

# ASU

ARIZONA STATE UNIVERSITY  
Volume 26 Number 2

**Thrive**<sup>®</sup>

**PLUS**

**PRINCIPLED  
INNOVATION**

Putting values and  
character at the  
center of decisions

**FROM BELARUS  
TO INTEL**

“I never thought  
I would have this  
opportunity.”

**OPEN COMMUNICATION**

# Feedback THAT inspires

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# Innovating with principle

For 20 years, the university has been working as a community and with partners to advance its visionary charter, mission and goals within a framework of eight ambitious design aspirations. Collectively, these objectives define what ASU believes, what kind of public enterprise it wants to be, and how it proposes to evolve and fulfill its commitments. To date, ASU has made significant and meaningful progress in its redesign as a university uniquely committed to access, excellence and social impact.

I think we should all be proud of this work and the success that we have made possible together for the many individuals and communities we serve. ASU is committed to continuously measuring, assessing, honing and improving in order to produce optimal outcomes across the institution and beyond.

Now in my 21st year as your president, I believe there is an opportunity for ASU to be increasingly intentional in its decision-making and in its practice of evaluating its societal impact.

A few years ago, the Mary Lou Fulton Teachers College took our commitment to learning and discovery up a level by establishing and refining a set of processes that draw from collective values, character and civic and intellectual assets to help determine a principled organizational trajectory. Through that learning, ASU will now begin the process of establishing the design aspiration of "Practice Principled Innovation."

#### ASU Design Aspiration 9: Practice Principled Innovation

ASU places character and values at the center of decisions and actions.

As always, your ideas and feedback are welcome, and I thank you for your ongoing dedication to ASU's success. I look forward to working together to strengthen the Principled Innovation mindset across the university and beyond.

#### Michael M. Crow

President, Arizona State University

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**Principled Innovation places values and character at the center of decisions.**



Liz Lerman created a feedback system that empowers.

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This powerful approach, Principled Innovation, helps ensure we are not just innovating for the sake of change but to fulfill our values. 26


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COURTNEY LIVELY

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**Reach new heights**

# “I never thought I would have this opportunity ...”

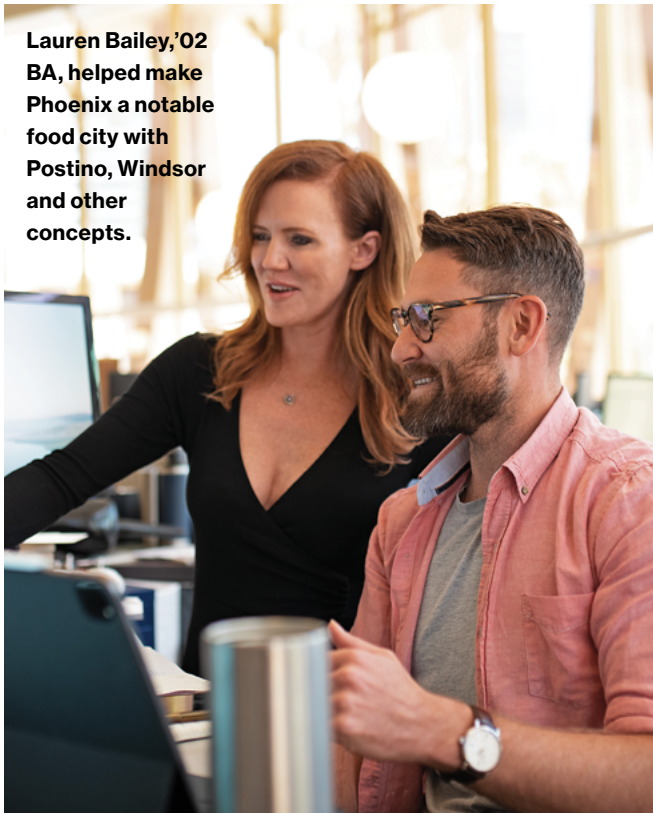
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**Sasha Sharstniou, '22 PhD, patented a process while working in Bruno Azeredo's lab.**

**Lauren Bailey, '02 BA, helped make Phoenix a notable food city with Postino, Windsor and other concepts.**



ERIKA GRONEK/ASU; COURTNEY LIVELY

**Join forces**

## Outside in

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Stella McHenry, first African American woman to graduate from ASU, rediscovered in photo album. 64



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## National Poetry Month

Every April, ASU's Virginia G. Piper Center for Creative Writing celebrates National Poetry Month with prompts featured on social media platforms, Instagram giveaways, poetry drop-in sessions and an online anthology of select entries. Follow along by using hashtags #HFRfreewrites, #PoetryMatters and #PiperPoetryMonth.

To learn more about Piper Poetry Month, visit [piper.asu.edu/napowrimo](https://piper.asu.edu/napowrimo).

**Free** **Family**

# Apr.

## Disrupting dance conventions

In the new dance work "Reckless Underdog," artistic director and choreographer Victor Quijada has overturned traditional conventions of dance by blending choreographic principles with street dance origins in three acts. Exploring new interpretations of ballet, break dance and theater, this piece is a whole new way to experience dance and choreography.

Saturday, April 1, 7 p.m., ASU Gammage

[asugammage.com](https://asugammage.com)

**Family** **Ticketed**



"Portrait of Taos Indian," by Joseph Henry Sharp, c. 1914.

"Portrait of a Massacred Indian," by Fritz Scholder, c. 1973.

## Bringing new perspectives to light

"Making Visible" features artworks from ASU Art Museum's permanent collections and examines how these objects perpetuate and fortify mythologies of the American West. With more than 90% of the museum's 13,000-plus objects entering the collection as gifts, this exhibition questions how the perspective of donors reflects specific tastes and fantasies about the Southwest. It also explores how museums create cultural narratives based on available objects without considering what is missing, and seeks to redress and restore the archival silences and gaps in the museum's collections by interrogating how exclusionary practices produced a collection that centers Eurocentricity.

Wednesday–Sunday through April 2024, 11 a.m.–5 p.m., ASU Art Museum, 51 E. 10th St., Tempe  
[asuartmuseum.asu.edu](https://asuartmuseum.asu.edu)

**Free** **Family**



## Lecture showcases award-winning author

Author Ibram X. Kendi will be featured in the A. Wade Smith and Elsie Moore Memorial Lecture on Race Relations series, the only endowed lecture at any college or university with an over-20-year history featuring renowned scholarly experts on race relations. Kendi is the Andrew W. Mellon Professor in the Humanities at Boston University and the founding director of the Boston University Center for Antiracist Research.

Thursday, April 13, 7 p.m.,  
Armstrong Hall, room 101,  
Tempe campus

[thecollege.asu.edu/wadesmithlecture](https://thecollege.asu.edu/wadesmithlecture)

**Free** **Family**



## Celebrating our home planet Earth

Join hundreds of scientists, scholars and students from across ASU as we honor planet Earth and the work, research and solutions being developed by them and our global network of partners. ASU Earth Week will be filled with captivating presentations, panel discussions and activities.

**Wednesday, April 19–Saturday, April 22, Tempe campus, West campus and online**  
[globalfutures.asu.edu/earthweek](http://globalfutures.asu.edu/earthweek)

**Free Family Sustainability**



## Check in to events to earn Pitchforks and rewards!

Sign in to Sun Devil Rewards in the ASU app for event listings, news, games and more.

Earn and be rewarded!  
[sundevilsrewards.asu.edu](http://sundevilsrewards.asu.edu)

## Hayden Library tour

Capping off a \$90 million renovation, ASU's Hayden Library, originally built in 1966, has been reinvented and reopened for the 21st century. Register for the walking tour.



**Wednesday, May 10, 1–2 p.m., Hayden Library, Tempe campus**

[asuevents.asu.edu](http://asuevents.asu.edu)

**Free Family**



## Sacrifice, service and identity

The 1982 Pulitzer Prize-winning thriller "A Soldier's Play" by Charles Fuller has rocketed back into the spotlight. In this riveting tale, the year is 1944 and the setting is a Louisiana Army base. Two shots ring out and a Black sergeant is murdered. A series of interrogations triggers a gripping barrage of questions about sacrifice, service and identity in America. Broadway's Norm Lewis leads a powerhouse cast in the show Variety calls "a knock-your-socks-off-drama," directed by two-time Tony winner Kenny Leon.

**Tuesday, May 16–Sunday, May 21, ASU Gammage**

[asugammage.com](http://asugammage.com)

**Family Ticketed**

# May

## 'Hairspray,' Broadway's Tony-Award winning musical

Join 16-year-old Tracy Turnblad in 1960s Baltimore as she sets out to dance her way onto TV's most popular show. Can a girl with big dreams (and even bigger hair) change the world? Featuring the beloved score of hit songs including "Welcome to the 60's," "Good Morning Baltimore" and "You Can't Stop the Beat," "Hairspray" is "fresh, winning and deliriously tuneful!" according to The New York Times.

**Tuesday, June 20–Sunday, June 25, ASU Gammage**

[asugammage.com](http://asugammage.com)

**Family Ticketed**



Visit [asuevents.asu.edu](http://asuevents.asu.edu) for more events.

Visit [thesundevils.com](http://thesundevils.com) for athletics matches.

# June

# Career



## Microelectronics Portfolio of Specializations

Given the high demand for semiconductor professionals created by the federal CHIPS and Science Act and Arizona's New Economy Initiative, ASU is launching a comprehensive microelectronics portfolio designed to provide the technical skills critical for success in the semiconductor field. Developed by the Ira A. Fulton Schools of Engineering in collaboration with the ASU CareerCatalyst team, the portfolio is available through the Coursera online platform. Upon completion, the program will roll out nine specializations emphasizing materials, tools, design, applications, manufacturing processes and packaging. Each 35- to 45-hour interactive specialization will be led by university engineering faculty and industry experts.

[links.asu.edu/microelectronics](https://links.asu.edu/microelectronics)

Online Employers



### Your career in motion

All Sun Devil alumni have lifetime access to ASU career fairs, webinars, networking and other career development events. ASU is here to help you chart your career path.

[alumni.asu.edu/services](https://alumni.asu.edu/services)

Free Networking Job Search

### Get career advice

Schedule a career advising appointment with a Career and Industry specialist to discuss career advancement, career transitioning and other professional development topics by making a virtual appointment. This service is free for all Sun Devil alumni.

[alumni.asu.edu/services](https://alumni.asu.edu/services)

Free Networking Job Search

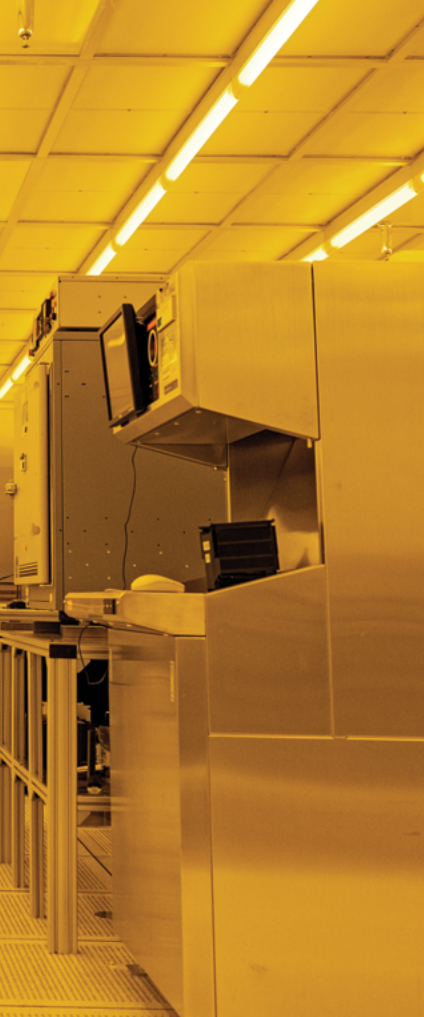
### Mediactive: How to participate in our digital world

In the age of information overload, learn how to spot misinformation, assess credible sources and claims, explain how the professional news media operate and use media to participate in your community. Sponsored by the Facebook Journalism Project, the ASU News Co/Lab offers this free course on media literacy principles in English and Spanish.

[asuforyou.asu.edu](https://asuforyou.asu.edu)

Free Online





## Engage learners with innovative resources

Infiniscope is a NASA-funded project that is transforming Earth and space science education and empowering educators through the creation of high-quality adaptive digital learning experiences, educator professional development, a community of practice, creative tools for designing digital content and a robust set of educator resources.

