Spring24

vol23no2



Spring24 vol23no2

upfront

How preparing students for a world of artificial intelligence has become more than a pass-fail moment **7**

Solving one of our nation's biggest environmental challenges is becoming clear as glass.

WSU's Rural Health Initiative is a prescription to providing Rx care next door. 10

To read or not to read—that's the misinformation question

12

This WSU lab is a hive of activity for all tiny things that glide, fly, or crawl. 13

It's the Gold standard. 20

COVER: LOOKING UP IN THE HOH RAINFOREST, JEFFERSON COUNTY (PHOTO AARON REED)

RIGHT: SPRINGTIME COMING INTO FOCUS ON THE PULLMAN CAMPUS (PHOTO SHELLY HANKS)





Thematics

SHORT SUBJECT 14

Black history in the

Pacific Northwest

OUR STORY 38

Goodbye to Johnson Hall

Departments

- Treating with empathy FIRST WORDS
- 4 A flag first? TALKBACK
- **16** A WSU tradition—the Cougar Marching Band **SIDELINES**
- **18** Chicken eggs IN SEASON
- **27** A versatile voice **28** Traditions **30** Feeding time at the zoos 31 A paper drive for our times 33 A cause celebrity **ALUMNI PROFILES**
- **34** Tom Foley, The Last Lookout on Dunn Peak **NEW MEDIA**
- **36** CLASS NOTES | Michael Blankenship '13 37 Laurelle Danton '83
- **38** IN MEMORIAM
- 42 Multicultural chapters ALUMNI NEWS
- Schooling on salmon LAST WORDS

Washington State Magazine is published quarterly by Washington State University. Editorial office: IT Building 2013, 1670 NE Wilson Road, Pullman, Washington. 509-335-2388 Mailing address: PO Box 641227, Pullman, WA 99164-1227. Printed in the USA. © 2024 Washington State University Board of Regents. All rights reserved. Views expressed in Washington State Magazine are those of the authors and do not necessarily reflect official policy of Washington State University.

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 ($\underline{magazine.wsu.edu/subscribe}$). 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).

SUPPORT WSU WITH A

Gift from Your IRA

Do you want to support WSU's mission?

Are you over 701/2?

Do you have a Required Minimum
Distribution (RMD) that you don't need?

Do you no longer itemize your charitable deductions?

Would you like guaranteed income for life by establishing a Charitable Gift Annuity?

If you answered yes to any or all of these questions, you may want to consider making a gift from your IRA through a **Qualified Charitable Distribution (QCD)**.

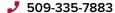
BENEFITS OF MAKING A QCD:

Tax Advantages: By making a QCD, the distribution is excluded from your taxable income, resulting in potential tax savings.

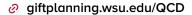
Fulfillment of RMD: A QCD can count toward satisfying your annual RMD from your IRA.

Impactful Giving: This simple and direct gift will directly support WSU's programs and students.

Contact the Office of Gift Planning for more information.













As a boy, Jim Elmer '70 loved watching buildings go up. During summers, he'd take his lunch to join construction workers, asking them questions. That passion turned into a WSU construction management degree and a successful career as the founder of James W. Elmer Construction.

A few years ago, Jim was diagnosed with Alzheimer's disease. As his symptoms progressed, his wife Sue decided to celebrate Jim's love for his alma mater with a gift to WSU.

Using a Qualified Charitable
Distribution to fund scholarships for
students majoring in construction
management, Sue honored Jim's
desire to help students in need and
continue his legacy of education and
construction for future generations.

FIRSTWORDS

Treating with empathy It's not easy to think about, but there's an epidemic raging in our state and nation. Opioid overdoses and substance use disorders are at all-time highs, especially in Washington. Heavy alcohol use, too, has shot up since the COVID pandemic. These public health crises require effective treatments, widespread prevention, and a good dose of empathy.

Pretty much everybody has some connection to somebody who has had trouble with addiction or substance use—sometimes with fatal consequences. Washington State University researchers, Extension staff, and others at WSU take a caring, human approach while they investigate innovative ways to treat, prevent, and reduce the harm of substance use disorders. This issue highlights some of those efforts to address addiction and substance use.

