**FALL 2022** 

# DEVELOPMENTS

# INNOVATION SUPERCHARGED

\$6M Hickman/Munger Gift Bolsters Cancer Research

Inside this issue: Faculty to Watch | New Strength at Munn | Exciting New Gifts

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Project broke ground with more than \$10M in gifts from donors

## FOR DONORS AND FRIENDS OF MICHIGAN STATE UNIVERSITY

MSU Developments, published three times each year, is devoted to the inspiration and impact of private philanthropy at Michigan State University.

VICE PRESIDENT FOR UNIVERSITY ADVANCEMENT Kim Tobin

## **EDITORIAL TEAM**

Stephanie Motschenbacher, Director Lois Furry, Editor Jen Weaver, Art Director Contributing Writers: Devon Barrett and Christina Schaffer Photography: Harley Seeley

Michigan State University, University Advancement Spartan Way 535 Chestnut Road, Room 300, East Lansing, MI 48824 (517) 884-1000

## What is IQ?

MSU's IQ building, also pictured on our cover, is home to the Institute for Quantitative Health Sciences and Engineering. IQ is dedicated to cross-disciplinary teamwork, with a focus on training the next generation of scientists to do more than just traditional research. Faculty have been recruited from some of the world's top academic centers to push the envelope of biomedical research, solving pressing problems in human and veterinary medicine with smart engineering solutions. See page 14 to learn about one example: an exciting new clinical innovations project in oncology research, thanks to a gift from the Hickman/Munger family.

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\$1.3M research project will use laser light to view biological processes at unprecedented resolution

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Former university leader John Cantlon and his wife Irene create new endowment

## **PROFESSORSHIP HONORS ANIL AND**

NANDITA JAIN

Multiple donors' gifts spanning years, totaled \$1M

2 New Developments 33 Student and Faculty Spotlights

The generosity of thousands of alumni and friends empowers MSU's students, faculty and leaders to accomplish the extraordinary every day.

## WAYS TO SUPPORT MICHIGAN STATE

Online Giving: You may make a gift securely online using your credit card. Visit givingto.msu.edu.

Cash, Stock, Real Estate and Other Gifts: To explore how you might provide financial support to MSU, contact the University Advancement office in your college or unit or call (517) 884-1000.

Estate Planning: To remember MSU in your will, personal trust, qualified retirement plan or IRA, contact the Office of Gift Planning at (800) 232-4678 or (517) 884-1000.

The correct reference is Michigan State University, East Lansing, Michigan, and the federal tax identification number is 38-6005984. If you have already named MSU in your estate plans, please contact us so we can welcome you to the Linda E. Landon Legacy Society. For more information, visit giftplanning.msu.edu.

Learn more at givingto.msu.edu

Developments

# new Meters



Troy Calkins, '88, James

James Madison students participating in a summer

possible.

Madison College (back row

center), and first-generation

bridge program his gift made

# MAKING MSU FEEL LIKE HOME FOR NEWCOMERS

Gift helps build a community for first-generation James Madison students

s a first-generation college student himself, alumnus Troy Calkins' desire to help students at risk of not completing their education is personal.

He recalls having to navigate quite a bit on his own, which was the impetus for his recent gift to James Madison College to create a bridge program for first-generation college students.

The program invites incoming first-year students who identify as first-generation to move in one week prior to the start of classes and engage in a variety of activities, including a writing course taught by JMC faculty, a financial planning workshop, mentoring by JMC students, tours of Lansing and East Lansing, a meet and greet with JMC faculty and staff and a dinner with JMC alumni and legislators. The benefit for students is to have added supports in place prior to the start of the fall semester.

"I look back and think about some of the guys I knew as a freshman who dropped out. They didn't drop out because they couldn't cut it academically," Troy said. "If they had had someone who was a resource to them—someone they could go to when they found themselves in a stressful situation—they might have avoided that."

Troy is the former executive vice president and chief legal officer for Workiva Inc., a software development company. Now retired, Troy divides his time between Chicago and Key West. He remains active as a "house husband" to his partner of more than 28 years, Dr. Robert Liem.

Troy and his husband are passionate about opportunities to promote growth and a sense of belonging, especially for students who do not have a strong foundation of supports.

"I want people to feel more at home. Building community can increase the odds of having a successful college experience," Troy said.

**LEARN MORE** about support for James Madison College by contacting Director of Development Rocky Beckett at beckettr@msu.edu or by calling (517) 432-2117.

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# A BROTHER'S LAST WISH CREATES **NEW ENGINEERING** SCHOLARSHIP

The devotion of a sister to her brother's memory has established a new scholarship in engineering. The Steven James Church Mechanical Engineering Endowed Fund will benefit students pursuing careers in mechanical engineering, thanks to a gift from Steven's sister Anne Marie Church.

Steven received his bachelor's and master's degrees in mechanical engineering at MSU and continued his studies in civil and environmental engineering at the University of California, Davis. He was a professional engineer, certified by the California Board of Professional Engineers.

Anne Marie says her brother "really was a rocket scientist," noting that his impressive career included working on the space shuttle and other projects at Rocketdyne and Aerojet General. He later joined the California Air Resources Board, where he excelled as a contract manager, working on highly technical and challenging air quality research projects.

Steven died in June 2021 at the age of 66.

"He really was a guy who lived his life to the fullest," his sister said, even earning his private pilot certificate and traveling to Australia.



## new **DEVELOPMENTS**



Tamara Reid Bush, professor and interim chair of the Department of Mechanical Engineering, said she is excited that the experiences Steven Church had in mechanical engineering at MSU resulted in a desire to give back to future students.

"It is passion from alumni, like Steven, that continues to confirm the positive, collaborative learning environment at MSU," she said. "The mechanical engineering faculty and students are extremely grateful for the kindness and support provided by this scholarship."

**LEARN MORE** about support for the College of Engineering by contacting Senior Director of Development Michael Wallace at walla203@msu.edu or by calling (517) 355-8339.



Bill Oswalt and his son Mike Oswalt, both animal science alumni, on their family farm.

# GIFT REFLECTS LIFE IN AGRICULTURE

MSU dairy science alum establishes discretionary endowment for animal science

ith the first milking at 5:30 a.m., the days were long, the pay was small and the rewards were great, recalls alumnus William (Bill) Oswalt. After earning a degree in dairy science, he returned to his family farm in Vicksburg, Michigan. He became a dairy industry leader and founded Ozland Enterprises, which manufactures and markets dairy management products throughout the U.S. and internationally.

Bill's lifelong commitment to agriculture was behind a recent \$100,000 gift to establish a fund that provides flexible support for the MSU Department of Animal Science. The William Oswalt Discretionary Endowment will enable the department chairperson to direct expenditures toward the most pressing needs at the time.

"MSU was established as and continues to be recognized as one of the premier land-grant universities," said Bill. "Life on this planet will continue to evolve and the validation of animal science must meet the challenges encountered along the path of inevitable change."

In 2016, Bill was named one of the charter members of the Farm Lane Society for his contributions to the College of Agriculture and Natural Resources.

"We are so grateful for Bill Oswalt's thoughtfulness to provide such flexibility for the future," said Catherine Ernst, animal science chairperson. "His generosity will have a tremendous and longlasting impact on our students and faculty and will provide vital support for enhancing our animal science teaching, research and outreach missions."

**LEARN MORE** about supporting the College of Agriculture and Natural Resources by contacting Senior Director of Development Jeff Martin at mart2767@msu.edu or by calling (517) 432-1576.

# CELEBRATING LOVE WITH GENEROSITY

Orchestral undergrads get support from fund grown out of a shared passion for music

Norman Huver and Doris Dahl shared a loving 42-year relationship, filled with the enjoyment of music and other arts. So when Doris passed away in 2011, Norman decided to honor their time together by creating the Doris H. Dahl and Norman Huver Endowed Scholarship for Orchestra.

"We have enjoyed the music department at MSU for many years, and have made many friends who I am still in contact with to this day," said Norman. "Now, with this scholarship, I have met so many hard-working students who need a little help and who are very appreciative."

As a freshman, violin performance student Maria Skidmore was one of two 2021-22 recipients of the scholarship.

Maria grew up in a family devoted to music. She started violin at age 4, piano at age 7, and picked up guitar along the way. At 12, she added composition to the mix after meeting Oscar winner Howard Shore—the composer for The Lord of the Rings and The Hobbit film trilogies.

She asked him how he started composing, and he replied "I picked up a pencil and wrote notes on a page."

"After that I was just inspired to do everything in music," she said.

Although Maria attended Bath Schools, she dual enrolled at East Lansing High School, where she served as the principal chair for the Chamber Orchestra, Symphonic Orchestra, and Encore Strings. She also was selected for the Michigan State Band and Orchestra Association's All-State and Honors Orchestra and attended MSU's Community Music School.

MSU was at the top of her list when it came time to apply to college.

She describes her days now as "go-go-go" between being a member of the MSU Symphony Orchestra and the Lab Orchestra—a small, select group that performs for conducting classes at MSU.

"MSU sets the bar high, and it's stretched me with difficult repertoire," she said. "I have to be in the zone and ready. Sometimes it can be intimidating to be around such good performers, but it helps me to be the best I can be."

