Just Dance Coming out of poverty, ASU alumnus J. Bouey struggled to enter the world of professional dance. See how Bouey's life mission has evolved since moving to New York City. **4**

Public Art Matters An artist's 3,000-square-foot mural transforms an auto body shop in the city of Maryvale into a source of pride and neighborhood revitalization. **11**

Be A Nice Human How can we be better people? Pursue that question through ASU's Project Humanities. **18**

Fall/Winter 2019
Issue No. 9

IMPACT

STORIES OF GENEROSITY AND OPPORTUNITY AT **ARIZONA STATE UNIVERSITY**

Committing to Memory

ASU researchers cross disciplines and join forces to tackle dementia

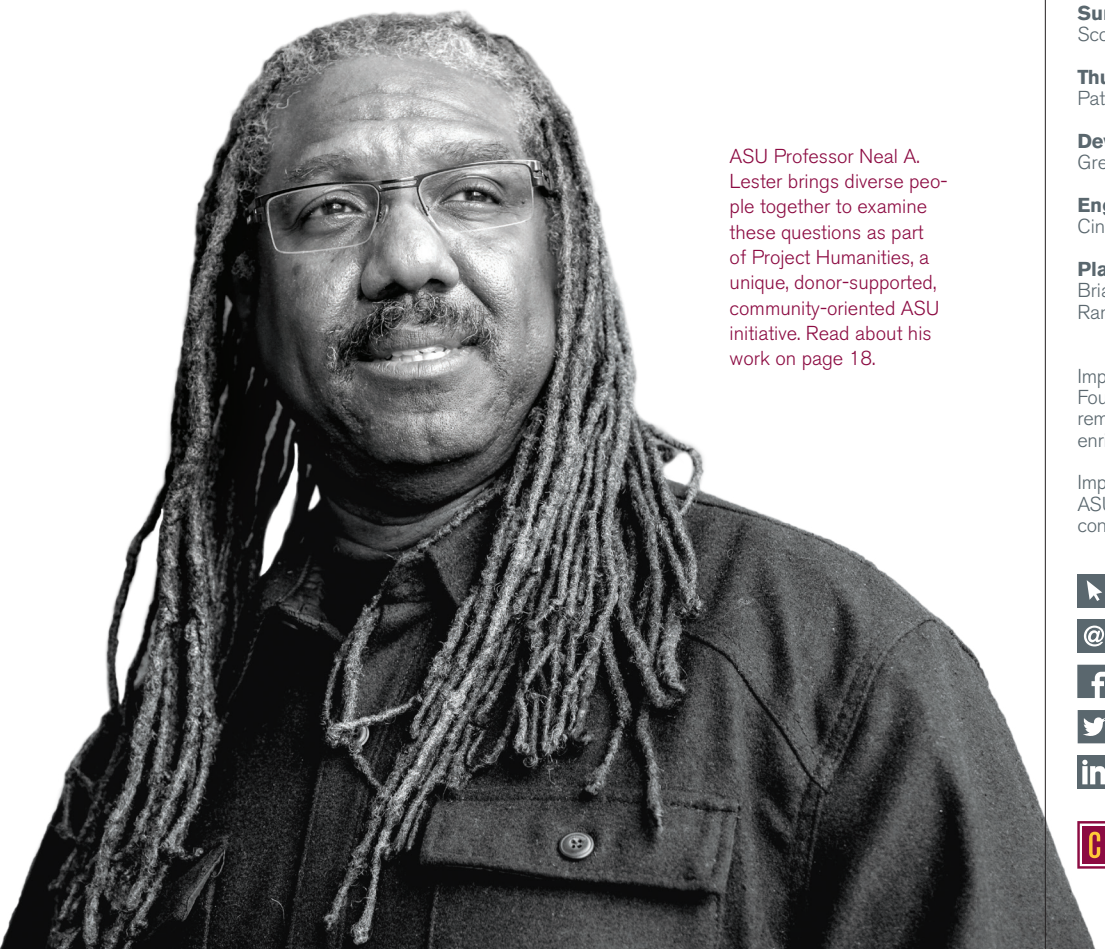
Arizona State University

Touch of Nature

Deborah Thirkhill, program coordinator for ASU's award-winning arboretum, says there is a story behind every tree. The story behind this cork oak? Years ago, children who wanted to fish in the Salt River would cut cork for their fishing bobbers from this towering oak in front of Old Main. Other arboreta have donated trees to ASU's collection, which is supported in part by Friends of the Arboretum. Find out about campus tours at arboretum@asu.edu. Photo by Philamer Batangan

BEING BETTER HUMANS Professor Neal A. Lester

"Are we losing our humanity? How can we be better people, more decent people?"



ASU Professor Neal A. Lester brings diverse people together to examine these questions as part of Project Humanities, a unique, donor-supported, community-oriented ASU initiative. Read about his work on page 18.

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Impact is published twice a year by the ASU Foundation for A New American University as a reminder of how private support enables and enriches ASU's creative and innovative enterprise.

Impact magazine would like to acknowledge ASU Now, the university's news magazine, for its contributions to Impact storytelling.

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CAMPAIGN ASU 2020

Valley resident Barry Smith, a volunteer with ASU's Project Humanities, finishes loading a trailer with supplies for Service Saturday, an outreach to people experiencing homelessness.

PHOTO BY PHILAMER BATANGAN

12

FEATURE

Every 65 seconds, someone in the U.S. develops Alzheimer's. ASU researchers knuckle down to meet that challenge.

18

FEATURE

How can we be better humans? ASU Professor Neal A. Lester wants you to join the discussion.

IMPACT

ON THE COVER

Illustration by Franziska Barczyk

THE STRUGGLE IS REAL J. Bouey persevered to succeed in the world of professional dance.

Hustl

When J. Bouey was asked to join the Bill T. Jones/Arnie Zane Company, it validated years of hard work and inspired Bouey to advocate for people who struggle to enter the world of dance.