Rural areas in the state have been hit especially hard by the opioid crisis, which highlights the need for more health care access in those communities. In response, the College of Pharmacy and Pharmaceutical Sciences has launched a rural health initiative that places pharmacy students at sites outside of cities.

Pharmacists play a vital role in the health of rural residents. Tyler Young ('13 PharmD) recognizes that need as he and his wife run a pharmacy on Vashon Island. "At a rural pharmacy, you're truly taking care of your neighbor. That's what makes it so rewarding," Young says.

Those strong personal relationships are familiar to WSU alumni and friends. In many ways, the Cougar Marching Band, now under a new director, exemplifies close-knit WSU connections. The band members' camaraderie and their ability to link together the Cougar Nation is abundantly clear.

Another way we can build empathy is reading stories of the past. Former WSU professor Quintard Taylor researched Black history in the Pacific Northwest, and he introduced some of the influential Black pioneers through his work.

We all like to get together for food, too, and what better food than WSU's own Cougar Gold? We're looking for your dishes that feature our signature cheese to celebrate its 75th birthday. Share your recipe via social media or **magazine.wsu.edu/contact** and it could be featured in the magazine.

EDITOR: Larry Clark '94

ASSOCIATE EDITOR: Adriana Janovich ART DIRECTOR: John Paxson SCIENCE WRITER: Becky Kramer

CONTRIBUTING WRITERS: Addy Hatch, Tina Hilding, Brian Hudgins, Wenda Reed '76, Devin Rokyta

PHOTOGRAPHERS: Keith Caffery Effler, Shelly Hanks '88, Robert Hubner, Cori Kogan, Zach Mazur '06 MFA, '21 PhD,

Aaron Reed, Shannon Tomey, Zach Wilkinson, John F. Williams, Ziyan Yang

WSU PRESIDENT: Kirk H. Schulz

Contact Kirk: presidentsoffice@wsu.edu | 509-335-4200

VICE PRESIDENT, UNIVERSITY MARKETING AND COMMUNICATIONS: Phil Weiler

ADVERTISING: Contact Lowell Ganin, 206-717-5808 or <u>lowell@everedify.com</u>
Advertising guide is online at **magazine.wsu.edu/advertising**.

Washington State Magazine is pleased to acknowledge the generous support of alumni and friends of WSU, including a major gift from Phillip M. '40 and June Lighty.





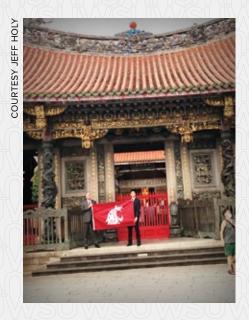
TALKBACK

A flag first?

I spent a part of September in Taiwan and had the opportunity to fly the Coug flag in front of the Lungshan Temple in Taipei. I thought it may be the first time for the WSU flag to have been flown in this location. I'm on the left in the photo and Taipei economic and cultural consul Tony Hu was gracious enough to hold the flag on the right.

JEFF HOLY ('83 PSYCH.)

CHENEY



LET'S CONNECT

Follow Washington State Magazine on social media...

Facebook—@WashingtonStateMagazine

Instagram—@washingtonstatemagazine

YouTube—@WashingtonStateMagazine

LinkedIn—Washington-State-Magazine

X/Twitter—@wsmagazine

Sign up for our email newsletter...

magazine.wsu.edu/email

Send us a message...

magazine.wsu.edu/connect

Correction: Jolie Kaytes is a professor in the School of Design and Construction. Her title was incorrect in the Winter 2023 issue.

A State of Wonder









Pacific beaches to Cascade volcanoes. Winemakers, mountaineers, apples, cheese, ancient villages, and modern cities.

There's no end to the natural beauty and compelling lives in the state of Washington.

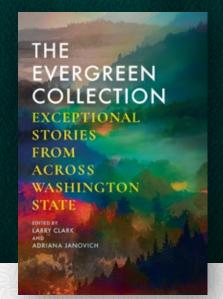
Washington State Magazine has brought those stories to life for more than 20 years, now gathered in this collection. Stunning full-color photos accompany the thought-provoking stories.

Proceeds support the magazine and Washington State University.



Buy the book at WSU Press via magazine.wsu.edu/evergreen or scan the QR code.





