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When will artificial intelligence really pass the test?

WASHINGTON STATE MAGAZINE SPRING 2023

FIRST GEN

YOUR SUPPORT OF THE FIRSTGEN@WSU FUND CREATES NEW OPPORTUNITIES

Did you know? More than 30 percent of WSU students are first generation, which means their parents have not completed a bachelor’s degree.

For these Cougs, having programs and resources that meet their specific needs can mean the difference between a successful WSU experience and a challenging one.

Aman Lowrey, a psychology major graduating in 2023, knows the importance of support for underrepresented students. “Being a first-gen student means ending a generational cycle and starting a new one. At WSU, there are tons of resources to help make that happen, and the donors who have given to first-gen programs are the reason we have such great support.”

Many of the vital programs and spaces that aid first-gen students like Amari are supported by WSU donors who, like you, are passionate about student success. By giving to the FirstGen@WSU Fund, you can help build the future of first-gen Cougs at WSU and beyond.

To learn more about WSU’s dedication to serving first-gen students—and how your gift can directly further their success—scan the QR code or visit first.wsu.edu.

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Washington State Magazine is published quarterly by Washington State University. Editorial office: IT Building 2013, 1670 NE Wilson Road, Pullman, Washington. 509-335-2388

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The Spring, Fall, and Winter issues of Washington State Magazine are distributed free to alumni, friends, faculty, and staff. The Summer issue is exclusive to WSUAA members and paid subscribers. Subscribe or gift the magazine for $25 yearly (magazine.wsu.edu/subscribe).

Change of address: Biographical and Records Team, PO Box 641927, Pullman, WA 99164-1927; address.updates@wsu.edu; 800-448-2978.

Washington State University is an equal opportunity, affirmative-action institution committed to cultural diversity and compliance with the Americans with Disabilities Act. This publication is available online as text only and in other accessible formats upon request: wsm@wsu.edu; 509-335-2388; 509-335-8734 (fax).

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many of the vital programs and spaces that aid first-gen students like Amari are supported by WSU donors who, like you, are passionate about student success. By giving to the FirstGen@WSU Fund, you can help build the future of first-gen Cougs at WSU and beyond.
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First Words

Vantage points

Japan truly opened my mind’s eye to a new culture and way of life. As a junior at Washington State University, I was fortunate to go on a year-long study abroad program to the Osaka area, where I lived with a Japanese host family, took classes, and studied the language. It changed me in countless ways.

That same experience—a new point of view gained from studying outside of the United States—began for me as a reality for a group of first-generation students in the past few years. As you'll read in this issue, the First-Gen Abroad program to Spain and Italy transformed students’ lives. And, as First at WSU director Angie Klimko says, “the impact only increases from there. One student going abroad can influence generations to come.”

Another avenue connects WSU’s research to an international experience: Fulbright awards. Students who receive these distinguished scholarships take their research projects around the globe with WSU’s support, as you'll read in this issue.

Research right here in Washington state creates meaningful change for people too. For example, biologists such as Georgina Lynch at WSU Spokane are making strides in understanding more about autism spectrum disorder, including early detection of autism through measuring pupil reactions in the eyes. The work could help families and health-care providers start interventions earlier for children.

Understanding different perspectives also applies to machines. WSU computer scientist Larry Holder and his team are part of a nationwide project to measure the artificial intelligence to adapt its thinking in unexpected circumstances. You can read about the battery of tests for AI in this issue, along with a short piece written by AI, with my assistance.

Machine learning is one of many strands of WSU’s research enterprise. Take a look at some of the achievements of the university’s scholars in this issue’s infographic.

Those accomplishments can be eye-opening. Beyond scientific inquiry, athletic feats such as the football kicking records of WSU alum Jason Hanson or the volunteer work of Nam Nguyen show us what’s possible.

All of our WSU experiences, from study abroad to research successes to helping others, can leave a profound effect on our lives.

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Advertising guide is online at magazine.wsu.edu/advertising
**TALKback**

Where’s Minshew?

The photo of the Cougars playing in a blizzard (Talkback, Winter 2022) reminded me of another game, much more recent, that was also played in an incredible, blinding snowstorm. And it was the Apple Cup game of 2018.

The QB that year was Gardner Minshew II, a truly spectacular character and player, and full of fun and great passes. He had led the Cougars to a great year. But, perhaps especially, being a southerner, he could NOT deal with the blowing snow, the blinding whiteout, and the Huskies ended up winning the Apple Cup. I believe the snow was lots thicker than in the storm shown in your photo from 1955.

I was surprised all that remarkable year that there were no write-ups on this player who gave the whole Cougar fandom so much fun. I have not lived in Washington since my graduation, following my husband to the Bay Area for a position at Stanford. I mention this only to say that the Stanford publications talk of their teams a lot more than do you. As you say, I was truly surprised that more stories on Minshew’s year were not published in your magazine at least.

And that was such a season full of excitement and cheer!

**HELENE FALKNOR WILSON ENGLAND ’51 Oregon**

Thank you for the letter, Helene. Gardner Minshew was certainly a shooting star through Cougar football. And that mustache is incredible. Since Washington State Magazine is quarterly, and we have a pretty lean crew, many of the articles are planned and completed a few months in advance. By the time Minshew had made his mark on WSU football, he was on his way to the NFL. That said, we always love to follow-up with Cougar alumni athletes, like this issue’s story on legendary WSU and Detroit Lions kicker Jason Hanson, so it’s possible Minshew could pop up in a story. Let us know if you have any ideas. Readers often ask where stories come from. While there are many channels, a number of stories come from readers, and we love to hear from all of you. If you know of a fascinating Coug story or would like to hear more about a topic, please tell us: magazine.wsu.edu/contact

— Larry Clark

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**Washington State Magazine Spring 2023**

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**Collaboration Hall at WSU Tri-Cities Opened the First Day of Fall Classes in 2021**

The building features state-of-the-art science teaching laboratories, interactive classrooms, study and collaborative areas, an open atrium and an outdoor amphitheater. It received a national design build project/team award in 2022. (courtesy WSU News)

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**WASHINGTON STATE MAGAZINE SPRING 2023**
MORE EXHIBITIONS FROM THE JORDAN SCHNITZER FAMILY FOUNDATION

JORDAN SCHNITZER MUSEUMS OF ART

JUVENTINO ARANDA: ESPERÉ MUCHO TIEMPO PA VER
August 23, 2022 – March 11, 2023

In Juventino Aranda: Esperé Mucho Tiempo Pa Ver (I Have Waived a Long Time to See), the artist searches for identity as a “Mexican and second generation American,” among social, political, and economic struggles and notions of the American dream.

Art: Y Lejaron Las Flores (The Funeral) detail, 2022.

JORDAN SCHNITZER MUSEUM OF ART
WASHINGTON STATE UNIVERSITY

ARLENE SCHNITZER VISUAL ARTS PRIZE
February 28, 2023 – April 29, 2023

The Arlene Schnitzer Visual Arts Prize is celebrating its 10th year! We are proud to see young artists rewarded and encouraged! This year’s award recipients represent work in a wide range of media. Recurring themes include racial identity and justice, everyday life, and the environment.


JORDAN SCHNITZER MUSEUM OF ART
PORTLAND STATE UNIVERSITY

ON EARTH: A FRAGILE EXISTENCE
April 2, 2022 – April 16, 2023

On Earth: A Fragile Existence highlights works from the Jordan Schnitzer Museum of Art’s permanent collection that reflect a multilayered understanding of humanity’s role in our shared ecology with the nonhuman, at-more-than-human, world.

The Art of Food
Oklahoma Contemporary Art Center • Oklahoma City, OK • 2/23/23 – 5/22/23

Storywork: The Prints of Marie Watt
Johnson Museum, Cornell University • Ithaca, NY • 2/11/23 – 5/13/23

Kara Walker: Cut to the Quick
Virginia Museum of Contemporary Art • Virginia Beach, VA • 3/9/23 – 6/11/23

Global Asias: Contemporary Asian and Asian American Art
USC Pacific Asia Museum • Pasadena, CA • 3/10/23 – 6/25/23

All Exhibitions from the Collections of Jordan D. Schnitzer and His Family Foundation provided at no cost to exhibiting museums.

Washington State Magazine

Students take classes in their host city, rooted in that city’s history and culture. On the Rome trip, for example, they participate in a “walking classroom,” where they visit the art and architecture they are studying. The courses count toward the students’ degree requirements, Klimko (’03 MA Comm.) says, so studying abroad doesn’t add additional time to a student’s degree completion, which can be a major concern for first-gen students.

First-gen students face concerns about and barriers to studying abroad that other students may not—particularly financial barriers, Klimko says. She works with students individually on financial aid and payment options and helps raise funds to support students in the program.

Last year, Gary Schneidmüller (’73 Bus., ’73 MA Ag. Econ.) and Chris Navan (’13 fed. Bus., ’14 MBA) donated to help offset the program and associated travel costs. Navan says his own experience as a first-gen student studying abroad motivated him to contribute.

“There’s a lot of growth and camaraderie that comes from studying abroad,” he says. “If I can give to someone from a similar background as me who may have decided not to go abroad because of limited financial opportunities, this is a good way for me to contribute that opportunity to someone in this program.”

Klimko says some students think study abroad isn’t in the cards for them because of financial barriers, fear of the unknown, and not knowing where to begin. “But it changes their lives, and the impact only increases from there. One student going abroad can influence generations to come.”

It made a world of difference to WSU students Tanya Rivera and Maritay Mendoza-Quiróz last summer. They shared the experience, in their own words, with Washington State Magazine.

To boldly go

BY RACHEL KOON, TANYA RIVERA, AND MARITAY MENDOZA QUIRÓZ

The experience of studying in a new country can seem out of reach for students who are first in their families to attend college. Expense and other hurdles may look like they outweigh the benefits. First-Gen Abroad at Washington State University removes those barriers.