[asuforyou.asu.edu](http://asuforyou.asu.edu)

Free Online

# Community



## NCUIRE Research Symposium

Experience, learn and be part of what makes interdisciplinary research extraordinary. Undergraduate, community college and high school students are invited to present their research and creative projects at the New College Undergraduate Research and Creative Projects Symposium. The event will feature an award ceremony, keynote address and refreshments.

Thursday, April 20, noon–4:30 p.m., ASU West campus, La Sala Ballroom

[newcollege.asu.edu/ncuire/symposium](http://newcollege.asu.edu/ncuire/symposium)

Free

## Summer programs for K–12 learners

This summer, young Sun Devils can experience college life firsthand, learn from world-renowned professors and explore their interests. Access ASU Summer Programs are open for students in grades 8–12 focused on topics including engineering, leadership, academics, community building, math, the arts and more. Programs are offered on all four ASU campuses, providing fully immersive residential experiences where students can begin their Sun Devil journey and get a head start toward their future success.

June–July, in person, registration required

[eoss.asu.edu/access/programs/summer](http://eoss.asu.edu/access/programs/summer)

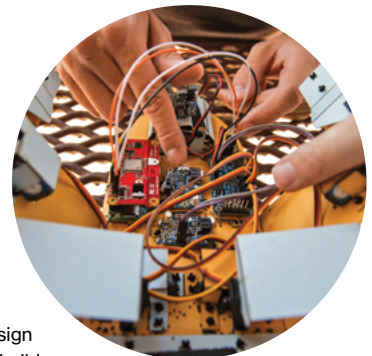
Ticketed Camp Grades K–12

## Fulton Summer Academy

Fulton Summer Academy, run by the Ira A. Fulton Schools of Engineering, gives K–12 students the opportunity to experience and take part in hands-on engineering projects. Summer Academy covers digital application development, circuits, robotics, logic, coding, leadership and much more. Students tackle design challenges and engage in STEM activities that build critical skills they can use to further their engineering aspirations and opportunities.

[outreach.engineering.asu.edu](http://outreach.engineering.asu.edu)

Ticketed Camp Grades K–12



See [asuevents.asu.edu](http://asuevents.asu.edu) for additional ASU events.



## CIRCLE OF INCLUSION

### Smithsonian collaboration

Thanks to a new partnership between ASU and the Smithsonian's Latino Museum Studies Program, museum studies majors like Ruby Maderafont (pictured on the left) spent 10 weeks of their junior year in Washington, D.C., helping to develop digital experiences for the National Museum of the American Latino.

Maderafont is one of eight Herberger Institute undergrads working with the Smithsonian as part of a group of 20 interns from Hispanic-Serving Institutions around the country. The National Museum of the American Latino provided travel, accommodations and a living-wage stipend.

The opportunity to gain hands-on, intensive experience with the museum studies program will "propel my career in the museum field and simply be a dream come true," Maderafont says.

Learn more about the museum at [latino.si.edu](https://latino.si.edu).





# Update in the news

**Ruby Maderafont (left) and animation major Francesca Galvan at the Smithsonian Institution Building. Both Maderafont and Galvan are part of the Smithsonian's Latino Museum Studies Program.**

## **Paving the way to college**

Military-bound high schoolers earn enrollment.

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## **Partnering with Mexico**

Boosting semiconductor production.

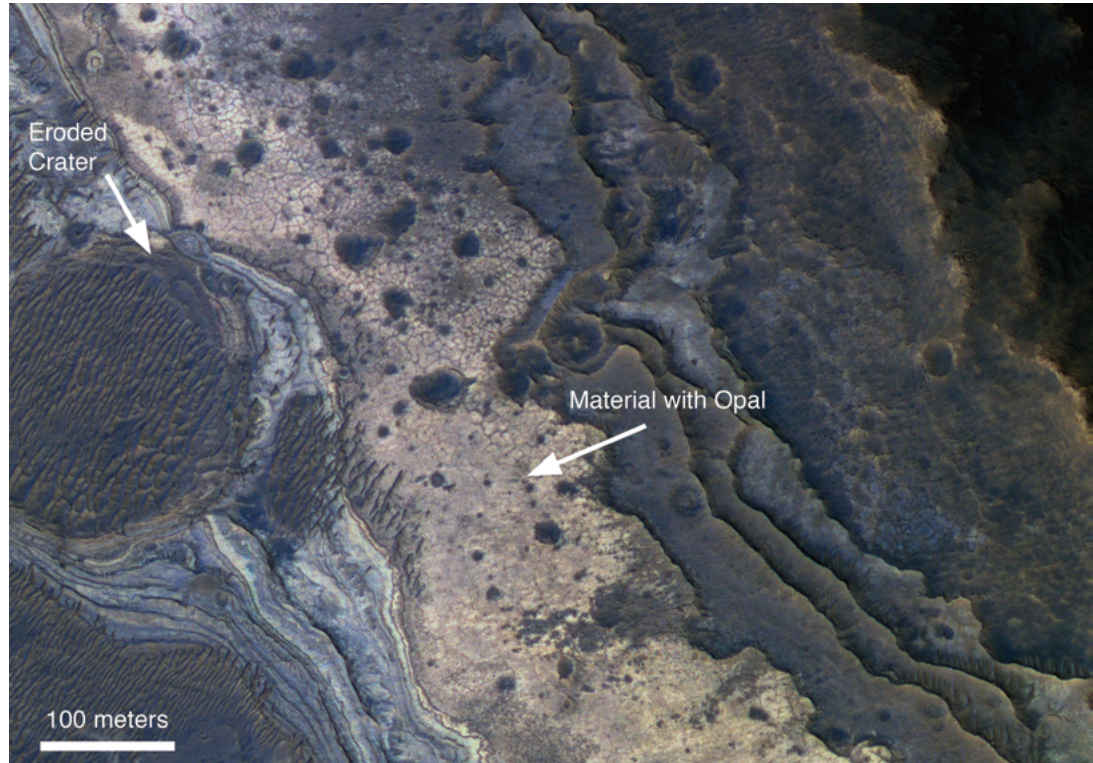
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## Dashboard reveals COVID-19 trends from wastewater

At the pandemic's onset, the city of Tempe, the state of Arizona, and ASU launched a project to monitor the spread of the COVID-19 virus by examining wastewater in Tempe's sewers. The project used logistics and infrastructure already in place for monitoring the opioid crises through this technology called wastewater epidemiology. The Tempe data set for the first waves of COVID-19 reliably predicted virus levels in nine areas of the city six to 11 days ahead of clinical testing, allowing health care providers to prepare for surges up to 16 days in advance.

The project continues to evolve and track trends. Visit [covid19.tempe.gov](https://covid19.tempe.gov) to view the dashboard.



## Mars research team verifies water-rich sites contain opal mineral deposits

Using new methods to analyze data from NASA's Curiosity rover, researchers verified that vast subsurface fracture networks on Mars contain opal, potentially providing future explorers with access to water.

Travis Gabriel, a former ASU NewSpace postdoctoral fellow, now a research physicist for the U.S. government, and co-author and ASU graduate student Sean Czarnecki led the study.

"Our new analysis of archival data showed striking similarity between all of the fracture halos we've observed much later in the mission," Gabriel says. Those later observations revealed

high amounts of silica and water in the surface. "Seeing that these fracture networks were so widespread and likely chock-full of opal was incredible."

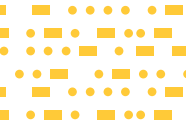


**A raw opal sample found on Earth.**

Opal is primarily made up of silica and water. Ground up and heated, opal releases water; perhaps as much as 1.5 gallons per meter of fracture halo within one foot of the surface, according to Gabriel's findings. Discovering opal on Mars may prove critical for future astronauts, as exploration efforts could

take advantage of these widespread water resources.

Learn more about ASU's projects in space [space.asu.edu](https://space.asu.edu).



## Learning WWI history through VR immersion

To teach her students about World War I, Victoria Thompson puts them in muddy, festering trenches, ducking shells and bullets hurled from the other side of No Man's Land. Or at least, in a convincing simulation of the Western Front. Thompson, an associate professor in the School of Historical, Philosophical and Religious Studies, teaches HST 130 The Historian's Craft. And part of Thompson's craft relies on virtual reality headsets and hand-held controllers that propel her students into a simulated WWI environment.



**“It is possible to use other sources ... to develop this sense of ‘historical empathy,’ but the VR experience seemed to accomplish this in a very different and memorable way.”**

—VICTORIA THOMPSON, ASSOCIATE PROFESSOR

Thompson's HST 130 was the first application of VR technology in a humanities course using Huddle, an instructional tool developed by students. Huddle enables groups of up to 13 students to share a virtual space for an instructor-led experience, interacting with one another and 3D objects.

Learn more at [lf.asu.edu/studios](https://lf.asu.edu/studios).



## ASU ranked in top 50 universities in the world for global employability

The 12th annual Global Employability University Ranking and Survey named ASU a top 50 university for employability among 1,000 universities worldwide. ASU is the only institution in Arizona to be ranked and is listed ahead of Johns Hopkins University, Georgia Institute of Technology and UCLA.

In two years, ASU jumped more than 110 spots, coming in at No. 34 for 2022, up from 88 in 2021 and from 145 in 2020.

**Keep up with the headlines at ASU by subscribing to the ASU News e-newsletter at [news.asu.edu/subscribe](https://news.asu.edu/subscribe).**



## Translating addiction research into real-world solutions

Academic research of substance use disorders is often disconnected from community agencies whose efforts might benefit from it. An ASU initiative could change that.

ASU's Substance Use and Addiction Translational Research Network was launched in 2020. Since then, it has built a community of academic researchers and agencies throughout Arizona, working in prevention, treatment and policy related to substance use disorders.

SATRn's efforts include a project funded by a \$1.3 million grant from the U.S. Health Resources and Services Administration and led by Matt Meier, director of ASU's Master of Science in Addiction Psychology program. Meier's program will expand access to care to more people in need, with particular emphasis on telehealth and cultural competence in working with Native American populations.

The Glen J. Swette Seed Grant program, another initiative, funds innovative, early-stage research. Current projects include tracking the effects of cannabis legalization in Arizona, a new intervention to prevent substance use among children of incarcerated parents, and an investigation of the potential of drug-checking services to detect fentanyl in street drugs, potentially saving lives.

Learn more at [satrn.asu.edu](https://satrn.asu.edu).

**“If we invest in institutions and help them scale to capacity so students can stay in their country and get a quality education, they’ll be of benefit to their country and continent of origin.”**

— BETHANY WEIGELE, CHIEF INNOVATION OFFICER, EDPLUS

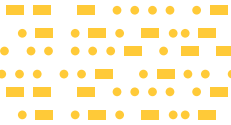
## Partnering with Ethiopia on online learning

The Mastercard Foundation and the university are collaborating with Ethiopia’s Ministry of Education to help create an online higher education initiative. The partnership, powered by a \$16.8 million grant from the Mastercard Foundation, will enable 50 Ethiopian higher learning institutions to leverage ASU’s expertise to expand online learning delivery.

“The scale of the project is significant,” says Amanda Gulley, chief of user experience design for EdPlus. “The potential direct impact is 800,000 students and 35,000 faculty and instructors. Long term, it will impact future generations of these students, which could be millions of Ethiopians.”

The new partnership builds on 10 years of collaboration between the Mastercard Foundation and ASU that began with the Mastercard Foundation Scholars Program, an initiative enabling exceptional young people, primarily in Africa, to access quality higher education. To date, the Mastercard Foundation Scholars Program has enabled higher education and leadership development access to 40,000 young people; 300 of them studied at ASU.

A street in Aksum, Tigray, in Ethiopia.



## Center helps policymakers make critical water decisions

One of policymakers' most valuable information resources is ASU's Kyl Center for Water Policy, says Congressman Greg Stanton. The center works to advance research, analysis and collaboration around building consensus on water stewardship for Arizona and the western United States.

Stanton says Kyl Center research informs his efforts for legislation critical to Arizona's water crisis, such as the Arizona Environmental Infrastructure Authority, which he authored and was signed into law in his first term; and the Water Resources Development Act of 2022, which secured \$37.5 million to reopen Tempe's Kyrene Water Reclamation Facility and groundwater recharge facilities. And Stanton calls \$3 million from a House appropriations bill to help Chandler build a new water reclamation plant to reuse water from the semiconductor giant Intel, "One of the best examples of how better using the water we do have can help support and create new jobs."



A depleted Lake Mead, formed by Hoover Dam and part of the Colorado River.