Growing up in south central Los Angeles, J. Bouey learned to dance by krumping – an improvisational art form. "Krumping was the black church's response to street dancing, and I learned to do it at a lot of different places … cookouts and barbecues," Bouey remembers. ¶ By high school, Bouey's family lived in an apartment in Chandler, Arizona. Bouey rediscovered a love for dance by joining the high school step team. By sophomore year, Bouey was captain. "I thought, maybe I need to take a dance class to be a lead captain," Bouey says. ¶ That's when Bouey learned a hard lesson. Families without material wealth find it almost impossible to access the kind of training that elevates talented dancers to elite levels. Sometimes, Bouey turned to YouTube for inspiration. ¶ Bouey attended the ASU School of Dance on several scholarships, which helped their journey but didn't eliminate the need to hold several jobs and take out student loans. ¶ "I was in some form of hustle mode to make sure I could get a degree," Bouey remembers. After graduation, Bouey moved to New York City and learned that life as a freelance dancer makes it hard to pay off

e Mode

student loans. ¶ So when Bouey was asked to join the Bill T. Jones/Arnie Zane Company – one of New York City's most renowned contemporary performance ensembles – it validated years of hard work and inspired Bouey to advocate for people who struggle to enter the world of dance: the impoverished, the gender nonconforming and those with physical or mental health challenges.

PHOTO BY MARIA BARANOVA

James Deibler

James Deibler says hard work and scholarship support help him navigate college while managing autism.

"I worked very hard to make it to this level in college," Deibler says in a letter thanking ASU supporters who funded his scholarship through ASU Family, a network of families that contributes to student-success initiatives. "Without your support, I might not have been able to succeed in the classroom and outside of school."

Deibler, who previously earned an associate degree from Glendale Community College, studies public management and administration and sociology at ASU.

Leah Nakaima

Growing up in Uganda, Leah Nakaima asked teachers why they paid more attention to American students.

They're smarter than you are, the teachers said.

Undaunted, Nakaima persisted in her studies, earning a Mastercard Foundation scholarship to ASU, where she immersed herself in learning opportunities and service projects. She graduated last spring with a degree in public health. ASU, she says, helped her recognize her intelligence and potential.

This fall, she started graduate studies at Harvard University.

Jackson Kellogg

"What do you want to give the world?"

That question sparked an epiphany for Jackson Kellogg, a 2019 graduate of The College of Liberal Arts and Sciences. A standout in the field of linguistics, Kellogg had a perfect GPA but wrestled with choosing a career in his field.

When a professor asked him the question, Kellogg vowed to use his mastery of linguistics for humanitarian purposes. One area of interest is the documentation of endangered languages.

With help from the Carl C. Carlie Linguistics Fellowship, typically reserved for advanced graduate students, he is pursuing an accelerated master's degree in linguistics and applied linguistics.

TODD LEMAY

Adventure Awaits

Todd Lemay is paving pathways for individuals with disabilities. The 1992 ASU graduate is making adventure accessible for all with TerrainHopper, an electric off-road vehicle that can conquer the type of challenging terrain a wheelchair can't, including hiking trails. ¶ Lemay, who uses a wheelchair because of a brittle-bone disease, discovered the TerrainHopper in the United Kingdom, obtained U.S. distribution rights and launched his own company in Tempe. He gifted a vehicle to the Watts College of Public Service and Community Solutions, and recently showed the dean, Jonathan Koppell, its capabilities.

Keon McGuire

Keon McGuire's research areas – race, gender, religion – can make people uncomfortable, but earned him one of only 30 Spencer Postdoctoral Fellowships awarded this year by the National Academy of Education. The Mary Lou Fulton Teachers College assistant professor says the grant will allow him to build, "a black male feminist research and learning community for black undergraduate men to engage with feminist literature, feminist ideas and to be in conversation with black feminists." McGuire wants students to redefine masculinity to counter patriarchy, sexism and homophobia.

Amy Ostrom

President's Professor Amy Ostrom, who holds the PetSmart Chair in Service Leadership in the W. P. Carey School of Business, studies the relationship between service and well-being. Her numerous publications include a highly cited article in the Journal of Service Research which surveyed businesses from startups to Global 1,000 companies to determine service priorities to benefit academia, business and government. Ostrom says the PetSmart endowed chair has enabled her to pursue another research focus, "the difficult work people living with a chronic illness must do to manage their role as health care consumers."

KATHERINE MCLIN

Profound Power

Violin Professor Katherine McLin completed her term as ASU's Evelyn Smith Professor of Music, which recognizes faculty members for outstanding leadership. McLin says support from the endowment, "... enhanced my students' educational experiences, better equipping them to be ambassadors for music in our diverse society." ¶ This year, McLin's violin students wrote pieces they performed for audiences with limited access to live music, in hospice centers and assisted-living facilities. McLin said her students "... observed first-hand the profound power of music, and were inspired to contribute to their communities."

Hao Yan

When Milton Glick, former ASU provost and president of the University of Nevada–Reno, died in 2011, UNR said Glick understood a university as the connective tissue to a better life.

Biodesign researcher Hao Yan, who holds the ASU endowed professorship named for Glick, demonstrated the value of university research to life-changing advances with his creation of nanobots that restrict the blood supply to cancerous tumors. Yan, who says his professorship frees him from traditional boundaries and allows him to take risks, was one of Fast Company's "Most Creative People in Business 2019."

Persuasive

Robert Cialdini recalls a trip to the Netherlands 15 years ago to speak at a government policy conference and being introduced as a behavioral economist. He told the organizer he wasn't an economist, but a professor in the psychology and marketing departments at ASU. His host said, "I know. But I couldn't have gotten you approved by my superior with those labels." ¶ That's all changed, Cialdini says. "All kinds of government units, all kinds of institutions within our society are taking into account what behavioral science has afforded them as a way to increase the outcomes of their persuasion campaigns." ¶ Cialdini, a best-selling author and in-demand speaker, is professor emeritus in the W. P. Carey School of Business, and creator and supporter, along with his wife, Bobette Gorden, of the WPC Behavioral Research Lab that bears his name. ¶ "We wanted to support an environment where faculty members and students in the ASU marketing department could make important contributions to knowledge," Cialdini says, "where students could learn the best practices for conducting experiments and test the ideas they found most fascinating." ¶ Cialdini and Gorden also donated to the Leap Forward Fund, an initiative in the ASU Psychology Department. "I wanted to do something for the psychology department to allow it to move forward in a way that it couldn't without an additional source of funding," he says, "to burnish their already strong reputation by taking chances on big projects." Those projects include a success center for undergraduates, and an educational program addressing problematic alcohol use among college students.

