 40-year periods.

Kettering University Online Earns Top Spot For MBA Program

The Kettering University Online MBA has been named the No. 1 Online MBA in the state of Michigan.

Criteria for the ranking by MBACentral.org included affordability, online support services and quality of classes. Data was collected from university websites, media evaluations and rankings (including *The Financial Times* and *U.S. News and World Report*), the National Center for Education Statistics and international education connector Quacquarelli Symonds.

Kettering University Online launched in 2015 to replace the former distance education program. KUO offers graduate degree programs, corporate training, continuing education and professional certification training utilizing the latest in online interactive technology and best practices. KUO has also earned the No. 2 position in the U.S. for its MS Online Operations Management Program, and the faculty for their programs have earned 100/100 from *U.S. News and World Report* for their credentials and training.

“To be recognized as the best in Michigan exemplifies Kettering University’s commitment to our students’ education experience and providing high-quality, innovative and flexible advanced degree options,” said Dr. Christine Wallace, Vice President for Kettering Global Campus.

For more information on Kettering University Online or to apply, go to online.kettering.edu.

Interim Dean of School of Management Named

Dr. Haseeb J. Ahmed was appointed Kettering University’s Interim Dean of the School of Management, effective November 18, 2019.

Prior to joining Kettering University, Dr. Ahmed served as Founding Dean, School of Business, Computer Science, & Information Technology; Adams Family Foundation Endowed Chair; and Professor of Finance at Heidelberg University in Ohio. Previously, he served as Chair of the Business Administration and Economics program and Sam Walton Faculty Fellow for Students in Free Enterprise (SIFE) at Johnson C. Smith University in Charlotte, North Carolina.



He has been actively involved in corporate relations, community engagement, student placements, programmatic and regional accreditation in higher education and development of innovative academic programs. Dr. Ahmed taught courses in Finance, Economics and

Quantitative Methods at various universities. He championed engagement opportunities for students through developing student organizations such as Delta Mu Delta, Tau Pi Phi, Collegiate DECA, Toastmasters and Enactus. He is the recipient of the 2009 Association of Collegiate Business Schools & Programs (ACBSP) International Teaching Excellence Award and Regional Teaching Excellence Award.

“Dr. Ahmed brings a wealth of experience to Kettering University and will provide excellent leadership to position the School of Management for its next transformation,” said Kettering University Provost Dr. James Zhang. “I look forward to working with Dr. Ahmed on curriculum improvements, online delivery of a variety of degree and non-degree programs, expansion of BS/master degree offerings and many other tasks that will make Kettering University’s School of Management a top-notch one.”

Dr. Ahmed earned a Doctor of Philosophy (Ph.D.) degree in Finance with minors in Accounting and International Business from the University of Mississippi (Ole Miss), Master of Business Administration (M.B.A.) with concentrations in Finance, Economics and Management from Jacksonville State University in Alabama and a Bachelor of Science in Mechanical Engineering (B.S.M.E.) degree from the University of Texas at Arlington.



The International Panel lunch featured (from left) moderator Tamara Bednarski of Admissions, Kettering Provost Dr. James Zhang, Baden-Wurttemberg Ministry of Science's Dr. Hans-Georg Wolf and MSU's Office of Study Abroad Acting Director Dr. Inge Steglitz.



Kettering's SAE Baja team and companies like BorgWarner and GM interacted with students and alumni at The Co-op Partner & Technology Showcase.

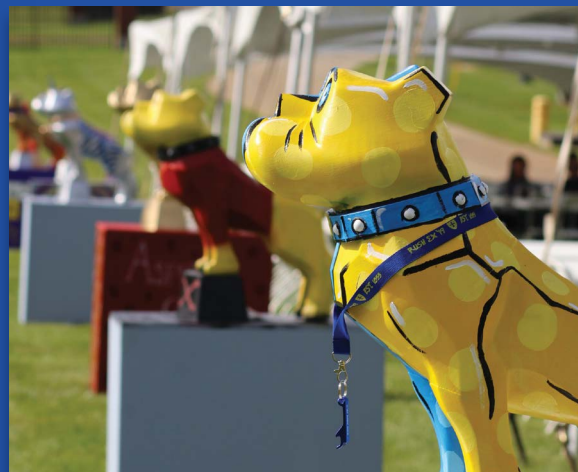


Graduates celebrating 50 years or more were part of the Golden Circle Brunch at University President's Residence.

The Future of Education Built a Century Ago

100 YEARS

1919 - 2019



On display at the Campus Block Party on the beach were bulldogs painted to represent the University's Greek houses.



Historic memorabilia as part of Inventing the Future — including photos, handwritten letters and even original inventions — provided an insider's peek into the University's forward-thinking past.



As part of the Celebration of Excellence, University President Dr. Robert K. McMahan honored Professor Gianfranco DiGuseppe.

Inventing the Future: The Hidden Collections of Kettering University Archives opened to guests during Founders' Week.



CELEBRATING OUR CENTURY

With a nod to its history and a peek into the future, Founders' Week encompassed every aspect of 100 years of pride

BY DONNA WICKS

Kettering University's storied 100-year history was front and center for the entire campus as it welcomed alumni, students, faculty, staff, community and special guests to its Founders' Week Celebration Oct. 15-20, 2019.

Whether it was exploring the founding fathers' inventions, learning the "real" story of General Determination during a chat with author Tim Noonan and University President Robert K. McMahan, or hopping a bus to visit Greek Houses and local pubs, there was something for everyone to enjoy.

The week's culminating event, the Centennial Gala on Saturday, Oct. 19, involved the complete transformation of the Connie and Jim John Recreation Center. More than 500 guests enjoyed an evening steeped in institutional pride in its past, exploration of its present and a sneak preview into its future. Attendees enjoyed wine by Fenton Winery & Brewery (co-owned by graduate Matt Sherrow '98 and his wife Ginny) and locally catered cuisine, celebrated outstanding Alumni Awardees (more on Page 9) and danced to music spanning the decades.

Here's a look at the week that led up to the Gala.

EDUCATION, EXPERIENCE ON DISPLAY



Kettering University's strong tradition of coupling education and real-world work experience was on full display during the week's kick-off event on Tuesday, Oct. 15. The **Co-op Partners & Technology**

Showcase gave the campus community an opportunity to interact with innovative technology created by several co-op employment partners as well as student groups. Participating corporate partners included General Motors, Asahi Kasei Plastics North America Inc., Light Guide Systems, BorgWarner, Cooper Standard, Glass and Mirror Craft, Bosch Corp. and Hurley Medical Center. Kettering's SAE Baja team also displayed their latest vehicle.