After a two-year hiatus due to COVID, 16 students traveled to Rome, Italy, and 19 to Seville, Spain, last May, making that total cohort the biggest since First-Gen Abroad began in 2015.

“Coming out of the pandemic, I’m so excited that we were able to achieve two First-Gen Abroad programs,” says Angie Klimko, the director of First at WSU, which supports first-generation students. “We’re ready to continue providing a valuable international experience that sets our students apart.”

First-Gen Abroad starts before students even leave the United States, with a one-credit class that covers key information such as what to expect in their host country, cultural values and biases, how to get a passport, and what to pack. Two advisors lead the course and travel with the students to ensure they have a safe, positive experience.

The Arts

Nobody can discover the world for somebody else. Only when we discover it for ourselves does it become common ground and a common bond and we cease to be alone.

—Wendell Berry
We’re Up to the Challenge

Washington State University scientists are working to reduce the environmental impact of air travel.

We’re investigating and testing sustainable aviation fuels made from plants or waste streams and alternative fuels like liquid hydrogen.

It’s an effort spread across eight programs in three colleges on two campuses.

It won’t be easy, but we’re up to the challenge.

wsu.edu

Growing up, my parents would surprise my sisters and me on random weekends and take us on trips.

Whether that was visiting Seattle or the Oregon Zoo, or driving to other cities in Washington, I loved getting out and seeing new places.

Hearing that there was an opportunity to go abroad to Seville, Spain, through First-Gen Abroad had me convinced. I knew right away I wanted to learn about a different culture, travel outside of the country, and visit places I have always dreamed of, like Barcelona and Madrid.

While looking through the plane window, everything was feeling surreal. I was traveling to Spain! I was going to spend seven weeks of my college life in Europe, doing the first-generation study abroad program!

¡Miren llegue a las Europas!! was the first thing I said to my family when I arrived in Spain. Who would imagine, traveling abroad? Sounds crazy.

My time in Seville, Spain, was memorable. I was able to meet amazing individuals, take classes, and explore the city. Seville has so much history and meaning in every corner.

In Spain, everything is special, from the tapas bars to the beautiful architecture. In Seville, everything feels different. It’s literally another world. Walking to class was the best—I was able to enjoy the city and my own company. I listened to my own thoughts, and I allowed myself to feel and learn.

Studying abroad helped me to see life and the world from a different perspective. I gained knowledge from other cultures, people, places. Learning so much about myself, about self-awareness, and about personal change. I explored new cities and traveled to other countries too. I made it to Portugal, France, and the United Kingdom. Simply amazing!

As a Mexican immigrant, first-generation, and low-income student, I never imagined I would be studying abroad. This is the first summer since I arrived in the States five years ago that I didn’t work in the fields because I had the opportunity to be in Spain. I never imagined being on another continent. From selling oranges when I was a little girl in Mexico, to working in the fields since I arrived in the States, to now traveling to Spain, I did it! Now I see my own growth as a person because this study abroad program gave me a different perspective on life. Now, I won’t give up! Y me pondre las pilas!
 Una bienvenida a la WSU

Lourdes Reyna’s earliest memory is in the orchards.

That’s where her parents’ two seasonal farmworkers in Yakima, would line an apple bin with a blanket as a playpen for Lourdes and her little brother.

As soon as the children could carry a bag, they joined their parents picking fruit. Up at 4 a.m., she’d get dressed, help make lunch and ride to the orchard with her family. The kids would always fall asleep in the car on the way home.

“We were so tired at the end of the day,” Reyna says. “Picking fruit is very hard. I don’t know how my parents are still doing it for a living.”

She wanted to go to college, and her parents wanted that for her too. With experience of college and very little English, however, Reyna’s parents worried about their daughter’s safety and happiness on campus. They also struggled with the complexities of admission, registration, financial aid, and housing.

Since 2007, families like the Reynas have found answers and welcome at Washington State University’s La Bienvenida, a Spanish-language orientation for parents or caregivers of students who come from seasonal or migrant agriculture jobs.

La Bienvenida is their required WSU orientation, with information on student groups, registering for classes, financial aid, and the like. For families, it’s a chance to learn about programs and costs, to see how their child will live on campus, and to meet other parents.

“I think more than anything, La Bienvenida allowed me to see that I could go to college, that it was a possibility,” Reyna says. “It helped my mom build connections that made her comfortable sending us there and leaving us there.”

She says “us” because Lourdes Reyna was the first Reyna sibling, but not the last, to become a Coug. She was followed to WSU and La Bienvenida by her two younger sisters, Samantha and Anjelica. Her brother attended another institution.

“Having the program in Spanish told me that WSU is inclusive,” she says. “The people I met there, you truly felt they cared.”

La Bienvenida is a mandatory part of CAMP, the federally funded College Assistance Migrant Program for students whose families work in seasonal or migrant agriculture jobs. In 2022 for the first time, La Bienvenida was offered on WSU campuses in Pullman, Tri-Cities, and Vancouver. Thanks to a gift from Bob and Karen Felton, the expansion meant La Bienvenida served more than 350 students and families last May and June.

The goal of La Bienvenida is to ease the transition to college and set the foundation for a successful first year, both of which are strong predictors of college success, says Marcela Carillo Pattinson, director of undocumented initiatives at WSU, which includes oversight of La Bienvenida.

The success has been dramatic. The number of participants who continue to their second and third years of college and on to graduation can be more than a third higher than for other students of color at WSU Pullman.

The majority of students served by CAMP and La Bienvenida are first-generation college students, so programming includes a lot of basic information. But families also meet with specialists from the Human Development department who can help lead discussion of potentially touchy topics like social life at college. Families who participate in Pullman stay in residence halls and eat in dining halls.

“Me siento cómoda con la gente, nos recibieron con brazos abiertos.”

(‘I feel comfortable with the people here. They welcomed us with open arms.’)

— A COUG PARENT WHO ATTENDED LA BIENVENIDA

The success of programs like CAMP and La Bienvenida, plus the wide range of multicultural student services, has brought growing numbers of Latino students to the university.

In fact, WSU serves one of the largest numbers of undergraduate Latino students of any college or university in the state, according to data from Excelencia in Education, a nonprofit organization that researches and promotes Latino student success in higher ed.

“WSU is becoming a destination for our Latinx communities within Washington,” says Heim.

Lourdes Reyna—now Lourdes Reyna Alcala—graduated in 2012, majoring in criminal justice and sociology. She’s a community health development manager at Greater Oregon Behavioral Health Inc. in Hermiston.

She says she had accepted another college’s offer of admission before a friend invited her to visit WSU with her.

“It was during La Bienvenida,” she says. “The vibe when I walked into that room was so motivating. I had visited multiple campuses and I never felt this kind of vibe before. I knew right away WSU is where I needed to be.”

Steve Nakata ’86 contributed to this article.
KATE ZUMSTEG—2022 FULLBRIGHT

KATE ZUMSTEG (’05 English, ’06 MEd) has been an educator for 15 years, and the chance to improve her effectiveness as a teacher of at-risk youth prompted her to apply for a Fulbright US Student award. She is conducting research at Katholieke Universiteit Leuven in Belgium with a professor who is renowned for restorative justice studies. The concept calls for a focus on mediation and reconciliation rather than punishment to settle interpersonal disagreements.

Six years ago, after teaching for a decade in public schools, Zumsteg joined Rosemary Anderson High School East, a nonprofit alternative school in Portland, Oregon, that serves at-risk students who have been expelled from or dropped out of public high schools. Many students are without homes and many are adjudicated. “The chance to help create a positive learning and living environment with these youth, some of whom everyone else had given up on, made me decide to pursue a career (at that school),” she says. Zumsteg and her teaching peers have been specially trained and use mediation, peace rooms, counseling, yoga, and restorative justice techniques to help students.

But she was alarmed when she saw the decline in effectiveness during the COVID-19 pandemic when students were not at the school. Determined to learn how to better help them, Zumsteg discovered that Belgium has the best juvenile justice system in the world and that the use of restorative justice is a large part of its success.

In addition to her studies, she is visiting local schools, collaborating with law enforcement officials, working with judges and counselors, and volunteering with an organization that offers restorative justice services to students.

When she returns to Oregon, Zumsteg will share her knowledge and work to make programmatic changes based on what she is learning in Belgium. She will also reach out to community professionals such as probation officers “so that youth are given the best opportunities available to be rehabilitated.” Her ultimate goal is to implement practices and processes that can be used throughout all Oregon schools.

Read more about Zumsteg: magazine.wsu.edu/extra/Fulbright-Zumsteg

MELANIE KIRBY—2015 FULLBRIGHT—NATIONAL GEOGRAPHIC STORYTELLING FELLOWSHIP

The windows of bee specialist MELANIE KIRBY’s office in Santa Fe, New Mexico, look out over the foothills rolling up to the southern Rocky Mountains. Outside her building and just below her windows is a tiered garden and orchard where food and medicinal plants grow and artist-decorated beehives sit tucked under juniper bushes.

As the extension educator of land grant programs at the Institute of American Indian Arts, the location—and the job—suit her perfectly. “Being here is a blessing as this position promotes the Indigenous experience through artistry, scholarship, and leadership, and it is a great place for me to leverage with my Native American heritage and history.”

“Even though IAIA is a land-grant tribal college, we can’t have large livestock here—but we can keep bees, which suits me perfectly!” Kirby (’21 ML Entom.), credits aspects of her Fulbright—National Geographic Storytelling Fellowship with leading her to the tribal college two years ago. A long-time beekeeper and queen honeybee breeder, she pursued a Fulbright to complement her master’s degree. A Peace Corps assignment in Paraguay in the late 1990s spurred an interest in insects, which led to several bee-related field jobs in Hawaii, Florida, and Michigan, and then a bee business in northern New Mexico.