"We wanted to support an environment where faculty members and students in the ASU marketing department could make important contributions to knowledge."

Robert Cialdini

PHOTO COURTESY OF ASU NOW

Giving

MAKE IT SO Robert Cialdini's life's work will live on at ASU, in part, through the lab that bears his name.

Crested Beauty

People used to think that plants don't get cancer.

Today, researchers know they do.

Consider the crested cactus, which sports bulbous, wavy, fan-shaped crests due to a mutation in their growth patterns.

To ASU researcher Athena Aktipis, crested cactuses are beautiful, not only to look at but as visual examples of how an organism can learn to live with an acute disease.

Aktipis, who specializes in evolutionary biology, evolutionary psychology, cancer biology and cooperation theory at ASU, is interested in that concept as it relates to cancer in humans: Perhaps there is a way of controlling cancer so people can live with it. Aktipis is working with her husband, Carlo Maley, director of the Arizona Cancer and Evolution Center at ASU, on clinical trials for "adaptive therapy," in which patients receive treatment only when a tumor is growing.

She spearheaded the creation of a crested cactus garden on the Tempe campus as a way to spur dialogue about cancer — one that focuses on manageable control rather than eradication.

The garden, named "Endless Forms Most Beautiful," is a place to remember and celebrate loved ones with cancer and engage in programming focused on the center's research. Support for the garden comes, in part, from the families of people impacted by cancer.

Crested cactuses are visual examples of how an organism can learn to live with an acute disease.

PHOTO BY CHARLIE LEIGHT/ASU NOW

Wiping Tears

As a group of freshmen filled the ASU Sun Devil Campus Store shortly before the fall semester began, the anticipation of buying books was tempered by the financial stresses that often accompany such purchases, particularly for this crowd – approximately 35 students who are part of the ASU Bridging Success program, which connects foster youth to ASU and supports them through graduation. ¶ Their worries were quickly washed away, however, thanks to a gift from Follett Corporation, which operates the Sun Devil Campus Store – along with nearly 1,200 other campus stores in North America. Not only did Follett provide each student a $50 store gift card to celebrate the start of their ASU journey, but the company also made a $25,000 donation to support Bridging Success students for the academic year. ¶ As detailed in a feature published by Follett on the company's official website, several students asked the store's team "...if they'd heard correctly, questioning multiple times to make sure they understood and, finally, hugging us and each other and wiping away tears. More than one student sought us out to say they had no plan to pay for their books … and didn't know what they were going to do." ¶ The donated funds, Follett noted, "delivered on our purpose that day of improving the world by inspiring learning and shaping education."

PHOTO COURTESY OF ASU

IMPACT ROUNDUP

Smashing News
A meteor the size of a washing machine tore through Earth's atmosphere last April, broke apart and showered hot rocks into a small town in Costa Rica, including one that crashed through the roof of a house and smashed the dining room table below.

Early reports indicated this meteorite belongs to a special group rich in organic compounds and full of water, according to a story in ASU Now, the university's online news publication.

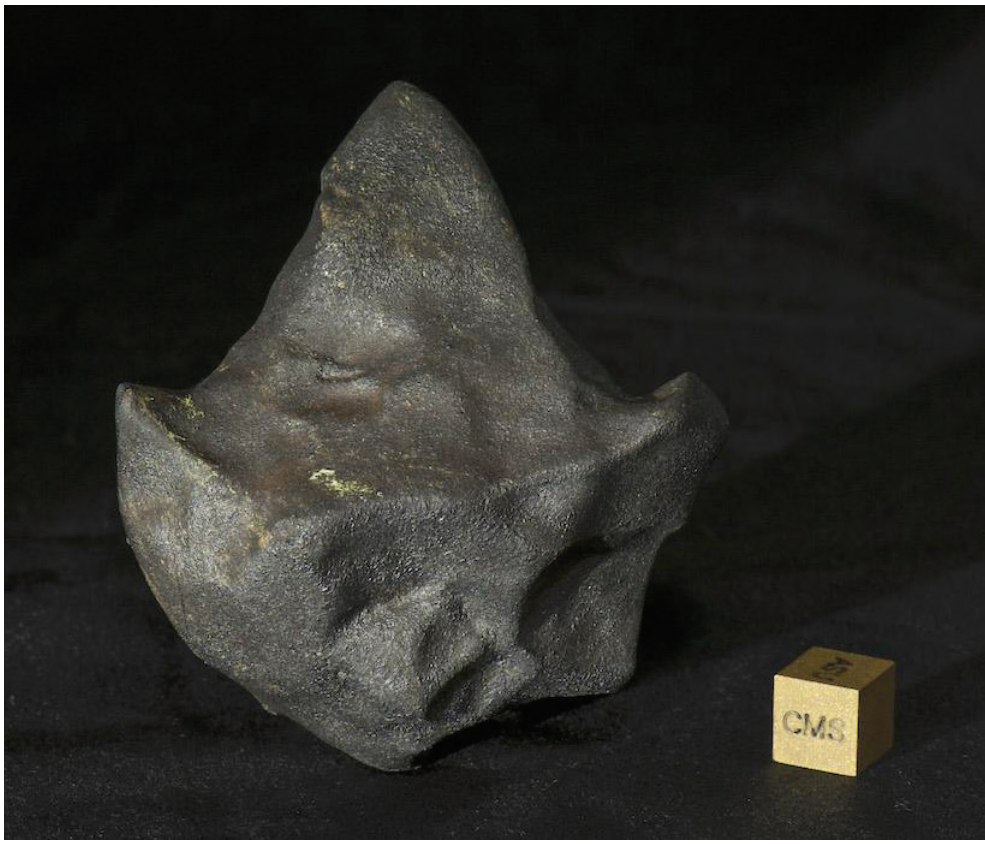
Fortunately, meteorite collector Michael Farmer donated samples to ASU's Center for Meteorite Studies, where curator Laurence Garvie led an international effort to classify the samples. A private donor also has provided funds for ASU to purchase additional meteorite samples from the fall.