She admits she doesn't know exactly where it will all lead yet, but she knows being a Spartan will help her shape a career in music.

"I was very thankful to receive the scholarship," she said. "It's wonderful to think that someone would be interested in investing in me as I grow my musical career and become the elite musician I want to be."

**LEARN MORE** about support for the College of Music by contacting Senior Director of Development Ann-Marie Lindley at alindley@msu.edu or by calling (517) 353-9872.

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Doris H. Dahl and Norman Huver Endowed Scholarship for Orchestra recipient Maria Skidmore

"I was very thankful to receive the scholarship. It's wonderful to think that someone would be interested in investing in me as I grow my musical career and become the elite musician I want to be."

-MARIA SKIDMORE

## new **DEVELOPMENTS**

## **NEW MSU** DONOR ADVISED FUNDS OPTION

SU has partnered with Bank of New York Mellon (BNYM) to provide alumni and friends with access to a new donor advised fund, the Michigan State University Donor Advised Fund (MSU DAF), which you can use to enhance your overall philanthropy while supporting the university.

As a donor, you can open an MSU DAF with a minimum of \$10,000, and additional contributions as low as \$250. Gift assets accepted include:

- Cash (wires, ACH and checks)
- Marketable securities
- Complex assets (case-by-case basis), including cryptocurrency, real estate, private equity, LLCs, etc.

The MSU DAF creates two accounts: MSU Only and Discretionary. Fifty percent is allocated into the MSU Only account, and 50 percent is allocated into the Discretionary account. The Discretionary account can be used to support MSU or almost any approved 501(c)(3) nationally, and qualifying foreign charities in certain countries. There is no required minimum distribution per year; the minimum grant is \$250 and grant requests can be made through the online donor portal or paper forms.

Contributions may be eligible for a tax deduction and grow tax-free, leveraging the value of your philanthropy. Grants are distributed at your own pace, providing the opportunity to develop a strategic approach that better supports your philanthropic vision.

**LEARN MORE** by visiting **bnymelloncharitablegiftfund.org/msu** or contact Deanna Gast, Office of Gift Planning, at gastd@msu.edu or (517) 884-1071.





# MSU SEES HISTORIC FUNDRAISING SUCCESS IN 2022

# MSU alumni led the way, contributing \$122.5 million of the \$284.4 million total

ith support from alumni, friends and partners, Michigan State University raised a record \$284.4 million in cash and gift commitments, outdoing MSU's previous fundraising record of \$272.6 million from 2019, and topping last year's total of \$232 million.

In a year highlighted by the opening of the Facility for Rare Isotope Beams, a new academic building for STEM teaching and learning, and expansion of partnerships in Flint, Grand Rapids and Detroit, more than 170,000 individual gifts were given to support the university's priorities to expand opportunities, advance equity, elevate excellence and strengthen the community for all Spartans. Donors made more investments in support of students and faculty than any prior year. "We're grateful to Spartans and friends for so generously supporting the success of our students, faculty and staff," said President Samuel L. Stanley Jr., M.D. "Our community is investing in us like never before, growing the university's capacity to pursue goals identified in the MSU 2030 strategic plan for expanding our excellence and impact."

MSU alumni led the way this year with a 26.6 percent increase in giving from the previous year, contributing \$122.5 million of the total. Nearly 9,700 individuals contributed to MSU for their first time, making up approximately 14 percent of the

total donors.

such as:

More than 81 percent of all dollars raised came from 344 donors who made gifts of \$100,000 or more. The largest gift, totaling \$17 million, came from alumnus Martin Vanderploeg to create an undergraduate scholars' program for firstgeneration students and to support endowed faculty positions in engineering. Of the total raised, more than \$251 million has already been received and made available for current operations and capital purposes to support strategic priorities

• Increasing opportunities for students by creating new and increasing investments in endowed scholarship funds.

Enabling faculty excellence through investments in endowed positions.Aiding innovative efforts and partnerships to reduce health disparities.

Gifts from foundations also were up, increasing by 25.5 percent to more than \$74.6 million in support. Notably, the Charles Stewart Mott Foundation awarded grants, totaling \$25 million, to support public health faculty, academic research and community health collaborations in Flint.

"Private philanthropy fuels MSU's innovation, success of our students and impact in the community," said Kim Tobin, vice president for University Advancement. "Our donors support the university's mission in many ways, and the success of faculty and students wouldn't be possible without the generosity of the entire Spartan community."

In all, there were 48 gifts of a million dollars or more, totaling \$157 million. Million-dollar gifts in fiscal year 2019 brought in \$143 million, making this year's total the largest from million-dollar commitments MSU has ever received.

 $10 \text{ M/} \Delta$ 

## **BUSINESS FORERUNNER**

## Judith M. Whipple, Ph.D.



DONALD J. BOWERSOX AND ROBERT W. THULL PROFESSOR IN LOGISTICS AND SUPPLY CHAIN MANAGEMENT Established through gifts from Robert

W. Thull and others in honor of the late Donald J. Bowersox

Interim dean of the Eli Broad College of Business and a professor in the Department of Supply Chain Management, where she is also faculty director of the Master of Science program. Her research interests include supply chain integration and collaboration, and she has extensive teaching experience at the undergraduate and graduate levels, teaching in the Full-time MBA, Executive MBA, MS-SCM and doctoral programs. For her accomplishments, she is a recipient of the MSU Teacher-Scholar Award and numerous awards and honors in her field, including being named a DC Velocity Rainmaker, a high honor by the leading multimedia news agency DC Velocity, which serves the logistics and supply chain industry.

## SUCCESS EQUALIZER



Kristen A. Renn, Ph.D. DR. MILDRED B. ERICKSON DISTINGUISHED CHAIR IN HIGHER, ADULT, AND LIFELONG EDUCATION Established through a gift from Dr. Bruce Erickson in honor of Dr. Mildred B. Erickson

A professor in the Department of Higher, Adult, and Lifelong Education, who serves as associate dean of undergraduate studies for student success research. Her research centers on college student learning, development and success in higher education, with current projects focused on low-income, firstgeneration students, and lesbian, gay, bisexual and transgender college students.



Kristen Renn spoke on behalf of the honored faculty at the 2022 Investiture for Endowed Faculty.

## 2022 Investiture Honors 27 Endowed Chairs and Professors

FACULTY

In recent years, MSU earned a spot among a group of 53 universities named by Times Higher Education as "international powerhouse" institutions, schools that have the best chance of being grouped alongside—or even ahead of—the most elite global "old stars," a group that includes the University of Oxford, Stanford, Harvard, Yale, MIT and Princeton.

MSU's scale and scope—which go far beyond the friendly confines of East Lansing—and its determination to achieve greater and greater excellence were surely contributing factors to making the list.

Of course, an enormous increase in private funding for research—more than \$340 million from gifts made in the *Empower Extraordinary* campaign—factors in too. And the pace of support for faculty and their research has not slowed since the campaign's end.

Donor-funded faculty positions are a key driver of MSU's ability to pull together renowned and innovative trailblazers from multiple areas of expertise.

This was in clear evidence when, after a COVID-19necessitated pause in formal ceremonies, MSU invested two years' worth of newly named endowed university chairs and professors at the 2022 Investiture in September.

These honored faculty are leading the charge in their fields—and they are the reason MSU has the capacity to catch up to some of the best institutions in the world. They are thought leaders within the academic community and are often on the front line when it comes to tackling challenges in areas such as food safety, education, public health and sustainability. They also mentor the next generation by creating innovative and exciting learning environments.

Here are the endowed faculty most recently honored, listed in no particular order, but instead organized under three broad categories that reflect their approach to their discipline.

udith Whipple is inte

dean of the Eli Broad

College of Business a

the Donald J. Bowersc

nd Robert Thull Profes

# **INSPIRING** OTHERS

## **PHYSICS PROTAGONIST**



Marcos D. 'Danny' Caballero, Ph.D.

LAPPAN-PHILLIPS PROFESSOR Established through royalties from the "Connected Mathematics 2" textbook authored by Glenda Lappan and Elizabeth Phillips

An associate professor of physics education who studies how tools and science practices affect student learning in physics and the conditions and environments that support or inhibit this learning. His work employs cognitive and sociocultural theories of learning and aims to blend these perspectives to enhance physics instruction at all levels.

## SPIRITUAL GUARDIAN



Morgan Shipley, Ph.D. FOGLIO ENDOWED CHAIR IN SPIRITUALITY Established in honor of the late Father Jake Foglio

An associate professor of religious studies whose current research and teaching have three main focuses: understanding mystical and esoteric new religions that highlight spirituality as opposed to institutional religiosity, positioning individuals and groups who increasingly identify as spiritual but not religious, and situating the nature and manifestations of secular spirituality.

## SCIENCE NEWSMAKER



Bruno Takahashi, Ph.D. BRANDT ENDOWED PROFESSOR Established through a gift from Ellis N. Brandt

An associate professor in the School of Journalism and of AgBioResearch. He is also

the research director in the Knight Center for Environmental Journalism. His research interests include news coverage of environmental affairs, environmental journalism practices and science communication. He has a particular interest in the communication of environmental issues in Latin America and among Hispanic communities in the United States.