She came to WSU to learn research design, become a translator between beekeepers and scientists, and advocate for sustainable beekeeping environmental practices, including breeding programs and bee germplasm conservation.

Kirby’s Fulbright to Spain in 2019 allowed her to compare mating habits of American hybridized honeybees to endemic ones living on the Iberian Peninsula. She was also chosen to be a National Geographic storyteller, sharing her experience through blogs, photography, videos, podcasts, and presentations.

After just a few months, the COVID-19 pandemic closed international borders and she returned to the United States, leaving behind her equipment and personal belongings with a fellow Spanish beekeeper. She hopes to return to Spain to complete the project.

“every detail matters—particularly in science—we work to make programs that can be used throughout all Oregon schools.”

BEV MAKHANI

OUR STORY

Distinguished scholarship tradition

One wants to save the bees. Another desires restorative justice for at-risk high school students. These two and many other Washington State University alumni benefited from distinguished scholarships, such as Fulbright, that gave them a global perspective.

The first distinguished scholarship at Washington State College, a Rhodes Scholarship, took Spokane native and future leader in the US Bureau of Foreign and Domestic Commerce Shiel Hyde Black to the University of Oxford in 1907. Since his pioneering achievement, 345 Washington State students have been recognized as distinguished scholars.

While the Rhodes is hailed as the oldest international postgraduate award, additional prestigious and highly competitive scholarships have emerged—such as the Fulbright, Goldwater, Udall, Marshall, Truman, Schwarzman, and Gilman—to meet distinct US and global priorities. The Goldwater addresses the need for highly qualified professionals in STEM fields; the Fulbright expands perspectives through academic advancement and cross-cultural dialogue, and the Udall fosters education in Native American health care, tribal policy, and the environment.

WSU helps students apply for the awards through the Distinguished Scholarships Program. Since its establishment within the Division of Academic Engagement and Student Achievement in 2011, students have honed their applications with staff help. Program director April Seehafer (’93 English) works with applicants to understand their goals, the paths to accomplish them, and how those goals benefit the state, nation, and world.

The program has significantly elevated the number of WSU’s distinguished scholarships. After the first Fulbright recipient in 1949, one-third of all Fulbrights awarded at WSU have come since the Distinguished Scholarships Program began. There were five WSU Fulbright recipients in 2022, the largest number in a single year for the university.

“The Fulbright experience reinforced my independence and motivation, and validated my resolve about agriculture,” she says. “It also helped me to recognize that I can share my skills and enthusiasm for STEAM representation with Indigenous students and communities, and that led me to the Institute of American Indian Arts.”

“As a person with a mixed Indigenous, Iberian, and Caribbean heritage, I feel I can serve as a representation of marginalized peoples and am committed to help broaden the narrative of what is means to be a scientist, an artist, and an educator.”

Read more about Kirby: magazine.wsu.edu/extra/Fulbright-Kirby

Many other alumni received distinguished scholarships that led them to interesting places. Read their stories—or share your own—online at magazine.wsu.edu/extra/distinguished-scholars.

JULIAN J. REYES—2011 FULLBRIGHT

JULIAN REYES (’08 PhD Civ. Eng.), National Climate Hubs coordinator in US Dept. of Agriculture’s Office of Energy and Environmental Policy, sees himself as a science-teacher. His Fulbright took him to the University of Bonn in Germany, where he saw the need for international collaboration and science communication on climate change issues.

Read Reyes’s full story: magazine.wsu.edu/extra/Fulbright-Reyes

JUSTIN NIEDERMeyer—2016 FULLBRIGHT

Physics doctoral student JUSTIN NIEDERMeyer (’16 Physics, Music, German) wants to understand how the universe functions. As a physicist, he studies quantum computation to solve important mathematical problems that conventional computing can’t solve very efficiently. His WSU and Fulbright experiences in Heidelberg, Germany, gave him skills to succeed.

Read Niedermeyer’s full story: magazine.wsu.edu/extra/Fulbright-Niedermeyer

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Read Niedermeyer’s full story: magazine.wsu.edu/extra/Fulbright-Niedermeyer
WHEN WILL ARTIFICIAL INTELLIGENCE REALLY PASS THE TEST?

Artificial intelligence is getting very good at doing certain things.

Google’s AI team has unveiled impressive early detection and warning of floods and wildfires. AI can aid wildlife conservation by analyzing millions of animal images. Somewhat controversially, AI can generate art and write articles.

These AI specialists continuously improve on their tasks, but how do you measure an AI’s general intelligence, and its ability to adapt and react to unanticipated changes?

“Most AI systems are evaluated in a narrow set of problems,” says Larry Holder, a computer science professor at Washington State University. “It’s what we call an AI savant that might be really good at one problem and terrible at another.”

Holder and his research team at the School of Electrical Engineering and Computer Science are working toward measuring how more robust AI systems can solve a large array of tasks with unexpected twists: an IQ test of sorts for machine learning.

They started in 2018 with ARQ, a free tool to evaluate AI abilities, developed by Holder and Christopher Pereyda, then an undergraduate and now a WSU doctoral student. ARQ provides an environment to test and rank AI systems on tasks like playing video games, answering SAT problems, and solving the Rubik’s cube.

The timing of the ARQ effort coincided with Holder and WSU receiving a grant of just over $1 million from the Defense Advanced Research Projects Agency (DARPA) to develop and evaluate AI systems for their ability to handle novelty.

Eight teams run AI systems while four other teams, including WSU, throw unexpected challenges at the AIs in the project, DARPA’s Sciences of Artificial Intelligence and Learning for Open-world Novelty (SAIL-ON). Three tests, called “domains,” allow AIs to test their mettle in dealing with novelties.

The first test, CartPole, simulates a pole on top of a cart, with the goal of keeping the pole upright by moving the cart from side to side. Easy enough for an AI, until the WSU or another team introduces wind or an incline.

AI systems play a version of classic first-person shooter video game Doom for their next test. Specifically designed for AIs, VizDoom “players” must shoot their way through monsters while avoiding damage.

It’s pretty straightforward until Holder and his team introduce some surprises, such as teleporting enemies to other rooms or eliminating extra ammo. The AI might think, “I’ll shoot like crazy because I can just pick up ammo if I need more. And now suddenly, you don’t have that and so you have to change your strategy,” Holder says.

The third domain connects to a WSU research strength: smart home environments. Diane Cook, Regents Professor in computer science, leads several projects to bring AI into homes to help seniors and others who need assistance. She is also part of the SAIL-ON grant.

In the SAIL-ON test, an AI tries to determine what a person in a smart home is doing, such as cooking, cleaning, or exercising. A lot of sensors collect data but, Holder asks, what if a sensor stops working? What if a person “fools” the sensors by doing something like opening and closing a door while pretending to go for a walk?

With each phase of the SAIL-ON program, WSU and the other teams introduce more hidden novelties. “We don’t tell anybody about the novelties,” Holder says, so in a complex setting like the smart home, AI systems really need to adapt to understand what’s happening.

Holder would like to see a component for AI systems to detect and adapt to novelties, rather than hard-coding novelty into the system. Holder’s team eventually wants to release this “novelty generator” to the public.

Anybody could play these different environments, encounter novelty, and measure how well their system does against it,” Holder says. “I think it would challenge the AI community and help motivate them to build more general purpose adaptability into their systems.”

In order for AI to progress and become more robust, it needs to be able to deal with lots of different tasks.” Holder continues. For example, a robot assistant in a home might do laundry, cook, and clean. “They need to be able to do all those tasks pretty well, but they need to be able to adapt to changes that the programmers may not have anticipated.”

Still, “I think we’re a long way off from an AI system that essentially can compete or exceed human capabilities in all areas, like Data from Star Trek,” Holder says.
With the help of artificial intelligence (AI), we can now take wildlife conservation to a whole new level. We can use data to better understand the behavior of animals, their habitats, and even predict the potential threats to their populations.

AI can be used to track and monitor endangered animals, alerting conservationists of any potential threats. For example, researchers have used AI to track and monitor deer populations, helping wildlife conservationists create better strategies for their care and protection. By monitoring their behavior and habitat, AI can also provide insights into how climate change is affecting these animals.

Washington State University wildlife biologist Daniel Thornton and his research team placed 650 camera traps across more than 4,300 square miles of northeastern Washington in an effort to measure Canada lynx populations. Their 2020 study provided much-needed data on the lynx range in Washington to aid conservation efforts. To identify the endangered cat and other wildlife, though, AI can provide support in sorting through millions of images.

Besides using AI-powered image recognition at WSU, other benefits of research have included improved animal identification systems, such as the WSU research, are also more cost-effective and require less of a workforce and more. It can help scientists to understand and monitor these habitats in ways that humans cannot. AI-powered animal identification systems, such as the WSU research, are also more cost-effective and require less of a workforce than traditional methods, providing a great advantage for those looking to conserve endangered species.

We can only hope that as AI science continues to evolve, so too will our ability to protect and preserve our planet’s natural beauty for generations to come.

**For more on artificial intelligence for wildlife conservation, visit:**

magazine.wsu.edu/extra/AI-ethics

**Editor’s note—I decided to try an AI experiment: the following article was primarily written by AI at ContentBot.ai. The grammar and structure were decent, but the AI had a hard time nailing down specific details. I added information about WSU and more.**

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**ing their participation in the program compared to people who didn’t enter the program, according to a 2013 report from the state Department of Social and Health Services. Taxpayers saved approximately $22,000 for each person diverted from prison due to the program.**

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**Whole, new ways for criminal justice**

**BY ALYSEN BOSTON**

Imagine a program where someone charged with a nonviolent crime received a combination of support from the justice system, social and mental health services, rehabilitation programs, and their communities instead of being sent to prison.