Later that week, on Saturday, Oct. 19, faculty and graduate student researchers presented more than 35 posters and visual demonstrations in the Sunset Room. The eighth annual **Faculty and Graduate Student Poster Session** gave alumni and guests a look inside the cutting-edge research Kettering embarks on every day.

HONORING OUR HISTORY

Two events during Founders' Week captured Kettering's unique history with personal stories, photos, inventions and more.

The **Grand Opening of Inventing the Future: The Hidden Collections of Kettering University Archives** was held Wednesday, Oct. 16, with a reception to unveil historic memorabilia, materials, artwork and even original inventions that illustrate the University's creation and evolution.

In commemoration of the Centennial, Author Tim Noonan conducted interviews with alumni, faculty, staff and friends, resulting in a beautifully illustrated coffee table book focused on the first 100 years of GMI/Kettering University as well as the surrounding Flint community. A **Book Launch and Signing** on Thursday, Oct. 17, hosted by University President Dr. Robert K. McMahan featured some of the surprising discoveries Noonan uncovered. The commemorative book "GMI/ Kettering at 100" is available online through the University Bookstore (ketteringbulldogwear.merchorders.com/) and on campus in the C-Store.



GLOBAL TIES

Not only was 2019 a celebration of the University's first 100 years, it also marked 25 years of global collaboration and outreach. Kettering University, together with the four universities of Applied Sciences in Baden-Württemberg and with the support of the ministry of Science, Research & Arts of Baden-Württemberg, developed an exchange program that allows students and faculty to participate in interactive collaboration in the applied sciences.

Throughout Founders' Week, the University community celebrated the exchange partnership.

To honor the milestone, the Office of International Programs (OIP) hosted more than 70 attendees at the **International Delegation Dinner** held on Wednesday, Oct. 16, at Flint's Factory One. The dinner included remarks from the head for internationalization at the ministry in Baden-Württemberg and Kettering President Dr. Robert K. McMahan as well as featured a photo exhibit with tributes to faculty integral to the exchange program.

On Friday, Oct. 18, an **International Panel Lunch** featured experts with insight on trends in cooperative education. The panel spoke about how partnering cooperative and international education creates a broader global workforce and provides students with opportunities to become global citizens.

The panel included Dr. Hans-Georg Wolf, Baden-Württemberg Ministry of Science, Research & Arts; Dr.



James Zhang, Kettering University's Senior Vice President for Academic Affairs and Provost; and Dr. Inge Steglitz, Acting Director, Office of Study Abroad at Michigan State University.

An **International Symposium on Advanced Mobility** was part of the global collaboration events as well. Six Kettering University faculty members and two visiting faculty from Baden-Württemberg highlighted the research being done on their campuses in the fast-growing area of mobility.

#KETTERINGBUILT

Today, alumni, students, faculty and staff are proud to call themselves "Kettering Built." Founders' Week provided many opportunities to celebrate that pride.

The annual **Celebration of Excellence** was held as part of the week's festivities. More than 600 guests enjoyed lunch in the fully decorated Jim and Connie John Recreation Center, where faculty research and academic awards were presented, and staff were recognized for years of service as well as other achievements.

For more than six months, a friendly A Section vs. B Section competition was held encouraging alumni and current students to see which section would have the greatest number of donors. The competition culminated with the 2019 **Founders' Day of Giving**, resulting in more than \$100,000 raised in 24 hours to support current students and B Section winning bragging rights for having the most donors.

And, for the first time since 2015, there was a small pre-Gala **Robots Reunion** of current students and graduates hosted by long-time faculty advisor and alum Bob Nichols '74. One big surprise for those attending the event in the Kettering University FIRST Robotics Center was returning Robot AI Sobey '45. (See Mr. Sobey's story on Page 26.)



WELCOME BACK, ALUMNI

Whether it was reliving their Greek days, revisiting a once-favorite downtown spot for a cold one or celebrating 50 years of friendship over food, alumni were onboard to return to Flint.

It started on Friday, Oct. 18, when the **Greek House Bull Dog Tour** kicked off at the Campus Center where Greek houses decorated replicas of General Determination (many in their fraternity or sorority colors) to earn funding for their house. Nearly all of the University's sixteen fraternities and sororities opened their doors to guests.

Later that day, more than 125 alumni, students, staff, faculty and guests were transported by bus downtown for the annual **Pub Crawl**. Following a brief narrated tour of the University Avenue Corridor, the buses stopped at three boisterous downtown Flint establishments – Churchill’s, 501 and Tenacity Brewing. A special Bulldog Centennial Beer was commissioned by Tenacity Brewing and on tap for the event, with a commemorative beer stein available to each guest.

And, of course, no celebration would be complete without a party on “The Beach.” During lunchtime on Saturday, students, alumni, faculty and staff enjoyed a **Campus Block Party**, giving the community an opportunity to enjoy some delicious barbeque and kick back together on a sunny day.

Founders’ Week culminated on Sunday, Oct. 20, at the University’s Presidential Residence. The **Golden Circle Brunch** honored the Class of '69 as they celebrated their 50-year reunion in addition to others who graduated prior to 1969. Guests enjoyed a champagne brunch- and swapping stories while author Tim Noonan signed copies of his book “GMI/Kettering University at 100.”



As part of the Centennial Gala on Saturday, Oct. 20, the Kettering/GMI Alumni Association honored five alumni for outstanding success in engineering, entrepreneurship, alumni service and other endeavors. Those receiving awards included Albert Sobey '45 (Distinguished Alumni Award), William Osborne, Jr. '83 (Alumni Service Award), Mary Gustanski '85 (Engineering Achievement Award) and '91, Paul Glomski '99 (Entrepreneurial Achievement Award), and an honorary alumni award to the great-grandson of the institution's founder, Charles Kettering III.

After nearly 40 years as a senior leader in the automotive industry (Senior Vice President and Chief Technology Officer for Delphi Technologies), Gustanski retired in December 2019. The former member of the Robot Society, Pi Tau Sigma and Tau Beta Pi fondly recently revealed her favorite experiences while at GMI/Kettering, the impact of the school over the past 100 years and what she's most anticipating for its next century.



ALUMNI AWARD WINNER TALKS LABS, A PASSION FOR ENGINEERING AND HOW KETTERING GRADS 'MAKE CHANGE HAPPEN'

How did your time at GMI/Kettering prepare you for the future?

My Kettering experience lit the fire in me to explore the possibilities, find creative solutions and innovate ... engineering was never a job for me, it was my passion!

What was your favorite experience as a Bulldog?