## ACCOUNTING ADVANCER



## Isabel Wang, Ph.D.

DELOITTE/MICHAEL LICATA PROFESSOR IN ACCOUNTING Established through gifts from Deloitte in honor of Michael Licata

A professor in the Department of Accounting

and Information Systems. Her research in the field has earned her recognition multiple times over from the American Accounting Association, as well as one of MSU's highest distinctions for faculty: the John D. and Dortha J. Withrow Teacher-Scholar Award.

## **STEM ADVOCATE**



Aman Yadav, Ph.D. LAPPAN-PHILLIPS PROFESSOR Established through royalties from the "Connected Mathematics 2" textbook authored by Glenda Lappan and Elizabeth Phillips

A professor of educational psychology and educational technology who also serves as associate director of computer science education in MSU's CREATE for STEM institute. His research focuses on preparing teachers to embed computational thinking practices and computing in the classroom. He is also focused on developing an understanding of problem-based learning and case-based instruction in STEM disciplines, with a specific focus on engineering education.

## OPENING DOORS TO NEW DISCOVERIES



Xiaobo Tan, the Richard M. Hong Endowed Chair in Electrical Engineering (left), with a graduate student, tests GRACE (Gliding Robotic Ace) on Higgins Lake.

## SMART TOOL MAKER



Xiaobo Tan, Ph.D. RICHARD M. HONG ENDOWED CHAIR IN ELECTRICAL ENGINEERING Established through a gift from Richard M. Hong in honor of MSU Professor Emeritus Kun Mu Chen

A professor in the department of electrical and computer engineering. Also an MSU Foundation Professor, Tan focuses his research on electroactive polymer sensors and actuators, modeling and control of smart materials and bio-inspired underwater robots.

### **QUANTUM LEAPER**



## Jonas Nils Becker, Ph.D.

JERRY COWEN CHAIR OF EXPERIMENTAL PHYSICS Established through a gift from Randolph L. and Elaine Cowen in memory of Jerry Cowen

An assistant professor of physics and the primary investigator for the Solid-State Quantum Physics Optics Group within the Quantum Optical Devices Laboratory. His research focuses on experimental quantum information science using optically active systems in solid-state hosts, such as defects in synthetic diamond and rare earth-doped crystals.

## SURGICAL PRECISIONIST



Loïc M. Déjardin, D.V.M. WADE O. BRINKER CHAIR OF VETERINARY SURGERY Established through gifts made in commemoration of the contributions of Dr. Wade O. Brinker to the field of veterinary surgery

A professor of small animal clinical sciences, as well as the head of Small Animal Orthopedic Surgery. His research interests include biomechanics and implant design, and as an orthopedic surgeon, he also specializes in minimally invasive surgery, pediatric traumatology, joint replacement and revision surgery.

## ENGINEERING HELMSMAN



Leo Kempel, Ph.D. DENNIS P. NYQUIST ENDOWED PROFESSOR IN ELECTROMAGNETICS Established through a gift from Dennis P. Nyquist

Dean of the College of Engineering and a professor of electrical and computer engineering. His primary research interests include conformal antennas, engineered materials for microwave applications and computational electromagnetics.

## **HOSPITALITY HARBINGER**



JOHN AND BECKY DUFFEY PROFESSOR OF HOSPITALITY BUSINESS Established through a gift from John and Rebecca Duffey

A professor in The School of Hospitality Business who has been working in the industry for over 40 years as a consultant, entrepreneur, faculty member and academic administrator, and in hospitality management careers across three continents. His research explores the intersection between service provider and consumer, and the impact of new technologies on consumer experience and consumer-centric organizational design.

## **CARBON CATCHER**

**Jason Edward Rowntree**, Ph.D. C.S. MOTT ENDOWED PROFESSOR

OF SUSTAINABLE AGRICULTURE Established through a gift from the C.S. Mott Foundation

An associate professor in the Department of Animal Science. He coordinates the Lake City and UPREC AgBioResearch and Extension Centers, where his work focuses on addressing economic, environmental and social complexity in agriculture, including a study into how grazing livestock can improve land and mitigate climate change by capturing carbon and providing other ecosystem services.

## PARKINSON'S WARRIOR



Caryl E. Sortwell, Ph.D. EDWIN A. BROPHY ENDOWED CHAIR IN CENTRAL NERVOUS SYSTEM DISORDERS Established through an anonymous gift

A professor of translational neuroscience whose research focuses on therapeutic strategies for Parkinson's disease. Her method enables her to study not only the impact of alpha-synuclein pathology, but also the potential of novel disease-modifying treatment strategies. Her research program also focuses on improving the efficacy of existing anti-parkinsonian treatments (pharmacotherapies, deep brain stimulation) using precision medicine approaches.

## ALZHEIMER'S COMBATANT



Irving E. Vega, Ph.D. RED CEDAR PROFESSOR Created by the Provost's Office in partnership with MSU's colleges to support recruitment and retention of faculty

An associate professor of translational neuroscience. His research focuses on molecular and biochemical mechanisms that modulate the accumulation of pathological tau proteins in Alzheimer's disease and related dementias. He is also working on ethnic disparities and the influence of ethnoracial factors on blood biomarkers in Alzheimer's disease.

## ENVIRONMENTAL CHAMPION



Timothy H. Warren, Ph.D. BARNETT ROSENBERG PROFESSOR Established through a gift from the MSU Foundation in honor of Dr. Barnett Rosenberg

A professor of chemistry and chair of the Department of Chemistry. His research group is focused on developing environmentally friendly new methods for organic synthesis, exploring the interconversion of nitrogen and ammonia as carbon-free fuel and decoding ways that biology communicates using nitric oxide as a molecular messenger.

## FUEL ADAPTER



## Guoming (George) Zhu, Ph.D.

G. GLENN AND MARLENE D. GARDNER ENDOWED CHAIR IN AUTOMOTIVE ENGINEERING Established through a gift from G. Glenn and Marlene D. Gardner

A professor in the Department of Mechanical Engineering. His research in the automotive control lab uses model-based control techniques to accurately control engine fuel injection timing and mass, charge mixture temperature and composition, and control the valve train and other engine subsystems. Work in this area of advanced engine control is foundational for a future that may require engines to have the ability to automatically adapt to multiple fuels and combustion modes.



Provost Teresa K. Woodruff presents Loïc M. Déjardin with the Wade O. Brinker Chair of Veterinary Surgery at the Investiture Ceremony.

## TURNING IDEAS INTO ACTION



Alumnus Dan Van Haften spoke about how his love of geometry inspired him to create the Van Haften Endowed Professorship in Deductive Literacy. He is pictured here with François Greer, the inaugural Van Haften Professor.

## MATHEMATICS LOGICIAN



François W. Greer, Ph.D. VAN HAFTEN ENDOWED PROFESSOR IN DEDUCTIVE LITERACY Established through a gift from Dan Van Haften

An assistant professor in the Department of Mathematics whose research is focused on enumerative algebraic geometry, with a specific focus on moduli spaces of Calabi-Yau varieties. Greer spent 2020-2021 at the Institute for Advanced Study conducting NSF-funded research into the relations between quasimodular forms and Gromov-Witten theory.

### CULTURE PROGNOSTICATOR



Kristin L. Arola, Ph.D. KAREN L. GILLMOR PH.D. ENDOWED PROFESSOR IN PROFESSIONAL AND PUBLIC WRITING Established through a gift from Karen I., Gillmor

An associate professor in the Department of Writing, Rhetoric, and American Cultures whose research and teaching focus on composing as culturing. She explores how the acts of writing, designing and making—as well as the ways those skills are taught—culture people into particular ways of being and sets of values. Her work brings together composition theory; making culture; and digital, environmental and cultural rhetoric.

## **FRUITFUL SCIENTIST**



Ph.D. MARTIN AND JUDITH BUKOVAC ENDOWED PROFESSORSHIP IN TREE FRUIT PHYSIOLOGY Established through a gift from Martin and Judith Bukovac

Todd Charles Einhorn,

An associate professor in the Department of Horticulture whose research focuses on understanding plant growth development and environmental stress in order to develop innovative horticultural strategies to optimize tree fruit productionnamely apple, pear and tart cherry trees.

## DATA DRIVER

## Antonio F. Galvao, Ph.D.



FREDERICK S. ADDY DISTINGUISHED CHAIR IN ECONOMICS Established through a gift from Frederick S. and Marilyn Marshall Addy

A professor of economics whose research is primarily focused on econometric theory and applied econometrics, as well as quantile regression and panel data.

## SUPPLY STRATEGIST



Anand Nair, Ph.D. ELI BROAD UNIVERSITY PROFESSOR OF BUSINESS Established through a gift from the Eli Broad Foundation

A professor in the Department of Supply Chain Management. His research examines how firms, teams and individuals learn adapt and organize to manage processes, supplies, technology and innovation, and the associated performance implications. His work has been applied in the manufacturing, healthcare and retail sectors.