For those who support justice system reform, this approach sounds like a dream. But for some people charged of a crime, this program already exists. Drug courts have sprung up throughout the country to deal with rampant opioid use that traditional punishments just can’t seem to fix. And it’s been widely successful. In Washington State, participants in drug courts were twice as likely to remain free of arrest in the three years following their participation in the program compared to people who didn’t enter the program, according to a 2013 report from the state Department of Social and Health Services. Taxpayers saved approximately $22,000 for each person diverted from prison due to the program.

So why isn’t this model used for other types of crime? "Most of the time, we tend to want quick fixes and oversimplified approaches, even when they repeatedly fail over and over and over," says Faith Lutze, professor in the Department of Criminal Justice and Criminology at Washington State University. “We invest in traditional systems because we tend to view them as if they have always been and always will be.”

Lutze, who has served on criminal justice policy boards at both the federal and state levels and provided expert analysis of drug courts and prison culture over the last few decades, has seen how the preference toward traditional systems can cause setbacks for individuals hoping to turn their lives around.

"We default to a punitive practice even though we have evidence that all these other interventions work better," Lutze says. "This affects the most vulnerable people, who don’t have the resources to get support outside the justice system.”

Thus, people who would benefit the most from holistic programs and resources, rather than imprisonment, don’t usually get them until they’ve already committed a crime. Lutze says, which contributes to uneven applications of justice based on factors like race, gender, or income status. If we take the findings from drug court proceedings and apply them to the community, then many people wouldn’t have to enter the system at all.

"If drug courts are effective in changing the substance abuse trajectory, why do people have to go through the justice sys-
Encoring Seattle’s Edge

Seattle’s Edgewater Hotel has a storied place in rock and roll history. Since the Beatles’ 1964 visit during their first North American tour, the hotel has been associated with musicians.

“The Beatles kicked it off, and Led Zeppelin made the Edgewater infamous,” says Bob Peckenpaugh (’01 Hotel & Rest. Admin.), noting the rock band was twice banned from the hotel for antics that included keeping mud sharks in their suite and throwing furniture into Elliott Bay. “I lived through some of that history as a young front desk clerk.”

When Peckenpaugh returned to the Edgewater as general manager in 2016, a handful of employees who witnessed some of the bands’ mayhem during the hotel’s opening, but they were nearing retirement age.

To capture those stories, Peckenpaugh enlisted the help of Mark Beattie (’81 Hotel & Rest. Admin.), associate vice chancellor at Washington State University Everett and assistant professor of hospitality business management for the Carson College of Business. Beattie worked with Brett Atwood at the Edward R. Murrow College of Communication to set up an independent study for students to collect and archive information.

Over five years, WSU Everett students created an Edgewater repository with more than 3,000 files. The archive contains old photos, playbills, advertisements, employee interviews, news articles, and video clips. The archive is a “Who’s Who” of the entertainers who came through Seattle, says Atwood, a scholarly music professor and former music industry writer.

Some of the material—including photos of the Beatles and footage of Nirvana’s Kurt Cobain—was featured in a mini-documentary prepared for the Edgewater’s sixtieth anniversary last year. In the future, the archived materials could be used for marketing campaigns, employee training, or even academic research.

“Knowing what happened here is almost like a little secret. This is where rock stars stayed and groups hung out,” says Lindsey Kirschman (’18 Comm.), corporate marketing coordinator for Noble House Hotels, the Edgewater’s parent company. “We don’t want that authentic part of our history to be lost to time.”

The Edgewater was built for Seattle’s 1962 World’s Fair, but construction issues delayed the hotel’s opening. By the time the Beatles tour dates were announced, the property was struggling financially.

“Other Seattle hotels balked at hosting the Fab Four during the height of Beatlemania. Too much security and insurance was involved. But the Edgewater’s general manager stepped up, and the band’s booking helped revitalize the hotel’s fortunes.”

“The Beatles stayed less than 24 hours during that first visit, but there are so many stories,” says Peckenpaugh, who left the hotel in 2020, but remains interested in the archival project.

Riley Gilbertson (’19 Hosp. Bus. Mgmt.) spent a summer researching the Edgewater for the independent study, digging into Seattle newspaper archives from the early 1960s through 1970.

“The work immersed him in the music of his parent’s era. ‘They grew up in Seattle, and they remember when the Beatles came to town,’” Gilbertson says. “He uncovered accounts of screaming fans descending on the hotel, which was surrounded by a chain-link security fence. A decoy limousine approached the Edgewater, band members arrived at the hotel in the back of an ambulance.

“The Beatles’ 1964 visit also produced the iconic photo of the band fishing from their room. At the time, the Edgewater had a bait and tackle shop for guests.”

Gilbertson also found accounts of visits by the Monkees, Dave Clark Five, and the Beach Boys. As the hotel’s reputation grew, its star-studded guest list expanded to include the Rolling Stones, Elvis Presley, Stevie Wonder, Black Sabbath, Eminem, Neil Young, and Louis Armstrong.

Some of the side stories intrigued Gilbertson.

“One article described how a young man sporting flip-over hair similar to the Beach Boys got mobbed by a group of fan-girls outside the Edgewater,” he says. “They were quite disappointed he wasn’t part of the band.”

Besides hosting big-name bands, the Edgewater has been a musical venue, the Crown Terrace Room. “It was an important contributor to Seattle’s nightlife, and it booked a diverse group of musicians,” says RJ Olson (’19 Strat. Comm.), who also worked on the research.

Jazz singer Sarah Vaughan and singer and actress Eartha Kitt were among the notable Black artists who performed at the Edgewater during the 1960s.

“When you consider everything that was happening with the civil rights movement, this was very forward-thinking for a club atmosphere in a fine hotel,” says Beattie.

The students’ archival collection spans nearly four decades of hotel history. Maddy Cone, the final student involved, curated vintage photos and video footage from the project for the Edgewater’s 10-minute mini-documentary. The timing was serendipitous for Kirschman, who had just started a marketing job at Noble House Hotels.

“When I found out WSU Everett students had created an Edgewater archive, it was the biggest win imaginable,” she says. “Maddy was able to pull these really big names from the archive for us, including footage of Kurt Cobain on the balcony.”

“The students built this trove of information now available for the Edgewater’s use and for scholarly purposes,” Beattie says. “I would love to see a music historian—perhaps someone from the university—dive into it.”

Peckenpaugh says the archives will keep the Edgewater’s legends alive. Some of the employees who retired during the pandemic knew Led Zeppelin lead singer Robert Plant on a first-name basis. Over the years, Plant became a regular visitor to the hotel.

“If you lose those firsthand stories, the personal connection to history gets lost,” Peckenpaugh says. •
The impact of wildfire smoke on people with asthma. Artificial intelligence and advanced technology in agriculture. Ceramic art projects that collaborate with medical sciences. This is a small sample of the array of projects fostered and supported by the Office of Research (OR) at Washington State University.
**Scapes and scallions**

BY ADRIANA JANOVICH

Think of them as garlic greens. Whimsical and wild-looking, the tender stalks of hardneck garlic grow straight from the bulb, then coil into lovely, long curlicues topped with fanciful flower heads.

Their young cousins, scallions, or green onions, grow tubular and pencil-thin, shooting directly from bulbs that never fully develop. Both of these oft-overlooked crops signify the spring harvest season. And, while they are milder than their counterparts—mature garlic bulbs and spring and other onions and alliums—they still pack a punch, offering a hint of what’s to come in the garden.

“They both have that muted flavor,” says Anna Kestell, food preservation and safety outreach educator at Washington State University Extension for Spokane County. “You’re going to get that really beautiful garlic or onion flavor without the bite.”

HARDCONE or STIFFNECK GARLIC

(Allium sativum ophioscorodon) is planted in autumn and enjoys two harvests: one for scapes and another for bulbs. Cutting scapes is a must. If they aren’t trimmed, plants spend their energy trying to grow the stems and flowers, leaving bulbs underdeveloped in both size and taste.

Green, garlicy, and gently vegetal, scapes aren’t as pungent as mature bulbs. Their flavor is more delicate and herbaceous, reminiscent of a combination of both garlic and green onion. Backyard gardeners and farmers’ market regulars know not to let them go to waste.

Low in calories, rich in B vitamins along with vitamin K and C, and high in flavor—but not overwhelmingly so—scapes are great grilled, sautéed, and puréed into soups and sauces. Add them to pasta and pizza. Put them in frittas and quiches, complemented with Cougar Gold.

Kestell pickles scapes, often mixing them into her giardiniera. Another favorite at her house: Cougar Gold mac and cheese with scapes.

Scapes can become tough and fibrous near the end that grows from the bulb. It’s best to trim that part. That, and their relatively short harvest, might be the only drawbacks to this late-spring offering, says Janis McBride of Canas, a master gardener with WSU Clark County Extension since 2017. She’s been growing garlic and scapes for six years.

She tends garlic both in her home garden and at Hazel Dell’s 79-acre 78th Street Heritage Farm, where she volunteers to help grow food for a local food bank. Music is her favorite variety.

“The hardnecks—including Music—grow best in the Pacific Northwest,” she says. “And they just have a good, solid garlic flavor.”

White-skinned with a pink blush, Music “grow best in the Pacific Northwest,” she says. “And they just have a good, solid garlic flavor.”

White-skinned with a pink blush, Music yields large, easy-to-peel, medium-hot cloves. “I think garlic is the easiest crop to grow,” says McBride, who recommends novice gardeners start with garlic. “It’s a long growing season, but you don’t have to do that much, just keep the bed weed-free. It’s almost fool-proof.”

Start with seed garlic the first season. “After that, take your largest cloves and plant these. You’ll get a little shoot within a month, and it stays that way for many months. It feels like it’s not even growing. Then come March or so, when it’s warmer, it really starts growing.”