My favorite experience was each and every lab as well as special projects. Many of these tasks provided the opportunity to not only work with talented team members but more importantly emphasized the “hands-on” part of my education. Learning is doing, and as a Kettering Bulldog every day was met with many opportunities.

Who or what has been GMI/Kettering's most significant contribution to during the past 100 years?

The alum! The GMI/Kettering program developed industry leaders in engineering and business over the past 100 years. Many of whom have been instrumental in leading existing companies to new levels of success, launching new businesses through entrepreneurial efforts and bringing inventions to light! The contributions of Kettering graduates have had a significant impact on the automobile industry, and the school will forever be a very important part of vehicle history.

Looking forward to the next 100 years, how do you see Kettering University graduates impacting the future?

I believe the Kettering curriculum will continue to evolve, keeping pace with changing needs in engineering and management, to ready graduates for the future. Kettering graduates will continue to be top leaders and innovators that will “make change happen.” Whether it's autonomous vehicles, connected environments, artificial intelligence applications or whatever will be the future, I'm certain Kettering graduates will be in the middle of it!

C E N T E N N I A L

Galala

Celebrating the Future of
Education Built a Century Ago



Master of Ceremonies Machelle McAdory '85



Alumni Association President John Thelen '89, Paul Glomski '99 (Entrepreneurial Achievement Award recipient) and Kettering University President Dr. Robert K. McMahan



Kari Perry '83, General Determination and Mike Perry '83



Troy Clarke '78 (CEO of Navistar) and J.T. Battenberg '66 (former CEO of Delphi)



Charlie Kettering III (Honorary Alumni Award recipient), Lizabeth Ardisana (Vice Chair Kettering Board of Trustees/CEO of ASG Renaissance) and Dr. Lisa Kettering



Jasmin Delva '19 and Amie Osborne (wife of Alumni Award recipient Bill Osborne)



Overview of the Gala dining and awards presentation room



Al Sobey '45 (Distinguished Alumni Award recipient) and George McNally '39



Musical performer Bluewater Kings Band



William "Bill" Osborne '83 (Alumni Service Award recipient)

"THIS EVENING IS DEDICATED TO THE IMAGINATION AND THE MEMORY OF OUR FOUNDERS, TRUE PIONEERS WHO CREATED THIS GREAT UNIVERSITY, AND TO THE ULTIMATE BENEFACTORS OF THAT LEGACY WHO HAVE ALSO SHAPED IT SINCE – THE GMI/KETTERING COMMUNITY: A CENTURY OF FACULTY, STAFF, STUDENTS AND ALUMNI, CORPORATE SPONSORS, FOUNDATIONS AND FRIENDS.

WE CELEBRATE THIS EVENING THE CREATION AND CONTRIBUTIONS OF A GREAT UNIVERSITY ON THE 100TH ANNIVERSARY OF ITS FOUNDING. MORE IMPORTANTLY, WE CELEBRATE ALL WHOSE LIVES HAVE TOUCHED IT AND WHO HAVE BEEN TOUCHED BY IT. WHAT TOGETHER WE HAVE BUILT, KETTERING UNIVERSITY, AT 100, IS TRULY EXTRAORDINARY."

Dr. Robert K. McMahan, Kettering University President

Centennial Gala featuring Alumni Awards and Donor Recognition

SATURDAY, OCTOBER 19



"With the online collaboration tools turned on, this is a talkative group," says Associate Professor of Chemical Engineering Dr. Jonathan Wenzel shown here with his Senior Chemical Engineering Design I (CHME 440) class on April 14, 2020. "I actually had more engagement now during lectures with some students than I ordinarily would on campus and because the lectures are recorded students can re-watch parts as needed and ask questions later."

Photo by Jennifer Wenzel

KEEPING US KETTERING

BY MELANIE BASS
AND BETSY HOMSHER

While dealing with the COVID-19 crisis, the University strives to balance academic excellence, safety and stability

Higher education — and the world — has been forced to make seismic shifts in response to the COVID-19 crisis. Over the past few months, as universities throughout this country have come to grips with the stark and unprecedented realities of the situation, Kettering University has forged a path that upholds its values, focuses on academic excellence and prioritizes the safety and well-being of its community.

In early January, the University began to frame its approach to a potential pandemic by mobilizing the Emergency Response Team (ERT), the President's Cabinet and other campus leaders. An exercise in monitoring the far-away novel coronavirus and considering its potential impact at Kettering evolved rapidly from formulating response plans to executing them as the disease began to spread quickly in the United States. Kettering's comprehensive response addresses and engages every aspect of campus life and its constituents.

Within days of the World Health Organization's March 11 warning of a global pandemic, the University catapulted from planning to acting to ensure students continue to receive the rigorous curriculum and personal attention that they expect and which makes this education model unique.

The ERT, now identified as the COVID Response Team, has led a campus-wide enterprise that addresses all aspects of operating a university; from new methods of teaching and learning to addressing cooperative employment issues, from providing financial assistance for students to keeping them on track for graduation; from addressing the needs of domestic students, to those from other countries; from sanitizing a campus to maintaining it; and more. Unlike other institutions, who were in the midst of their last term of the school year, Kettering found itself at the end of one term with another one set to begin in a few weeks, broadening its challenges.

UNDERSTANDING AND IMPLEMENTING ITS OWN RESPONSE

Kettering's distinctive cooperative education model and academic calendar require a unique response. On March 11, A-section students were only two weeks away from completing their Winter term. B-section students were scheduled to return to campus a week after that to begin Spring term. While other universities were moving classes

online with months to go before beginning a new semester, Kettering needed to conclude one term and begin another one immediately.

"Not only did we have to weigh the consequences of what every decision would mean for our students academically, we had to balance that with the safety of our entire campus community, without a similar institution to work with on how to do this best, and at a time when events were evolving daily, sometimes twice daily, across the country and in Michigan," said University President Dr. Robert K. McMahan. "Ultimately, we are alone in navigating this amongst other institutions, but we are in it together as a University. And we have, and continue to be, committed every day to working together to doing what is right for our students, our staff, our faculty, our alumni, our institution and our community."

The COVID-19 Response Team made, and continues to make decisions very quickly within an ever-changing landscape as new information about COVID-19 emerges. Sometimes decisions made in the morning have to be changed completely given new information or governmental directives issued later that day.