Exposing Myths
Americans often romanticize the violence of the Old West. A book by Eduardo Obregón Pagán, ASU professor of history, strips away the veneer of romanticism and exposes the aftereffects of living with violence: traumatic stress disorder.

"Valley of the Guns: The Pleasant Valley War and the Trauma of Violence," tells the story of factions that caused Arizona's Tonto Basin to erupt in a five-year spasm of violence. Eighteen people died. Later, alcoholism and suicide took more lives.

Obregón Pagán was able to take on the multiyear project with resources provided by the Bob Stump Endowed Professorship, named in memory of the U.S. congressman from Arizona.

A meteorite collector donated samples of this special group of meteorites to ASU.



Journalism students cover stories related to immigration and border issues as part of the Cronkite – Borderlands initiative.

PHOTO COURTESY OF CRONKITE NEWS – BORDERLANDS

IMPACT ROUNDUP

Digital Access
One way that ASU continues to reduce barriers to higher education is by developing digital teaching and learning opportunities.

EdPlus, the university's enterprise-wide unit that focuses on developing digital education, includes 175 fully online degree programs for undergraduate and graduate students, courses for aspiring college students to improve their readiness to take college classes, partnerships with corporations to customize learning programs, and continuing education for adult learners, among other programs.

Thanks to the generosity of donors, ASU offers a number of scholarships to online students.

On the Border
Thanks to a grant from the Howard G. Buffett Foundation, ASU journalism students have the resources to travel to the U.S.–Mexico border and create multimedia stories on pressing issues such as migrant border crossings, the impact of a proposed border wall and the lives of refugees.

Last year, students in the Cronkite News–Borderlands program were able to travel to Puerto Rico, where they immersed themselves in the culture and created a variety of multimedia resources, including a website, documentary and book capturing their experience.

Because of You
More than 101,500 Arizona State University supporters – giving gifts both large and small – set a new record for generosity for the fifth consecutive year last year, giving a total of $413.7 million, a 65 percent increase from the previous year. Of those, 25,520 were new donors.

Donor generosity funded dementia research, advances in revolutionary medical technology, community redevelopment programs, scholarships for more than 7,000 students, faculty support in the form of named chairs and professorships that provide enrichment funding for their work, and more.

Budding Scientists
ASU's Biodesign Institute does not award degrees, but its labs are full of students gaining hands-on experience and laying the foundation for successful careers in scientific research. A critical component of that is presenting research findings at conferences. But the costs of travel and lodging are prohibitive for many.

So the institute established a Student Travel Grant Fund as a focus of faculty and staff giving on Sun Devil Giving Day, an annual, universitywide fundraising event during which ASU supporters give to the causes they are most passionate about.

To date, 15 students have traveled to conferences around the world to represent ASU and share research findings with peers.

Atoms in Action

The processes most important for life are the smallest and hardest to see. The behavior of proteins in cell membranes, for example, happens on a scale much smaller than a wave of light, and so remains invisible. ¶ But not to the instrument Associate Professor William Graves is designing for ASU's Biodesign Building 3: an X-ray free electron laser. ¶ "Our X-ray wavelength is the size of a hydrogen atom, so it can resolve very small structures," Graves says. "XFELs are also able to emit very short pulses of waves, allowing us to track dynamics, such as chemical reactions, instead of just static pictures. They can be used to understand how cancer and other diseases attack cells, how to speed up drug discovery and reduce side effects and how new classes of materials exhibit exotic behavior such as high-temperature superconductivity." ¶ Graves' design is the world's first compact XFEL. The laser's beamline will be only 30 feet long, he says, but the device will deliver performance similar to full-sized XFELs, some of which span miles and cost billions. The CXFEL laboratory is funded by a gift from Phoenix attorney Leo Beus and his wife, Annette, longtime ASU supporters. ¶ "I'm most excited about having XFEL capability directly on campus," Graves says. "It's a new model from the existing one in which university researchers have to take their samples to the national labs. It can change how science is done and greatly expand the impact of X-ray science."

The Big Picture

Isaac Caruso paints on the largest canvases he can find: broad expanses of wall. Like many muralists, Caruso started with graffiti as a teenage "tagger." Now 29, Caruso is an in-demand, prize-winning creator of large-scale public art.

"Public art is unique in that it's viewable to everyone for free," Caruso says. "Painting murals not only beautifies communities but gives people a reason to visit certain neighborhoods, supporting businesses."

"Sí, Se Puede" ("Yes, We Can") is Caruso's latest example, painted on the 3,000-square-foot wall of an auto shop in Maryvale, northwest of downtown Phoenix. Across the parking lot are offices of Chicanos Por La Causa, which partnered with ASU's Watts College of Public Service and Community Solutions to bring the mural to life. The project is part of the One Square Mile Initiative funded by ASU supporters Mike and Cindy Watts to revitalize and unify the community they grew up in.

With "Sí, Se Puede," Caruso did his part to encourage unity. He created a paint-by-numbers system that enabled volunteers to help render the mural.

Caruso says the images of a Latino family and, nearby, César Chávez, met his goal "to tell other people's stories. Any painting that makes you stop what you're doing and break from reality for a few moments is successful."

Muralist Isaac Caruso set out "to tell other people's stories" in "Si, Se Puede," a work of public art.

PHOTO BY ALEXIS BOJORQUEZ

A FUTURE OF FORGETTING

STORY BY DIANNE PRICE
ILLUSTRATIONS BY FRANZISKA BARCZYK

As Alzheimer's disease and other dementia-related illnesses ravage families, leaving few today untouched, researchers and educators across disciplines at Arizona State University are tackling the diseases from many angles. ASU's multi-pronged approach spans the biological sciences, where researchers seek to identify causes and cures, to the health fields, where researchers develop tools for families and patients to manage life and care for those with dementia.