Among other projects, the Kyl Center produces the ASU Colorado River Visualization Enterprise, which democratizes information about the Colorado River shortage, making the data available and easy to understand. [morrisoninstitute.asu.edu/asu-curve-project](http://morrisoninstitute.asu.edu/asu-curve-project)



## Creating a \$50M plastic-to-hydrogen facility

A collaboration between the Rob and Melani Walton Sustainability Solutions Service and Clean-Seas will bring a clean hydrogen facility, the first of its kind, to Arizona. The \$50 million facility will convert plastic waste into recycled-content plastic and Clean-Seas' clean hydrogen product.

**“Part of a green hydrogen-based economy is using renewable energy, and also coming up with new, non-fossil fuel technologies to do that more efficiently.”**

— MICHAEL DORSEY,  
DIRECTOR AND CHAIR,  
ROB AND MELANI  
WALTON  
SUSTAINABILITY  
SOLUTIONS SERVICE



## Providing higher education options to Ukrainian students

At American University Kyiv, fall students showed their resilience by enrolling in five inaugural degree programs: Bachelor of Science in business administration, Bachelor and Master of Science in global management, and Bachelor and Master of Science in software engineering – even during the continued Russian invasion.

A member of the ASU-Cintana Alliance network, AUK is the first university in Ukraine designed as a world-class institution with a foundation in U.S. higher education standards. The university also is powered by ASU, providing students with access to ASU curriculum, opportunities to participate in exchange programs and access to dual degrees from both universities.

“Studying at AUK is an entirely new experience for me,” says Vasyl B., a student in the global management master’s degree program. “I admire the openness of the university’s leaders, teachers and administrators. They are ready to help anytime and want to pass on all possible knowledge and experience to the students.”

Currently, classes occur online. As soon as it is safe, AUK plans to initiate in-person classes on its flagship Kyiv RiverPort campus, a historic site renovated to provide an American higher educational experience to students.

## PREPARING FOR COLLEGE

## Paving the way for military-bound high schoolers

The university offers a new program that enables Arizona high school seniors who plan to join the military after graduation to attend ASU immediately upon completion of their military service contract. Typically, veterans who are released from duty and want to start college have to reconnect with their high school to get documents such as transcripts and test scores before they can apply for admission.

ASU's Veteran's Commitment Plan allows military-bound students to prepare for their post-military college education while still in high school. An Arizona student who plans to join the military immediately after high school would apply to ASU and, if they meet admission requirements, be granted automatic admission with deferred enrollment.

As they near the end of their service, ASU will help them prepare for their next steps through ASU's Pat Tillman Veterans Center – the university's unit that supports student veterans. They can enroll at ASU for the semester following their honorable or medical discharge from the military. They will also be eligible for ASU's New American University merit scholarship, and can even begin taking courses through ASU Online while still on active duty.

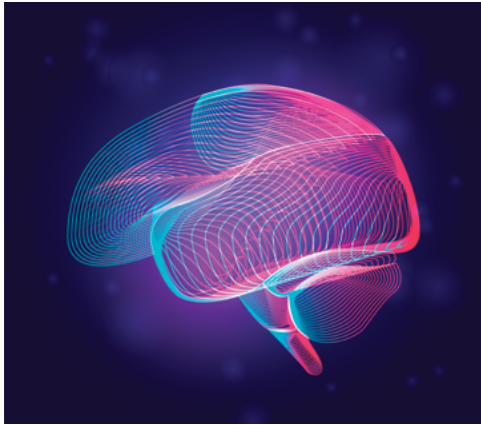
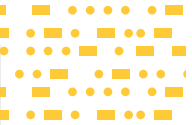
Visit [veterans.asu.edu/asu-veterans-commitment-plan](https://veterans.asu.edu/asu-veterans-commitment-plan) to learn more.



**“Graduating high school students with a drive to serve our nation shouldn’t feel they need to choose between earning a college degree or joining the armed forces.”**

— MATT LOPEZ, ASSOCIATE VICE PRESIDENT, ACADEMIC ENTERPRISE ENROLLMENT AND EXECUTIVE DIRECTOR, ADMISSION SERVICES

Army veteran and liberal studies graduate Armando Gandarilla receives his stole.



## Tracing cellular hallmarks found in 6 neurodegenerative diseases

A study appearing in the current issue of *Alzheimer's & Dementia: The Journal of the Alzheimer's Association* finds that multiple neurodegenerative diseases share similar fundamental dysfunctional cellular processes.

**“Differences between diseases may be key to discovering regional cell-type vulnerabilities and therapeutic targets for each disease.”**

— CAROL HUSEBY, ASU-BANNER NEURODEGENERATIVE DISEASE RESEARCH CENTER

Corresponding author Carol Huseby, research professor in the ASU-Banner Neurodegenerative Disease Research Center, and her colleagues looked at various cellular alterations in six distinct neurodegenerative diseases: amyotrophic lateral sclerosis or Lou Gehrig's disease, Alzheimer's disease, Friedreich's ataxia, frontotemporal dementia, Huntington's disease and Parkinson's disease. [Learn more at biodesign.asu.edu/neurodegenerative-disease](http://biodesign.asu.edu/neurodegenerative-disease).



## Drug to treat Alzheimer's in people with Down syndrome

Children born with Down syndrome face a statistical near-certainty that they will develop Alzheimer's disease, often between the ages of 40 and 50. But an ASU-University of Arizona team has developed a drug that may block the disease's advancement.

Travis Dunckley, assistant research professor with the ASU-Banner Neurodegenerative Disease Research Center, UArizona's Christopher Hulme and colleagues are exploring a drug that decreases the levels of DYRK1A, a type of enzyme known as a kinase, which is overexpressed in Down syndrome patients and linked to cognitive deficits. If successful, it will be a medical milestone for those with Down syndrome and may offer a new approach to Alzheimer's disease in the general population.

## ASU, Mexico partner to boost semiconductor production

The university will work with higher education institutions in Mexico, along with industry partners, to increase production of semiconductors in North America. In November, ASU President Michael M. Crow signed a memorandum of understanding with Mexican Ambassador to the U.S. Esteban Moctezuma Barragán to seal the partnership.



“We need to continue working in this effort of bringing production back to North America,” Moctezuma says. “It is not just a matter of trade but of technology, education, competitiveness, innovation, workforce development, regional security and geopolitics. Let us own the reality that our geographic proximity means sharing challenges and sharing solutions, but most important, sharing our common future.”

Sally C. Morton, executive vice president of Knowledge Enterprise at ASU, said that the agreement with Mexico is a natural outgrowth of ASU's Charter.



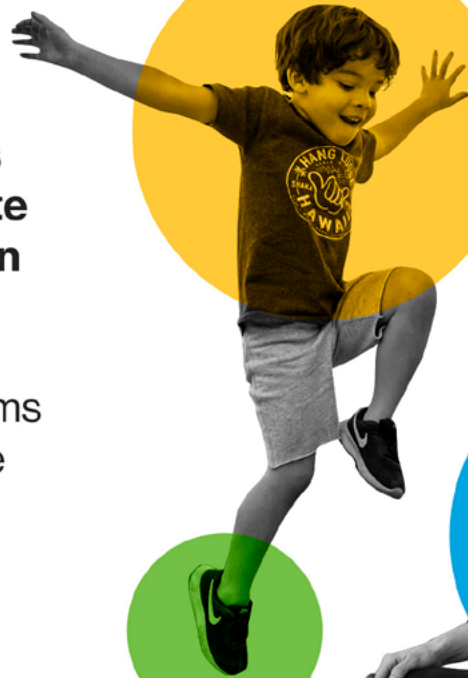
# No days off.

The average university stadium is massive and expensive but only sees use a few times a year. **Arizona State University is flipping that fact on its head.**

ASU 365 Community Union transforms Sun Devil Stadium into a public space for programming as vibrant as the community it serves. With comedy shows, watch parties, yoga sessions and more, **there's something for you and your family.**

For information about upcoming events or venue rental, visit [asu365communityunion.com](https://asu365communityunion.com).

**ASU** 365 Community Union  
Arizona State University



# Advance your career

## More than surviving — thriving

Happiness comes easily to some of us. Others not so much. John K. Coffey and Katherine Nelson-Coffey, associate professors at ASU's School of Social and Behavioral Sciences on the West campus, say that based on their research findings, positive psychology may help increase happiness.

**What it is** – Positive psychology focuses on the character strengths and behaviors that allow us to build a meaningful life and purpose. In other words, it's not simply surviving, but thriving.

**What it's not** – Positive psychology does not mean avoiding negative emotions or trauma, Nelson-Coffey says, and people should not avoid these emotions as it can make things worse.

"Most positive psychology activities are simple, enjoyable and self-directed," Nelson-Coffey says.

Get more tips at [wellness.asu.edu](http://wellness.asu.edu).

Drop the completed card in the special box at the reception center and be entered to win a special recognition card.  
Cards will be collected to the employee recognition center then forwarded to the recipient.

ASU Arizona State University

To: \_\_\_\_\_  
From: \_\_\_\_\_  
Reason for recognition: \_\_\_\_\_  
Date: \_\_\_\_\_

Thank you for  
all your SUPPORT

Put psychology to use in your daily life by building close relationships, by expressing gratitude or practicing kindness. Sample activities include writing a gratitude letter, spending time with loved ones and practicing self-compassion.

### 3 things to start saying

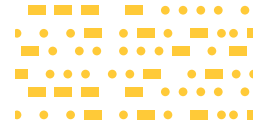
Powerful phrases to signal your commitment.

18

### YouTube college credits

ASU partners to offer classes.

21



# 3 things to start saying right now

## Signal your commitment, professionalism and empathy with powerful phrases



### May Busch

The former COO of Morgan Stanley Europe is now an executive coach, speaker, advisor, author and executive-in-residence in ASU's Office of the President.

[maybusch.com/asuthrive](https://maybusch.com/asuthrive)

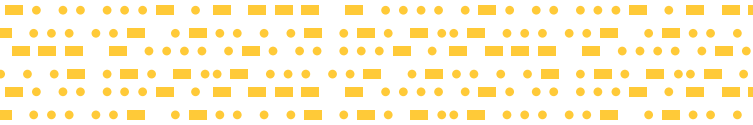
In today's working environment, commitment, professionalism and empathy are key.

These are the qualities senior leadership looks for, and these are the things people want in a colleague, boss, partner or teammate.

Maybe you already have these traits. Then the question is, how do you show it?

### Pay attention to your soundtrack

Imagine you have a recording of yourself at work in the last 24 hours, what does it sound like?



Are you often complaining instead of encouraging? How often do you tell people what to do rather than help them grow?

How your soundtrack lands with others is a critical part of your personal brand and reputation.

So here are three things to start saying at work right now:

**“What else can we be doing to achieve XYZ goal?”**

A simple way to signal your commitment to the team, organization or mission is to ask this question in your meetings or one-on-ones.

**Pay attention to your words and choose language that makes you sound like the committed, empathetic professional you are and aspire to be.**

This question taps into the wisdom in the room and shows you are dedicated to doing everything to achieve your goal.



**“This was an important learning experience. What I’ve taken away from it is ABC, and here are the actions I’m taking to address it.”**

A great opportunity to signal your professionalism is to acknowledge when you’ve made a mistake.

Not only do you take accountability, you also close the loop and indicate what you’ll do going forward.

**“Tell me more about that” or “I’d love to hear about that.”**

When someone shares something, take the opportunity to “double-click” on what they said and ask them about it. Then listen.

This presents the opportunity to find out more about someone and demonstrate your interest and investment in them as a person.

This also gives you a chance to find out valuable information – what caused your team member’s frustration? What caused a conflict? What made their project such a big win for them?

**Look for your opportunities**

Every day you have opportunities to show your commitment, professionalism and empathy. It’s up to you to make the most of them.

Pay attention to your words and choose language that makes

you sound like the committed, empathetic professional you are and aspire to be.

Notice which phrases you use that land well with others and which you’d like to change. Keep experimenting and practicing so that sounding like a leader becomes your new normal.

What will you start saying? ■

**Powerful resources**

For more phrases to demonstrate your best qualities at work, go to [maybusch.com/37phrases](https://www.maybusch.com/37phrases).





## ASPIRING STUDENTS

## YouTube-enabled ASU program expands to offer courses for college credit

Previously, ASU partnered with YouTube and Crash Course to launch Study Hall, which offers guidance on everything learners need to navigate their journey to and through college. Now, for aspiring college students, including those looking to go back to college later in life, ASU is partnering with YouTube and Crash Course to offer college courses that begin on YouTube.

The courses create a flexible pathway to higher education that provides up to 12 transferable college credits. The seven-week courses, called College Foundations, are English Composition, College Math, U.S. History and Human Communication – classes typically taken in the first year of college.