Do You or You and Your Neighbor Have 300+ Acres of Clean Farm or Pasture Land? Lease Us Your Land!



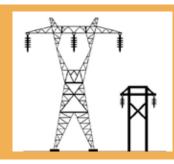
300 acres or more relatively level, clean farm or pastureland with a large transmission line crossing?

Lease Your Land for Solar Power Production

Extraordinary income to the right property owner(s)

If your property qualifies or your property along with neighbors qualify you may potentially receive long term income. (20 – 40-year lease)

\$800 - \$1200 Per acre Per year with incremental increases



Do You Have Power Lines Like This On Or Adjacent To Your Land?

- Can Not be Subtranssmision Lines
- Must be Transmission Power Lines
- Must be 115 Kv to 345 Kv

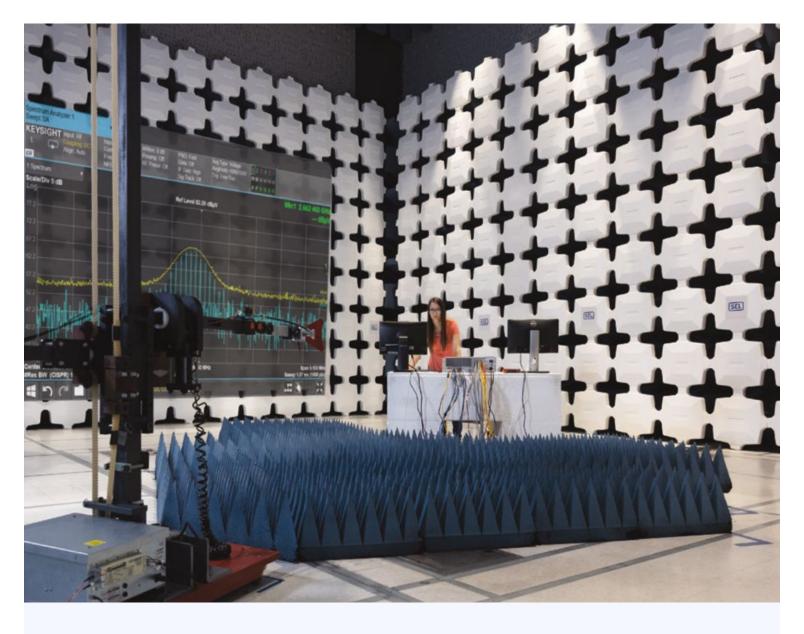
Please Note the Four Essential Requirements Below

Transmission lines crossing or within 200 yards of property 300 or more acres (must be in recent cultivation or in pasture or clear open range) No timberland or clear cuts

State or county maintained road bordering the property

CALL (828)-817-5400 or (828)-817-9101 Email Us at: InnovativeSolarFarms@gmail.com

Visit our website at innovativesolarsystemsllc.com to view recent projects



World-Class Technology, Made in the Northwest

Every day, we invent, design, and build the systems that protect power grids around the world. SEL's employee owners are dedicated to making electric power safer, more reliable, and more economical.

Learn more at selinc.com/company/about.





When ChatGPT launched in late 2022, university faculty worried about the powerful artificial intelligence tool's impact on learning.

Among other things, ChatGPT can answer questions, write papers, and create images based on natural language prompts. How would students gain knowledge and critical thinking skills, they wondered, with the ever-present temptation to claim AI-generated work as their own?

"It was very much a hair-on-fire moment," recalls Andrew Perkins, a professor of marketing. "A lot of us faculty—and not just at Washington State University but across the nation and the world—were saying, 'We've got to figure this out quick."

Perkins is part of a WSU Carson College of Business task force convened to discuss ChatGPT and other AI tools. Faculty members recognized that banning ChatGPT's use for assignments and policing violations wasn't realistic. Detection programs couldn't keep up with the rapidly evolving technology.

"Instead, we've chosen to incorporate ChatGPT into our teaching, with the idea it could enhance student learning and productivity," Perkins says. "We think of it as a competitive advantage for our students compared to students from universities with more restrictive ChatGPT policies."

At the Edward R. Murrow College of Communication, Nanu Iyer arrived at similar conclusions. WSU policy lets individual faculty members decide if and how students in their classes can use AI for assignments.