FIRST DECISIONS CHANGE CLASSROOM DELIVERY

On Thursday, March 12, President McMahan announced that all remaining Winter term in-person classes would be replaced with virtual learning the following Monday. In making this announcement, the president said "Disrupting the delivery of courses at this time cannot be done casually and must be done reflecting the true nature of the risks involved. We are committed to acting on objective

LATEST NEWS

At the writing of this story, the week of April 6, 2020, the COVID-19 crisis was still evolving. Find updates from Kettering University, our alumni and co-op efforts to help, resources and more at kettering.edu/covid-19. Updates are also shared across all official University social media platforms (Instagram, Facebook, LinkedIn and Twitter). There also is an email, covid-19@kettering.edu, for those with questions not addressed on the website.

evaluations of data and not the emotions of the moment or media pressure, to using the best factual information available to us, and to incorporating the mission and particular nature of our institution.”

Faculty were already prepared as Kettering had anticipated and planned the transition. In the weeks prior, faculty had completed training to carry out virtual learning; mastering virtual teaching methods and the associated electronic tools. Faculty learned how to deploy applications, upload course materials and teach and deliver final exams in a virtual environment with one goal: uninterrupted course delivery for the remainder of the Winter term.

Kettering University Online [KUO] leadership and guidance in making this transition proved indispensable. So too did Information Technology’s expertise in providing the electronic infrastructure requisite to virtual learning.



MAKING VIRTUAL LEARNING A REALITY

“While faculty may have not signed up to teach virtually, they adapted quickly thanks to the tireless efforts, support, training and experience from both the University’s IT and KUO teams,” said University Provost Dr. James Zhang.

Students and faculty noted the ease with which the shift took place. “All my professors have made the

transition to online courses as seamless as possible,” said mechanical engineering student Paul Resch. “They’ve really made this as easy on their students as they could in the given situation.”

Dr. Jonathan Wenzel, who has taught chemical engineering at Kettering for 10 years, said the most surprising part about the shift was how quickly both he and the students adapted to the virtual classroom.

“We were able to keep the connection that was developed during the in-person part of the quarter (term),” said Wenzel. “Class can still be delivered with handwritten whiteboard lectures with students working on problems, alternating with PowerPoint and showing videos — all the while receiving student feedback as the lecture is going on.”

PUTTING STUDENTS FIRST: A KETTERING COMMUNITY ENTERPRISE

Even before the first announcements of sweeping changes to Kettering’s learning model, departments across campus had formulated strategies for addressing the needs of students under multiple scenarios. Advising, tutoring and thesis services; IT; health services; Residence Life; the Office of International Programs, Custodial, Maintenance, Campus Safety and other departments had plans ready for execution — many of which shifted to electronic delivery platforms which staff could deliver remotely, if necessary. The plans demonstrated agility and flexibility without compromise to curriculum. With a keen focus on doing everything possible to mitigate delays in students’ progress to graduation, they reflect the University’s steadfast commitment to putting students first. Some examples:

- The Academic Success Center, which provides advising, tutoring and thesis services, has worked with hundreds of students — more than 200 in one week alone — almost all virtually. In addition to providing typical advising, staff have reached out to each student nearing graduation to

“WHILE FACULTY MAY HAVE NOT SIGNED UP TO TEACH VIRTUALLY, THEY ADAPTED QUICKLY THANKS TO THE TIRELESS EFFORTS, SUPPORT, TRAINING AND EXPERIENCE FROM BOTH THE UNIVERSITY’S IT AND KUO TEAMS.” - Dr. James Zhang, University Provost

HOW THE KETTERING COMMUNITY IS GIVING BACK

In times of need, the Kettering Community gives back. Whether it's staff donating to area hospitals or giving students activities to keep busy during social distancing to alumni businesses and workplaces with graduates transforming their organizations to produce medical supplies — Bulldogs are there.

Here are some of the ways our community is helping:

- In a partnership with Flint's Hurley Medical Center, Kettering University's Atwood Stadium will be the site of COVID-19 drive through testing scheduled to start April 15.

- As part of its "Cabin Fever Initiative," the University Rec Center provided exercise equipment and stationary activity to nearly 30 students living off campus. In addition to



the resistance bands and jump ropes, the students received adult coloring books, cards, 3D models and puzzles. "We want to remind them (students) that all Student Life staff (and all KU employees for that matter) are still available to them even if we aren't on campus," said Recreation Services Senior Administrative Coordinator Linda Dvorscak, who organized the giveaway. "And I encouraged them to stay active." The Rec Center also has been posting at-home exercises, daily workouts and tips that don't require equipment on the University's internal communications platform, my.kettering.edu.



- On March 27, Kettering University donated much-needed additional medical supplies to both Hurley Medical Center and McLaren Flint. Each facility received 480 3M 8000 N95 masks, 120 mini bottles of hand sanitizer and 48 protective goggles to assist in their efforts to increase adequate supplies of PPE (personal protection equipment) for their medical staff.

- Alumnus, Anthony Gosur '10, currently works for Troy Design & Manufacturing (a subsidiary to Ford Motor Company) as a Manufacturing Engineer. The company is aiming to construct 1,000,000 PPE face shields a week to aid in the fight against COVID-19.



Anthony has helped implement and oversee daily operations to deliver masks all over the world (i.e. Florida, California, New York to Michigan). They currently have a "wall of hope" which exhibits the gratitude from the hospitals, emergency units and more.

Are you a member of the Kettering Community who's is helping?
Let us know by emailing communications@kettering.edu.

ensure keeping them on track, including offering options for thesis completion among students whose cooperative employment situations have changed.

- The Cooperative Employment team has identified all students whose jobs have been impacted by COVID-19 and is contacting each individually to help them secure new positions.
- The University's Library leveraged its existing robust virtual resources to be even more available to all students, faculty and staff. Also, librarians are available via phone, text, email and chat.
- The Office of International Programs facilitated the return of all Study Abroad students. Also, it applied for and received State Department approval for virtual learning for international students, ensuring their status is not impacted by the move to virtual delivery. In collaboration with the Academic Success Center and the Registrar's office, all students who had planned to study abroad in Spring Term are now enrolled in Kettering classes.
- The Wellness Center is open and offers mental and physical health services for all members of the Kettering community. Licensed health care professionals provide virtual mental health counseling, for groups and individuals, along with counseling by phone which is available 24/7.
- Residence Life remained opened until March 28 so students without alternatives could have safe, sanitized housing. Dining Services provided meals — and continues to provide meals through take-out only.