## **ARTIFICIAL INTELLIGENCE SURVEYOR**



Anjana Susarla, Ph.D. OMURA-SAXENA PROFESSOR IN RESPONSIBLE A.I. Established through a gift from Manoj Saxena in honor of Glen S. Omura

A professor in the Department of Accounting and Information A professor in the Department of English Systems. She is renowned for her expertise in the economics of who has developed and teaches courses in information systems, social media analytics and the economics of film directing, screenwriting and narrative film fiction, as well as artificial intelligence. In these fields, she is working to advance in African American cinema and cinema of the African Diaspora. ethics and technology, uncovering the harmful side of unregulated An accomplished filmmaker himself, his features and short films A.I., which can be biased and discriminatory and spread have been screened in the United States and abroad. misinformation like wildfire.

## INFORMATION BALANCER



**Kjerstin S. Thorson, Ph.D.** BRANDT ENDOWED PROFESSOR Established through a gift from Ellis N. Brandt

A professor in the Department of Advertising and Public Relations and the School of

Journalism, and the associate dean for Strategic Initiatives in the College of Communication Arts and Sciences. Her research explores how digital platforms are changing the ways we learn about our political world and the democratic consequences of information inequality, especially among youth and young adults.

**ARTFUL STORYTELLER** 



Silvia Tita, Ph.D. CAROL ANN BENNETT-VALLÈS PROFESSOR Established through a gift from Carol Ann Bennett-Vallès and Iohn-Paul Vallès

A professor in the Department of Art, Art History and Design. An art historian and digital humanities researcher, she focuses her research on early modern art in transnational contexts through diplomatic and missionary channels.

## FILM TALEBEARER



Jeff C. Wray, MFA

TIMNICK CHAIR IN THE HUMANITIES Established through a gift from Henry O. Timnick

**LEARN MORE** about endowed chairs, this year's investiture event and MSU's best and brightest faculty members at go.msu.edu/investiture-2022.

From left: Executive Vice President for Health Sciences Norman J. Beauchamp Jr., Veterinary Medicine Dean Birgit Puschner and Human Medicine Dean Aron Sousa at the IQ building, where crossdisciplinary teamwork is driving new discoveries in health.

# INNOVATION SUPERCHARGED

-

\$6 million, multigenerational gift from the Hickman/Munger family will spur cancer research innovation in human and veterinary medicine

COVER STORY

BY DEVON BARRETT

Continued on next page

lumnus Stephen Hickman ('64, Business), his wife, Sally, and their family—daughter Stephanie Hickman Boyse, a 1990 graduate of the College of Communication Arts and Science; daughter Tracy Hickman, who earned a degree in interior design in 1988; and Tracy's spouse, Chad Munger, a 1988 graduate of the College of Arts & Letters—have come together to make a \$6 million gift to support cancer research and treatment at Michigan State University.

The gift will create a \$3 million expendable fund that will fuel research and initiatives that advance the standard of care in veterinary and human medicine, including the Clinical Innovations Program in the College of Veterinary Medicine. "MSU reaches into small communities and collaborates. We recognize the depth of MSU and the resources it has to make a difference."

-SALLY HICKMAN

Continued on next page

# WHAT IS CLIP?

It has been said time and time again that Michigan State has the infrastructure to be a formidable force in the fight against so many serious diseases. With two different medical schools, a veterinary medical school and animal hospital, and a critical mass of great minds working toward advancements in science, engineering and technology as they relate to health care—it's very possible that the next "big thing" could come out of MSU.

That is the Hickman family's hope and, thanks to a portion of their gift, that hope lies within the new Clinical Innovations Program (CLIP): the latest addition to the world-class biomedical research and development ecosystem at MSU. CLIP, which is housed in the College of Veterinary Medicine, will advance discoveries and technologies in such disciplines as pharmacology, infectious disease, cardiology, surgery, physical therapy, wearable monitoring devices and, of particular interest to the Hickmans, the treatment of cancer.

Because there is so much overlap among the diagnostic tools and therapeutic methods that identify and treat disease in humans and animals, CLIP will be the place where research and technology aimed at either population will be translated in ways that benefit and improve the lives of both.

Thanks to MSU's close ties with veterinary medical facilities across the state and the Midwest (many practices and clinics are led by CVM alumni), researchers already have access to data about patterns that exist in various animal populations. But within those populations, they have something else: eligible participants for future clinical trials, innovative therapeutic methods or new methods of prevention.

CLIP will support those initial clinical trials in the veterinary field, with the eventual goal of translating and scaling them for human populations and utilizing the connections the Colleges of Human Medicine and Osteopathic Medicine have with medical providers across the state for trials in people. And, CLIP will be the place where external collaborators—from investigators to practitioners to policymakers—bring their own expertise to the table and find ways to apply it across the board.

**LEARN MORE** about supporting the College of Veterinary Medicine by contacting Associate Director of Development Eric Langdon at langdon4@msu.edu or by calling (517) 353-7891.



Continued from previous page

The remaining \$3 million will establish the Hickman Family Endowed Chair in Oncology, which will take advantage of the synergy between veterinary and human medicine to develop diagnostic and therapeutic tools to fight cancer in people and animals.

"These gifts will support work offering great promise for human and animal health care," MSU President Samuel L. Stanley Jr., M.D., said. "I'm grateful for the Hickman family's confidence in Michigan State's stewardship of their generosity. Such transdisciplinary research is a vital element of the excellence and impact MSU's strategic planning envisions."

The Hickman family's roots are in Adrian, Michigan, where synergy, now and for the decades to come." Steve's father helped found Brazeway, Inc., which today is the The Deans of the Colleges of Human Medicine and of world's largest producer of innovative aluminum components for Veterinary Medicine noted that the Hickmans' generosity builds the HVAC, automotive, appliance and commercial refrigeration on the capacity of the Institute for Quantitative Health Science industries. To the same degree that Brazeway was the family and Engineering at MSU. business, philanthropy became a family tradition that now spans "The endowed chair will support a translational scientist three generations and has made a transformative impact in a at the very highest caliber," said Dean Birgit Puschner, College variety of areas, in their home communities and beyond. of Veterinary Medicine, "one who in turn will attract other "We feel a responsibility to give back to a community that clinicians and researchers to our Clinical Innovations Program."

"We feel a responsibility to give back to a community that has been good to us," said Steve Hickman. "Our giving started out in small doses, but now we are focused on making an impact, which takes us to a whole new level."

Sally Hickman added: "MSU reaches into small communities and collaborates. We recognize the depth of MSU and the resources it has to make a difference."

COVER STORY: INNOVATION SUPERCHARGED

Contributing to work that advances efforts to vanquish cancer has long been a philanthropic priority for the Hickmans, and the family has been impressed by MSU's collaborative, multidisciplinary approach to research and commitment to improving access to quality health care across the state.

"The Hickman family is inspirationally purpose-driven," said MSU's Executive Vice President for Health Sciences Norman J. Beauchamp Jr., M.D. M.H.S. "They share our commitment to hastening the pace at which the most promising advances in cancer diagnosis and treatment are made available to all. This is a gift that fosters integration, collaboration and synergy, now and for the decades to come."

Aron Sousa, Dean of the College of Human Medicine, added: "A significant fund to support research alongside the fund for a chair position will help researchers answer questions no one has thought of yet, allowing us to explore promising new leads and to lay the groundwork for new discoveries that will preserve health—not just treat diseases after they occur." FEATURE

# GIFT HONORS HISTORY WHILE SUPPORTING the FUTURE

Forest Akers Trust \$2.3 million gift builds strength and conditioning center at Munn Ice Arena

BY LOIS FURRY



From left: Forest Akers Trustee Brian Breslin, Hockey Head Coach Adam Nightingale, Athletic Director Alan Haller and Forest Akers Trustees Nancy Craig and Steve Terry in the newly named Forest Akers Trust Strength and Conditioning Center at Munn Ice Arena.

hanks to a \$2.3 million gift from the Forest Akers Trust, a state-of-the-art strength and conditioning facility is now serving MSU's hardworking student-athletes. It's part of stunning upgrades recently completed that have transformed Munn Ice Arena and greatly enhanced the lives of MSU hockey players as well as studentathletes in numerous other sports. It's also the latest in a long line of gifts from a trust that spans more than five decades, totals nearly \$14 million in cumulative giving and honors a man who was somehow both expelled as a student and welcomed as a trusted overseer on what is now the MSU Board of Trustees.

As legend has it, a young Forest Akers, a baseball player service. Roger Wilkinson is an MSU vice president emeritus and at Michigan Agricultural College, was asked to leave in 1908 Stephen (Steve) Terry an assistant vice president emeritus, both for lackluster academic performance as well as a propensity for Finance and Operations and Treasurer. Nancy Craig is the for campus hijinks. (He was believed—though he denied former director of Investments and Trusts at MSU. Brian Breslin involvement—of being behind a powder keg explosion set off is a former member of the MSU Board of Trustees. All four are also MSU alumni. during a visit by President Theodore Roosevelt.) An older, and presumably wiser, Forest Akers redeemed himself through a long "It's a real honor to be a trustee of the Forest Akers Trust," career in the burgeoning auto industry, where he rose through explained Steve. "Everything about it reflects a long association the ranks from car salesman to vice president for the Dodge with MSU. We are entrusted with the means to help the Division of Chrysler Corporation. He also maintained his love university realize dreams, and it is exciting to see the impact." A longtime hockey fan, Steve said the latest gift from the of sports, becoming an avid golfer, and held no grudge against MSU. He once said of the decision to expel him: "They were trust is particularly gratifying for him. never, in all their history, more right."