"As a teacher I feel it's my responsibility to address this and prepare my students for a world that will use AI, deliberately or unknowingly, in every single task before too long," says Iyer, an associate professor at WSU Vancouver.

By the end of 2023, ChatGPT had more than 180 million users, according to parent company OpenAI. Not teaching students how to use the tool effectively, while recognizing its shortcomings, felt like turning them loose without an instruction manual, Iyer says.

Bringing AI into the classroom required changes in how they teach, both Perkins and Iyer say.

Perkins reviewed the homework for his classes, scrapping projects that students could easily complete with ChatGPT. Instead, he focused on instructing students on how to use it as a time-saving tool while critiquing its output.

Last fall, he built a lesson around the United Auto Workers strike. Before class, the marketing management students watched a YouTube video where a used car salesman discussed the strike's impact on retail lots.

"The salesman is hilarious, and he's got insightful views on the inner workings of the used car market," Perkins says. "But he's talking extemporaneously in the 12-minute video, so there is lots of repetition and ums and ahs."

Students used ChatGPT to create a transcript of the video and summarize the key points. After a class discussion, they worked in teams to create marketing messages around the strike. Assigned the role of an automobile manufacturer, they used ChatGPT to craft messages tailored to dealers, customers, and other audiences.

GO COUGS MEANS

Discovering Solutions

Global problems need global solutions. That's why Washington State University has a permanent presence in East Africa.

Scientists there are finding, tracking, and working to control infectious diseases. They're training the next generation of specialists in Africa, for Africa.



LEARN MORE

GLOBAL





waste cleanup.

cleanup challenges.

training a generation of students to solve

critical environmental challenges in nuclear

Washington, the DOE is building the world's

largest treatment plant to clean up 56 million

gallons of radioactive and chemical waste

that has long been held in 177 underground

storage tanks. As much as 70 percent of the

periodic table is contained within the highly

heterogenous waste, a mixture of liquid,

sludge, and crystallized salts, making it one

of the most complex of any nuclear waste

waste into durable glass that can be safely

stored for thousands of years. WSU research-

ers are involved in investigations to better

understand how glass corrodes, performs, and

alters over time. The work aims to optimize

the rate of nuclear waste melting to speed its

cleanup while ensuring that the final glass

The treatment plant will convert the

At the Hanford nuclear site in eastern



Evaluating the effectiveness of the Algenerated messages was part of the in-class assignment. Students also turned in their ChatGPT prompts, and they're responsible for the accuracy of Al-generated content.

"If you don't have expertise in the subject matter, it's really difficult to know if what AI is giving you is accurate and correct," Perkins says.

That's a point Iyer drives home with his students. ChatGPT is generally designed to predict the next phrase in a sequence. It can create "AI hallucinations," spouting nonsense with authority.

Last year, Iyer's students wrote a research paper on their own and turned in a paper written by ChatGPT on the same topic. "The AI version gave them ideas for improving their writing and helped highlight common mistakes they were making," Iyer says.

He also assigned a literature review created by ChatGPT. To their dismay, students learned that ChatGPT cited researchers who didn't exist and referred to fabricated information in journal articles.

"They realized that AI doesn't know how to say no, even when it doesn't have the answer. It will cook up AI hallucinations and pass them off as real," Iyer says. "You can't use AI-generated work without proofing, checking, and verifying."

Ultimately, Iyer says he's preparing students to use AI ethically and responsibly in their future workplace. It can help them speed through mundane tasks, freeing up time



upfront

for creativity and critical thinking. Besides checking AI-generated responses for accuracy, students also must know how to write effective prompts to get the most out of AI software.

"This technology will become integral to how we work," Iyer says. "AI may not take over our jobs, but people with AI skills definitely will." *

A solution becomes clear

BY TINA HILDING

On José Marcial's desk sits a 2,000-year-old piece of glass from Israel.

Created incidentally by ancient people as they were smelting copper, the glass holds clues that could help researchers solve some





FROM LEFT: JOSÉ MARCIAL (COURTESY VOILAND COLLEGE OF ENGINEERING AND ARCHITECTURE) AND JOHN MCCLOY (COURTESY INSTITUTE OF MATERIALS RESEARCH)

of the biggest long-term environmental challenges in nuclear waste cleanup.