It works like this: Learners can watch course content on the Study Hall YouTube channel for free. If they like what they see, they can pay \$25 to sign up to take the full online course through ASU. All of the courses are led by ASU faculty and involve interaction with other students. After they complete the coursework, learners can pay \$400 to receive college credit for the course. The credits are transferable to any of the hundreds of institutions that accept ASU credits.

Learn more at [studyhall.asu.edu](https://studyhall.asu.edu).



The Study Hall channel already provides video series such as “Fast Guides,” which include information about dozens of majors and career prospects. Complexly co-founder Hank Green (pictured) says one of the invisible barriers to college is “the knowledge of how to interact with these institutions,” a challenge Study Hall aims to dismantle.



## COLLABORATIVE CREATIONS

### VR labs put new design aspiration into practice

Learning Futures studios is one of ASU's virtual reality labs making projects, including generative AI, virtual reality and game development, that explore what education will look like in the next three to five years. At the core of their creations is responsible and Principled Innovation, says Dan Munnerley, Learning Futures executive director.

"Principled Innovation helps us operate ethically and make daily decisions that inform our code, design and even the way we meet and communicate," Munnerley says. Learning Futures studios comprises specialist future skill guilds with students from any discipline. It is one of ASU's various extended reality studios teaching all aspects of VR using Principled Innovation as a core value. Another example is Meteor Studio, which often collaborates closely with Learning Futures studios. Meteor Studio employs students and offers free workshops for Unity, an XR software program.

Learn more about Meteor Studio at [meteor.ame.asu.edu](https://meteor.ame.asu.edu) and about Learning Futures studios at [lf.asu.edu](https://lf.asu.edu).





Anthony Delphy, Jesus Franco Yescas, lab instructor and graduate student Olivia Hernandez, '22 MFA, and Zahra Khaleghian working on VR programs in the Creativity Commons.

# Design with purpose

“Principled Innovation helps us operate ethically and make daily decisions that inform our code, design and even the way we meet and communicate.”

– DAN MUNNERLEY, ASU LEARNING FUTURES EXECUTIVE DIRECTOR

**Innovating with purpose**  
Practicing Principled Innovation to fulfill values. 26

**Feedback that inspires**  
The Critical Response Process empowers creators and those providing critiques. 30

“Design aspirations are those things we are attempting to achieve through the design of the institution that aid our ability to accomplish the ultimate goals of the charter.”

– MICHAEL M. CROW, ASU PRESIDENT

Nine **design aspirations** guide ASU’s ongoing evolution as a **New American University**.

#### Leverage Our Place

ASU embraces its cultural, socioeconomic and physical setting.

#### Transform Society

ASU catalyzes social change by being connected to social needs.

#### Value Entrepreneurship

ASU uses its knowledge and encourages innovation.

#### Conduct Use-Inspired Research

ASU research has purpose and impact.

#### Enable Student Success

ASU is committed to the success of each unique student.

#### Fuse Intellectual Disciplines

ASU creates knowledge by transcending academic disciplines.

#### Be Socially Embedded

ASU connects with communities through mutually beneficial partnerships.

#### Engage Globally

ASU engages with people and issues locally, nationally and internationally.

#### Practice Principled Innovation

ASU places character and values at the center of decisions and actions.



### Our ninth design aspiration

ASU will now begin the process of establishing the design aspiration of “Principled Innovation,” wherein we will formally embrace a philosophy designed to maintain a standard that defines ASU as a knowledge enterprise, what it represents and the driver of its actions.

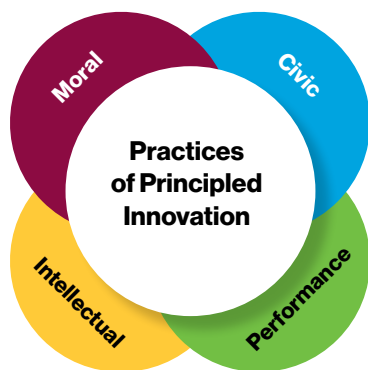
– MICHAEL M. CROW

## ASU Charter

ASU is a comprehensive **public research university**, measured not by whom it excludes, but by **whom it includes** and **how they succeed**; advancing **research and discovery** of public value; and assuming **fundamental responsibility** for the economic, social, cultural and overall health of the **communities it serves**.

# What is Principled Innovation?

Principled Innovation is a practice in which we imagine new concepts, catalyze ideas, and form new solutions, guided by four aspects of our character – moral, civic, intellectual and performance.



Download a card deck with more prompts for Principled Innovation process at [pi.education.asu.edu/pi-card-deck](http://pi.education.asu.edu/pi-card-deck).

## How can Principled Innovation apply in my life and my work?

Try working with these questions the next time you are looking at change you would like to make or pursuing an innovation project.

### Moral questions

- How are my values reflected in my decisions?
- How am I being empathetic toward myself and others?

### Intellectual questions

- What evidence do I have to support my perspective?
- What might we be missing?

### Civic questions

- What are the strengths of the community in which we are operating?
- How have we received feedback from the community about the project?

### Performance questions

- How do I support and build on team members' ideas?
- How will we know if the innovation is effective?

**Why and how was  
Principled Innovation created?**

# Innovating

WITH

# purpose



**Story by** CRISTY GULESERIAN

Cristy Guleserian is the director of Principled Innovation at ASU's Mary Lou Fulton Teachers College where she works collaboratively with faculty, staff, students and community partners to integrate MLFTC's core value of Principled Innovation into culture, curriculum and practice.

**This powerful approach helps ensure we are not just innovating for the sake of change but to fulfill our values**

When using Principled Innovation, we start with a basic question about any prospective change or course of action: We can, but should we? Principled Innovation is a practice that offers reflective approach to change that centers the well-being of humanity, communities and society as a whole. It is a framework for ethical decision-making that can be embraced by individuals, organizations and systems. It informs simple, everyday decisions and complex actions at all levels.

At the heart of Principled Innovation are four dimensions of character: moral, civic, intellectual and performance. When individuals practice Principled Innovation, their actions exhibit the empathy, honesty and humility inherent in moral character; the desire to serve others that is part of civic character; the truth-seeking impulse of intellectual character; and the problem-solving commitment of performance character.

Systems change can be messy. Principled Innovation offers practical techniques for perspective-taking and thinking through the possible consequences of even the most intricate



systemic actions. It creates a kind of intellectual and ethical muscle memory that helps individuals, teams and institutions seek out and listen to input from multiple perspectives.

It helps us ask ourselves the tough questions and consider the intended and unintended consequences of our decisions and actions, and whether they fulfill our charter commitments to equity, inclusiveness and taking responsibility for the well-being and success of the communities we serve.

### **Developing a character framework**

The impetus to develop a character-based framework for decision-making originated in the need, articulated by Dean Carole Basile, for Mary Lou Fulton Teachers College to respond to a variety of challenges facing colleges of education and, more broadly, education systems. **Even as our college's enrollment was rising, we saw the shortage of educators in Arizona and the United States getting more acute.**

Too many schools in too many communities were not meeting the needs of all their learners. We were graduating people into a profession and a system that was enduring a long-term crisis.

And, because innovating in education involves making the kinds of decisions that will affect the lives and learning of students, educators, families and communities, it was imperative for us to forge a way of making decisions worthy of the

trust and confidence of the people affected by them.

Values and ethics always drive individual and organizational decision-making. But those values are not always transparent. We wanted to create a clear, intentional process for how character could inform decision-making in education, including our own decisions.

So we started a conversation about character at our college. Not surprisingly, challenging questions and important arguments were quick to emerge. Whose morals? Whose virtues? Whose character?

We spent the first two years in a collaborative and iterative cycle of listening, writing and revising. And then we did it again. And again.

We started with a framework from the Jubilee Centre at the University of Birmingham. We heard loud and clear that context matters, and we needed to "ASU-ize" this work. In other words, we needed to tie our notions of character – what it is and why it matters – to ASU's defining characteristic of innovation.

Our faculty, staff and students shared a view of character not as virtues they perceived to be dogmatic but as assets required to achieve purpose. They moved from a notion of character education as prescriptions learners passively receive to a process learners actively pursue through practice and action.

As we adapted the process to fit the needs of our stakeholders and everyone involved, we began to create and codify a process.

### **Practical outcomes**

Principled Innovation drove the



process of redesigning one of the core activities of Mary Lou Fulton Teachers College: our teacher-preparation programs. We had an initial starting state of a program that was successful with professional experiences celebrated nationally and locally. Despite this, it was not fulfilling the college's larger mission as well as it could. Graduates reported areas in which they felt underprepared.

We also faced the question: How could we improve at preparing teachers who stayed in and flourished in the profession?

Conscious application of Principled Innovation practices led to a comprehensive, widely



## Practices of Principled Innovation

### Moral

- Identify and acknowledge fundamental values.
- Utilize moral and ethical decision-making.

### Civic

- Understand culture and context.
- Engage multiple diverse perspectives.

### Intellectual

- Develop habits of an informed systems thinker.
- Reflect critically and compassionately.

### Performance

- Design creative solutions.
- Navigate uncertainty and mitigate consequences.

participatory review of teacher-preparation programs. Stakeholders reviewed curricula, teaching methods, professional experiences (e.g., internships and residencies), organizational structure and operational processes – all with a focus on positive change that would improve the learning outcomes and experiences for both ASU students and the preschool–12th grade learners they serve.

### A process for meaningful, complex innovation

The work of formally codifying and evolving Principled Innovation has been intentional, messy, exciting, challenging, purposeful, exhausting,

### Get familiar with Principled Innovation

Learn more at [pi.education.asu.edu](https://pi.education.asu.edu).

Explore additional resources at [pi.education.asu.edu/resources](https://pi.education.asu.edu/resources).

exhilarating, frustrating, uncertain and, most of all, rewarding. It helped us to identify and acknowledge the fundamental values of our college and the communities we serve.

### Principled Innovation gave us opportunities to practice moral and ethical decision-making in a very intentional way as we grappled with difficult dilemmas.

Where we have landed is very different from our starting point.

At Mary Lou Fulton Teachers College, Principled Innovation is now our core value, and ASU has adopted Principled Innovation as the ninth design aspiration, through which character development can occur.

This is not the end – Principled Innovation remains a living process. We will continue to learn and grow throughout all of ASU and beyond. ■



# Feed back



Liz Lerman's Critical Response Process empowers those providing critiques and creators alike, in classrooms, artists' groups, workplaces and beyond

Story by NANCY WOZNY  
Photos by COURTNEY LIVELY, '07

# that inspires

# The curtain opens on a world premiere. Like magic the show materializes. How many sets of eyes contributed to making it happen? And how did it all come together?

Key questions like this and the answers have always intrigued visionary artist Liz Lerman, a nationally lauded choreographer and recipient of many awards, including the 2011 United States Artists Ford Fellowship in Dance.

Why would anyone want to keep the process of making art a secret, she wondered. Any veteran artist would be quick to admit that a fully formed concept appearing onstage without feedback and revisions is unlikely.

It never happens that way. Ever.

The process of making art involves feedback. Many years ago, Lerman, a professor in the School of Music, Dance and Theatre and a MacArthur “genius” grant fellow, was determined to figure out what kind of feedback situation would leave an artist hungry to get back

into the studio to improve their art. And that is how the Critical Response Process was born. It’s been used extensively as a formal process for more than a decade – and was in development and refinement in real-world situations even before then, starting back in 1990.

Not only is CRP being used for providing feedback on artistic creations, but also for engineering concepts, inventions, workplace performance and more.

## How it works

The steps of the process are straightforward, but provide profound results in the way they create an environment where everyone learns and improves their communication skills.

CRP is an elastic process. It can be a formal experience in a designated time and place with a performance or presentation, or it can be scaled down for a work or home situation. You can share something as large as an opera or something as small as a recipe. Flexibility is built into the steps.

Learning the process can happen in a few minutes, but practicing it can be a lifelong process. Some facilitators and practitioners have made it central to their understanding of how judgment can be engaged and suspended – whether in their personal or professional lives – and see honing communication skills as a continuous journey.

You can take a workshop, or read Lerman’s new book to see how it unfolds in various settings. You can also read through these



steps and try it right now.

Most often, the process begins with a showing of a work in progress that can be an art piece, a grant application, brochure content or even a very early idea.

Generally, participants sit in a circle. There are three roles: artist/maker, facilitator and responders. You can use the process with a room full of responders or just one.



## Statements of Meaning

After listening to the performance or idea, or after reading or viewing the artwork, responders state what was meaningful, evocative, interesting,



Using cake as the “artwork” provides a low-stakes way to learn how to ask for and provide feedback as part of the Critical Response Process.

exciting or striking in the work or idea.

Statements can be very specific, for example, “When you were leaping across the downstage diagonal I really felt your forward momentum.” Or they can be more general, “I really appreciated all the research you put into your subject.”