"My mother was driving to work one morning and was alarmed to see an older man riding a bicycle against traffic," says Diego Mastroeni. To her surprise, that man was his grandfather, Giuseppe Abramo. For Mastroeni, now an assistant research professor and neuroscientist at Arizona State University's ASU-Banner Neurodegenerative Disease Research Center, dementia struck close to home, with painful immediacy.

Mastroeni has warm memories of teaching his grandfather to speak English and spending magical hours gardening together at his home in Italy.

Abramo was a veteran of World War II. He had seen firsthand the horrors of war. As he aged, sounds, sights, even smells, would trigger sporadic, surprising and even violent reactions. Mastroeni was 16 when his parents asked him to take his grandfather to the dementia care facility, for Abramo trusted only him.

"This was the defining day when I changed from a boy to a young man," Mastroeni says. "As I held his hand as he had held mine all those years, I promised I would be back to visit."

Fast-forward 25 years, Mastroeni, his wife and two daughters live in the United States. His 85-year-old grandmother-in-law is diagnosed with Alzheimer's disease, and must leave the ranch where she has lived for 40 years with her beloved husband. Lorene Lueck had begun the long descent. Mastroeni recognizes the telltale signs: memory loss, delirium and anxiety. Before long, the family has to hire full-time help for Lueck, who can no longer live alone.

"I watched her slowly leave our world," he says, "and told myself there must be a better way. People should not have to live this way."

"We live in a world where we want answers, but with Alzheimer's disease we are left with more questions than answers," Mastroeni says. He believes that although progress is being made, it just is not fast enough.

Today, Mastroeni is a researcher at the ASU Biodesign Institute, expected to become one of the world's largest teams of neuroscientists devoted to combating Alzheimer's, Parkinson's and other neurodegenerative diseases.

COLORING OUTSIDE THE LINES

With the show-stopping headline, "Alzheimer's study discovers toxic protein behind disease that could radically change treatment research," Newsweek chronicled Mastroeni's discoveries last year.

Along with ASU chemistry professor Sidney Hecht, director of the Biodesign Center for Bioenergetics, Mastroeni and his team studied whether cell breakdown — not plaque buildup (the prevailing theory) — leads to the development of Alzheimer's.

With his research partner, Paul Coleman, also part of the ASU-Banner Neurodegenerative Disease Research team, Mastroeni focuses on an emerging science known as epigenetics. Researchers have long believed that Alzheimer's is a function of genetics: If you had a certain genetic profile, you would get Alzheimer's.

Epigenetics refers to the ways in which the world around us modifies how our genes are expressed. Chemical modifications resulting from stress, diet, sleep, exercise or the environment can switch gene behavior from healthy to unhealthy. Some theorize that Alzheimer's is triggered by the way genes turn on and off in the brain.

Together, Mastroeni and Coleman examine genetic changes within the brain regions affected early in Alzheimer's disease and Parkinson's disease. Their results are shedding light on the genetic basis of how glial cells (cells associated with neurons) go awry, resulting in dementia. Their work could lead to new targeted therapies for Alzheimer's and Parkinson's diseases.

Mastroeni and Coleman's work has been supported in part with funding from foundations devoted to combating the disease and to advancing science, including the Alzheimer's Association and the NOMIS Foundation. Additionally, their work has received support from the Arizona Alzheimer's Consortium, a nonprofit organization composed of seven member institutions, including ASU, and three affiliated medical institutions across the state devoted to Alzheimer's research.

THE LONG GOODBYE

According to the Alzheimer's Association, every 65 seconds someone in the U.S. develops the disease. Among the top 10 causes of death in the United States, Alzheimer's is the only disease that cannot be prevented, slowed or cured. Some 14 million Americans will be afflicted with the disease by midcentury, at a cost of $1 trillion.

Despite its costs to society, Alzheimer's receives far less than the research funding dedicated to cancer, also one of the world's most deadly diseases. In fiscal year 2019 the National Institutes of Health will direct $2.3 billion toward Alzheimer's research and $6.6 billion toward cancer.

Alzheimer's robs its victims of their sense of identity, memory, ability to reason, understand and even move. The toll it takes on patients, family and society makes Alzheimer's a worldwide health crisis.

In Arizona, there is strong incentive to lead. According to the Alzheimer's Association 2019 Facts and Figures report, the state has the nation's fastest growth rate for the disease. The number of people living with Alzheimer's in Arizona is expected to grow 43 percent in the next six years. Yet advances in disease treatments may not keep up with the growing number of cases: There has not been a new Alzheimer's drug approved in more than a decade, and 99 percent of clinical trials have failed.

Like the larger research world, dementias (of which Alzheimer's is the most prevalent) continue to be confounding. Newer theories maintain that Alzheimer's is not a singular disease but — like cancer — many diseases with a multiplicity of origins.

> **"IF THE DISEASE COULD BE IDENTIFIED MUCH EARLIER — CLOSE TO ITS ORIGIN — THERE IS HOPE THAT PERHAPS IT COULD BE SLOWED OR EVEN HALTED IN ITS TRACKS."**
>
> – Paul Coleman, ASU-Banner Neurodegenerative Disease Research Team

Collaborating with the Banner Alzheimer's Institute, Barrow Neurological Institute, Mayo Clinic and the University of Rochester, Coleman has put a new tool on the table: a blood test that can predict the potential of getting Alzheimer's in people as young as their early 20s.

"We no longer talk about a cure," said Coleman. "We talk about early detection. The single biggest obstacle to understanding Alzheimer's is the fact that it resides in your body long before symptoms appear. By the time we know that someone has Alzheimer's, it's too late to do anything about it."

Coleman's test does more than simply identify neurodegeneration in general; it identifies the specific type of degenerative brain condition.

According to Coleman, "If the disease could be identified much earlier — close to its origin — there is hope that perhaps it could be slowed or even halted in its tracks." Ideally, doctors would test patients as a normal part of their annual physical. One hypothesis holds that there are existing drugs that, if administered earlier, could slow or arrest the disease.

THE CAREGIVER CONUNDRUM

A study of 1,200 married couples in rural Utah reported an astounding statistic: Spouses of people with dementia have a 600 percent greater risk of developing dementia themselves. (On average, caregivers in the study had been married for 50 years.) A shared lifestyle and chronic stress, isolation, decreased physical activity and the challenges of eating healthy may all play into the decline.