“WE ARE EARMARKING OUR INCREASED ANNUAL DONATION TO HELP KETTERING CONTINUE TO PROVIDE EDUCATIONAL OPPORTUNITIES THROUGH THIS FUND. WE FEEL THIS IS AN INVESTMENT IN THE FUTURE OF OUR COUNTRY.” - Jim Armstrong, '64

- IT's virtual resources have smoothed the transition to online learning and working for students, faculty and staff. Its team delivers virtual training and responds to individual needs and requests. They also continue to support of the University's varsity E-sports team, one of the most popular new student activities.
- Student Accounts has instituted new tuition payment plans for families impacted by COVID-19.
- The Communications department keeps the community informed of all developments through the University's website with the latest updates, direct links to resources, information and more. It also shares news through Kettering's official social media platforms.
- Human Resources implemented a temporary remote work protocol for supervisors and employees. In collaboration with IT, this department provides instructional videos for easing the transition to remote work, as well as answers to ever-changing questions as the situation evolves.
- Admissions hosted the University's first Virtual Bulldog Preview Day on April 10. Prospective students and their families interacted directly with current students and University staff via an interactive panel discussion and Q&A. Families were also able to tour the campus from the comfort of their homes. A new, online chat feature allows prospective students to talk with staff about applications, enrollment, financial aid and more.
- Enrollment & Marketing: The collaborative Enrollment and Marketing teams created a first in the University's history: A new program, called “SEEK: Success through Early Enrollment at Kettering,” designed to retain newly admitted students who will enroll in 2020-21. SEEK has already successfully recruited nearly 80 admitted high school and transfer students to complete nine-week virtual courses that will earn them college credit and kick-start their STEM careers at Kettering.
- Alumni Relations has transitioned to the interactive online world, reformulating popular networking events and gatherings as virtual meet-ups.

Significantly, Kettering employees have executed these actions, and many more, while also maintaining normal campus operations. No small challenge in these abnormal times.

“SOCIAL DISTANCING DOESN'T MEAN WE CAN'T CONNECT OR SUPPORT EACH OTHER THROUGH THESE UNCERTAIN AND CHANGING TIMES. WE MUST, AND WE DO. IT JUST MEANS WE EVOLVE HOW WE DO IT. I'M SO PROUD OF THE TEAMWORK, INNOVATION, PASSION AND COMPASSION DISPLAYED THROUGHOUT OUR ENTIRE COMMUNITY.” - **Dr. Robert K. McMahan**, *Kettering University President*

KETTERING ALUMNI STEP UP TO HELP STUDENTS

Alumni quickly realized that students faced financial hardships as a result of the COVID-19 crisis. In concert with University Advancement, they established the “Bulldogs Backing Bulldogs” campaign, an emergency relief fund to help students meet unexpected financial burdens resulting from the loss of co-op positions and families’ financial distress.

“No one wants to see students drop out of school due to the economic challenges of the crisis. Scholarships are the best option,” said Vice President of Advancement Susan Davies.

That’s why Kettering alumni and friends like Jim Armstrong ’64 and his wife Marilyn wanted to give.

“On the front lines of this crisis’ impact will be our colleges and universities,” said Jim Armstrong. “We are earmarking our increased annual donation to help Kettering continue to provide educational opportunities through this fund. We feel this is an investment in the future of our country.”

In just three weeks, this campaign has inspired many other alumni to contribute, raising funds essential to providing student scholarships.

“STAY HOME, STAY SAFE,” STAY CONNECTED

On March 24, Michigan Governor Gretchen Whitmer enacted a three-week “Stay Home, Stay Safe” executive order, set to expire on April 13. The University immediately limited all campus activities to essential operations only and all staff who could perform their jobs remotely were instructed to do so. Only essential staff continue to work on campus.

While preparing this special edition for publication, Gov. Whitmer extended the existing “Stay Home, Stay Safe” executive order through April 30. Kettering’s leadership announced an extension to its temporary remote work policy for eligible employees through Friday, May 1. The University has, and will continue, to abide by all governmental directives.

As this situation evolves, so will the University’s response.

Announcements regarding the status of the remaining weeks of the Spring Term, commencement and other events will be made April 20.

In the meantime, the University remains open with faculty providing instruction and staff providing services, communicating and connecting to each other, students, prospective students, alumni, co-ops and community.

“Social distancing doesn’t mean we can’t connect or support each other through these uncertain and changing times. We must, and we do. It just means we evolve how we do it,” said President McMahan. “I’m so proud of the teamwork, innovation, passion and compassion displayed throughout our entire community.”

As we go to press, B-section students are learning virtually and most staff are working remotely. We hope to return to on-campus learning and working on May 4. Our ability to do so, however, depends on many factors well beyond our control. As we go forward, we will continue to approach this unprecedented situation innovatively, with agility, flexibility, and integrity; pursuing excellence in academics and operations. It’s what makes us #KetteringBuilt.

TAKING AIM

Chelsea Carter '20 is an entrepreneur, champion for girls in STEM, proud Robot – and she's not even close to slowing down

BY HANNAH BRODERICK



Photo By Erika DeWitt

She owns an online clothing store that promotes positivity, pride, social responsibility and erasing negative stereotypes in the community (earning well-known celebrity fans like Snoop Dogg and DeJ Loaf).

She's the host of a current events radio show.

And she's an advocate for providing Flint-area girls science, technology, engineering and mathematics (STEM) opportunities.

These are just a few of the accomplishments Chelsea Carter, a senior at Kettering University, already has on her resume.

Her academic track record is just as impressive.

The 22-year-old majoring in computer engineering (with minors in computer science/cybersecurity) is a former student representative for the President's Board of Trustees on Academic Affairs and is a member of the Robot Society and two academic honors societies – Eta Kappa Nu and Kappa Mu Epsilon.

In addition to classes and a Co-op with Harman International, she hosts her own WKUF show, "Chelsea's Live Line," airing weekly during B-Section, and is the former President of the Kettering Entrepreneurship Society.

But if you ask the Farmington Hills, Michigan-native, these experiences at Kettering might not have happened if it weren't for Academically Interested Minds (AIM), a five-week residential summer program offered by the University for high school students of color interested in STEM.

"AIM has provided me with so much support – not just financially, but socially and emotionally as well," Carter said. "No AIM, no Kettering."

During Carter's five weeks in the AIM program, she participated in various courses such as computer programming, business management and physics. She also took advantage of volunteer opportunities, social activities with other high school students participating in the program and corporate visits with Kettering Co-op partners Bosch and General Motors.

The experience had a lasting effect. Not only did it reinforce a decision to pursue engineering, it laid the groundwork for her to give back to her community – and in particular to women.

"Chelsea possesses great leadership qualities that influence and empower others," said Ricky Brown, Director of

Multicultural Student Initiatives and Director of the AIM program at Kettering University. "She's a great example and representative of the positive outcomes of those who participate in the AIM program."