Lerman describes the feeling in the room after step 1 as “amazing.” The initial statement uplifts the artist/maker and everyone else. It also provides useful information often not experienced inside most systems of feedback.

It is understood that observers may see problems in the work,

and this is important, but they hold those comments for later.

### **STEP 02** Artist as Questioner

The artist/maker asks questions about the work or the idea. In answering, responders stay on topic and express opinions in direct response to the artist’s questions.

This can be applied to any situation where an artist/creator desires feedback to motivate them to get back to work with ideas of how to improve it. This step places the process in the hands of the artist/maker. They decide what gets discussed first and allows them to address what is most worrisome.

Lerman notes how important this creator-driven step is because it gives the responders insights into where the artist/creator is coming from and provides context for critiquing the work.

### **STEP 03** Neutral Questions

Responders ask neutral questions about the work, and the artist responds. Questions are neutral when they do not have an opinion couched in them. For example, a question like, “Why was the music so faint?” embeds the opinion that you felt like you could not hear it. If you reframe the question to, “Can you talk about the process of selecting the music and the music’s volume?” you will learn more about the artist’s intention in using that particular selection. It keeps responders curious for a longer amount of time and might even affect their opinion.

### **STEP 04** Opinion Time

Responders state opinions if and only if they are given permission from the artist or receiver; the artist/receiver has the option to say no. For example, the responders can say, “I have an opinion on your choice of the composer, would you like to hear it?”

At the heart of CRP is the agency of the artist/maker. They decide how the process unfolds in a way that will be most useful to them in honing their work.

### **In the workplace**

Phil Stoesz, design expert and facilitator for the University Design Institute, an ASU unit that strives to transform traditional educational

models, helps train people to use Lerman's CRP in work environments.

"The process is dynamic, and is so easily adapted to work environments," Stoesz says. "Too often feedback is owned by the bosses. In CRP, we give the power to employees too."

In addition to facilitating CRP workshops for artists and teachers, Stoesz, a CRP-certified facilitator, co-founded ReCreate, which brings the method to the workplace. Recently, Stoesz was part of a team that introduced CRP to a security team at Google.

According to Stoesz, step 1 is natural as it's common for bosses to cheer on their employees.

Steps 2 and 3 provide valuable insights. "Employees bringing questions to their supervisors reveals their curiosity about their work," he says. Step 3 allows the supervisor to learn more before delivering an opinion, he adds.

During trainings, Stoesz often brings in cookies as the "artwork" to learn the steps in a low-stakes situation, a practice Lerman and colleagues introduced into the process years ago.

He sees CRP as the future of workplace feedback, adding, "the process gives agency to workers and builds a better work culture."

## A personal example from the writer

**I've had the good fortune of experiencing every role in CRP. During my making years, Houston was lucky to have Liz Lerman as a guest artist, where she trained a room full of dance artists in CRP.**

**These days, if I am harboring an opinion about anything at all, I go to step 3 and gather more information, so that by the time I get to my opinion, I not only know more about someone's choice, but have built rapport.**

**I have used CRP from everything to discussing family vacation ideas to selecting colleges when my sons were teens, a time when parents' opinions are often disregarded. If my son mentioned an exotic college choice, I would go to step 1 and acknowledge his imaginative thinking. Instead of telling him it was an impractical choice, I would find out more about what was driving his choice. Turns out, his initial choices were more about the opportunities to travel abroad than the actual colleges.**

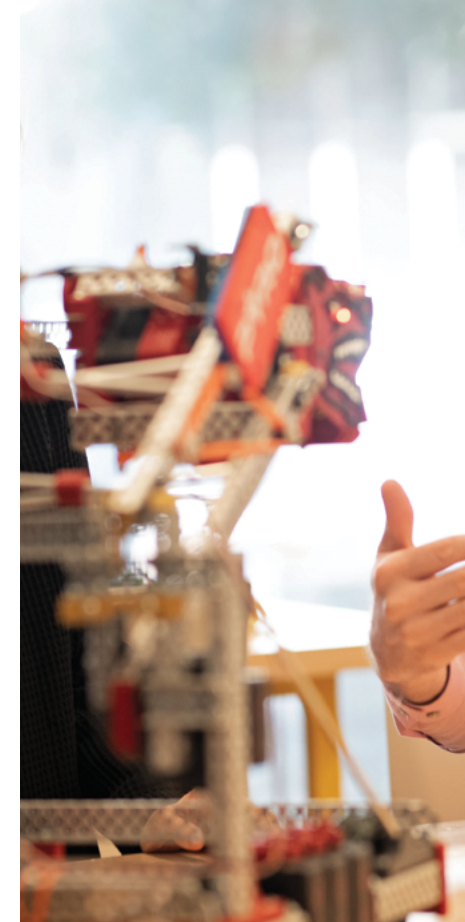
### In academics

Shawn S. Jordan, an associate professor at the Ira A. Fulton Schools of Engineering, has seen how useful CRP can be in classrooms.

"I had already heard about Lerman's work from a colleague, but was delighted to learn that she was working at my own institution," he says. "I was immediately engaged and inspired by CRP's mindset."

When a CRP class was offered to the participants of a leadership group, Jordan signed up. The class included a broad range of the ASU community.

"The mix really showed me the breadth at which this work could be applied," recalls Jordan. "Engineers design solutions and products that need feedback. But the usual way is to pick a design concept apart, which is not consent-based and affects confidence."



Jordan found that CRP works well for giving feedback on engineering solutions.

"With CRP, the control is in the hands of the designer," he says. "It's a positive experience, and they are more likely to stay in engineering."

Jordan is one of many faculty members across disciplines who use the process to provide more meaningful feedback to learners — and to help teach students how to provide insightful feedback.

### Critical Response Process resources

This past July, Wesleyan University Press published "Critique Is Creative: The Critical Response Process in Theory and Action," written by Lerman in collaboration with her longtime colleague John Borstel. The book includes stories about the process in action from the past 30 years. It's an excellent resource for getting comfortable



**“With CRP, the control is in the hands of the designer. It’s a positive experience, and they are more likely to stay in engineering.”**

— SHAWN S. JORDAN, AN ASSOCIATE PROFESSOR AT THE IRA A. FULTON SCHOOLS OF ENGINEERING

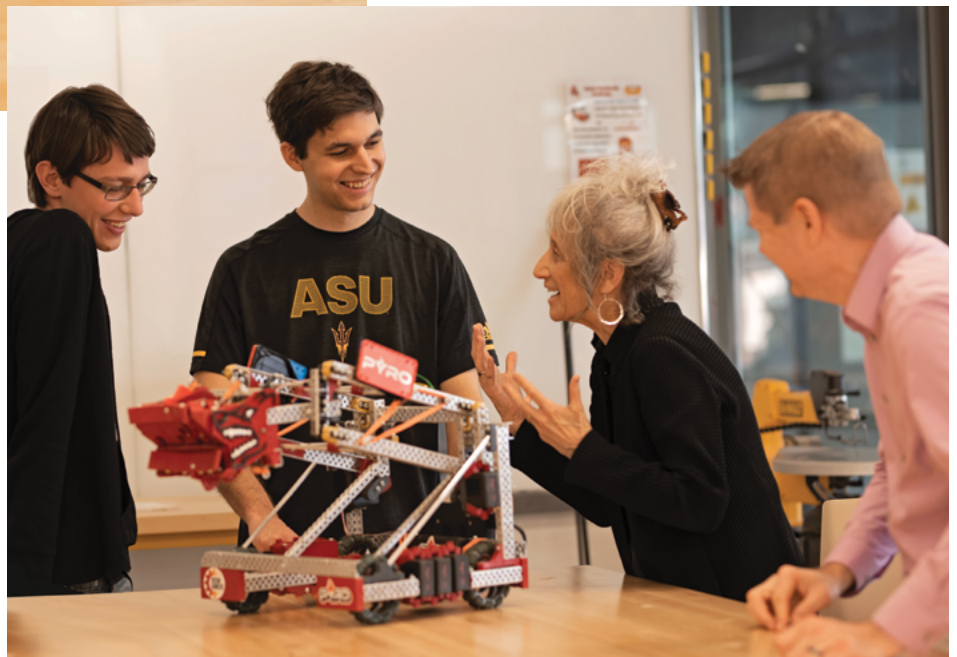
using the process in your own life.

“We worked really hard figuring out the structure of the book,” Lerman says. “It’s simple, straightforward and not fancy.”

Lerman’s dream for the book is that more people will find out about the process. “I hope they will be excited about the variations they see,” she says. “Live with it, try it and read these stories.”

Another way to become more adept with the process is to take a workshop with Lerman or a CRP-certified practitioner. Lerman coaches everyone along and sometimes halts the process to return to a previous step to go deeper, points out Sumana Sen Mandala, a CRP-certified practitioner, or to explain the step’s purpose better.

“I was struck and continue to take inspiration from this ‘time out’ idea in CRP,” Mandala says. “There is such wisdom in the reflections




Lerman does on the spot on the way the group is using the process.”

Another idea is to consider working with teachers who use CRP in their arts programs or classrooms. However you go about working with CRP, Lerman encourages you to begin trying it and practicing it. ■

## Apply the Critical Response Process

Go to [lizlerman.com/critical-response-process](https://lizlerman.com/critical-response-process) to watch videos demonstrating the process, see upcoming training opportunities and more.



Dense, molecular hydrogen, which is around -200 °C (approximately -300 °F). The colder gas provides an environment for stars to form.

## STUNNING VISTAS

### The dawn of time

After the James Webb Space Telescope launched in December 2021, the first thing researchers observed from the images are galaxies undetected to Hubble. The images will help astronomers look further back to the beginnings of the universe and allow students, including third-year astrophysics graduate student Rosalina O'Brien, to join in the discoveries.

"The diffuse light that I measured in between stars and galaxies has cosmological significance, encoding the history of the universe. I feel fortunate to start my career right now — JWST data is like nothing we have ever seen, and I'm excited about the opportunities and challenges it offers," O'Brien says.

Adds Rogier Windhorst, Webb interdisciplinary scientist and ASU Regents Professor: "We have about 18 targets with Webb this first year. A lot more of this is coming. Stay tuned. It will be mind-boggling." Watch Webb videos at [sese.asu.edu](https://sese.asu.edu).

Located in a nebula, 200,000 light-years away, a dynamic star cluster known as NGC 346 has been brought into vivid view by NASA's James Webb Space Telescope Near-Infrared Camera.



# Reach new heights

What looks like the head of a dragon are areas of active star formation.

The pink gas represents energized hydrogen, which is typically as hot as around 10,000 °C (approximately 18,000 °F).

As stars form, they change the environment. The effect of this is seen in the ridges, which are created as the light of these young stars breaks down dense clouds.

**From  
Belarus  
to Intel**  
“I never  
thought I’d  
have this  
opportunity.”  
**38**

**Made in  
Arizona**  
Powering  
the world’s  
devices.  
**44**

**Aliaksandr “Sasha” Sharstniou (right) and Bruno Azeredo, an assistant professor of manufacturing engineering in the Ira A. Fulton Schools of Engineering.**





**FROM BELARUS  
TO FULTON SCHOOLS  
OF ENGINEERING  
TO INTEL**

**“I never  
thought  
I would  
have this  
opportunity.**

**Aliaksandr “Sasha” Sharstniou patented a scalable fabrication process while at ASU — and now works at Intel**

**Story by MONIQUE CLEMENT, Photography by ERIKA GRONEK**

**You never  
know where  
you will  
end up.”**

As a materials science undergraduate in Belarus, Aliaksandr “Sasha” Sharstniou liked physics, chemistry and making things with his hands. Bored with an extensive lesson on old bipolar transistors in one of his laboratory classes, he spoke up about wanting to move on and talk about newer, more advanced semiconductor technologies.

His lab instructor there said, “It’s not like you’re going to be working at Intel.”

Ten years later, that’s exactly where he is. Sharstniou, ’22 PhD in materials science and engineering, has started a position as a

nanoimprinting, or Mac-Imprint. Sharstniou’s innovative technique, for which he holds a U.S. patent, could contribute to industrial advances in semiconductor manufacturing processes in the next five or 10 years.

Bruno Azeredo, assistant professor of manufacturing engineering and Sharstniou’s doctoral advisor for more than five years, says Sharstniou’s work is helping to overcome a major hurdle in the semiconductor industry’s quest to develop microelectronics that use optics, or signals made of light, instead of electrical signals.

“Miniaturizing fiber optics

structuring and scalability that are so relevant.”

### **A difficult start**

Raised by a single mother and his grandparents in Vitebsk, Belarus, Sharstniou and his family struggled financially.