Whimiscal and wild-looking, the tender greens. Whimsical and wild-looking, the tender greens.

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McBride grows Music at home. At the farm, she tends Romanian Red, Inchelium Red, Nootka Rose, and Shandong. They’re planted in a 75-foot row, yielding “probably 300 to 400 heads of garlic” and as many scapes.

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McBride processes scapes into pesto for pasta or crostini, and toasts them into stir-fries. “They’re really good in sesame oil with salt and black pepper,” she says.

SCALLIONS (Allium fistulosum), rich in vitamins A and C, taste like a mild onion. The white bulbs ends have a sharper bite than the long, hollow greens, which enjoy just a gentle zing.

Mix them into mashed potatoes or make scallion pancakes. A staple of Chinese cooking, scallion pancakes are easy and fun to make, not to mention delicious. Scallions are also great with smoked salmon and cream cheese on a bagel or in an omelet.

“For me, egg dishes are where they shine,” Kestell says. “I also love them in mac and cheese. I’ll use them in tacos. They’re great in baked potato soup and stir-fries. They’re also great in any salad because they won’t overwhelm the salad.”

One of her favorite springtime salads is strawberries and spinach with chopped scallions and vinaigrette. The scallions and dressing “balance out the sweetness of the strawberries,” says Kestell, who also adds scallions to biscuits and breads as well as sandwiches “for a little bit of extra flavor. They also go well in salsa if you don’t like a real strong oniony flavor.”

Kestell dries them in her food dehydrator so she can “use them all the time. I’ve always had some on the shelf, even in the middle of winter.”

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**GARLIC SCAPE PESTO**

1 cup garlic scapes, sliced crosswise (about 10 to 12 scapes)
1 cup raw sunflower seeds
1/2 cup extra-virgin olive oil
1/3 cup Parmesan cheese
1/4 cup basil leaves
Juice of one lemon

**PREPARATION**

Place the garlic scapes in a food processor and pulse for 30 seconds. Add the sunflower seeds and pulse for 30 seconds. Scrape down the sides of the bowl. Add the olive oil and process on high for 15 seconds. Add the Parmesan cheese and pulse until the ingredients are combined. Add the basil and lemon juice and process until reaching the desired consistency. Add salt to taste and serve immediately.

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**SCALLOP PASTA**

**PREPARATION**

Blanch the scallops in boiling water for 30 seconds. Drain and pat dry. In a large skillet, heat the olive oil over medium-high heat. Add the garlic and sauté for 30 seconds. Add the scallops and sauté for another 30 seconds. Add the white wine and cook until the liquid is reduced by half. Add the tomato sauce and simmer for 5 minutes. Add the basil and salt and let the mixture cool completely. Whisk in the cream and olive oil until well combined. Add the cooked pasta to the sauce and toss to coat. Serve immediately.

**FROM NYT/Cooking**

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JASON HANSON HS Zool I never imagined playing pro football for 21 years, let alone setting records.

Hanson holds the National Football League record for the most seasons played with one team, the Detroit Lions, having been selected in the 1992 draft. During that long career, he capped off the most points with any player for the Lions until his retirement in 2013.

"Being the Lions' all-time leading scorer was great in hand in hand with playing so long with them, so it's an honor to hold that record," says Hanson, who lives in a Detroit suburb with Kathleen; he has three children: sons Ryan and Luke, and a daughter, Jessica.

Hanson also set an NFL record for the most field goals ever made (237), as well as the most points scored (1,695) in his career. "Those are two big achievements that I'm very proud of," Hanson says.

"I'm becoming a very firm believer that if things happen for a reason and people are put in places they are needed," Andrea says. "I heard you saved a guy," Leach said. "I appreciate that Andrea was present and willing to step in." Martin says: "She's an angel."
The earlier that children who are showing signs of autism spectrum disorder receive specialized intervention, the better the outcomes.

Early detection and intervention for autism spectrum disorder (ASD) can significantly improve the lives of autistic individuals. Research has shown that children who receive early intervention have better language skills, cognitive skills, and adaptive behaviors compared to those who do not receive early intervention.
While an estimated 1 in 44 children in the United States is diagnosed with autism spectrum disorder by age 8, many kids get misdiagnosed or missed altogether due to the subjective nature of the diagnostic process. Having a quick, objective screening method to encourage more extensive behavioral screening could help improve the accuracy and speed with which children are diagnosed. That’s why Georgina Lynch and her research colleagues want to look into their eyes.

Lynch (Ph.D. Interdisc.), assistant professor at Washington State University Spokane’s Department of Speech and Hearing Sciences, and her team have developed a tool that measures how the eyes’ pupil change in response to light, known as the pupillary light reflex. Studies indicate that the eyes of children with autism respond differently than those of other children. Lynch and her research colleagues want to look into their eyes. “We believe this test could be an early indicator of autism.” Lynch says.

Since early intervention can reduce the severity of ASD symptoms and improve social interactions, communication, and daily living skills, the eye test could aid the work of health-care professionals like Dawn Sidell, director of the Northwest Autism Center in Spokane. Sidell works with people with autism and their families. “The objective measurement can help physicians decrease that gap between identification and diagnosis, and increase the speed with which children get referred for treatment and support.” she says.

Lauren Thompson at WSU’s Department of Speech and Hearing Sciences also treats children with ASD. She says it would certainly help with an earlier, objective detection test. “It’s a sensitive, indirect, noninvasive measure of neurodevelopment and could be an early indicator of autism,” Lynch says.

Lynch received her interdisciplinary doctoral degree in neuroscience and psychology at WSU and began researching a tool to measure the eye reactions of children with ASD. They started with a more cumbersome binocular device in a lab, but found a smaller monocular device worked just as well in tests.

Trained clinical providers could use the handheld monocular pupillometer device to measure one eye at a time of a child. The researchers found that children with autism showed significant differences in the time it took their pupils to constrict in response to light. Their pupils also took longer to return to their original size after light was removed.

A pediatrician wouldn’t need to administer the quick test. “It takes two to three minutes to do this test.”

Lynch wants to see the pupillary screening tool get in the hands of suppliers, so that they recognize that it could be a while and that it’s just one step.

“This test will not help kids learn to talk, but it will absolutely help get them in with the right people who can assess what needs to happen to move that process along.”

“I’m careful to say this isn’t a be-all and end-all,” she says. “That’s the last thing we need in the autism research community. It’s just one more piece of the puzzle. And I hope it helps build confidence for a health-care provider to start the assessment.”

The VALUE of SCREENING

Although the new pupillary reflex test is still in development, there are already several behavioral screening tools that can be used to identify children who may be at risk for ASD. The Modified Checklist for Autism in Toddlers (M-CHAT) and the Early Screening of Autistic Traits (ESAT) rely on extensive interviews and multiple sessions.

“Historically, the diagnosis of autism has relied on interview and observation by qualified providers to make a diagnosis.” Sidell says. “We’re pretty excited about the research that WSU has pioneered in the use of biomarkers and contributing to the diagnostic process.”

Sidell, who received her nursing degree in 1987 at the Intergovernmental Center for Nursing Education in Spokane, says the American Academy of Pediatrics has established that the diagnosis can be made as young as 18 months. However, despite the exponential increase of autism identification in recent decades, there hasn’t been a whole lot of success in improving the speed with which diagnosis gets made.

“We still see it languishing around age 4,” Sidell explains. “Spedding up that process would be very helpful to children and families.”

Gillian Brandenburg, clinical supervisor at the Northwest Autism Center, agrees. “If we can pack in as much learning in the first few years for any child, that’s going to make a huge difference to their future. And having the appropriate tools influences the trajectory of that learning,” she says.

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As of 2014, Washington state covers ASD treatment through private and public insurance. About 50 trained providers now work in the region, and it is much easier for families to access a provider for a diagnostic workup.

Thompson’s research tries to address another big barrier: the quality of current screening tools for individuals. Thompson says that, according to the most recent statistic she has seen, only 17 percent of pediatricians conduct universal ASD screenings across the United States.

“Pediatricians are either not aware of the available tools or the tools don’t work well enough that they feel confident using them in practice,” she says.

Thompson is also curious about intervention models for infants and toddlers with autism, and how some children respond to certain tools. “I’m very interested in the evidence behind practice,” she says. “That’s obviously too long when we have an optimal window for kids to receive access to intervention.”

Access is particularly tough for people in rural communities. The Northwest Autism Center and WSU are expanding rural outreach through partnerships such as telehealth with partners in remote areas. More people working in the field tell Thompson Brundage says the center had more than 200 parents come in last year that they couldn’t serve because of limited staff.

Some underrepresented communities also lag in identification of ASD. Thompson shares the sentiment. “Research here doesn’t happen in a bubble. The work that we do with families and people with autism in our labs should have a direct and meaningful impact for autistic youth.”

“We know that the sensitivity of the current behavioral screening tool, M-CHAT, for correctly identifying autism drops substantially if you’re from an underserved community or minority group. It’s because of social determinants that reflect how we report on that tool,” Lynch says. “As Lynch and her colleagues measure the effectiveness of screening tools and investigate new tools, they make sure the focus is on the children with ASD.”

“When we work with kids with autism, everyone is special. Every single child and every parent has a way of navigating through this process,” Lynch says. “If this tool can help mediate some of that, I will have felt I’ve made an impact that matters.”

Thompson shares the sentiment. “Research here doesn’t happen in a bubble. The work that we do with families and people with autism in our labs should have a direct and meaningful impact for the families and practitioners in our communities,” Thompson says.

“My hope is really to just help families realize their full potential,” Lynch says. “There’s beauty in neurodiversity. There’s also quality of life in terms of the ability to communicate your wants and needs. “At the end of the day, it’s really about helping children get to that point. So let’s get them there.”
Cougs near and far are invited to participate in the third annual Women's Leadership Summit hosted by the WSU Alumni Association.