Carter, who went on to receive a scholarship from the Michigan Council of Women in Technology, embraces college life.

She also has found a way to extend her Kettering experience to serve members of the community. In addition to taking on the role of First Robotics software mentor for the all-female Team 7598 at St. Catherine of Siena Academy of Wixom, she teaches the basics of coding to young girls as part of the "Girl Scouts Hour of Code."

"They say it takes a village to raise a child. I am a product of such a village," said Carter. "With the support of family and mentors who have kept me on the right path, I am able to live an altruistic lifestyle. I am forever grateful of the time that was invested into molding me. Without giving back to others, I would not be the person I am today – someone who is not afraid to take on opportunities for self-development to make the world a better place."

When Carter graduates this summer, it might be the end of her Kettering academic experience, but it won't be the end of her adventures both in community service and professional excellence. In addition to graduate school for cybersecurity and her online clothing store, Detroit Luxury Clothing, she has big plans.

"As women are currently underrepresented in STEM careers, it is my goal to continue to increase the numbers of those involved," said Carter. "I will always give back because doing so helps me find my true happiness and allows me to keep being a gift that keeps on giving."

ACADEMICALLY INTERESTED MINDS (AIM)

- Launched by Kettering University in 1984.
- A five-week residential summer program for 11th grade high school students of color who are interested in science, technology, engineering, math and business.
- Courses offered: Business Management, Calculus, Chemistry, Computer Programming, Economics, Physics (some with labs)
- For requirements and details, go to kettering.edu/precollege/special-programs/aim



Kettering University Assistant Professors and GREEN program coordinators Dr. James Cohen and Dr. Julia Kiernan

Photo By Caroline Rathbun

GREEN LIGHT

New CSLA program exposes students to environmental issues across sciences (social, physical, biological) and humanities

BY HANNAH BRODERICK

While terms like recycling, environmental awareness, composting, carbon footprint and clean energy are not new to Kettering University, a program launched in fall 2018 infused sustainability into multiple courses like never before.

Inspired by the founding Dean of the College of Sciences and Liberal Arts Dr. Laura Vosepika, two CSLA Assistant Professors, Dr. Julia Kiernan and Dr. James Cohen collaborated to create the GREEN program.

In addition to allowing students to incorporate, learn and practice environmental approaches within their chosen degree, this program opens doors to other possible career tracks. Planning and resource management, geotechnical engineering, urban management, conservation and restoration, sustainability policy and practice, and ecosystem management are just a few of the paths to which students are introduced.

“THE GREEN COURSE CLUSTER (WITHIN COMMUNICATIONS, LIBERAL STUDIES, BIOLOGY AND MATHEMATICS OFFERED TO B-SECTION STUDENTS) IS UNIQUE BECAUSE STUDENTS STAY WITH THE SAME GROUP THROUGH THEIR YEARS IN THE PROGRAM WHICH HELPS SET THEM UP FOR SUCCESS” - Dr. Julia Kiernan, GREEN Coordinator

“The GREEN course cluster (within communications, liberal studies, biology and mathematics offered to B-section students) is unique because students stay with the same group through their years in the program which helps set them up for success,” said Kiernan, who serves as GREEN coordinator in addition to her role as Assistant Professor of Communication.

QUESTION: Why GREEN?

Cohen: Julia and I were interested in infusing the curriculum with more ecological and environmental concepts, and we thought it would be very nice to tie together the sciences and humanities in order to do so because these themes are very interdisciplinary. Our dean (at the time) gave us the freedom to build this type of program, so it is very much designed by faculty thinking of students.

Kiernan: I met Dr. Cohen and was struck by his passion for ecology and the environment. As one of my undergraduate degrees is in biology, I was immediately engaged with the idea of how KU could shape general education (particularly my area of communications) to take up ideas of environmental stewardship.

Q: Why is it important for Kettering University to have a program like GREEN available to students?

Kiernan: Because the environmental catastrophes future generations are facing are tremendous, so we need innovative minds to work to find solutions. Additionally, the cross-disciplinary nature of this program means that students will be prepared to work across a number of fields to address sustainability issues. I think just considering the three pillars of sustainability (environmental, social and economic) has been really eye-opening for students so far because this approach emphasizes that there are a number of factors working together. Students realize that so many of their courses can be focused on the environment. It’s not just a natural science issue. It’s important to engineering, business, social sciences, sciences, math, communications, etc.

Cohen: Ecological and environmental issues are only going to continue to become more pressing during the next decade (not that they haven’t been during the previous ones), so it is important for students to understand not only the science behind the ways our planet functions but also the reasons that we, as humans, are so connected to nature. We have worked to ensure that the program focuses on both of these areas.

Q: The program is only just over one year old and already has more than 60 students. What do you attribute the success and interest to?

Kiernan: Students and faculty want to make a difference. Students are especially keen to get involved and make positive changes. This past term we had a number of sophomore students working on proposals to improve sustainability across campus. There were so many great projects, like starting a composting program, building a greenhouse and eliminating single-use containers (e.g. coffee cups, straws, utensils, etc.); freshman students worked with the GEO Club on a poster campaign to improve recycling on campus. The passion that GREEN students have shown is extraordinary. I am continually inspired by the dedication of our GREEN students, especially the fact that all this work is happening in courses outside their major.

Cohen: Just look at who Time magazine’s person of the year was for 2019 – Greta Thunberg. Earlier generations have had the opportunity to work to solve environmental issues related to climate change, sustainability, deforestation, pollution, etc., and we haven’t done enough; therefore, people coming of age today want to know that the planet will be there for them and their children. We want to make sure that they aren’t just inspired to action (which is important) but also know how to examine the issues within a scientific framework.

For more information, email GREEN@kettering.edu.

FULLY CHARGED

Kettering entrepreneurs grow rideshare solutions company Kuhmute with new investor, partner and forward momentum

BY HANNAH BRODERICK



WANT TO KNOW MORE ABOUT KUHMUTE?

- Watch a video on Kettering University's YouTube site (Kettering University; search "Kuhmute")
- Go to the website - kuhmute.com
- Follow on Twitter - @kuhmute
- Follow on LinkedIn: Kuhmute

At the end of last year, Kettering University alumnus Peter Deppe and senior Scott Spitler were making headlines for Kuhmute, their forward-thinking V2G (vehicle to grid) service for existing micro mobility rideshares and last mile delivery robots.

But as with all companies, they needed one thing to make their innovative idea a reality.

Money.

A second-place finish in a pitch competition in Youngstown, Ohio, that they weren't even initially allowed to enter, netted them \$75,000. They also earned a Best Mobility Hardware company title and \$10,000 from the 2019 Hardware Tech Summit in Detroit. Not bad for a new start-up with big goals but not quite enough capital.