"Until there's a cure, there's care," says David Coon, associate dean of research at the Edson College of Nursing and Health Innovation and director of ASU's new Center for Innovation in Healthy and Resilient Aging.

Coon is on a mission to change the way we experience and perceive aging. "I call it 'hamster head.' How do I get you off that wheel so I can change the way you think about aging?" he says.

The center supports interdisciplinary efforts to solve challenges in aging — from the individual level to the policy level — by connecting faculty, students and community partners in biomedical research, clinical studies and behavioral interventions.

Coon became transfixed with the elderly as a teenager, prompted by his close relationship with his grandmother, Mary Louise. As she developed what was then called "hardening of the arteries," Coon stepped up to be her chauffeur and to help her pay her bills.

"The question of caregiving is becoming increasingly complex," Coon explains. "This is not the same as the day when your grandparents took care of one another. Today, caregiving requires a tremendous commitment of time and money — something that many cannot access."

Many caregivers lack access to proven treatments to help alleviate stress and distress. In particular, those in rural areas, those with full-time jobs, or those who are homebound lack the kind of assistance that helps them enhance their emotional well-being and physical health.

To answer the needs of those caregivers, Coon and his colleagues are adapting his evidence-based intervention, CarePRO, a group-based, skill-building program for family caregivers. More than 1,600 caregivers have participated in CarePRO, which received the 2013 Rosalynn Carter Leadership in Caregiving Award from former first lady Rosalynn Carter herself.

FUEL FOR THE FIGHT

ASU's multipronged, multidisciplinary approach to dementia research received a wellspring of support last spring when entrepreneur and businessman the late J. Orin Edson and his wife, Charlene, gave a transformative gift to the university that was split evenly between the College of Nursing and Health Innovation — now named for the family — and the Biodesign Institute.

At Biodesign, the gift will fund research to identify causes and cures, including through the Charlene and J. Orin Edson Initiative for Dementia Care and Solutions. In the Edson College of Nursing and Health Innovation, it will fund research and programs that lead to better caregiving and quality of life. To elevate nursing care overall and within the field of dementia care, the gift created the Grace Center for Innovation in Nursing Education, named for Charlene's mother.

This summer, Coon began to widen the program's reach by embarking on a new project, the Sun Devil Caregiver Academy, a proposed home for interventions like CarePRO, training opportunities for professionals to learn them, and continuing education related to caregiving. An anonymous ASU donor gave almost $75,000 to help launch the academy.

MUSIC AND MEMORY

Coon's Music and Memory Project focuses on the power of music to evoke positive emotions and ease suffering in those with dementia. With musicians from the Phoenix Symphony, the project is a blend of nursing, music performance, music therapy and behavioral science. According to an interview in ASU Now, the university's online news publication, the project's researchers found that residents at two area long-term care facilities who participated in the program exhibited higher levels of positive mood and lower levels of cortisol, the stress hormone.

In the beginning of the project, the musicians performed planned selections, but progressively the music became more improvised and responsive to the residents. From fight songs to hymns to complex classical pieces, the musicians took cues from the residents about what music to play. When someone requested a polka, the performers readily complied.

Coon describes one profoundly moving moment when a couple, hearing "their song," got up to dance.

FAST-FORWARD TO INNOVATION

While Mastroeni keeps a keen focus on bench science, his impatience with answers is leading him in new directions. He has an idea for an "Alzheimer's app" – sort of a Fitbit™ for patients and caregivers.

Using tools like retina scanning, big-data analytics and artificial intelligence, Mastroeni envisions a wearable two-way communications system that supports the social, behavioral, physical, medical and nutritional needs of dementia patients. Through data mining and predictive analytics, the system will store necessary information and experiences, and provide useful information to caregiver and patient.

For example, the mechanism may detect a bout of agitation in a patient. A signal would go to the caregiver, reminding the caregiver that the last time the patient was agitated, a certain piece of music calmed him. Mastroeni even foresees the ability of the patient's physician to monitor a patient's health in real time.

Despite advances, dementia remains frightening, frustrating and perplexing. Researchers at ASU and across the world are undeterred.

"We're gaining on it," Mastroeni says.

Being Better Humans

By **Melissa Bordow**
Photographs by **Tim Struck**

The sun is barely over the Phoenix horizon one morning in June, but the temperature already is inching its way to 105 degrees. Despite the heat and the early hour, about 150 men and women experiencing homelessness line up along the sidewalk spanning 12th Avenue between Jefferson and Madison streets.

The men and women know that every other Saturday, volunteers from ASU's Project Humanities transform this dusty patch of sidewalk into a free-store where they can handpick everyday necessities: clean clothes, shampoo, shoes, undergarments, a hat to block the Arizona sun.

They wait quietly as about 25 volunteers erect folding tables and lay out articles of donated clothing, neatly folded, sorted and labeled by size and gender.

Overseeing the bustle is ASU Professor Neal A. Lester. Dressed for the heat — shorts, T-shirt and a signature bandana wrapped around flowing dreadlocks — he is both cheerful and on-point. "Don't forget to drink water," he reminds volunteers and shoppers.

Lester has been bringing volunteers to this stretch of road in downtown Phoenix every other Saturday for five years, after he founded

Project Humanities, an ambitious, award-winning initiative to elevate the study and practice of humanitarian values.

Volunteers finish organizing, then pair up with shoppers to help them choose items. The process is orderly and efficient.

Until one woman tries to cut in line.

An argument erupts, spurring Lester and regular volunteer Chris Dotts into action. They calm the women standing in line with assurances that everyone will get a chance to shop, and then broker a compromise: The woman can sit at the front of the line while she waits her turn.

Customers finish up and disperse into side streets, large plastic bags in hand. Lester gathers volunteers around him to assess the day's events.

"I know there were some bumpy spots, but we handled that pretty well," he says. "I saw people showing patience and compassion. I saw people showing kindness."

These kinds of teachable moments define Project Humanities, where "talking, listening and connecting" are hallmarks of its year-round programming. Service Saturdays, as the day is called, is one of many ways the initiative brings people together to learn to understand each other.