“My mom is a doctor, but in Belarus, doctors are not paid very well, so she had to work several shifts to make a living,” Sharstniou says. “Now I realize how much she was doing to make things work and I was lucky to have what I had back then.” Sharstniou had books on physics and chemistry, and later, a computer and dial-up internet.

After high school, his family helped him attend the Belarusian State University of Informatics and Radioelectronics. As part of a research group, he explored the fabrication of porous silicon and deposition of zinc oxide nanostructures onto it. Research, Sharstniou says, “definitely taught me about critical thinking, the careful design of experiments and about thoroughness.”

### **Serendipity in Spain**

Sharstniou and his friend and classmate, Stanislau “Stas” Niauzorau, ’22 PhD in materials science and engineering, attended a semiconductor conference in Spain where they met Azeredo.

Azeredo remembers meeting the two young researchers who were knowledgeable about his work. He invited them to join his new lab at ASU. He was just beginning his faculty position at ASU.

“Your first PhD students are the people who build everything you

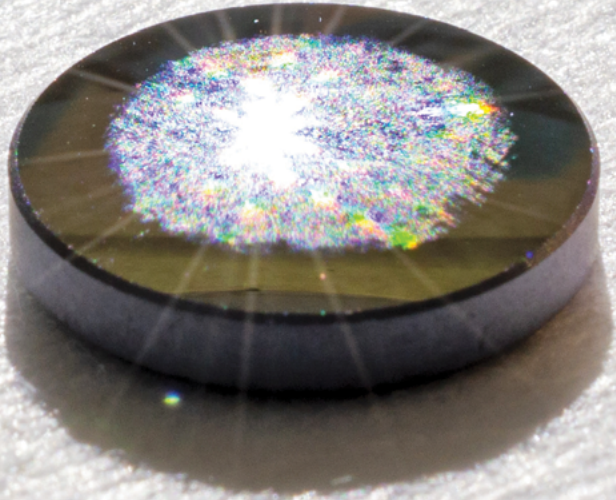
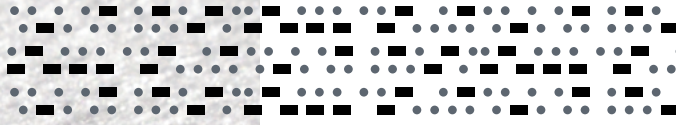
**His lab instructor in Belarus said, “It’s not like you’re going to be working at Intel.”**

packaging R&D engineer at the Intel advanced packaging research and development facilities in Arizona, a position he was hired for as he was finishing his doctorate from the Ira A. Fulton Schools of Engineering.

“I never thought I would have this opportunity,” Sharstniou says. “You never know where you will end up.”

His doctoral research focused on creating a scalable fabrication process for optoelectronic semiconductor devices called metal-assisted electrochemical

has been a gigantic challenge both from a design standpoint, because the devices have to be designed in novel ways, and in manufacturing because it involves heterogeneous materials and novel manufacturing processes,” says Azeredo, a faculty member in the School of Manufacturing Systems and Networks, part of the Fulton Schools. “Sasha’s contribution is developing a way to make these optical materials with silicon and delivering metrics in resolution, 3D



**Sasha Sharstniou's patented technique for optical metasurfaces involves pressing a 3D stamp coated in a noble metal like gold against a silicon lens while immersed in a chemical solution. Once "imprinted," onto the lens, the lens diffracts a rainbow of colors.**

see in the lab," Azeredo says.

Sharstniou was thrilled by the invitation, but getting to ASU would be difficult. It meant leaving behind his wife, Aksana Atrashkevich, who was pursuing a bachelor's degree in Belarus. And it required the help of his family to pay for a plane ticket and the move far from home.

Sharstniou says he was grateful to have Niauzorau with him as they built Azeredo's lab. "Being able to participate in the discussions of what we need, what is the future direction of the lab and how it will be developed — it was a very unique experience that I will cherish," Sharstniou says. "It led to several months of overnight work, but I also liked it because I was working with my friend."

**Achieving results at ASU**

One of Sharstniou's most rewarding moments was when he finally held something he made — a successful product of his innovative fabrication technique.

Optical metasurfaces require the creation of tiny 3D structures that interact with light in a unique way. Sharstniou was tasked with fabricating those structures on a silicon lens to demonstrate the versatility of the Mac-Imprint process. The technique involves pressing a 3D stamp coated in a noble metal like gold against a silicon lens while immersed in a chemical solution. Using an electrochemical corrosion process, 3D features of the stamp are then etched, or "imprinted," onto the lens.

"It was kind of a crazy idea. We took flexible, stretchable nanosponges that are typically

**New Economy Initiative  
impact on Arizona**

|                                   |                                |                          |
|-----------------------------------|--------------------------------|--------------------------|
| <b>40K</b>                        | <b>\$6.9B</b>                  | <b>100+</b>              |
| <b>New high-wage jobs by 2041</b> | <b>Economic output by 2032</b> | <b>Industry partners</b> |

Learn more at [neweconomy.asu.edu](http://neweconomy.asu.edu)

|   |   |
|---|---|
| <b>30K students enrolled in STEM</b>  | <b>ASU is #4 in the U.S. for undergrad STEM degrees</b>         |
| from all U.S. states and 156 countries, making ASU a premier, international technology and engineering powerhouse | ahead of UCLA, University of Michigan and UC San Diego          |
|   | <b>3 ASU engineering programs in top 10 for remote learners</b> |



**Sasha Sharstniou and Aksana Atrashkevich, who was pursuing a bachelor's degree in Belarus and later joined her husband at ASU.**

meant to filter water and inflated them like a balloon to conform to the surface of the lens," Azeredo says. "As a graduate student, I didn't think of doing some of the things he did, so I'm proud of him."

Azeredo and Sharstniou remember the first time the process was successful after years of work. Seeing the etched surface of the silicon lens diffract a rainbow of colors created a huge moment of joy.

Earlier parts of this work provided a significant amount of the preliminary results that led to Azeredo earning a prestigious 2020 National Science Foundation Faculty Early Career Development Program (CAREER) Award.

Sharstniou's major contributions to this research over the past few years also led to his being the first author of research papers published

in the Proceedings of the National Academy of Sciences and Advanced Materials, two of the top journals for science and engineering.

With the help of Azeredo, his other collaborators and the resources at ASU – lab facilities including the Eyring Materials Center and access to the latest research literature, things he only dreamed about in Belarus – Sharstniou has had an amazing journey, and it's still in progress.

### **Onward to Intel**

Azeredo says Sharstniou had multiple offers of postdoctoral research positions from top 10 universities. His skills in a variety of fields – electrochemistry, electrical and mechanical engineering, materials science and more – are in high demand. But meeting his prospective

manager at Intel made Sharstniou sure about his choice to start his industry career.

Sharstniou looks forward to a highly research-oriented position requiring him to establish a state-of-the-art lab and develop new technologies, processes and equipment for semiconductor chip interconnects. He's excited about those professional opportunities, but also for what they mean for his family.

His wife joined him in the U.S. in 2018 and was accepted into ASU's environmental engineering doctoral program under Fulton Schools Assistant Professor Sergi Garcia-Segura.

"Understanding that your efforts are actually used to make people's lives better, that is important to me," Sharstniou says. "I hope my future work will do that." ■



# A fresh perspective on insurance

As ASU Alumni Association's preferred brokerage, VIU by HUB is here to help the Sun Devil community find personalized home and auto insurance options. With expert advice and fast, free quotes that match your needs, insurance has never been this easy.



Get an auto insurance quote



Get a homeowners insurance quote



**“This facility is an incredible testament to global collaboration, to TSMC’s ingenuity, and it is an important milestone for advanced manufacturing in America.”**

– TIM COOK, CEO OF APPLE, TSMC CUSTOMER

## 10,000+ jobs

**in high-paying, high-tech roles, including 4,500 direct TSMC jobs**

## Near zero

**liquid discharge. All water used will be recycled, recovered and reused.**

SOURCE: TSMC

# Made in Arizona to power the world’s devices

Taiwan Semiconductor Manufacturing Company announced that in addition to its first Arizona fabrication facility, which drivers can see in North Phoenix off the I-17, it has also started the construction of a second fab. The first is scheduled to begin production in 2024, the second in 2026. The overall investment for the two fabs will be approximately \$40 billion, representing the largest foreign direct investment in Arizona history and one of the largest in the history of the U.S. “ASU will work to provide the talent to support the workforce that TSMC needs and research that is of value,” says Michael M. Crow, president of ASU, which is an education partner of TSMC.

Learn more about ASU’s work in semiconductors and with local partners at [neweconomy.asu.edu](https://neweconomy.asu.edu).





#### FROM CLASS TO FAB

TSMC recruiter Alexandra Moulinet and early talent manager Roxanna Vega meet with students outside the Engineering Center building G, as they and another representative from TSMC visited ASU to speak with students. The company held information sessions about employment opportunities now and in the future. TSMC is the world's largest contract chipmaker and is constructing two major chip fabrication plants in the northwest Valley.

To learn more about engineering careers visit [career.engineering.asu.edu](https://career.engineering.asu.edu).

TRUE CRIME

## CS'fly': Insect research at ASU West campus holds clues to crimes

Ten minutes after a murder, blowflies arrive on the scene, says Assistant Professor Jonathan Parrott. The timeline of blowfly to maggot can prove useful to a forensic team when solving a murder.

Not only is a blowfly's life cycle helpful to investigators but, like humans, blowflies respond differently to outside conditions. A blowfly native to Phoenix is different from one in Iowa. With proper identification, a blowfly can tell you where the body has been, where it was moved, for how long and if it was covered or buried. Parrott and several students are developing one of Arizona's first genetic and developmental databases of forensically important blowflies to assist in murder cases. Sydnee Wedel is one of those students. She has worked in the lab for two years. "I really want to help solve crimes," Wedel says. "And my background here is giving me the edge I need to work in a crime lab."

Learn more at [newcollege.asu.edu/forensics](https://newcollege.asu.edu/forensics).

Lab manager and forensic psychology graduate student Sydnee Wedel checks a sample in a blowfly-filled cage in Assistant Professor Jonathan Parrott's forensic entomology research lab on ASU's West campus.





# Join forces

## **Outside in**

A building bridging our ancient past to our thriving future.

**48**

## **Setting the scene**

ASU alumni are introducing Postino to food cities across the nation.

**54**

## The skin

The building is on track for LEED V4 Platinum-certification and clad in a shell of glass fiber-reinforced concrete panels that absorb and store less heat. The panels' design is inspired by a saguaro's orientation to the sun. South-, east- and west-facing windows are heavily shaded by the angled concrete panels, while the north-facing windows are barely covered.



Professor Barzin Mobasher in the Ira A. Fulton Schools of Engineering says that the building's reinforced concrete uses small glass fibers (picture right) to save materials without sacrificing strength, cutting the building's need for concrete by 35%.





# Outside in

## **A building bridging our ancient past to our thriving future**

The desert is a place that tells stories. Petroglyphs. Tire tracks. Paw prints. Who was here. What they did. And so it is with the Rob and Melani Walton Center for Planetary Health, a building of the desert.

The building is home to the Julie Ann Wrigley Global Futures Laboratory, the Global Futures Laboratory, the Global Institute of Sustainability and Innovation, the Rob and Melani Walton Sustainability Solutions Service, the College of Global Futures, the School of Sustainability and the Institute of Human Origins.

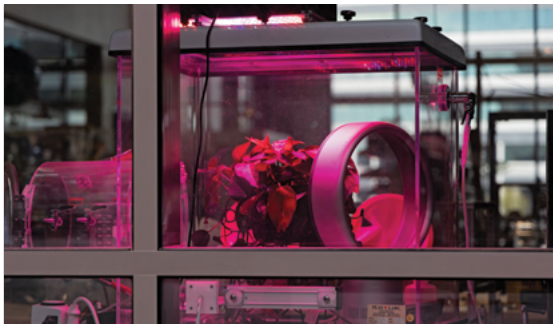
The area near the corner of University Drive and Rural Road, where the Rob and Melani Walton Center for Planetary Health now stands, has been a crossroads for the region since ancient times.

## A gathering place

The site has long been a meeting place. Today, it's one of the busiest intersections in the state at the corner of East University Drive and South Rural Road in Tempe. A thousand years ago, the Akimel O'Odham and the Piipaash people brought foods like mesquite pods here. There was a foot path and, later, a stagecoach route. Waters flowing through here once powered the Hayden Flour Mill.



The original canal still runs through the courtyard. Below is the Center for Negative Carbon Emissions, which advances technology to capture carbon from the air.