This online collaboration provides an opportunity to celebrate the successes and learn from the experiences of WSU alumnae. This year’s Summit will highlight female leaders from across the OneWSU system and showcase how WSU played an integral role in their professional journeys.

Register today, then log on for the live event to be part of this important conversation.

WSU’s Sleep and Performance Research Center, Peixoto examines sleep problems that may be linked to a mutation in SHANK3, a gene strongly linked to autism. Peixoto and her colleagues first analyzed sleep data from patients with Phelan-McDermid syndrome (PMS), a genetic disorder often associated with autism known to be caused by a missing SHANK3 gene. Starting at age 5, most kids with PMS wake up multiple times, have trouble falling asleep, and often get less than six hours of sleep a night, as many sleep regulation genes that didn’t turn on correctly. This suggests that people with SHANK3 mutations may experience worsening symptoms due to sleep deprivation, Peixoto says.

She collaborates on sleep research with Annette Estes, professor of speech and hearing sciences at the University of Washington, director of the UW Autism Center, and a specialist in early diagnosis of ASD. Peixoto says that the UW Autism Center received many comments from parents that they needed to look for sleep problems in their kids as early as 12 months, baby siblings who had trouble falling asleep were much more likely to later have a diagnosis. Insomnia or poor sleep is not a side effect of your brain being different, though. Peixoto says, it might be a core aspect of the disorder.

Peixoto points out that ASD is a developmental disorder and not everything is known about how sleep loss affects development. The Peixoto lab is continuing its autism research in collaboration with Marcos Frank, a world-renowned expert of sleep and development at WSU. Plus, “there is no drug for autism. It is behavior,” she says.

Exploring the fundamental causes of sleep problems and ASD is more than academic to her. “I wanted to work on something that was relevant to individuals and caregivers,” Peixoto says. “Perhaps sleep problems can be detected very early on. As some aspects of the sleep problems develop as the baby develops, it potentially creates opportunities for intervention.”

“And there’s no debate that sleeping better will benefit everybody.”

LUCIA PEIXOTO
PHOTO CORI KOGAN
“I was told I was going to be a doctor,” Ron Howell says of his parents’ advice to him growing up. So Howell (’80 Biochem.) entered Washington State University as a premed student, but his heart wasn’t in it. Instead, he became a partner of sorts with doctors and other health professionals. As CEO of the Washington Research Foundation (WRF) for 29 years, Howell helped researchers in Washington’s universities and nonprofit institutions turn their discoveries into commercial ventures to benefit public health. By providing funding, his influence has been felt in advances in an astonishing number of fields from vaccines, immunotherapy, and cancer treatment to AI-assisted 3D imaging, cardiac care, and inflammatory bowel disease treatment.

Howell’s father grew up in the projects in Youngstown, Ohio, facing a great deal of racial prejudice. He became a psychiatrist. His mother was a surgical nurse. “Education, education, education was what my parents emphasized,” Howell remembers of his years growing up in Spokane and Lacey. “They said, ‘You’re Black, and that’s what you need to be respected and have a good living.’”

The most respected profession they could think of was a medical doctor. “But I hate hospitals,” Howell says. At WSU, he enjoyed learning for learning’s sake: calculus, chemistry—especially biochemistry—music, English.

“I wanted a career, not just a job. But if I wasn’t going to medical school, what would I do?” He tried pharmaceutical sales. Hated it.

He took a job with a paper seller. Went to training and was told, “I thought you were White.”

He sold hospital supplies. Found he was wasting time driving over a huge area, so bought himself a computer, learned programming, and figured out how to maximize sales. He carried his computer skills into an insurance company, where he served as the operations coordinator. His promotion kept being delayed.

“One day I was having lunch with a coworker and his wife, and she said WRF needs a technology transfer specialist. They wanted someone with a life-science degree and a sales background who knew how to program,” says Howell, who lives in Seattle with his wife of 42 years, Darlene Howell (’80 Finance). “That kind of describes me.”

Howell was hired in 1989, joining a new field. In 1981, Tom Cable, Bill Gates Sr., and Hunter Simpson started the foundation because they were frustrated that researchers would invent things in a lab but never see a return on their investments.

“We wanted to ensure that [the University of Washington] would benefit from the commercialization of intellectual property resulting from UW research,” Cable said in a news release about Howell’s recent retirement.
Companies have applied the method to the development of hepatitis B, HPV, and other vaccines, as well as insulin manufactured by Novo Nordisk and diagnostic proteins used to evaluate the safety of blood products.

Companies backed by WBF Capital are bringing innovations to market, ranging from tailored cell therapies and body-worn diagnostic tests to opioid with removal treatments and cloud-based virtual labs. There’s even a company that produces a nano-laminated alloy stronger and lighter than steel that may eventually replace conventional metals and composites.

Georgia Lynch, an assistant professor at WSU’s Elson S. Floyd College of Medicine, is developing a tool to screen toddlers for autism with WBF funds.

The foundation also invests in young people. Five years ago, it began awarding fellowships to 10 postdoctoral scientists a year in natural science and engineering with three-year salary support. Recent WSU recipients include Ellie Armstrong, biological science; Molly Carney, anthropology; and Ian Richardson, mechanical and materials engineering.

Fellowships are also granted to UW and WSU graduate students in STEM fields, UW undergraduates, and WSU’s Team Mentoring Program.

On its own time at WSC, Howell says, “I will be ever grateful for the beginning of my education at WSU. It was a necessary step to a lifetime of learning from the best and brightest, which is what I really love.

Now in retirement, Howell enjoys motorcycle riding—he recently took a 10-day western US trip—playing saxophone, and spending time with family. He and his wife have three adult sons: Spencer, Brenan, and Darrin.

He says he hopes WBF continues its investment in young people who will make the upper levels of research and start-up companies more diversified. “You see fewer and fewer Black people in the sciences as you go from undergrad to graduate to postdoctoral level,” he says. “As did young people make all the decisions for their older selves, often without enough guidance.”

In September 2022 that work was recognized as the recipient of the 2022 Asperian Rising Presidents Fellowship by the Asperian Institute College Excellence Program. The honor allows Ezeonu to continue her leadership in research overall for roughly 50 years. “I was the endowment to fund researchers in the life sciences and support grants went to university and nonprofit researchers with assets of $300 million. assets to one of the state’s largest private granting organization with $13 million in The equity in equality

When Rolita Flores Ezeonu speaks out about the future, she addresses events of the recent past. She recalls images of George Floyd with a police officer’s knee on his neck, the air choked out of him as he begged for mercy.

Floyd’s May 2020 murder sparked passionate tests and difficult conversations across the country, but it also renewed and strengthened Ezeonu’s lifelong fight for equity and social justice in higher education.

“I’m raising kids who identify as Black,” Ezeonu says, “and my hope is that they will have the same opportunities. When she got into university, her parents were thrilled. But, for her, the excitement really started when she began studying communication and realized how it could serve as a conduit for bettering not just her life but the lives of others being denied equitable opportunity.

“Toward the end of my 12-year tenure at the University of Washington, I had the privilege of co-directing an endowed chair, the William S. Sutton Chair in Communication and Realization. It was a great honor to continue my work in communication and serve as a leader in this field.”

Ezeonu taught communication at community colleges in Seattle and Hawaii. As a Fulbright-Hays Scholar, she traveled to South Africa and Namibia to learn about post-apartheid reconciliation. She also was a visiting professor in Nigeria. After receiving a doctorate in education from Seattle University, she was appointed dean of instruction for transfer and precolllege education at Highline College in Des Moines, where she later served as interim vice president of academic affairs.

In 2018, Ezeonu came to Green River College, where she led a quest for the first time to be able to record the muscle strength of a single human muscle cell obtained from

Donald S. Wood, president and CEO of the Muscular Dystrophy Association, has devoted much of his life to improving the lives of people with neuromuscular diseases, even though there’s a long way to go, the positive results have changed lives.

Ezeonu notes the MDA’s great fields of research: development of new therapies and treatments, and new therapies for genetic disease.

“The leader of MDA allows me to participate in the development of what I call genetic medicine,” Wood says. “We are seeing advances in research and science that are astounding.”

A technology transfer specialist manages to get licenses and patents so that their innovations can be commercialized. “It had to learn some of everything—grants, litigation, patent law, big data,” Howell says.

There were so many aspects to analyze, he explains, “Is this innovation worth paying for a patent application? Can it be turned into a useful product? Is there enough market for it? Will the technology last? Is it different enough from other innovations? Is it a medical application, will it get through clinical trials and FDA approval before the patent expires?”

When you’re trying to guess the future, you ask, “Is this even going to be a business, you ask, ‘Is this even going to be a road and business around it in the future.’”

But “there was actually an advantage to being a nonexpert,” Howell told the print. “When you’re trying to guess the future, you ask, ‘Is this even going to be a business, you ask, ‘Is this even going to be a road and business around it in the future.’”

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have never occurred before in human history. We are truly, truly changing the course of medicine. So much so that we have also been invited by the FDA to participate with many others in how to develop clinical trials in disorders where you don't have enough people affected by them to do the gold standard—the double-blind placebo role trials. Most neuromuscular disorders are progressive, so whenever they start they get worse over time. Because they're genetic, the question is what at point in time of the person's progression will a treatment work to stop the disease? And how do you make people better then? How do you judge whether it has actually caused the loss of tissue and the loss of function?

Wood also leads the MDA in making strides in its national network of more than 150 care centers serving more than 60,000 patients a year. And the organization doesn't just serve patients with muscular dystrophy. In fact, the first gene ever identified as contributing to a form of familial amyotrophic lateral sclerosis was discovered by MDA grantees as well as the first drug developed to slow the disease. Wood says, “We were never a single-disease organization. We went where the science took us in neuromuscular disease,” he says. In fact, the MDA has spent more than $1 billion in research in neuromuscular disease.