Starting a Movement

Lester began Project Humanities nine years ago. The country was emerging from the Great Recession and students were fleeing the humanities in favor of other presumably more lucrative disciplines.

ASU President Michael M. Crow challenged Lester, then dean of the humanities, to rekindle interest in the field and cultivate a more robust program.

Lester embraced that challenge.

He envisioned an initiative that would elevate the study and practice of the humanities across ASU's campuses and beyond — out in Arizona's communities and among the state's disparate socioeconomic, geographic and cultural populations.

The time was ripe, he says. Society seemed to be fracturing along political fault lines, civil discourse all but disappearing.

"There didn't seem to be a story in the headlines that didn't echo that refrain," he says. "Are we losing our humanity? How can we be better people, more decent people?"

Lester was convinced that the humanities — broadly defined as the examination of the human experience through the lenses of literature, art, religion, philosophy, music and other forms of expression — is the perfect vehicle to unite people around those questions.

Demystify, Disseminate

How could he bring people together to talk about — and listen to — opposing viewpoints? What does it take to expand someone's worldview and preconceived notions, particularly around complicated issues like race, sexuality, privilege, unconscious bias or gender equality?

He set out to dispel the notion that humanities education happens only on college campuses. Lester and his Project Humanities team began facilitating community discussions in churches, people's homes, high schools, community centers, libraries, businesses and dusty street corners where people gather.

A hallmark of the project is the Humanity 101 initiative. Participants in Humanity 101 pledge to abide by seven principles: compassion, empathy, forgiveness, integrity, kindness, respect and self-reflection.

Through film screenings, performances, community dialogues, workshops, lectures and panels, high school symposia and festivals, participants engage these principles as they discuss timely and diverse topics.

Shared Values

As more people embraced the Humanity 101 pledge, Lester looked for ways to deepen their involvement. He established a Founders program seeking 101 supporters — individuals and organizations — willing to invest at least $1,000 each and to champion the initiative's seven values in support of Project Humanities programs.

These values resonated with ASU supporters and Founders, Michelle Mace and her partner, Jim Tuton.

Mace and Tuton learned about Project Humanities three years ago from Mace's son, Andrew, then president of his high school's Rho Kappa National Social Studies Honor Society. Andrew was looking for a speaker to discuss cultural awareness at his high school, located in a Phoenix suburb. Intrigued by Lester's background, the family invited Lester and his wife to dinner. As they visited around the table, Mace began to realize something about Humanity 101 values: They encompass what it means to be a good parent, a topic dear to her.

Mace believes that good parenting can help children of all ages overcome adversity in life; conversely, bad parenting can create adverse circumstances that can take years and sometimes generations to resolve.

Mace and Tuton ultimately founded the Come Rain or Shine Foundation to support initiatives that help people incorporate Humanity 101-like values into parenting. Additionally, they gifted $25,000 to Project Humanities, which is collaborating with them to develop community-based programming. Learn about Project Humanities events, including those on parenting, at projecthumanities.asu.edu/events.

THE LONG GAME Descendants and family members of George F. Miller Sr. honor his legacy by supporting outstanding students.

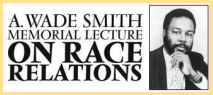
Matters

George Fuller Miller Sr. devoted his life to service. Born in 1903, he became a Boy Scout, achieving the rank of Eagle. He spent his professional life as a Scout executive, and in 1952 helped establish the Arizona Boys Ranch as a home for troubled youth. ¶ Miller also helped found the American Humanics program at ASU – now the Nonprofit Leadership Alliance – which supports students preparing for careers in the nonprofit sector. Seed money to start the chapter at ASU was donated by the Phoenix Rotary 100 club, which honored Miller by naming it after him. ¶ Miller's family honored his life with a gift to ASU in 1981, establishing the George F. Miller Outstanding Student Award in the Nonprofit Leadership Alliance program. "The Miller investments have launched the careers of many outstanding professionals who are making an impact in the nonprofit sector, and I feel privileged to have the career that I've had because of the sound foundation provided by the NLA," says Jill Faver Watts, who won the award in 1995. Watts is director of capacity building initiatives for ASU's Lodestar Center for Philanthropy and Nonprofit Innovation. (Lodestar itself owes its founding to Miller.) ¶ The George F. Miller Award continues strong because he also left a personal legacy. Other members of the Miller family – a son, daughter, two daughters-in-law, two grandchildren and their wives – contribute annually to the cash award in the NLA program, a testament to the impact of ongoing and consistent gifts from annual donors.

"The Miller investments have launched the careers of many outstanding professionals who are making an impact in the nonprofit sector."

Jill Faver Watts

ILLUSTRATION BY DAVID PLUNKERT



A. Wade Smith

In 1989, student protests triggered by incidents of discrimination prompted ASU to create a Campus Environment Team devoted to promoting diversity.

Professor A. Wade Smith, chair of ASU's department of sociology, stepped up to chair the committee, developing a reputation as a tireless advocate for improving race relations.

When he died of cancer at the age of 43, Smith's family and friends secured his legacy by endowing a gift to establish the A. Wade Smith Memorial Lecture, an annual event that brings to campus some of the country's foremost voices on race relations and civil rights.

Speakers have included Pulitzer Prize winner Isabel Wilkerson, author of "The Warmth of Other Suns," which chronicles the migration of 6 million African Americans out of the American South.

Darin Shebesta
Tiffany House

Darin Shebesta recalls the motto coined by William Polk Carey, benefactor and namesake of ASU's W. P. Carey School of Business: "Doing good while doing well." The tagline is included in all his emails, and guides the philanthropic life he leads with his wife, Tiffany House.

Both are financial planners who passionately advocate for their profession – and for ASU.

Shebesta ('06) was just 29 when he drafted a will and decided to reserve a portion of his assets for the business school in what is commonly known as an estate plan. "I started learning the different strategies and concepts and thinking, if I'm speaking to clients about this, I should be doing this myself," he says.

Inspired to educate the next generation, Shebesta and House's gift will support scholarships for students interested in pursuing a similar career.

"It's never too early to start thinking about your legacy," he says.