Climb the steps and traverse history from the ancient to a thriving future. After the Ancient Technology Lab on the first floor, on the second floor, the Lucy skeleton comes into view – one of the oldest known human ancestors, discovered in 1974 by ASU paleoanthropologist Donald Johanson. Going up takes you into interactions with scientists across disciplines working to create solutions to climate challenges.

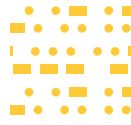


Students learn about the ancient past by working with raw materials in the lab, like stone, to make tools.



The Institute of Human Origins studies the science of our place in the world and how we came to occupy it.

Learn more about the building and the work of ASU's Global Futures Laboratory at [globalfutures.asu.edu](https://globalfutures.asu.edu).



# Where does my water come from?

Water has been in the news a lot lately. Despite living in a desert city like Phoenix, it's easy for me to take water for granted.



I turn on the faucet and there it is, a trusted friend who is always there for me, whether it's filling up my water bottle or jumping in a pool on a hot summer day.

So even though water is pretty much my bestie, I have never taken the time to really understand exactly how water reaches my home. Where does water in Arizona actually come from? I need answers, so I turned to experts, like Sarah Porter.

-LUU DAGDA, '14 BA,  
ASU VIDEO EDITOR

## Sarah Porter, director of Kyl Center for Water Policy



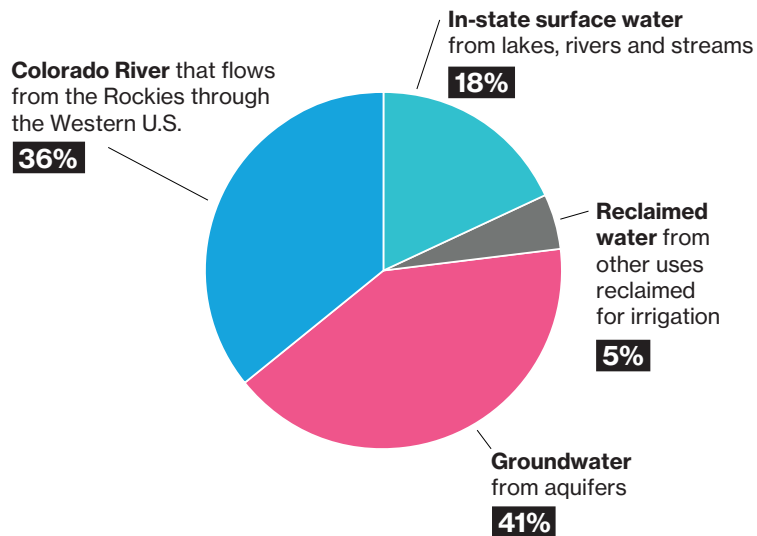
helps policymakers make decisions about water, and answers questions about Arizona's water resources.

Learn more at [azwaterblueprint.asu.edu](http://azwaterblueprint.asu.edu).



## Arizona's water supply

Four sources supply Arizona's water



## Arizona's total annual water demand is roughly 7 million acre-feet

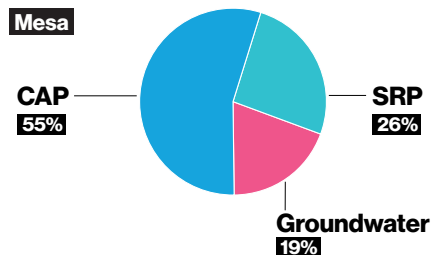
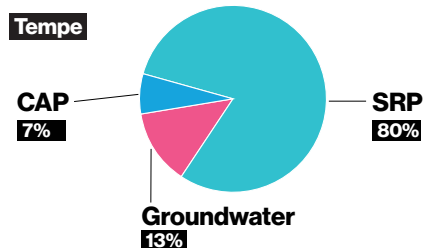
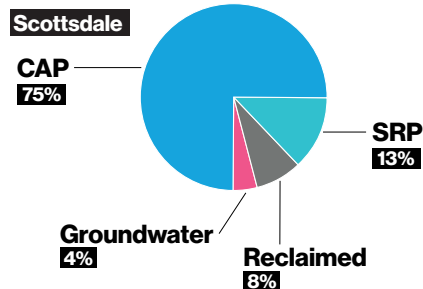
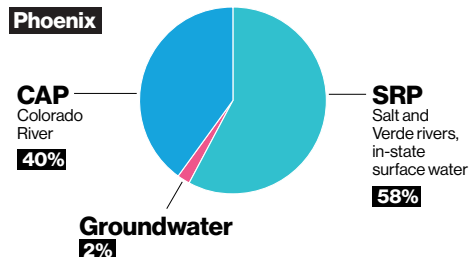
across industrial, municipal and agricultural sectors.



An acre-foot of water is roughly **326,000** gallons and supplies three households with a year's worth of water.

## Water used by source

Each city uses water from different sources, which may be different from cities next door.



SOURCES: CITIES OF PHOENIX, SCOTTSDALE, TEMPE AND MESA

The majority of water for residential use in Arizona comes from two systems.



**Central Arizona Project**  
Water in the CAP system is brought in from the Colorado River through a **336-mile system** that begins at Lake Havasu and ends in Tucson. Melted snow from the Upper Rockies feeds the supply.



**Salt River Project**  
Water from the SRP system begins as **melted snow** that flows down the mountains and into the Salt and Verde rivers.

On average, SRP water travels about **150 miles** from the source.

“I have a newfound appreciation for the journey water took to get here. I also like the thought that my water bottle is filled with melted mountain snow. And a little bit of **magic**.”

- LUU DAGDA '14 BA IN ENGLISH LITERATURE



JOIN





# Setting THE scene

**ASU alumni are taking Postino to food cities across the nation**

**Story by** ALLYSON REEDY

**Photography by** COURTNEY LIVELY, '07

It's not even 3 p.m. on a Wednesday, and more than half of the tables on Postino's sweeping patio are already taken over by a diverse group of diners. There's the mother-daughter duo alternately bonding and bickering over charcuterie, some guys tapping away on their laptops, pockets of friends, and a couple grabbing some vino with their dog.

If you've been to a Postino – and surely you've been to at least one of the Valley's eight outposts of the popular wine bar and cafe – then you recognize this scene. Except this Postino isn't in Arizona; it's perched on a sloping street in Denver's food-competitive LoHi neighborhood.

Postino currently packs patios in four states, including in metros



like Denver, Dallas, Atlanta and Irvine, California.

Lauren Bailey, '02 BA in communication and fine arts, is co-founder and CEO of Upward Projects, a food and beverage-focused group that operates 25 Postino locations (and counting), along with Windsor, Churn, Federal Pizza and Joyride Taco House. Together with co-founders and fellow ASU alumni Craig DeMarco, '02 BA in art, and Kris DeMarco, '96 BA in communication, Bailey has helped energize Phoenix's food scene — and taken it beyond Arizona.

Bailey's team includes more than 15 ASU alumni in positions from finance to marketing to HR to design. A few include Rosana DeMar, '17 BS in interdisciplinary studies, P and C manager; designer Sam Hendricks, '19 BS in graphic design; and Aaron Kimberlin, '06 BS in housing in urban development, director of art and restoration.

With more than two decades of dedication, Bailey and her team have helped the Valley create a unique food community and share it with others.

### **A rising food city**

"I think the culinary landscape is just in its teenage years," Bailey says of Phoenix's restaurant scene. "We're right on the precipice of these neighborhoods becoming clearly defined and emerging with clear identities. A ton of people have moved here that really love food, and there's a growing demand from Phoenicians. Chris Bianco, the James Beard



Lauren Bailey, '02 BA communications and fine arts, pictured at the Upward Projects headquarters, is co-founder and CEO of Upward Projects and is on the ASU Foundation board of directors.



Award-winning chef and owner of Pizzeria Bianco, set the stage, and then eyes turned toward Phoenix and we got more attention.”

As a testament to this, Kai Restaurant at the Sheraton Grand at Wild Horse Pass, was once again named a Forbes Travel Guide Five-Star restaurant this last year. Other accolades come from nationwide food critics, like Miami-based writer Matt Meltzer, who in 2019, wrote a story for Thrillist declaring the Phoenix metro area’s food scene worthy of “America’s A-List.”

“Food and restaurant buzz helps attract people,” Meltzer says. “So much of travel is going to have experiences you can’t have at home, so obviously if there’s something you can eat or drink in a city that’s totally unique, then people will want to go there.”

And a notable food scene helps mark a city as a place with culture. This, in turn, fuels the city’s economic diversity and helps make a city a place where people want to live.

### A champion for Phoenix restaurant culture

When a Postino opens up in a Denver or a Houston, the goal is to bring that welcoming, community feel that Phoenix does so well to a new market. That’s why Postino has been such a successful ambassador for Phoenix food culture — because it fits in so seamlessly into whatever neighborhood it joins.

“We wanted to be this spot that the community could gather in, however they wanted to,” Bailey

**“We wanted to be this spot that the community could gather in, however they wanted to ... there’s a high level of intention and thoughtful design that goes into creating that sort of space.”**

— LAUREN BAILEY,  
CO-FOUNDER AND  
CEO OF UPWARD  
PROJECTS

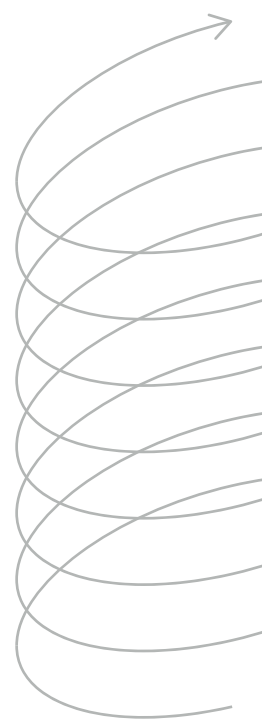
says. “To some people we’re a bar, to some we’re a restaurant, and to some we’re a co-working space. There’s a high level of intention

and thoughtful design that goes into creating that sort of space.”

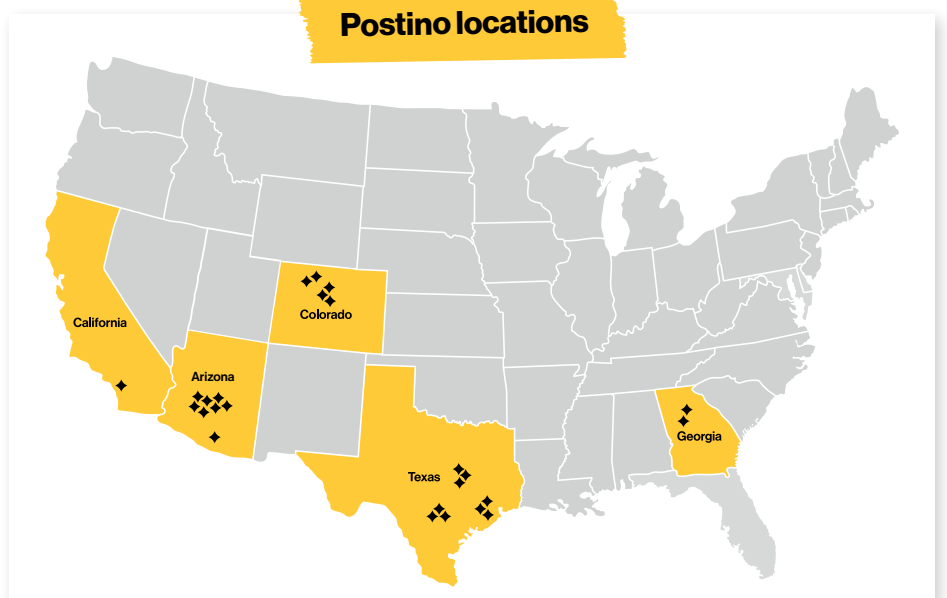
Creating that space starts with the building, Bailey says. And Bailey’s design team loves to rehab mid-century buildings.


The first Postino opened inside an old post office, and Upward Projects has continued the trend of repurposing buildings of a certain age. Postino Central lived another life as the iconic Katz Deli; Denver’s LoHi Postino was a former bookbinding factory and now features a book wall to pay homage to the history; two have been

former gay bars and feature their own unique art walls to celebrate the buildings’ pasts; and Postino Annex resides in an old ASU art



### Postino locations





building where Bailey attended classes. The restaurants are an extension of their abodes, telling the buildings' stories.

Next comes the décor. There's no set blueprint for the vintage furniture or eclectic light fixtures. Everything you see lives only there, because what works in Kierland doesn't work in LA.

"Other companies prize efficiency. We take the opposite approach. We want to be thoughtful, which is the enemy of efficiency in some ways, and we're OK with that," Bailey says.