By 1939, he had been elected to the state Board of Agriculture—the equivalent of today's MSU Board of Trustees where he served until 1957. Before his death in 1966, he donated land and money to build golf courses on campus, supported students with scholarships and established the Forest Akers Trust.

The name Forest Akers is familiar to every Spartan, thanks to the man and his trust. It's on one of the largest residence halls, two picturesque golf courses, one of Berkowitz Complex's impressive auxiliary gyms, some of the campus's best learning spaces in Bessey Hall and a synthetic practice field that has transformed marching band practice and other athletic endeavors of MSU's students. Additionally, the trust has provided funding for Hannah Professorships, support for building the Eli and Edythe Broad Art Museum and the Clara Bell Smith Student Athlete Academic Center and endowments to support student-athletes, entrepreneurship and education abroad.

If the things the trust has supported sound like a list of the university's most critical enterprises, that is no coincidence. In accordance with Forest Aker's wishes, the trust is set up solely for the benefit of MSU's faculty and students, and funds projects and programs that are top priorities of the president and provost.

Every member of the four-person board for the Forest Akers Trust has deep MSU connections and each signed on for lifetime "The new facilities are going to help with recruitment, and it is heartening to see hockey making a comeback," he said.

Munn Ice Arena recently completed a \$22.5M renovation to update and add much-needed amenities for MSU players and staff, and create a more welcoming entryway for fans, including a Ron Mason Hall of History. The Forest Akers Trust Strength and Conditioning Center means that student-athletes no longer have to trek down Red Cedar Road to the football building for conditioning. The new facility, together with a theater room for watching film, a space for studying, a place to practice shooting and brand-new locker rooms, will stand out to new recruits choosing among some of the best hockey programs in the country.

Spartan Hockey head coach Adam Nightingale, "We are grateful to the Forest Akers Trust for supporting our studentathletes through their philanthropy. Thanks to generous donors, we now have the finest college hockey facility in the country to recruit, train, and provide a transformative experience for players."

It's the newest iteration extending the long MSU legacy of the former student, sportsman, auto industry executive and trustee. Thinking of his intention to establish the Forest Akers Trust as a way to benefit MSU and its students, one might remark: "He was never, in all his history, more right!"

**LEARN MORE** about supporting the Munn Renovation Project by contacting Executive Associate Athletics Director and Senior Director of Development Rebecca Surian at surian@ath.msu.edu or by calling (517) 432-4610.



# REACHING for/THE SKY

Hidden Lake Gardens Treetop Canopy Walk taking shape thanks to \$1.25 million in gifts

BY LOIS FURRY

| FALL 2022 | givingto.msu.edu



t's not every day that you can journey high into the trees. See the world like a squirrel moving from branch to branch. Catch every note of songbirds perching below. Feel the breeze rustling in leaves around you.

A walkway being built through the treetops of MSU's Hidden Lake Gardens soon will offer visitors all this and more. Slated for final completion in spring 2023, the \$1.25 million project is being funded entirely through the philanthropic support of donors.

A 700-foot-long Jeane Johnson Canopy Walk—named in honor of a generous estate gift from the late Jeane Johnson—will be the latest attraction at Hidden Lake Gardens, a botanical garden and arboretum owned and operated by MSU, situated about 65 miles southeast of East Lansing.

Donors and community volunteers will get a sneak peek at the walk on Saturday, October 22 with a celebration led by MSU President Samuel L. Stanley Jr., M.D. The canopy walk will open with full public accessibility in spring 2023.

"This effort exemplifies the very best kinds of partnerships, where the community and the university see the benefit and seize the opportunity together," President Stanley said. "We are grateful for the support of donors who saw the value in this project. Their unwavering commitment is now a part of the legacy of Hidden Lake Gardens and its work to improve lives by connecting people with nature."

Tecumseh attorney Charles (Chuck) Gross chaired the steering committee for the project, whose members gave generously themselves and helped inspire the support of others, including the Stubnitz Foundation, the Lenawee Community Foundation and Consumers Energy Foundation. Notably, Paul and Kathy Smoke, who live near the gardens, contributed \$150,000 to name the walk's classroom space.

"The early commitments by the Lenawee Community Foundation and the Stubnitz Foundation showed the support of the community for the project and gave us the credibility needed to secure other donors," Chuck added. "The support of Jeane Johnson, who was raised on a nearby farm, gave our fundraising the post-covid boost we needed to push it over the top." The project is designed to provide significant new opportunities for education, outreach, research, visitor experience, tourism and economic development, according to Hidden Lake Gardens Director Paul Pfeifer, who noted that it was critical that the canopy walk be fully ADA accessible.

"We know people need places not only to appreciate the beauty of nature but to engage with our environment and learn from it to become better stewards of the world around us," he said. "The canopy walk will be an exciting new way for people of all ages and abilities to explore nature and experience the gardens."

The project is being carefully executed for sustainably and to preserve the flora and fauna of the area.

Hidden Lake Gardens boasts six miles of one-way paved drives and 12 miles of hiking trails through both landscaped and undeveloped natural areas, as well as multiple demonstration gardens, an entire hillside of hostas, a nationally renowned bonsai courtyard, an equally renowned conifer collection and a conservatory that inspires visitors year-round with a tropical dome, arid dome and temperate house displaying unique plants from around the world.

Hidden Lake Gardens is supported through admission fees, endowments, gifts and the "Friends of Hidden Lake Gardens" membership program. The Gardens is open 360 days of the year, with an admission fee of \$10 per person. Guided tours, requested at least two weeks in advance, are available for \$5 per person.

**LEARN MORE** about support for Hidden Lake Gardens by contacting Associate Director of Gift Planning Laura Peek at lpeek@msu.edu or by calling (517) 884-1070.

# PACKAGING MODERNIZES its BUILDING



Project broke ground with more than \$10 million in gifts from donors

s students returned to campus this fall, they likely didn't recognize the Packaging Building on Wilson Road.

More than \$10 million in gifts are behind an ongoing construction project to transform the building that houses the School of Packaging. University officials, donors, alumni and students gathered for a groundbreaking ceremony on April 19 with an expected completion in early 2023.

The School of Packaging celebrated breaking ground on renovations with Trustee Melanie Foster, Provost Teresa Woodruff, CANR Interim Dean Kelly F. Millenbah, student Lily Kirkman, Ring Container **Technologies President Brian** Smith, Jackie and Chuck Frasier, Director Matt Daum, Associate Director Laurent Matuana, Amcor CEO Ron Delia. President Samuel L. Stanley and Trustee Dianne Byrum.

"Michigan State's School of Packaging is proud to be known as the first, the largest and the most comprehensive packaging program in higher education," said MSU President Samuel L. Stanley Jr., M.D. "We are excited that MSU's tradition of excellence in packaging is being reinforced with donor support for a significant expansion and improvement of our facilities and addition of an endowed faculty chair."

The renovations are supported by commitments from alumni and donors, including lead gifts from Amcor, Charles and Jackie Frasier, and Ring Container Technologies.

• Amcor made a transformative gift to the School of Packaging to establish a partnership that allowed the school to begin renovations to create a modern, collaborative environment for our students and faculty that will be a hub for sustainable packaging thought leadership across industry, academia, governmental agencies and nongovernmental organizations (NGOs). The Amcor partnership also establishes an endowed chair position focusing on sustainable packaging solutions. This faculty member will have a unique platform to influence and lead the



thinking around truly sustainable and scalable packaging solutions across the whole value chain

- Charles and Jackie Frasier, of Ft. Lauderdale, Florida, made both the first gift to launch the renovation campaign and the last gift needed for the first phase of renovations to begin. Their gifts will name the Charles L. and Jacqueline C. Frasier Atrium, a focal point as you enter the building, and the Charles L. and Jacqueline C. Sustainability Lab. Additionally, they committed another \$1.5 million to endow a professorship through an estate gift.
- Ring Container provided support to renovate the main corridor, to be renamed the Ring Container Technologies Innovation Hall, re-imagined and redesigned with collaboration in mind. The new expanded space will connect to the Frasier Atrium and will nurture both large and small collaboration groups for students, faculty and industry partners. This prominent hall will quickly become a preferred gathering location, not only because of its various collaboration spaces, but also because of its comfortable, bright and modern design.

"I am truly grateful for our donor partners. Their gifts demonstrate a spirit of cooperation with the School of Packaging and a willingness to pay it forward for the next generation of students who will benefit from this investment in outstanding facilities and new faculty," said Matt Daum, Ph.D., School of Packaging director.

The new upgrades—the first the building has seen since 1986—will help MSU remain a leader in the packaging field with spaces that encourage collaboration and integrate technology seamlessly, invite industry to engage and enhance the student experience, and attract faculty with the proper space and tools to conduct world-class leading research.