Enter Downtown Flint (Michigan) businessman Phil Shaltz and a \$500,000 investment.

"Phil's generosity and faith in us is vital to the success to Kuhmute," said Deppe '19 (electrical engineering). "It will help keep technical talent in Flint, which greatly helps in increasing jobs and economic growth in the area," said Deppe.

Shaltz, now a full-fledged business partner, and the Kuhmute co-founders are making big plans from their new Ferris Wheel co-working space in Downtown Flint, including expanding manufacturing and supply chain management opportunities.

"I don't invest in companies; I invest in the people. Peter and Scott are young, aggressive, smart entrepreneurs," said Shaltz. "I do believe their product will be successful knowing their ambition to succeed."

The product Shaltz is referring to involves efficient and environmentally friendly electric scooters and universal charging stations in multiple cities around the country and starting in Flint.

It's an idea that came about after Deppe and Spitler (computer science and computer engineering), met through the Kettering Entrepreneur Society (KES), a University-wide initiative that aims to foster mentoring, networking, funding and opportunities for its student entrepreneurs. That was three years ago, and KES provided critical initial funding for the Kuhmute's November 2018 launch by Deppe, the "business planner," and Spitler, the "tech guy."

According to Deppe, it all started with "a beat up e-scooter bought off Amazon and a prototype hub made out of PVC pipes."

“I DON’T INVEST IN COMPANIES;
I INVEST IN THE PEOPLE. PETER AND
SCOTT ARE YOUNG, AGGRESSIVE,
SMART ENTREPRENEURS.”

- Phil Shaltz, *Flint Businessman*



Kuhmute founders Peter Deppe and Scott Spitler with partner and investor Phil Shaltz.

Photos By **Caroline Rathbun**

Within a year, Kuhmute had gained local media attention and evolved to include a prototype hub and scooter to provide a universal charging infrastructure for micro mobility vehicles. Think flexible docking stations for

e-scooters, e-bikes, pedal bikes, as well as autonomous and teleoperated delivery vehicles and fleets in convenient locations throughout cities — including Flint — that multiple ride operating services can utilize.



The future is bright and moving fast. With 40 e-scooters and eight pilot docking stations now throughout Flint, Kuhmute is putting charging stations in Grand Haven (Michigan) and Jersey City, New Jersey, with plans to expand to even more locations.

But next on Deppe and Spitler’s plate is working to bring their charging hubs home to where the idea for Kuhmute was born — Kettering University.

“It’s a lot of late nights, but it’s fun. We use everything we learned here (Kettering) and more,” Spitler said.

STEM-ING HOPE

For William Tiger Jr. '81, opening doors and breaking barriers for Native Americans is personal

BY MELANIE BASS

Growing up in South Florida the son of a Miccosukee Tribal chairman and a Caucasian mother, William Tiger Jr.'s world was entrenched in Native American culture, farming and football.

After scoring well on his SATs, multiple colleges approached the star athlete. One high school counselor mentioned a college more than 1,000 miles away that offered a unique Co-op program and a career path Tiger had never even heard of.

"I knew nothing of engineering. I had never met an engineer, nor did I have a clue of what an engineer would do," said Tiger '81. "It was one reason I was interested in General Motors Institute (GMI)."

The decision to pursue mechanical and electrical engineering was one that would change his life. It also cemented a passion in the now retired General Motors senior plant manager to help other Native American children with little to no exposure to science, technology, engineering and mathematics (STEM) have the same educational opportunities and professional success he did.

"There is a need for Native STEM professionals as they are greatly underrepresented in the STEM fields. With Native Americans representing 2 percent of the U.S. population, less than 0.5 percent of engineering degrees will be awarded to Native Americans," said Tiger. "There are certainly barriers to overcome, so working with people to develop those strategies and tactics to increase the Native STEM pipeline is a priority. Education is important to me because it provides opportunities but also because it is an indicator of the hope and ability to see a future."

Tiger, who now lives in Naples, Florida, hasn't slowed down in retirement. He attends schools and conferences around the country to meet with Native American students – many who don't even know what STEM is. He connects

with them by sharing his own personal and professional stories of pursuing higher education and in particular, a STEM-focused career.

"I can speak to them about what they are struggling with – leaving home and family, being able to afford an education – I experienced the same things," Tiger said.

In fact, it was a scholarship offered by GMI to Tiger that ultimately put him on a path to success.

"GMI kicked my butt in the beginning – the level of academic competition was something I had not experienced. And the adjustment to leaving my family, acclimating to college and learning to be an engineer – it was a lot," he said. "But having the scholarship alleviated that one financial stress and allowed me to focus on my studies and Co-op instead of having to try and find a job to make ends meet. It was tough, and at times I wasn't sure if I'd make it through, but I did. And having that scholarship was more influential than I realized even at the time."

That's the message Tiger spreads to students and within organizations such as the nonprofit American Indian Science and Engineering Society (AISES). He's also looking at pipelines for scholarship funding and hands-on work experiences within institutions of higher education such as Kettering University, Native American groups and STEM-centric organizations.

Fusing the fight for hope and opportunities for Native Americans from his father, the core value instilled by his mother to always help others and the encouragement by his longtime employer, GM, to always strive to improve your community, Tiger is optimistic.

"The timing now is right for Co-op programs, scholarships, opportunities and for open discussion and solutions to address these barriers in the Native American community," he said. "Not that it will be easy, but it will be possible!"



"I CAN SPEAK TO THEM ABOUT WHAT THEY ARE STRUGGLING WITH – LEAVING HOME AND FAMILY, BEING ABLE TO AFFORD AN EDUCATION – I EXPERIENCED THE SAME THINGS,"

- William Tiger Jr. '81

Photo by Elizabeth Morrissey

HISTORY OF MICCOSUKEE TRIBE AS TOLD BY WILLIAM TIGER

The Miccosukee Tribe is small but has some unique history.

Originally we were from the North Florida/Georgia/Alabama region. As the East Coast was "settled," we were pushed farther south into Florida. Between 1817 and 1858, there were the "Seminole Wars" where Natives fought to stay and not be forcibly resettled or eliminated. In 1858, the Seminole and Miccosukee were in the Everglade region of South Florida where the federal troops gave up on hunting them further and essentially said, "Fine, stay out there."

For almost 100 years, the Miccosukee lived in the Everglades with very limited contact with non-Natives. As civilization continued to encroach into the Everglades, Miccosukee Indians were being arrested for hunting and fishing out of season. (Hunting and fishing out of season had no meaning to the Miccosukee because we hunted and fished to live).