If there's a common denominator to Upward Projects' restaurants, it could be the patios, which Bailey describes as being "100 percent non-negotiable."

When you're eating and drinking alfresco, you're going to want to nibble on snacky things, the little bits of this and that, which are fun to share and dig into. Things like sweet potato wedges with Calabrian chili tahini, meaty skewers primed for dunking into creamy garlic yogurt, and bruschetta boards gussied up with prosciutto and figs, smoked salmon and pesto, and peppers and goat cheese. You want to drink prickly pear lemonade and refreshing wines that make you feel like you're on vacation somewhere you've never visited. Or sip a local beer or wine that your really fun aunt would love.

Beverage director Brent Karlicek is "the root of it all," Bailey says.

Karlicek ensures Postino stays true to its mantra, and you'll find

**“Postino helped codify what I think of as the Phoenix millennial wine bar aesthetic — stylish but also casual, fancy but not too fancy. A sort of one-size-fits-all third space for dates, birthday parties and happy hours.”**

— PATRICIA ESCÁRCEGA,  
FORMER DINING  
CRITIC FOR THE  
LOS ANGELES TIMES

glasses and bottles of wine on virtually every table, every day from open to close. The volume of wine Postino orders allows Karlicek to procure long-standing relationships with premium wine growers and producers that otherwise might be out of reach.

Once the physical location and menus are in place, the next step is hiring people to work there. "The staff brings life into the space and design," Bailey says.

People certainly feel connected to their local Postino. Denver LoHi general manager Jen Gray-Beery says that COVID-19, in spite of the shutdowns, brought the staff and guests closer.

"The pure, raw humanity at that time was next level," Gray-Beery says. "We saw a different side of people. We had a regular

who'd come in four times a week before, and during the closure he came in every few weeks and dropped \$500 to distribute to the staff. People don't do that if they don't feel connected to a place."

### **Community and diversity through food**

Patricia Escárcega has had a front row seat to Phoenix's growing restaurant scene. After working as the dining critic for Phoenix New Times and for The Arizona Republic, she moved to the Los Angeles Times to be a restaurant critic from 2018 to 2021. She graduated from ASU in 2003 with BA degrees in English literature and political science.

"In the decade or so that I followed the city's food scene closely, I watched Phoenix's dining scene become more diverse, more attuned to native and regional ingredients, and generally become more assured of itself," Escárcega says. "The number of restaurants devoted to northern Mexican regional cooking blossomed, as did the city's Chinese and Korean dining scene. It's been thrilling watching it grow."

Escárcega was living in Phoenix when Postino was founded, and she likens the success of Upward Projects with another local restaurant group that's expanded beyond Arizona: Fox Restaurant Concepts with Flower Child, Culinary Dropout and Blanco.

"Postino helped codify what I think of as the Phoenix millennial wine bar aesthetic — stylish but



also casual, fancy but not too fancy. A sort of one-size-fits-all third space for dates, birthday parties and happy hours,” Escárcega says.

That’s why Upward Projects chose Postino as its expansion vehicle. It appeals to a variety of people, helping it resonate beyond city and state lines.

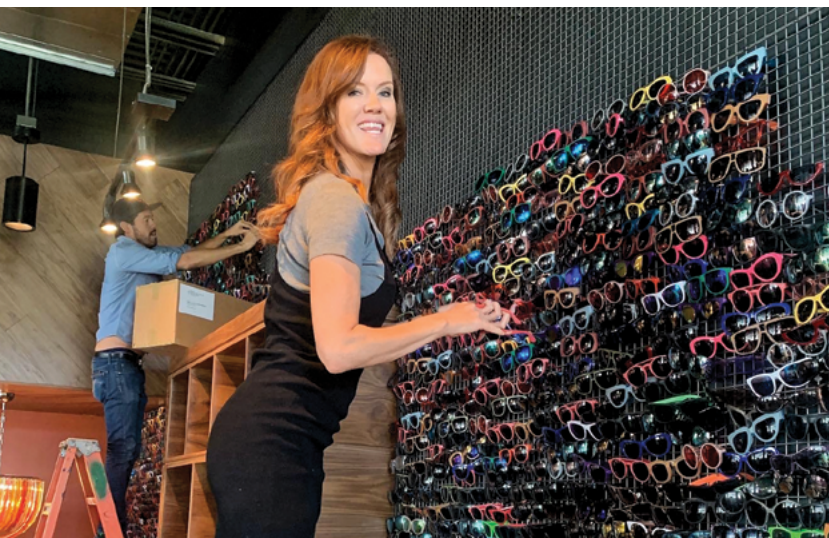
“It straddles sophistication and approachability,” Bailey says. “You can roll in with flip-flops or dressed to the nines and fit right in. Whether you know a lot about wine or not, you’re still going to feel comfortable here. And it was the most unique of the bunch [of the Upward Projects restaurants].”

That approachability attracted Los Angeles-based private equity firm Brentwood Associates, and with more investment behind the brand, Upward Projects is looking to take Postino even further. It’s got its sights set on moving into more new markets on the East Coast and expanding deeper into California, Texas and Colorado, too.

So yes, the packed patios of mother-daughter duos, groups of happy hour-going friends and telecommuters wanting a change of scenery might look familiar, but it’s because these sorts of eaters are most everywhere. And soon, Postino might be too.

“ASU fostered a unique sense of connectedness to other like-minded people, and exposed me to so many experiences that I couldn’t have duplicated,” Bailey says. “We really try to create the same environment within our restaurants.” ■

Above: Postino Annex in Tempe used to be a university art building where Lauren Bailey took classes. Below: Denver’s Postino 9CO features a wall with over 6,000 pairs of sunglasses.





TO THE BALL GAME

## Baseball stars

Nine alumni played Major League Baseball in the 2022 season. They're among more than 50 Sun Devils in professional baseball worldwide.

**Austin Barnes**

Los Angeles Dodgers  
at ASU 2009–2011

**Merrill Kelly**

Arizona Diamondbacks  
at ASU 2010

**Brian Serven**

Colorado Rockies  
at ASU 2014–2016

**Ryan Burr**

Chicago White Sox  
at ASU 2013–2015

**Deven Marrero**

Miami Marlins  
at ASU 2010–2012

**Spencer Torkelson**

Detroit Tigers  
at ASU 2018–2020

**Kole Calhoun**

Texas Rangers  
at ASU 2009–2010

**Seth Martinez**

Houston Astros  
at ASU 2014–2016

**Trevor Williams**

New York Mets  
at ASU 2011–2013

Get the Sun Devils' spring baseball schedule  
at [thesundevils.com/sports/baseball](https://thesundevils.com/sports/baseball).



# Play like a Sun Devil®

The first overall pick of the 2020 MLB Draft, alum Spencer Torkelson played in 110 games for the Detroit Tigers last year, smacking eight home runs and 28 RBIs.

## **Swim and Dive sweep meet**

Teams win every single event.

63

## **All-American soccer player**

Joins dozens of other Sun Devils.

63



## Sun Devil Athletics maintains all-time best GSR

Sun Devil Athletics has matched its all-time high of 92% Graduation Success Rate for its student-athletes, the NCAA announced. SDA has either maintained or surpassed its all-time best GSR every year since 2008. In addition, eight teams posted GSR scores at 100% – men's basketball, women's basketball, women's golf, gymnastics, lacrosse, women's swimming and diving, and women's tennis and triathlon.

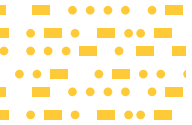


## Golf Channel ranks Sun Devil Women's Golf No. 1 in the nation

Sun Devil Women's Golf signed a historic recruiting class ranked No. 1 in the nation by Golf Channel. Paula Schulz-Hanssen, Beth Coulter and Patience Rhodes represent one of the most talented first-year groups in program history.

Head Coach Missy Farr-Kaye, who was inducted into the Arizona Golf Hall of Fame last October, is in her eighth season with ASU. She is also a three-time cancer survivor, defeating breast cancer twice, and most recently, colon cancer.

"Life isn't always fair, and it doesn't always make sense," Farr-Kaye told Golfweek in January 2021. "I want to prepare them for life. I feel that's part of my purpose in why I coach."



## Sun Devil Swim and Dive sweeps Arizona in record-setting season finale

The Sun Devil Women's and Men's Swimming and Diving teams won every swimming event in their season's final meet. The men's 165-point margin of victory and the women's 123-point margin of victory are the largest over Arizona since 1998.



Sophomore Léon Marchand cruised to a new NCAA record in the 400 IM on Jan. 21.

## Men's Swimming team moves to No. 1

The Sun Devil Men's Swimming and Diving team made history and broke records for the team and ASU this season. The Sun Devils have posted some of the fastest times in the nation. They currently own the country's best 200 free relay, the fastest 200 IM mark and the country's fastest 200 fly time. Additionally, their 400 free relay, 800 free relay and 400 medley relay are the second-fastest in the nation.

Follow their wins at [thesundevils.com/sports/mens-swimming-and-diving](https://thesundevils.com/sports/mens-swimming-and-diving).



## Academic All-Americans

Eva van Deursen is one of 62 Sun Devils who have made first-team Academic All-American status going back to 1962. Here is a look at a few of the superb athlete-scholars of the past few years.

### 2021-22

- Jorinde Van Klinken, '22 MGM, track and field
- Turner Washington, '20 BS, track and field
- Grant House, '22 BS, men's swimming
- Iman Isanovic, '22 BA, volleyball

### 2020-21

- Turner Washington, '20 BS, track and field
- Anthony Valencia, '19 BA, wrestling

### 2019-20

- Samantha Noennig, '20 BS, track and field

For a complete list, go to [thesundevils.com](https://thesundevils.com) and search "Academic All-Americans."



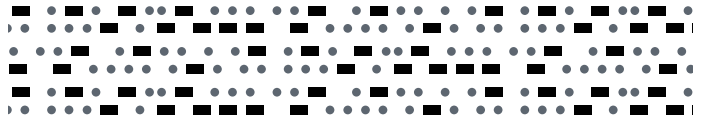
## Sun Devil soccer player makes the first-team All-American, joining numerous Sun Devils who've received the honor

Eva van Deursen came to ASU from Veldhoven, Netherlands, to play soccer but stayed for an education. She graduated with a bachelor's degree in kinesiology, and last December earned her master's degree in clinical exercise physiology with a 4.0 grade point average.

A midfielder on the Sun Devil Women's Soccer team, van Duersen was one of 34 student-athletes named to the 2022 Academic All-America women's soccer teams selected by the College Sports Communicators. She is the only Sun Devil named as a 2022-23 first-team All-American. The honor requires that a student-athlete be a starter or important reserve with at least a 3.30 cumulative GPA.

She is playing professional soccer in Germany, but wants to put her education to use.

"My plans would be to work as an exercise physiologist with a professional soccer team and improve the performances of the athletes using data like heart rate and fatigue indexes," van Deursen says.



### TRAILBLAZER

## Stella McHenry, first African American woman to graduate from ASU, rediscovered in photo album

Michele Neptune McHenry and her husband, Joseph McHenry, were slowly making their way through the photo album when they came upon the photos and name card.

The card, gray in tone, was about 1-by-2 inches. On it was a name: Miss Stella McHenry.

They were unsure who this young woman was or how she fit into the family on Joseph's side.

Their curiosity would lead to a genealogy project and then to an archivist at Hayden Library. It would lead to records that were incorrect, to a young girl from Clifton High School who became a teacher and, as it turned out, was the first African American woman to graduate from ASU. Stella McHenry graduated in 1925. Learn about Estella Rochelle McHenry, better known as Stella at [news.asu.edu](https://news.asu.edu) or [youtube.com/ASUNews](https://youtube.com/ASUNews) and search "Stella McHenry."



**Stella McHenry pictured with her brother, Lawrence.**



**Stella McHenry pictured in Miami, Arizona, in 1923.**



**The original Sahuaro yearbook photo when she attended Tempe State Teachers College, which became Arizona State University.**



In the shadow of uncertainty,

**an answer**

can light the way.

MAYO  
CLINIC



You know where to go.



# Micro-electronics are Arizona's future

ASU's MacroTechnology Works in Tempe is a one-of-a-kind facility that operates as both a lab and a fab, a national resource for microelectronics companies of all sizes.

## ASU is leading the way

Arizona State University's MacroTechnology Works facility in Tempe brings the public and private sectors together to develop the research and workforce Arizona will need as it transforms into a global hub for microchip manufacturing. **It's a win-win for ASU students and our state's new economy.**

**ASU** Arizona State  
University

[neweconomy.asu.edu](http://neweconomy.asu.edu)