Courtyard skylights were in place as students returned, new furniture has been ordered and renovated classrooms are on schedule to be open for classes in January 2023. Watch the live video feed of the construction progress, provided by Christman Construction. "Our upgraded facility will be a gathering place for the best

and brightest packaging minds, and a place that brings together academia, industry, government and non-government leaders to solve the toughest packaging challenges," said Daum. "Updating and expanding the current facility to meet modern teaching and research needs will better reflect the rapidly evolving, technology-ready packaging workplace. This ultimately results in better-prepared graduates." The top-ranked MSU School of Packaging has over 600 undergraduate and graduate students. It is the only school that offers a Ph.D. program in packaging and boasts 10,000 alumni worldwide.

LEARN MORE about support for the School of Packaging by contacting Senior Associate Director of Development Kathy Spring at springk1@msu.edu or by calling (517) 355-0284.

## THE UPDATES TO THE **BUILDING INCLUDE:**

• A 5,700-square-foot addition to the Packaging Building with another 14,000 square feet of renovations.

• Upgraded labs and restrooms.

- A new enclosed courtyard designed for student collaboration.
- Modern technology and equipment.
- Renovated classroom and office configurations to spark ideation and creativity.

# **GIFT SUPPORTS MSU** ENTOMOLOGY MISSION, **EDUCATION**

A \$2.75M gift from Mary Tatter honors her passion for youth education and commemorates her late husband, MSU alumnus Jordan Tatter

ary E. Tatter, of Watervliet, Michigan, made a \$2.75 million gift to advance the research, teaching and outreach of the Department of Entomology. A \$400,000 portion of the gift also creates a graduate fellowship in education.

Her gift honors a passion for education and is in the spirit of her late husband, Jordan Tatter, who was a 1960 MSU entomology graduate, advised by former MSU President Gordon Guyer during Guyer's years as a professor. Mary passed in January. Jordan died in 2003.



"We are grateful for the Tatter family's generosity, which conveys their confidence in the value of MSU's mission," said President Samuel L. Stanley, Jr., M.D. "Their support will allow us to elevate our excellence in entomology and education — two areas critical to solving challenges facing our world — and we are honored that the Tatters' contributions will be forever associated with MSU."

The family indicated that their gifts are to honor previous and current faculty and students at MSU and to support important future contributions in entomology and education.

"My mother and father were passionate about the importance of entomology, agriculture and natural resources to our world. They believed supporting MSU was the best way to pursue this passion," said the Tatters' son, Stephen Tatter, M.D., Ph.D., who is a professor and neurosurgeon at Wake Forest School of Medicine.

"The idea of giving to the community is like giving to your family, and MSU is family. Giving to MSU is like taking care of your loved ones," he added. "My mother studied in the MSU College of Education, and teaching, reading and special education were her lifelong passions."

Mary Tatter



## ENSURING EXCELLENCE IN ENTOMOLOGY

For entomology, \$2.35 million creates an endowment to provide a perpetual source of income-the Tatter Family Endowment for Excellence in Entomology-and two expendable funds to provide immediate support: The Tatter Family Fund for Excellence in Entomology and the Tatter Family Fund for Diversity and Inclusion in Entomology.

"This tremendous and thoughtful gift from the Tatter family will positively impact the entomology department programs and people for years to come," said Kelly F. Millenbah, Ph.D., interim dean for the College of Agriculture and Natural Resources.

Both the endowment and expendable funds will support the research, teaching and Extension mission of the department at the discretion of the department chair.

"When you get a grant, a large portion is for salary. There's rarely enough money left to get started on new projects," Tatter said. "We wanted to give the department an opportunity to have resources to build promising programs and make advancements that the college and department leadership feel are important."

## ADVANCING THE EDUCATION OF EDUCATORS

Additionally, \$400,000 created the Dr. Cassandra L. Book Graduate Fellowship in Education, honoring the retired associate dean emeritus of the College of Education.

"I am especially excited that this award is named in honor of Dr. Cassandra Book, with whom I had the privilege to work for many years," said Ann E. Austin, interim dean for the College of Education. "Dr. Book brought energy, creativity and dedication to her many years as a leader and colleague in the College of Education."

Book's love for teaching came to fruition as a counselor and program director at Camp Watervliet, where she also developed a lifelong friendship with the Tatter family.

Camp Watervliet was a summer girls camp founded in 1934 by Dr. Henry and Velda Tatter, Jordan's parents. Mary attended Camp Watervliet, where she met and later married Jordan. They had two sons, Stephen and Scott.

Mary studied special education at Southern Illinois University and MSU. She was dedicated to children, education and learning, through her work as a counselor, water-skiing instructor and program director at Camp Watervliet and as a reading tutor and youth group leader. She served on the boards of the Michigan 4-H Foundation and the Watervliet District Library.

Jordan Tatter earned bachelor's and master's degrees in entomology, botany and plant pathology from the MSU Honors College inaugural class in three years. He was a member of the MSU soccer team and the Sigma Xi Scientific Honor Society.

Jordan was recognized statewide and nationally as a leader in agriculture, natural resources and improving state government services. He began his career as an apple grower and agricultural consultant, co-founding Prescription Farming in Eau Claire, Michigan. He was an MSU Extension district agent for fruit crops. He helped establish Hanson Cold Storage as one of the largest and most successful refrigerated warehousing corporations in the United States, initially as a board member and finally as president and CEO. He was president of the International Association of Refrigerated Warehouses.

Jordan chaired the Michigan Agricultural Commission for four of the 10 years he served. He chaired a committee on the eradication of bovine tuberculosis, and served on an advisory committee on fruit and vegetable production as well as on the Michigan Food Safety Alliance. He also served on a commission charged with improving state services to Michigan citizens and chaired a committee on improving state services to rural citizens.

A strong advocate for MSU, Jordan was a member of the CANR Stakeholder Advisory Board, the MSU Foundation board of trustees and the MSU Extension and AgBioResearch State Advisory Council.

The Jordan B. Tatter Conference Center at the Southwest Michigan Research and Extension Center is named for him. In 2003, the Michigan Horticultural Society and the Michigan Vegetable Council initiated The Jordan Tatter Scholarship in Horticulture to support MSU students pursuing careers in the fruit and vegetable industries.

LEARN MORE about supporting the College of Agriculture and Natural Resources by contacting Senior Associate Director of Development Kathy Spring at springk1@msu.edu or by calling (517) 355-0284.

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Tatter famil

## MSU'S FIRST-EVER W. M. KECK FOUNDATION RESEARCH AWARD WILL SHOW LIFE IN A NEW LIGHT

A \$1.3 million research project will use laser light to record movies of biological processes at an unprecedented resolution

he W. M. Keck Foundation has awarded Michigan State University's Marcos Dantus and Elad Harel \$1.3 million to start a new revolution in the way we use optical microscopes to understand the living world.

To date, the foundation has announced 13 philanthropic research awards in 2022. Seven are supported by the Keck Foundation's Medical Research Program and six, including MSU's, were awarded by the Science and Engineering

Program. This also marks the first time that scientists at MSU have claimed the award.

"This gives us a tremendous opportunity," said Dantus, an MSU Foundation Professor and a University Distinguished Professor of chemistry in the College of Natural Science. "It's really special."

"It's the dream

scenario," said Harel, an associate professor in the Department of Chemistry. "Grants like these don't come around very often, and when they do, they allow you to be your most creative self."

Harel's and Dantus's research will push the limits on what light-based or optical microscopes can see, which would bring benefits to a range of scientific and engineering fields. But the new approach is poised to deliver the greatest impact to our understanding of health and disease by revealing what life looks like, in motion, at the scale of proteins and DNA molecules.

"Below a certain point, what we know is based on static pictures and simulations," said

Dantus. "There are parts of the machinery of life that are hidden by size and time scale. That's what we're trying to make available."

The new technology would also be able to record movies of biological processes with a high frame rate. That means researchers could record things like viruses assembling and proteins doing their chores inside cells, then watch replays in slow motion to better understand what's happening and how.

"Going from our eyes to the first microscope—that opened up a whole new world people hadn't seen before," said Harel. "That's the kind of change we're going for."

## **RISK AND REWARD**

The Keck Foundation encourages creativity by rewarding transformative projects that traditional funding agencies might see as too ambitious or risky.

"By funding the high-risk/high-impact work of leading researchers, we are laying the groundwork for new paradigms, technologies and discoveries that will save lives, provide innovative solutions and add to our understanding of the world," the foundation states on its website.

The W. M. Keck Foundation was established in 1954 in Los Angeles by William Myron Keck, founder of The Superior Oil Company. One of the nation's largest philanthropic organizations, the W. M. Keck Foundation supports outstanding science, engineering and medical research. The foundation also supports undergraduate education and maintains a program within Southern California to support arts and culture, education, health and community service projects.

Developing a proposal that threaded the needle of risk and reward was a challenge, but Harel and Dantus had help. Previous applicants at Michigan State shared insights from their experiences to help hone the duo's

current submission. MSU is also now home to researchers who have won the award at different institutions, and who offered guidance.

"Michigan State University is proud to have the excellent research of Dr. Harel and Dr. Dantus recognized at the national level," said Provost Teresa K. Woodruff, Ph.D., a 2013 Keck Foundation award recipient. "Their innovative project represents the kind of creative and transformative research that characterizes MSU, with broad application to benefit the greater good."

