

## Students create ‘robohand’

BY KATE PERKINS

**T**wo undergraduates in a school that did not exist two years ago have given a 12-year-old boy a new grip on life.

A random email sent by a mother hoping to locate help for her son found it in two enterprising students from OU’s new Stephenson School of Biomedical Engineering. Established in 2016, the school frequently partners with the OU Health Sciences Center, Oklahoma Medical Research Foundation, the Price College of Business and the regional bio-science industry to create innovative solutions through engineering.

Twelve-year-old Austin Shumsky of Oklahoma City was born with Poland Syndrome, a condition that affects one side of the body, often the hands or pectoral muscles. In Austin’s case, his left hand is significantly smaller than his right, and his fingers are fused together.

Jennifer Shumsky, Austin’s mother, discovered a resource for her son when she stumbled across the blog of a 7-year-old girl from Nevada with the same condition. Engineers from the University of Nevada, Las Vegas, created a “robohand” for her with the aid of a 3-D printer.

“I sent a random email this summer to the [OU] engineering department ... telling them about Austin and his syndrome, and asked if it was a possibility that maybe some of their students might want to do,” Jennifer Shumsky says.

She was referred to Rachel Childers, an assistant professor of practice in the school. Childers recruited Emily May and Amanda Phillips, two biomedical engineering juniors, to help with the project.

After taking careful measurements of Austin’s hand, May and Phillips programmed a 3-D printer in Carson Engineering Center to create segments of a wrist, palm and fingers made from extruded polylactic acid, a type of plastic. The segments were printed separately and assembled using elastic and Velcro, May and Phillips say.

The hand attaches to Austin’s wrist like a glove, and the fingers move in an inward motion as he bends his wrist. May and Phillips gave him the prototype around Thanksgiving.

*“It was so cool – he was so excited,” says May.*

Austin loves soccer and the NBA2K video game, his mother says, and while his smaller hand had not stopped him from enjoying these things, his new hand has made everyday actions like getting a better grip easier.



Lynette Lobban



Paxson Haws

Amanda Phillips, left, and Emily May display the 3-D printer they used to create a “robohand” for Austin Shumsky, pictured at left.

Because Austin will grow and the hand was a prototype, the biomedical engineering students are hoping to develop an improved product.

“We’re working on potentially creating our own design, now that

he’s had his hand for a while and we’ve seen what the kinks are with it and what needs to be adjusted,” says May.

Austin is already thinking about one adjustment he would like — making his next robo-hand “look like Iron Man’s.”

*Kate Perkins is a journalism major and reporter for the OU Daily.*

## Museum of art revitalized under Boren administration

Robert Taylor



One evening while an undergraduate at Yale, David L. Boren was invited to the university president's house. Walking into the beautiful home and coming face to face with the president's magnificent art collection was "life-changing," he says. During his presidency, Boren has raised the visibility and stature of the Fred Jones Jr. Museum of Art to one of the leading public university museums in the nation.

"The arts are not optional at a great university — they are a necessity," says Boren. "Art allows us to see through the eyes of others and the world around us."

In 1996, with a lead gift from the late Mrs. Fred (Mary Eddy) Jones, the President and First Lady Molly Shi Boren led a fundraising campaign to acquire the important collection of the late Richard H. and Adeline J. Fleischaker, which contains more than 350 works of Native American art and artists of the Southwest.

Four years later, the museum received the single most important collection of French Impressionist art ever given to a public university. The Aaron M. and Clara Weitzenhoffer

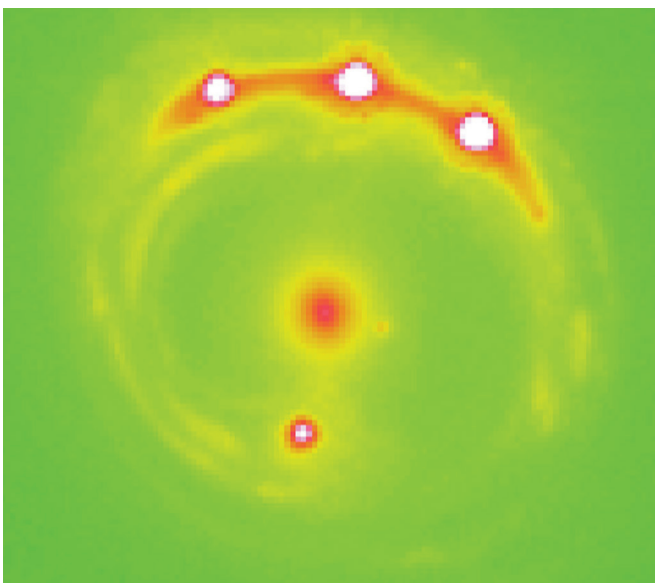
Collection includes 33 works by the most celebrated artists of the era, including Renoir, Monet, Degas, Gauguin and Van Gogh.

As the museum's reputation grew, so did the depth and breadth of its collections. Art collectors, impressed with the museum's permanent collection and its academic mission, chose the Fred Jones as the beneficiary of their carefully curated collections.

In order to accommodate new works and expand educational opportunities, the museum has gone through two major expansions in the Boren Era. The Mary and Howard Lester Wing, which opened in 2005, added more than 34,000 square feet to the original building. With the addition of the Stuart Wing in 2011, an additional 18,000 square feet was added to provide exhibition space for the museum's expansive photography collection and special exhibitions.