Wood credits WSU as crucial to his career and where he is today. “I would say my success subsequently has been directly traceable to my time at Washington State University on several levels,” he says. Attending a prestigious summer physiology course, which brought together students from around the world in 1966, contributed to his realization by comparing notes of the strong value of Washington State's educational philosophy.

“When I got from Washington State University and what I brought to the table was a broad knowledge of biology, zoology, and physiology. That has helped me transition from physiology to genetics, from animal and physiology. That has helped me transition from physiology to genetics, from animal,” Wood says. “I've always been passionate about learning any English and experiencing bullying, homelessess, and other difficulties—he also “was suffering from mental health issues and depression” and had contemplated taking his own life.

“Then I got into graduate school, and I started working as a graduate student at the University of Washington,” Wood says. “I started working with Dr. Donald Wood, who was a very important and influential figure in my life. I had the opportunity to work with him, and I was able to do research in the field of muscular dystrophy.”

Wood continued his education at Stanford University, where he earned his PhD in molecular biology. He then went on to work as a postdoctoral fellow at the National Institute of Neurological Disorders and Stroke. From there, he moved to the National Institutes of Health, where he continued his work on muscular dystrophy.

Wood joined the MDA in 2002 as senior director of research and development, where he was responsible for overseeing the organization’s research programs. He later became executive vice president for research, where he was responsible for directing the organization’s research strategy and overseeing its research investments.

Wood was appointed as the organization’s chief executive officer in 2013. In his role, he oversees the organization’s research, advocacy, and community outreach programs. Under his leadership, the MDA has continued to make significant progress in the fight against muscular dystrophy, and has supported important research breakthroughs that have led to new treatments and therapies for patients.

When a friend confided suicidal thoughts, Nam H. Nguyen understood the feeling all too well.

As a teen—shortly after arriving in the United States, hardly knowing any English and experiencing bullying, homelessness, and other difficulties—he also “was suffering from mental health issues and depression” and had contemplated taking his own life.

“Then I got into graduate school, and I started working as a graduate student at the University of Washington,” Nguyen says. “I started working with Dr. Donald Wood, who was a very important and influential figure in my life. I had the opportunity to work with him, and I was able to do research in the field of muscular dystrophy.”

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Her story offers inspiration and hope to other first-time farmers, particularly women, not only in Washington state but beyond the confines of the Pacific Northwest. Still, anyone with an interest in farming, locally grown and raised food, sustainable food systems, land stewardship, and the impact of land-grant universities would appreciate her testament, learning along as she does, “you own land, but you know it is not really yours,” and “pasture has its own grace.”

— Adriana Janovich

From Refuge to Consultant: An American Adventure
HELEN SZABLYA 76 FOR. Lang. and Lit., GERMAN 2021

Helen Szablya is just 22 when she and her husband, John, their two toddlers, and newborn sneak out of Hungary, escaping Communism for Canada via Austria. It’s December 1956, about a month after the revolution is crushed. Under the cover of night, they walk to freedom.

My Only Choice (2013), leaves off.

Helen’s epic journey continues where her first volume, My Only Choice (2013), leaves off. From Refugee to Consultant details the latter part of her extraordinary life—coming first to Canada, then Pullman, where John teaches electrical engineering at Washington State University for 18 years, and, finally, to Bellevue where, after about 36 years as a transit planner for King County Metro and Sound Transit, he offers glimpses into the growth of the city’s streetcar industry—paid with promissory notes provided by the city’s streetcar network in 1919.

It’s a humorous play on Jon Krakauer’s 1997 The First Milestone he reached within the next 10 years. Reminiscent at times of Jim Whittaker’s 1959 autobiography A Life on the Edge: Memoirs of Everest and Beyond, Kopczynski’s memoir describes the allure of the mountains, human bonds that form while doing the difficult and dangerous, enduring to push him- self to the limits, and persevering. He mixes personal history and philosophical musings with geography and geology, peppering pages with life lessons, words of wisdom “from the wild,” photos, sketches, and reminders that tragedy lurks on craggy peaks at high altitudes.

His autobiography offers some anecdotes about his Spokane childhood in the 1950s, but largely details his “marriage to the mountains” and numerous worldwide expeditions—from his first look at Mount Verendrye during a family vacation to British Columbia at 15 to climbing on weekends as a college student in Pullman, a post-graduation trip to scale the Matterhorn, and more.

It includes a foreword by friend and longtime climbing partner John Roskelley (71 Geo.), who appears throughout the book. The last of the 26 chapters is “Into Thin Air,” the volume’s original title when Kopczynski first had it self-published last year. It’s a humorous play on Jon Krakauer’s 1997 bestseller Into Thin Air: A Personal Account of the Mt. Everest Disaster.

Kopczynski’s words will resonate with seasoned and aspiring climbers and adventures as well as armchair travelers who will discover that, for Kopczynski, a world-class climber who worked full-time as a general contractor in Spokane, mountain-climbing is more than a favorite sport. It is a way of and metaphor for—life.

“I believe that my brain was hardwired to climb in a way that often overrides feelings,” he writes. “Climbing to me is linear and intense. It’s similar to surfing, where you fix your eyes on the horizon while feel- ing the ocean. . . . The harder and higher the mountain, the deeper my joy.”

— Adriana Janovich

Seattle’s Streetcar Era: An Illustrated History, 1884–1943
MIKE BERGMAN WSU PRESS: 2021

Seats were made of wood or wicker, rides cost a nickel or dime, and Seattle’s popula- tion was booming. When cable cars and electric streetcars moved people around the city, the number of souls in Seattle nearly doubled in one decade (1890 to 1900), then tripled in the next (1900 to 1920).

Seattle’s population continued to grow into the 1930s. But by then, its streetcar era was beginning to decline. The story of Seattle’s streetcars is largely one of fi- nancial hardship—employers of Seattle Municipal Street Railway were sometimes paid with promissory notes—as well as political and other challenges, including derailments and the city’s tumultuous takeover of the streetcar network in 1919.

Seattle native Mike Bergman’s well- researched account covers the rise of the city’s streetcar industry—13 companies provided streetcar service in Seattle in 1886—as well as its controversies, eventual collapse, and conversion to rubber-tired buses during World War II. Along the way, he offers glimpses into the growth of the city, its leadership, and, of course, how they got around. It’s a story of resourcefulness, perseverance, and adversity.

Bergman grew up on Queen Anne, where an underground counterbalance once propelled street cars up and down the hill’s 18 percent grade. It’s one of his favorite highlights. So is the self-proclaimed “Center of the Universe” that is Fremont, home of the old Fremont Trolley Barn, which now houses the production facility for Theo Chocolate.

Fremont was once a “grand union,” or junction where two double-track lines cross at a grade. Sixteen railroad switches allowed streetcars to continue in any di- rection to go in any of the other three directions, making the neighborhood quite bumbling but full of life. Asphalt now covers the lines, but their influence remains.

Seattle grew from the downtown and the Central District through annexations of the “street- car suburbs” of Ballard, West Seattle, and more. Routes influenced the city’s expan- sion and neighborhood development.

Bergman’s large-format, hardbound book also helps readers peer into the past through more than a dozen maps and a treasure trove of more than 100 archival images of old Seattle. He retired in 2016 after about 36 years as a transit planner for King County Metro and Sound Transit. He serves as president of the Tacoma Chapter of the National Railway Historical Society, and volunteers on the Pacific Northwest Railroad Archive in Burien.

— Adriana Janovich

BRIEFLY NOTED

The Washington Apple: Orchards and the Development of Industrial Agriculture
AMANDA L. VAN LANE 94 MA, ’09 PHD HISTORY UNIVERSITY OF OKLAHOMA PRESS: 2022

Applies aren’t native to Washington. So how did the state become the leading producer of America’s most popular fruit? Amanda L. Van lane, professor of history at Lewis Clark State College in Lewiston, Idaho, traces the origins, evolution, and environmental consequences of Washington’s apple industry.

Tree Fruit Trade: An Agricultural Economist Reviews Fifty Years of Washington State’s Key Orchard
DESMOND O’ROURKE WSU PRESS: 2022

Drawing from half a century at both Washington State University and through private consulting, O’Rourke pays tribute to the past and offers cautious advice for the future of the state’s apple industry.

Jews in Contemporary Visual Entertainment: Raced, Sexed, and Erased
CAROL SIEGEL INDIANA UNIVERSITY PRESS: 2022

Carol Siegel, a professor of English, film, and women’s, gender, and sexuality studies at WSU Vancouver, explores the sexualization and racialization of American Jews in movies and television since the 1970s onward, including The Marvelous Mrs. Maisel

Nightmare on the Scioctte: The Underside of a Doomed King Crabber
STEVEN D. ORSINI RAZAL BOOKS: 2022

College buddies Steve and Jack kiss their girlfriends goodbye at Christmas 1969 for what they envision as a Caribbean adventure before classes start back up. What they encounter, instead, is a terrible passage fraught with delays, foul weather, fatigue, and failure. It’s one mishap after another
Happy ValenWines Day

Celebrate Your ValenWines Day and become a member of the Wine-By-Cougars Wine Club! The wine club for Cougs is free to join for WSUAA members. World-class wines that spotlight WSU alumni wineries and support WSU scholarships? We’ll toast to that. Choose from four different shipment options and enjoy premium wines delivered right to your door, four times a year.

alumni.wsu.edu/valenwines

Gray Dog Press: 2022
for the crew slated to deliver the Statue to Seattle from Mobile, Alabama. “That’s the trouble with a new boat,” says the captain. “You just don’t know what to trust.”