The investigators worked closely with University Advancement to engage with the Keck Foundation and with the Office of Research and Innovation to perfect their proposal. This collaboration is essential as MSU looks to increase philanthropic support for research.

"The university was extremely supportive," said Dantus. "We had lots of conversations, and we got lots of advice. That support and excitement were really important."

"It goes all the way from the department to the highest level of the university," Harel said. "It feels like we're one team, and it makes me feel good that we have the institution behind us."

That support will continue as Harel and Dantus now take on the challenge of delivering what they've proposed. They're inventing a laserbased system that can sidestep a fundamental limitation of optical microscopy to record living systems as never before.

## **PUSH IT TO THE LIMIT**

When using light to magnify the invisibly small world, researchers inevitably run up against a barrier imposed by physics. When a beam of light strikes a sufficiently small object or opening, the beam spreads out and loses its resolving power.

Over time, scientists have developed Nobel Prize-winning technology that confronts this limitation to see smaller and smaller things, but there are always trade-offs. Take electron microscopy, which uses electrons instead of light to take snapshots with nearly atomic resolution.

"Electron microscopy is really the only way to get down to the nanometer scale, to the size of proteins in biology," Dantus said. "Our challenge from the beginning has been to convince people that our approach has the potential to reach that resolution."

But electrons can damage cells and their contents, so imaging biological samples requires

special preparation that removes them from their natural environments. For this reason, electron microscopy can't be used to visualize biological processes as they happen.

By using light, Harel and Dantus keep that possibility alive. But to succeed, they'll need to find a way around the diffraction limit, the problem that causes light to spread out in space. To this end, the researchers had an idea: If the limitation is in space, why don't we make measurements in time, which we can do with incredible resolution, unrestrained by diffraction?

To make those measurements, they'll use lasers that can send out 80 million pulses of light per second, with each pulse lasting about 10 quadrillionths of a second. By measuring and analyzing when certain parts of the pulses strike certain parts of a sample, the researchers believe they can show what the sample looks like-again, with unprecedented resolution, and unimpeded by the diffraction limit.

If this sounds a little out there, remember, that's the goal. But this approach also draws inspiration from something used every day in the real world: magnetic resonance imaging scans, or MRIs. Although they don't use light, MRIs rely on similar thinking to reveal living biology at a level that once seemed "too small" for their magnets and radio waves.

The Michigan State researchers are hoping that one day their new idea will join the ranks of MRIs and other imaging technologies that are so common, they're almost taken for granted. It's a lofty goal, and history has shown that reaching it will take years of research, development and teamwork. But Dantus and Harel are looking forward to the journey, and they're proud to be taking the first ambitious step with the philanthropic support of the W. M. Keck Foundation.

"The really exciting part for me is the collaborations that we could form with experts in different areas, asking, 'Now that I have this ability to zoom in, what can I do with it?" Harel said. "If we can show our idea can solve real problems, we give people something to build off of, drive further and help develop to its full potential."

..... LEARN MORE about supporting the College of Natural Science by contacting Senior Director of Development Corey Palmer at longleyc@msu.edu or by calling (517) 353-9855.

and Marcos Dantus in

their MSU lab.



# NEW ENDOWED PROFESSORSHIP HONORS PROFESSOR AND WORK IN GLOBAL HEALTH

Daniel and Marsha Edson committed \$1 million to establish chair position

riendships can lead in many directions. For a small group of northern Michigan friends, it has
led to the establishment of an endowed professorship in the Michigan State University College of Osteopathic Medicine (MSUCOM).

Daniel and Marsha Edson committed \$1 million to establish the Daniel C. and Marsha J. Edson Endowed Professorship in Global Health in Honor of Terrie Taylor, D.O., ensuring that the vital work Dr. Taylor and MSUCOM are doing in Malawi continues far into the future.

The path that would eventually lead to the endowment began with work that Daniel Edson did with Taylor's father, Ken Taylor, D.O., in Traverse City, Mich. Edson says he admired Ken Taylor and after learning more about Terrie Taylor's work with malaria in Malawi, he reached out to her because

> he was working with malaria proficiency testing. The friendship between Edson, Taylor and her husband, John Robert Williams, grew.

Taylor, an internationally recognized expert on malaria and other tropical diseases and a MSU Distinguished Professor and MSU Foundation Professor, studies malaria, which continues to kill hundreds of thousands of people a year, mostly children in sub-Saharan Africa, even though available drugs can kill the parasite very quickly. Her work is focused on finding how to intervene to rescue these children from the disease.

Taylor says the endowed professorship will help continue the work, even after she retires, by providing the recipient significant discretionary funds to cope with unpredicted occurrences, such as a compressor going out on a freezer holding samples, which could be disastrous, or a patient with unusual complications who needs a medicine not available at the hospital.

"There are myriad opportunities to put these funds to great use," Taylor said. "I'm so appreciative."

For Edson, this was an opportunity to add to his support of MSU. In addition to this endowed professorship, he contributes significantly to MSU Athletics, the College of Agriculture and Natural Resources, the College of Human Medicine and the College of Natural Science.

He hopes this endowed professorship inspires other potential donors to consider the "good program and great cause" and get behind it. "I wanted to establish another legacy gift and I thought about Terrie and her work, her career in Malawi," Edson said. "It felt like a way to recognize someone who grew up in northern Michigan who has made an international name for herself."

"What finer way to support Terrie and Michigan State," he added. "It just feels right. Sometimes you go with your heart."

The gift from the heart provides resources to the MSU College of Osteopathic Medicine to recruit and maintain its world-class faculty in global medicine.

MSUCOM Dean Andrea Amalfitano, D.O., Ph.D., agreed. "This work is a long-standing and premier highlight of not only COM, but MSU's research and outreach efforts internationally that have done so much for so many," he said. "With Terrie's strong leadership at the helm, this work was destined for success." The gift, Taylor adds, will enhance the attractiveness of the position. "It's a tremendous validation of the efforts in Malawi and an insightful recognition that grant funds don't cover everything required to keep the ship sailing straight," she said. "This endowment will allow the recipient to take advantage of new opportunities, generate preliminary data and respond quickly to unanticipated needs."

Taylor lives six months of the year in Malawi—during malaria season—and has done so for 35 years. Living there is of incalculable value, she said. "This has allowed me to be an effective partner in this now not-so-new medical school here," Taylor said. "When you live here six months a year, or more, you are able to perceive needs that may not be immediately obvious—and this professorship provides some help in responding."

This endowment continues Edson's legacy of giving to support MSU, where he earned a Master of Science degree in clinical laboratory science in 1979. As an MSU graduate student, he developed the first blood test for Legionnaires' disease and helped investigators trace the cause to contaminated air conditioner cooling reservoirs at a Philadelphia hotel. He then went to work at Sparrow Hospital to establish a Virology Laboratory and later joined a Traverse City firm that specialized in analyzing pathology work for hospitals. When the company relocated to Chicago, he devised a novel way to assess the accuracy of laboratory tests performed in hospital and physicians' office laboratories and formed the American Proficiency Institute (API) in 1991. Since then, API has expanded on a global scale, with more than 20,000 subscribers to their programs for both clinical and food safety proficiency testing.

Edson was awarded the 2002 College of Natural Science Outstanding Alumni award and the 2004 MSU Distinguished Alumni award.

**LEARN MORE** about support for the College of Osteopathic Medicine by contacting Director of Development Chris Surian at surianc@msu.edu or by calling (517) 355-8355.



Daniel C. Edsor



ciency testing. anding Alumni award and the Terrie Taylor

## JOHN AND IRENE CANTLON ESTABLISH NEOGEN LAND **GRANT PRIZE**

Gift from former university leader and spouse supports promising graduate student research

hen a retired university executive and his spouse make a significant gift to create an MSU endowment named the Neogen Land Grant Prize, you know there has to be a bit of a

It starts with a highly successful spin-off enterprise of MSU-food safety giant Neogen Corporation—but it is also about two stalwart believers in the value of MSU

John Cantlon, the former vice president for Research and Graduate Studies, and his wife Irene made their gift much in the same way they've always supported MSU—not drawing attention to themselves but reflecting their strong belief in the importance of scientific discovery, the worldchanging mission of land-grant universities and the meaningful contributions of graduate students. In short, they sought to highlight Neogen's and MSU's mutual goals of scientific research excellence.

The prize the Cantlons created provides \$30,000 in annual support for MSU graduate students whose work has the potential to advance scientific understanding in ways that will also contribute to



John Cantlon

economic improvements in Michigan and beyond. It's a legacy that fits well with John's long career as an MSU leader.

"John Cantlon is a visionary leader who during his tenure at MSU played an instrumental role in expanding research in environmental toxicology, material science, biotechnology and nuclear physics, as well as creating our osteopathic medical school (now college)," said Doug Gage, vice president for Research and Innovation. "Farsighted innovators and philanthropists like John are an example for all Spartans. We sincerely appreciate his gift and support of the next generation of innovators."

John first joined the MSU faculty in 1954, becoming an associate professor in botany and plant pathology. "I was a happy professor, with federal grant funding and four excellent graduate assistants," he says, until President Walter Adams convinced him to take on being provost in 1969.