My father, Buffalo Tiger (tribal chairman), had learned some English and could read and write some, so he engaged with the local governments to resolve the issues and stop arresting Miccosukee. The state and federal governments considered us Seminole. We resisted and demanded to be recognized as Miccosukee. (The federal government had stopped recognizing new tribes).

In July 1959, a delegation of Miccosukee was invited by Fidel Castro to come to Cuba and discuss Cuba recognizing the Miccosukee as a sovereign nation at the United Nations. As a result the U.S. recognized us without having the U.N. showdown. Thus, the Miccosukee as the only tribe with no peace treaty with the U.S.

DISTINGUISHED ALUMNI AL SOBEY '45 DIES AT 94



Al Sobey '45, son of Kettering University founder Major Sobey, prolific inventor, businessman and alumnus, passed away Monday, Dec. 9, at the age of 94 and surrounded by his family.

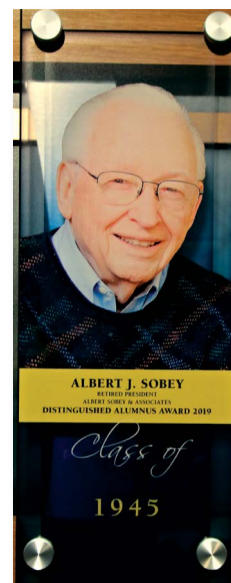
While a student at Kettering University during the 1940s, he was a member of the Robot Society, the Society of Automotive Engineers and the Camera Club, and he was Chairman of the Publications Council. At that time, the Publications Council oversaw all school publications including the handbook, Technician and Reflector (for which he was editor). His Co-op was with the Allison Division of GM, and he earned his bachelor's in Mechanical Engineering in 1945. He was a member of the first class to be required to produce a thesis – his involved optimizing propulsion in propeller driven aircraft.

His thesis, produced towards the end of World War II, was of such importance and utility that it was immediately classified by the Department of Defense. Only very recently was it declassified and made available publicly.

After graduating, he went on to have a long and successful career with General Motors, Transportation Technology and Booz Allen & Hamilton. He as was President of his own company, Albert Sobey & Associates. He never stopped innovating and inspiring others throughout his life, ultimately holding more than 30 patents covering his groundbreaking work in turbine engines, rocketry and other technologies. He also published dozens of articles and lectures as well as a textbook for aircraft and rocket control systems and designs for engineering energy efficiency in transportation systems.

In 1995, he received the Outstanding Alumni Achievement Award from the University followed by an honorary Doctorate of Engineering in 1997. He also established the Al Sobey Lectures on Leadership and Ethics Endowment in 2007. In October 2019, he returned to Kettering University during its Centennial Year and Founders' Week celebrations. He was the 2019 recipient of the Distinguished Alumni Award.

Preceded in death by his wife of 58 years, Barbara Boyd Sobey, he is survived by his sons Dan Sobey and Jim Sobey, a daughter Sue Dickinson and two grandchildren. Funeral services were held Jan. 18, 2020, in Bloomfield Hills, Michigan. The family has asked that any memorial donations be made in his name to the Al Sobey Lectures on Leadership and Ethics Endowment at Kettering University.



Longtime GMI/Kettering Professor and Department Chair William Edington

William F. Edington, 98, who retired from GMI/Kettering University in 1980 after holding multiple positions including Professor and department chair, died on Oct. 21, 2019, in Flushing, Michigan.

Following his service in World War II, Mr. Edington, came to GMI in 1946, where he joined the English and Coordination department. From 1951-56, he worked in the Economics, Psychology and Personnel department. After being named Head of the Psychology Section (1956-60), he spent most of the next decade as Chairman of the Social Studies (renamed to Social Sciences) department. As a Professor of



William F. Edington (far right) is shown in this 1950 photo with GMI/Kettering University Presidents Charles F. Kettering, Albert Sobey and Guy R. Cowing.

Social Science in 1968, he spent the remainder of his tenure as Chairman of Humanities and Social Sciences.

Mr. Edington was a major contributor to the University's curriculum development in Psychology, Social Studies/Science and Humanities. He also was instrumental in faculty recruiting and evaluation, budgeting, course development and scheduling, department administration and the upgrading of facilities and instructional equipment. He was a member, researcher, president and chairman of the Liberal Education Division of the American Society for Engineering Education (ASEE) for 25 years.

John A. Adamek '58
 Kent J. Adams '62
 Truman E. Alderman Jr '52
 James E. Alexander '53
 Timothy L. Allen '74
 Burton K. Arbuckle '55
 Jeffrey J. Austin '96
 Mark M. Axe '74
 Jan W. Bachman '67
 William J. Bader '50
 Charles R. Bailey '48
 Donald R. Barnes '57
 Gerald H. Baron '59
 Richard E. Bartos '64
 Robert L. Baumgartner '61
 David S. Bayer '52
 Arthur M. Berg '49
 David A. Blough '84
 John A. Boquist '70
 James E. Boyce '48
 Philip M. Brelesky '61
 James D. Brockman '73
 Merwyn W. Browning '58
 Earl R. Brummett '59
 Maurice W. Bufano '48
 Eugene J. Cappo '52
 Donald J. Charney '66
 James R. Clements '53
 Gerald A. Collins '67
 Frank P. Compagnoni '46
 Paul F. Conte '48
 Louis B. Cracco '58
 Jerry W. Cunningham '73
 Morris V. Dadd '50
 Jason C. Davis '00
 Robert C. Degeneff '66
 Jonathan M. Dessenberg '93
 David J. DeVries '57
 Theodor E. Diewald '62
 William E. Downard '53

Robert F. Dunbar '52
 Wallace E. Edgar '60
 Norman S. Edwards '49
 Charles W. Eggert '59
 James F. Eigner '69
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As a student at Detroit Wilbur Wright High School, E. Roland Maki '60 experienced hands-on work at GM's Research Lab. The experience proved to be a natural fit for him at GMI, now Kettering University. As a Registered Professional Engineer and a Life Fellow of the American Society of Mechanical Engineers, he has published numerous peer-reviewed research papers in domestic and international journals. Roland enjoys international travel, biking, volunteering with non-profit organizations and designing stained glass art.

Mr. Maki chose to leave an unrestricted gift in his trust to Kettering University that provides the flexibility for multiple opportunities for students in the academic and campus environment.

"Giving back to the University that provided the educational foundation for my career is important to me," he said. "My gift ensures that future students will experience the tough academic program with experiential learning opportunities that shaped me and so many others."

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