Decolonizing African Higher Education: Practitioner Perspectives from Across the Continent
EDITED BY CHRISTOPHER B. KNAUS, 978 MA COMM., TAKAKO MINO, AND JOHANNES SEROTO ROUTLEDGE: 2022
In this scholarly work, professors and administrators challenge contemporary curricula in higher education across Africa, examining strategies for applying Indigenous thought and methods to curricula, pedagogy, research, and other areas of academics.

Backwoods Railroads: Branchlines and Shortlines of Western Oregon, updated edition
D. C. JESSE BURKHARDT
WSU PRESS: 2022
This volume has a fresh look and images as well as the full text of the first edition from 1994 and a new recap of the past nearly 30 years of rural railways in the Willamette Valley, Coast Range, Cascades, and Siskiyou.

Speech Sounds Adventures: Miss R Keri Jones ’98, ’00 MA SPEECH & HEARING SCI., ILLUSTRATED BY JESSICA JONES 2022
Miss R takes a vacation from words in this choose-your-own-adventure style book aimed at helping children ages 3 and older pronounce R sounds. Keri Jones is a speech language pathologist at Pullman Regional Hospital.

Spokane and Coeur d’Alene Freshwater Shark Attacks
JAMES P. JOHNSON ’80 BUSI.
GRAY DOG PRESS: 2022
This slim, spoof-tacular paperback lampoons absurd histories of monuments such as landmarks in the Inland Northwest, offering this slim, spoof-tacular paperback lampoons absurd histories of monuments such as landmarks in the Inland Northwest, offering

Hearing Science, Illustrated by Keri Jones ’98, ’00 MA Speech & Hearing Science
Keri Jones
Speech Sounds Adventures: Miss R
“Science is not memorizing the periodic table or knowing that the mitochondria are the powerhouse of the cell,” Brown says. “It’s making sense of the matter and energy around us and using our powers of explanation and expression to model and share human knowledge.”

To build it down, the most important thing science education can do is to help students never lose the creativity and wonder to ask ‘why?’”

BY LARRY CLARK

Newmedia

Helping students learn, especially abstract science concepts, brings joy to JOHANNA BROWN (’13 MGT Ed.). The desire to teach science led her to Washington State University for a master’s in teaching, then across town to Pullman High School.

After several years of teaching chemistry and computer science, the National Science Teaching Association recognized Brown in 2022 for her achievement in sci-

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That award comes after Brown was one of six Washington state math and science teachers selected in 2021 as finalists for the Presidential Award for Excellence in Math and Science Teaching.

In addition to Advanced Placement chemistry and computer science classes, Brown coached the PBS Knowledge Bowl and Science Bowl teams.

“I once had a student in AP chemistry ask, ‘Ms. Brown, don’t you get bored just thinking about the same chemistry stuff every year?’ I responded with, ‘I’m not thinking about the chemistry, I’m thinking about you all learning the chemistry, and that always changes.’

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BY LARRY CLARK

Newmedia

Helping students learn, especially abstract science concepts, brings joy to JOHANNA BROWN (’13 MGT Ed.). The desire to teach science led her to Washington State University for a master’s in teaching, then across town to Pullman High School.

After several years of teaching chemistry and computer science, the National Science Teaching Association recognized Brown in 2022 for her achievement in sci-

ence education, with the Robert E. Yager Exemplary Teaching Award. The award honors a teacher who makes science education accessible to students.

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in the flexibility she wanted from work. She was laid off while pregnant and sought opportunities with women in cloud.

**Shelley Broadr** (‘06 So. Sci.) is one of the first five members inducted to WSU Global Campus’s Society of Distinguished Alumni. She has worked as a CEO, executive officer, or board member for Walmart, Michaels Stores and Chico’s. She has been named to Forbes 30 Under 30, and has also worked for eBay, Yahoo, and Pinterest. She is also a member of the WSU Alumni Association and serves as vice president of the board of directors.

**Tag Jacqueline** (‘14 MBA) joined the Coeur d’Alene Bancorp and board of directors. Jacqueline is a board member and president of Jacklin Land Company and Riverbend Commerce Park in Post Falls, Idaho, and a partner in Bingham Ventures. Jacqueline is also the board director for the Post Falls Chamber of Commerce and board director and treasurer for the Coeur d’Alene Area Economic Development Corporation.

**Sarah McKillop** (‘17 Arch.) is an architectural associate at the design firm BCRA. She supports BCRA’s multifamily residential and retail markets at the Tacoma office.

**Nam Nguyen** (‘20 Busi.) was named to the 2023 Points of Light Inspiration Honor Roll. Founded by George H. W. Bush Sr., the recognition was created to honor acts of service, kindness, and civic engagement in communities around the world. **Sarah Movius** (‘21 MCER) received the WSU College of Education’s Famous Distinguished Educator Award for her work with educational escape rooms. Movius previously taught English as a foreign language to students in Mongolia through Peace Corps and has worked as a substitute teacher and paraprofessional.

**Maddie Comes** (‘22 DVIN) is a staff veterinarian at Double Arrow Veterinary Clinic in Cheyenne, Montana. **Gary Rubenstein** (‘22 So. Sci.) is one of the first five members inducted to WSU Global Campus’s Society of Distinguished Alumni. He is the director of academic program management for Walmart Global Tech and has also worked for eBay, Yahoo, and Amazon.

**Jace Kothes** is an active member of WSU’s Alumni Association and serves as vice president of the board of directors.

**COMING MAY 2023 AlumNI ASSOCIATION**

COMING MAY 2023

MEMBER APPRECIATION MONTH POWERED BY DEIC

Of the many amazing opportunities throughout May, one of the favorites is the WSUAA members-only edition of the Washington State Magazine!

Don’t miss out. Become a member of the WSUAA today!

alumni.wsu.edu/join
In Memoriam


William D. Hydlof, a third-generation Cougar, was twice appointed US Attorney for the Eastern District of Washington. He served as president of the WSU Alumni Association in 1991-92, received the WSUAA Alumni Achievement Award in 2002, cochaired WSU’s Legislative Network, and co-chaired the WSUAA centennial celebration committee in 1998. Hydlof practiced law for 40 years in Spokane and was an advocate for equal access to the justice system. He was president of the Spokane County Bar Association in 1999 and Washington State Bar Association president in 2015.


Maris Mareen DiGiovanni Jordan (14 Elem. Ed.), 50, October 6, 2022, Spokane.

Faculty and Staff


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THE WASHINGTON STATE UNIVERSITY ALUMNI ASSOCIATION is gearing up for a record-breaking number of class reunions, many of which were postponed early in the COVID-19 pandemic. Sixteen class reunions are scheduled for the first weekend in June. Hundreds of alumni are expected to return to WSU Pullman to reconnect with the campus and classmates, and celebrate their college years. Honored will be the classes of 1950, 1951, 1952, 1953, 1960, 1961, 1962, 1963, 1970, 1971, 1972, 1980, 1981, 1982, and 1983—marking 40 to 73 years since graduation. "It’s the most reunions we’ve ever held at the same time," says Kim Mueller, director of alumni engagement for WSUAA, noting the last round of reunions was held in 2019. Four—Crimson, Golden, Diamond, and Platinum—are typically held each year. This year’s festivities, slated for June 1–4, feature four classes each of Crimson, Golden, Diamond, and Platinum alumni. Crimson marks 40 years. Golden marks 50 years. Diamond marks 60 years. And Platinum marks 70 years. Mueller has already received calls from members of the celebrated classes, asking for info. Plans are still being finalized, but calls for golfing at Palouse Ridge Golf Club on Thursday. Friday features a welcome from administrators as well as opportunities to visit different colleges and departments, followed by happy hours by decade and by major or department. Saturday, there are more opportunities to visit colleges and departments, including lunch with WSU Athletics, as well as an optional motor-coach tour of Pullman or a campus walking tour. "I don’t want mobility concerns to keep anyone from coming," Mueller says. "We will guide them or drive them anywhere." Families of alumni are also welcome. "We’re working with WSU Housing to offer the option to stay in one of the residence halls as a less expensive way for people to bring their children or grandchildren." Saturday night in the Compton Union Building’s M.G. Carey Senior Ballroom is the grand finale: a three-course banquet with a keynote speaker and musical performances. Another gathering is planned Sunday morning before departure. "My hopes are that everyone feels honored and special and treasured," Mueller says. "It’s been a difficult three years of not having hosted the reunions. It recharges the staff; we get as much joy out of it as the alumni do. We look forward to hearing their stories. Crimson, Golden, Diamond, and Platinum alumni who would like to share memories—of favorite classes, professors, places on campus, special moments—are invited to email anecdotes to wsm@wsu.edu. For more information about the reunion weekend, visit alumni.wsu.edu/reunions.
Many of our greatest discoveries, adventures, achievements, and breakthroughs began with one simple question.

On April 12, WSU will celebrate those who dream big and ask:

WHAT IF...?

Volcano views

ONE OF THE AESTHETIC JOYS of Washington State University's Vancouver campus is the proximity to the Cascade Range. Campus planners more than 30 years ago took advantage of the vistas and aligned the central walking mall with a stunning view of Mount St. Helens. Look in another direction and you can see Oregon's Mount Hood.

On clear days, it almost feels like the campus's Salmon Creek location is throwing distance from the volcano.

The location of Mount St. Helens offers more than postcard beauty. WSU scientists take a closer view of the mountain since it offers a living laboratory of the effects of a volcanic eruption. The massive 1980 explosion covered the region in ash, but researchers have watched the return of life there.

Biology professor John Bishop at WSU Vancouver has studied the region since 1990. He returns often to the Pumice Plain to observe the plants and animals and monitor biodiversity on permanent survey plots for WSU.

The Cascades Volcano Observatory in Vancouver also keeps an eye on the mountain. "Mount St. Helens was important because it was so well observed," said volcanologist Don Swanson (‘60 Geol.), who witnessed the 1980 eruption and worked at the observatory, told Washington State Magazine in 2020.

BY LARRY CLARK