And since 2012, an annual \$60,000 gift from the OU Athletics Department provides free admission for all visitors to the Fred Jones Jr. Museum of Art in perpetuity.

## Extragalactic galaxies discovered



OU Public Affairs

**A University of Oklahoma astrophysics team** has discovered a population of planets beyond the Milky Way galaxy. Xinyu Dai, professor in the Homer L. Dodge Department of Physics and Astronomy in the College of Arts and Sciences, with postdoctoral researcher Eduardo Guerras, made the discovery with data from the National Aeronautics and Space Administration's Chandra X-ray Observatory, a telescope in space that is controlled by the Smithsonian Astrophysical Observatory. The OU researchers were able to detect objects in extragalactic galaxies that range from the mass of the moon to the mass of Jupiter.

In support of the growing physics department, a new academic building and research laboratory are being built on Van Vleet Oval. Together with Nielsen Hall, the buildings will comprise the "Dodge Physics Complex," named for Homer L. Dodge, who served as chair of the OU physics department from 1919 until 1944.



# SEEDS OF EXCELLENCE

## Gaylord College produces award-winning journalists

**T**he Gaylord College of Journalism and Mass Communication is one of the most obvious signs of President David L. Boren's unprecedented impact on OU academics. And it isn't just because of the giant, scrolling news ticker that overlooks Lindsey Street.

Journalism had been taught for nearly a century at OU by the time President Boren and then-H.H. Herbert School of Journalism Director David Dary agreed that the school had outgrown its 40-year home in Copeland Hall and that it was time for the program to be elevated to a college.

A landmark gift from the Gaylord Family – then the single-largest in U.S. history to a public university journalism school – brought about a grand new facility featuring the latest in video editing and broadcast and audio training, along with a two-story multimedia convergence laboratory.

As the new college rose on the south oval, so did the college's reputation and standing among its peers. Today, Gaylord College is home to more than 1,000 students in journalism, advertising, creative and media production, professional writing and public relations. The college's alumni feature multiple Emmy and Pulitzer winners; in fact, alums have won six Pulitzers in just the past three years. OU students also have their own stash of national prizes, including Heartland Emmys and Addy awards.

"When I talk about the assets we enjoy at Gaylord College – a great building, modern technology and a terrific faculty – I always include the unconditional support of President Boren," reflects Dean Ed Kelley. "As someone who grew up in public



Heather Hanson

life, he clearly understands the crucial role of journalism and media in a democracy. His steady encouragement to our program is a blessing to our students and the news and informational audiences they will serve in the future."

**PRESIDENT BOREN** stands between fossils of *Deinonychus* and *Tenontosaurus* specimens at the Sam Noble Oklahoma Museum of Natural History Hall of Ancient Life. Under Boren's leadership, the museum completed a 10-year effort to build a new home and opened to tremendous fanfare in May 2000, with more than 100,000 visitors in the first month alone. Since that time, the museum has welcomed millions and garnered an armload of prestigious prizes, including the 2017 University Museums and Collections Award from the International Council of Museums and the 2014 National Medal for Museum and Library Service, considered the nation's highest honor conferred on museums and libraries for service to the community.



Jim Beckel/The Oklahoman





Students process before the flags of Oklahoma's 39 Native American nations during Indigenous Peoples Day on the OU Norman campus. A recent gift from the Chickasaw Nation will centralize resources to benefit OU students and tribal members at the new Native Nations Center.

## Native Nations Center

**President David L. Boren's** commitment to diversity and collaboration shines through OU's Native Nations Center, a hub connecting students and tribal communities with the university's exceptional resources.

The OU Native Nations Center was established with an endowment from the Chickasaw Nation and centralizes programs across the Norman campus.

"OU is poised to become the leading institution in all areas relating to Native Americans," says Amanda Cobb-Greetham, director and department chair for OU Native American Studies.

The Native Nations Center will host special events and lis-

tening sessions with tribal leaders to better understand their communities' goals and objectives.

Research in the areas of tribal governance and policy, language revitalization, and indigenous arts and cultural expression will be a major focus of the Native Nations Center. The center also will facilitate grant submissions and develop a digital database of national Native American resources for use by students, researchers, communities and tribal governments.

Yatika Fields, a member of the Osage, Cherokee and Creek Nations of Oklahoma, paints a mural inside the Sam Noble Oklahoma Museum of Natural History in March. The artist was featured along with his mother and father in the exhibition, "Fluent Generations: The Art of Anita, Tom and Yatika Fields," which brings together the talented Native family to showcase their sculptures, photographs and paintings that celebrate the vitality of Indigenous cultures.



## OU opens Rainbolt MBA Center

The University of Oklahoma entered a new era in business education with the Gene Rainbolt Graduate School of Business.

Located in Oklahoma City's Innovation District, the center became a reality through the determination of President David L. Boren and a leadership gift from the Rainbolt family in honor of Gene Rainbolt, a noted businessman, civic leader and philanthropist.

The campus is anchored between Oklahoma City's energy and financial sectors to the west and the growing health care and aerospace sectors to the east, making the OU MBA a natural choice for adult learners who work in Oklahoma City and encouraging collaboration and mentorship with neighboring industry leaders.

The graduate school is home to OU's full-time and professional MBA programs, executive education programs, and Oklahoma City locations for the Ronnie K. Irani Center for the Creation of Economic Wealth and the Office of Technology Development.

