MSU Engineering featured in national and state news in March

A team of approximately 10 Spartan Engineers, including Larry Drzal of chemical engineering and materials science and mechanical engineers Tom Pence and Tamara Reid Bush, and other MSU engineers and students worked with injured MSU basketball player Nick Ward to create a carbon fiber brace for his injured hand in time for Nick to compete in the Big Ten and NCAA tournaments. (Social media for MSUToday and the college: 170,000+ views/reach and growing.)

• CBS Sports did two live stories on the engineering-athletics collaboration during the NCAA tournament game on March 23. See MSU’s video at: https://youtu.be/9zOck7WeicQ.

• Other media:
  BTN LiveBig
  Composites Manufacturing Magazine
  CompositesWorld
  Detroit News
  Lansing State Journal
  Larry Brown Sports
  MSUToday
  WDIV TV 4 Detroit

• As a mechanical engineer, Tamara Reid Bush creates tools and devices that can improve daily life for individuals with disabilities or those who have undergone surgical procedures. This Spartan Engineer is “Engineering A Better Future.” See MSU’s video on Tammy at: https://youtu.be/lQpw2lmC0Kc

• MSU Head Basketball Coach Tom Izzo offered a shout out to the College of Engineering during the Big Ten Tournament for helping construct a brace-and-pad protective device for Nick Ward’s injured left hand. “That’s what you call a university and an athletic department working together,” Izzo said.

247 Sports
MSU will install 2,000 sensors under the Mackinac Bridge to test its structural integrity. “This successful large-scale deployment will dramatically transform the economics of bridge preservation/management,” said MSU associate professor of civil and environmental engineering Nizar Lajnef. The Associated Press moved the story nationally, plus other media covered the announcement:

Bridge Design & Engineering
Civil & Structural Engineer
Detroit News
KBJR TV 6 (Duluth)
MLive (Grand Rapids Press)
My San Antonio
NSF GeoSciences
Phys.org
Radio Results Network
Reading Eagle (Pennsylvania)
Sault Ste. Marie Evening News
Seattle Post Intelligencer
Soo Today
State Tech Magazine
Today Chan
Up North Live
WDIV TV 4 Detroit
WPBN/WGTU (Traverse City)
WXYZ TV 7 Detroit
U.S. News & World Report

MSU media
MSUToday
Research @MSU
@MSUNews (Twitter, almost 55,000 followers)

Other news in March --

MSU Engineering launches two online degree programs for an M.S. in electrical engineering and an M.S. in mechanical engineering. ECE Chair John Papapolymerou and ME Chair James Klausner provided leadership for this “first” in the College of Engineering.

dBusiness - Detroit
MiTech News (Michigan's largest tech e-newsletter)
Tech Century (Engineering Society of Detroit)
Erin Purcell, an assistant professor of biomedical engineering and electrical engineering, has landed a $1.8 million NIH R01 grant to improve brain implants – which are used to treat brain diseases and injuries.

MSU will share almost $3 million to develop a freshwater recovery system to extract clean irrigation water from hydraulic fracturing wastewater, thanks to the U.S. Department of Energy's Advanced Research Projects Agency-Energy. The reclaimed water could help dry western states that need water for crops and livestock. Andre Benard, associate professor of mechanical engineering, is MSU's lead PI. He'll work with MSU Foundation Professor James Klausner, chair and professor of mechanical engineering.

Mi Zhang is behind the development of Deep ASL, a sign language technology to help the hearing impaired. The assistant professor of electrical and computer engineering tells Michigan Radio's Stateside about the new tool that translates American Sign Language in real time.

Transparent solar panels developed to generate electricity. A team of researchers, led by Richard Lunt, associate professor of chemical engineering and materials science, has developed fully transparent solar panels, a breakthrough that could lead to countless applications in architecture, mobile electronics or the automotive industry.

Endurica, a provider of elastomer durability and fatigue tests and software, will team up with Roozbeh Dargazany, an assistant professor of civil engineering at MSU. Dargazany is developing durability evaluation methods for adhesive joints during the three-year project.
Subir Biswas, professor of electrical and computer engineering, is working with psychologist Steve Kozlowski on a NASA-funded research project that could aid missions to Mars by lending new insights on the social bonding of teams. Biswas is contributing through wearable technology that is preparing future workers to collaborate in space.

Thomas Bieler, professor of chemical engineering and materials science, named Fellow by The Minerals, Metals and Materials Society. Less than 1 percent of 13,000 members are selected for this honor.

WKAR's Curious About Careers visited Amanpreet Kaur (PhD, ELEC EGR ’16) for a tour of a clean room @michiganstateu to learn more about electromagnetics and electrical and computer engineering. The visit is part of PBS Kids.

A computer science and engineering capstone project by Spartan Engineers Dylan Stokes, Vivek Dhingra, Lian Zhengyi, Connor Masini, and Bogdan Pozderca is featured in Firefox’s recap of student projects in 2018. Team Mozilla extended Firefox’s Theming API to increase styling and cross-browser compatibility with Google Chrome themes.

Alumni

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Current Students

Mechanical engineering senior Matthew Belknap is MSU’s chair for The American Society of Mechanical Engineering’s E-Fest, coming to campus April 5-7. Engineering students will showcase their technical skills and projects at the festival at the Breslin Center and parking lot.

More than 70 civil and environmental engineering students at MSU are getting real-world experience as they dig through the details of the plans for the new $450 million hospital for their senior capstone project for Spring Design Day.

The March edition of IEEE’s Robotics & Automation Magazine features students Pooja Panguru, Ryan Aridi, Maria Castano and Thassyo Pinto in an article on MSU’s Robotic Racing Challenge last year. Thassyo, a PhD student in electrical and computer engineering, wrote the article on the success of the robot competition.

Junior Elizabeth Schester wants to work for NASA someday so she puts her hair up in a ponytail and wields heavy machinery and tools like other mechanical engineering majors. She tells The State News that the contrast between the number of men and women in her college classes stands out to her.

VEX Robotics

Teams from Flint, Grandville, and Niles win Michigan’s VEX Robotics Championship.

Belding Robotics focuses on FIRST Robotics after losing at MSU in VEX Robotics state Championship.

MSU Pride Points

• March 13: MSU Foundation Professor Xiaobo Tan has been named a Fellow of the American Society of Mechanical
Engineers.

- **March 18:** H. Metin Aktulga, of the Department of Computer Science and Engineering, has received one of NSF’s most prestigious honors – an NSF CAREER Award. He is the 17th faculty member in the college to receive a CAREER Award since 2010.
- **March 21:** For scientific contributions to materials science, Professor Thomas Bieler has been named a Fellow of The Minerals, Metals and Materials Society. The honor is presented to less than 1 percent of the 13,000 TMS members.

Related Website: [Communications contact: Patricia Mroczek](https://www.egr.msu.edu/news/2019/04/03/march-2019-media-report)