Six years and a presidential transition later, John took advantage of an opportunity to instead serve as the vice president for Research and Graduate Studies, a post he felt was more compatible with his passion for graduate students and the creative, can-do spirit they and their mentors bring to research projects. He held the position until his retirement in 1990.

During his tenure, Neogen was formed by MSU professors with an investment of just \$50,000 from the university. As John recalls, it was seen as a way to help the State of Michigan diversify its economy, while at the same time helping MSU retain rising faculty stars, who could see that the university was willing and able to create businesses based on their research.

Neogen has become an international food safety company with an enterprise value of more than \$1.5 billion. Its Lansing-based Food Safety Division is a leader in the development and manufacturing of rapid test kits that detect dangerous substances in food products.

John served on the scientific advisory board for the company for 10 years. He chose to take stock options rather than draw a salary. At the same time, Irene saw the promise of the company, and also invested in its stock early on. Their stock holdings formed the basis of making their gift for the endowment of nearly \$700,000.

Recently, the former CEO of Neogen, Jim Herbert, made an additional \$100,000 gift to the endowment.

"Neogen was a great idea," said John. "Our hope is that this endowment will help retain some piece of its origin within MSU and ultimately be a benefit to the communities MSU serves."

## **INAUGURAL AWARDS GO TO NATURAL SCIENCE SCHOLARS**

In 2022, two College of Natural Science graduate students won the inaugural \$30,000 Neogen Land Grant Prize awards in a competitive selection process administered by the Office of Research and Innovation.

Allison Vanecek, a chemistry Ph.D. candidate, conducts research that focuses on the exploration of a novel therapeutic strategy for Lou Gehrig's disease, also called amyotrophic lateral sclerosis or ALS.

Statistics Ph.D. student Sarah Manski's project assesses the risk climate change may pose to farmers in the United States. She is building a predictive model to quantify the risk value of soil health practices, such as conservation tillage, diverse crop rotations and cover cropping, and the savings that would be accrued by adopting these regenerative practices.

"This grant will go a long way to expanding the impact of our project throughout the Midwest, especially to my home state of Michigan," Manski said. "Our work has the potential to facilitate widespread adoption of regenerative agriculture and, in the spirit of land grant institutions like MSU and the Neogen Land Grant Prize, make American agriculture more sustainable, climate-resilient and climate-friendly."

Vanecek also expressed her appreciation for the support: "This award will have a huge impact on my research and will provide the opportunity to explore many more possibilities to further investigate this new therapeutic strategy," she said. "Ultimately, my greatest hope is that it will also have an even larger impact on society, leading to the development of a new treatment to help those affected by ALS."

LEARN MORE about supporting The Graduate School by contacting Director of Development Meseret Negash at negashme@msu.edu or by calling (517) 353-3062.





Allison Vanecek



Sarah Manski

# PROFESSORSHIP HONORS ANIL AND NANDITA JAIN

Multiple donors' gifts span years, totaled \$1 million



Anil and Nandita Jain

endowed professorship, made possible by multiple donors whose gifts spanning a number of years have totaled \$1 million. The Anil K. and Nandita K. Jain Endowed Professorship will strengthen the Department of

ichigan State University will further

expertise in biometrics with an

advance its proficiency and renowned

Computer Science and Engineering and its ability to recruit and retain faculty for teaching and research in the specialized fields of pattern recognition, computer vision and machine learning.

Anil Jain is a University Distinguished Professor of computer science and engineering who has conducted trailblazing research in data clustering, fingerprint recognition and face recognition. As holder of the top H-index ranking, he is consistently ranked No. 1 in the world in computer science and electronics, according to Guide2Research.

Jain is currently serving on a committee of The National Academies of Sciences, Engineering and Medicine as it initiates a study on the positive use and potential misuse of facial recognition technologies in the United States.

The endowed fund was made possible by new and previous gifts to the College of Engineering, many made in honor of Jain, combined with approved modifications of a 2015 gift made anonymously by a visiting scholar who once worked in Jain's laboratory. Anil and Nandita Jain and their three daughters also made a substantial contribution toward this endowment.

"Professor Anil Jain represents faculty excellence at Michigan State University and has a tremendous reputation as a biometrics expert," said President Samuel L. Stanley Jr., M.D. "We are honored to be able to create this endowed professorship, which is a critical investment in support of his groundbreaking work and creates a lasting tribute to his legacy as faculty leader."

Leo Kempel, dean of the MSU College of Engineering, said the new fund will help the college support faculty who make extraordinary impacts on computer science education and research.

"The generous support of donors is critical in attracting and retaining the best faculty members, especially in the highly competitive environment of computer science and engineering," Kempel said. "This particular fund is especially gratifying as it recognizes the generational impact made by Anil and Nandita on the department, college, university and field of computer science."

Abdol Esfahanian, professor and chair of the Department of Computer Science and Engineering, said, "The contribution of Anil Jain to the field of computer science is beyond measure. Similarly, his contribution to the department, the college and the university is incalculable. The establishment of this fund, made possible in part through the generosity of Anil and Nandita, will be instrumental in hiring faculty members who will strive to become the Anil Jains of tomorrow."

JC Mao (Ph.D. '94), vice president of engineering at Google Assistant, said he was fortunate to receive a high-quality education and rigorous training at MSU, under Jain's supervision.

"Professor Jain has an unparalleled ability to identify research topics that are both fundamental and practical in the fields of pattern recognition, computer vision and machine learning, and to connect research work with the industry," Mao said. "He's offered me invaluable advice and guidance and provided many opportunities for me to stretch myself, both throughout my time at MSU and thereafter.

"The education I got from MSU was my biggest asset when I left MSU, and it still is today. It has had a profound impact on my career and life," Mao continued. "This endowed professorship honoring Professor Jain and his wife will further advance teaching and research at MSU and positively impact the careers and lives of many students in the years to come."

LEARN MORE about support for the College of Engineering by contacting Senior Director of Development Michael Wallace at walla203@msu.edu or by calling (517) 355-8339.

# FACULTY Spotlight



MSU professor and Federal Reserve Board of Governors Member Lisa Cook

# STUDENT Spotlight

BAILEY BOWCUTT

system.

Foundation.

Three MSU juniors, all members of Honors College, are recipients of the nationally competitive Goldwater Scholarship for 2022.

Since the Barry Goldwater Scholarship and Excellence in Education Foundation began the scholarship program in 1989, 52 MSU students have been recognized with the honor, which recognizes their potential for significant future contributions to science, mathematics or engineering.

### Bailey Bowcutt, from

Cheyenne, Wyoming, is also a recipient of MSU's STARR Scholarship. She majors in microbiology and is a research assistant for a project examining how antibiotic treatment leads to antibiotic-

## **ECONOMIST LISA COOK JOINS FEDERAL RESERVE BOARD**

History was made this year when MSU economics and international relations professor Lisa D. Cook was appointed to the Board of Governors of the Federal Reserve System, making her the first Black woman to serve on the board in its 108-year history.

The Federal Reserve System and its seven-member Board of Governors conduct U.S. monetary policy with the purpose of maintaining stability in the nation's financial

Cook is an internationally renowned economist who joined MSU's faculty in 2005, following positions at Harvard and Stanford universities. Her academic home in MSU's Department of Economics was recently ranked sixth in the nation in terms of research dollars awarded to U. S. universities, according to a survey by the National Science

**LEARN MORE** about supporting the College of Social Science by contacting Senior Director of Development Alex Tripp at actripp@msu.edu or by calling (517) 884-9489.



CALISTA **BUSCH** 

resistant microbes in dairy cattle gut microbiome. Bowcutt is president of MSU's Microbiology and Molecular Genetics Club and 3D printing team lead in association with the Resource Center for Persons with Disabilities.

**Calista Busch,** from Mason, Ohio, majors in genomics and molecular genetics. She is studying the effect of diet and oxybenzone on the proliferation of breast cancer as a research assistant. She is also an undergraduate learning assistant in Lyman Briggs College and group leader for the Spartan Support Network.

**Samuel Sottile** hails from College Station, Texas, majors in advanced mathematics and is president of the MSU



SAMUEL SOTTILE

Math Club. He is pursuing a research project that focuses on ergodic quantum processes.

The National/International Fellowships and Scholarships Office, administered by the Honors College, helps interested undergraduate and graduate students pursue major national and international opportunities by providing information and direct support throughout the competitive application processes.

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LEARN MORE about how you can support the Honors College by contacting Director of Development Tonya Frisbey at frisbey2@msu.edu or by calling (517) 884-7591.

# MICHIGAN STATE

## **Developments**

University Advancement Spartan Way 535 Chestnut Road, Room 300 East Lansing, MI 48824



# WKAR TURNS 100

Begins Yearlong Century of Service Celebration

KAR—one of the nation's leading public media services—turned 100 in August and kicked off a yearlong celebration of its century of service.

WKAR officially went on the air August 18, 1922, beginning as an AM radio station that broadcast agricultural news and information. Thanks in part to a steady stream of community support, the service has grown into a robust media organization that includes WKAR TV, WKAR Radio, wkar.org, Radio Reading Service, WKAR Digital Studios and WKAR Family.

**LEARN MORE** about supporting WKAR by contacting Senior Director of Development Melanie McGuire at melanie@wkar.org or by calling (517) 884-4730.