BUCKHORN BATHS
Preserving History

Beginning in the 1940s, the Buckhorn Baths Motel in Mesa became renowned for its taxidermy collection – more than 450 preserved animals including Gila monsters, horned toads, chuckwallas and even a two-headed sheep. ¶ That collection now resides in ASU's Natural History Collection, where scholars are cataloguing it for use as an educational tool for Arizona schoolchildren. ¶ The collection was a joint gift from companies involved in sale or development of the property: Sliger Buckhorn Limited Partnership, the David J. McHenry Family Trust and Urban Fabric Builders. It was once the largest private natural history collection in Arizona. ¶ Buckhorn Baths was also renowned as a spring training destination, its mineral hot springs attracting greats like Ty Cobb and Willie Mays.

BikeMaps.org

A mom and avid cyclist, Trisalyn Nelson is passionate about creating safe conditions for cyclists.

Nelson, director of ASU's School of Geographical Sciences and Urban Planning, founded BikeMaps.org, which gathers crowd-sourced data to identify hot spots of cycling safety and risk.

According to BikeMaps, only 30 percent of bike collision data is collected. BikeMaps uses information contributed by citizens to map bicycling safety concerns, analyze data to determine factors that influence safety, and help cities improve decision-making. State Farm recently provided a grant to BikeMaps to promote its work.

In August, the City of Tempe recognized Nelson's work with its 2019 Bike Hero award.

Jude LaCava

"What are you going to do about it?"

That question haunted Jude LaCava, a longtime Valley sportscaster, ever since his mother, Dorothy, died of breast cancer when he was a teenager.

LaCava, his sister, Sandy, and his wife, Jill, decided to make a difference in the fight against cancer by establishing a foundation that brings people together in the field of cancer research, facilitating the sharing of information and supporting effective treatments.

The Dorothy Foundation has become an advocate for the ASU Biodesign Institute, channeling more than $100,000 to support the institute's cancer research.

SUN DEVILS UNITE

Community Service

ASU collaborated with Valley of the Sun United Way to host Sun Devils UNITE, a week of philanthropy and service held last spring across all four ASU campuses. Hundreds of students took part in charity and service events, raising thousands of dollars for United Way objectives centering on youth success, ending hunger and homelessness, and promoting financial stability.

Hubbard Family

When Di Bowman learned that drowning is the leading cause of unintentional death among 1-to-4-year-olds in the United States, she decided to do something about it.

Bowman, a professor in the Sandra Day O'Connor College of Law – and the mother of a toddler – also learned that children from poor families have less access to swim lessons, which can be expensive.

With the help of ASU swim coach Bob Bowman (no relation), she created an award-winning public service announcement encouraging water safety. She also is collaborating with the Phoenix-based Hubbard Family Swim School on a multifaceted drowning prevention program, highlighted by an effort to provide better access to swim lessons.

Popular courses include those that develop skills in public speaking, time management, personal development and college and career planning.

"I want to learn the skills that will help me be more successful." ¶ That statement from a young person in the United Arab Emirates encapsulates why students there are taking part in a new educational partnership designed to prepare them for university life and professional careers. ¶ The youth took part in the Al Ghurair Young Thinkers Program, an online platform with more than 30 hours of college and career readiness coursework in English and Arabic. ¶ The program is a partnership between the Abdulla Al Ghurair Foundation for Education, a Dubai-based organization that provides underserved Arab students with scholarships, support and skills training; and ASU's EdPlus, the university's enterprise-wide unit that delivers global digital education. ¶ The Young Thinkers Program currently has more than 3,500 users from across the Emirates taking courses, says Bethany Weigele, senior director of lifelong learning initiatives at EdPlus. ¶ Popular courses include those that develop skills in public speaking, time management, personal development and college and career planning. In more than three-quarters of the courses, students report an increase in their skills. ¶ "Feedback on the courses is positive," Weigele says. ¶ An additional 7,000 users have used the me3 career-pathway app, an interactive quiz that helps users discover majors that fit their interests and helps them find a degree program. ¶ Businessman and philanthropist Abdulla Al Ghurair created the foundation that bears his name, pledging one-third of his wealth to its goals. The foundation seeks to prepare Emirati students for college, and open up educational opportunities to Arab youth through scholarships and programs.

Young

PHOTO COURTESY ABDULLA AL GHURAIR FOUNDATION FOR EDUCATION

Thinkers

SKILL SET The Al Ghurair Young Thinkers Program, an ASU EdPlus partnership, offers skills training to Emirati students.

What the Doctor Ordered

Allison Nanez

Year attended: 2016

Each year, high school seniors attend a weeklong, all-expenses-paid camp to explore careers in health care. Hosted by ASU's College of Health Solutions, it's called the Summer Health Institute. And it's a philanthropic success story.

Since the camp began in 2014, donors have embraced its mission to inspire passion in highly motivated students who want to have an impact on the health of their communities.

For the students, it's a week filled with life-changing experiences. They get a glimpse of college life by living in dorms at the Downtown Phoenix campus, gain hands-on experience in lab settings, and make valuable contacts in the health care field.

2014 Cohort

The first class of Summer Health Institute participants has been followed by six more; a total of 194 high school seniors exploring careers in the health care fields.

By the Numbers

6

years in which the college has brought high school seniors to downtown Phoenix to explore health care careers.

17

states from which SHI participants have come to ASU.

194

total number of SHI participants since its inception in 2014.

"Prior to the institute, I had never been exposed to suturing, intubating, placing an IV or any of the other hands-on activities we experienced that week."

Dwayne Martin-Gomez

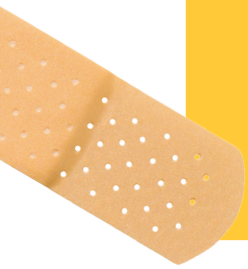
Year attended: 2015

"The Summer Health Institute gave me confidence in my abilities and knowledge of how to achieve my goals, making it possible for me to be the first person in my family to pursue a career in medicine."

"This felt like a community even after the program had ended. I still remember some of the techniques I learned ... such as stitching and inserting a vaccine intravenously."

Julia Jackman

Year attended: 2016, 2019 (as a counselor)



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