"It's an astounding combination of archaeology and materials science that allows us to observe the rate of glass corrosion," says Marcial ('13, PhD '17 Mat. Sci.), a scientist at Pacific Northwest National Laboratory. "This gives us an opportunity to understand how glass corrodes under real conditions over time, whereas in the lab we have to speed the process up."

Marcial was the first in what has become a long list of students in a decade-long collaboration between WSU and the US Department of Energy's Office of River Protection (DOE-ORP). Albert Kruger at DOE-ORP envisioned product meets safe storage requirements for radioactive components.

"This project is not a 10-year problem," says John McCloy, director of WSU's School of Mechanical and Materials Engineering who has led the collaboration. "It is going to be here 50 to 100 years from now—long after you and I are gone. We need well-trained people for the future workforce."

The WSU and DOE-ORP relationship began when leaders in the nuclear waste cleanup effort realized that they could improve and possibly eliminate some complicated pre-treatment processes with a better basic understanding of glass formulations, and an intensive training provided by universities. **

9

ANCIENT ISRAELI GLASS FRAGMENT (COURTESY

A prescription for rural pharmac

BY BECKY KRAMER

Students like **Catalina Yepez** could help solve Washington's shortage of rural health care providers.

A 30-year-old Washington State University pharmacy student who lives in Benton County, Yepez got interested in the field after

her dad was diagnosed with diabetes in his 40s. When she tallied the number of family members she knew with the disease, the statistics hit home.

"Diabetes is common among the Hispanic community in Washington, and it's a chronic disease," she says. "People are often on a lot of medications, and diabetes can cause complications that will require different meds."

Yepez worked at Columbia Basin College for a few years after she graduated from WSU Tri-Cities with a bachelor's in biological sciences. During the Covid pandemic, she interviewed for pharmacy school.

"The pandemic reminded me

of why I went to college in the first place and where I thought I could make the most difference," says Yepez, who wants to practice rural pharmacy.

About 800,000 Washington residents live in sparsely populated areas that lack access to health care professionals. Much of eastern Washington fits that category, according to the state Department of Health, and so do parts of central and southwest Washington.

To help fill the provider gap, the College of Pharmacy and Pharmaceutical Sciences launched the Rural Health Initiative. Besides recruiting pharmacy students from rural areas and underserved populations, it encourages rural pharmacies to offer more primary care.

The initiative is the brainchild of Mark Leid ('83 Pharm.), WSU's dean of pharmacy, who grew up in the farm town of Waitsburg. Who better to serve rural communities, he thought, than people from rural areas?

And what better place than the local pharmacy?

"Pharmacies are the front door to the health care system," he says. "You can walk in and see a pharmacist with no appointment. That person could be up to their neck filling prescriptions. But if you walk in with a question, they're going to drop everything to answer you."

An effective program, Leid knew, also had to

prepare students for the realities of rural practices.

"While it might sound kind of romantic to say, 'I'm specializing in rural pharmacy,' it's a lot of work and much different from practicing in an urban area," he says. "You might be the only health care provider for 100 miles."

The Rural Health Care Initiative has a 10-year plan for growing Washington's ranks of rural pharmacists. Besides recruiting students, the initiative—which launched in 2022 with an anonymous \$2.2 million gift—offers financial support, specialized training, and career connections.

Rural-track pharmacy students are eligible for \$10,000 annual scholarships if they spend three years working in rural areas after graduation. Their curriculum includes classes tailored to rural health care, and they do clinical rotations in smaller communities.

"If you don't know the area, you might have difficulty seeing yourself taking a job in Republic, Omak, or another small town after graduation," says Angela Stewart, associate dean for rural health and pharmacotherapy professor. "But if you already have connections there, there's more of a draw."

Yepez takes classes through WSU's pharmacy program in Yakima, where she's on track to graduate in 2025. She and her husband live in Prosser, where her parents and other family members help care for the couple's three-year-old son.

Yepez also drives to Walla Walla, where her clinical rotation at St. Mary Medical Center led to an internship at the hospital's pharmacy. Part of her scholarship money helps fill the gas tank.







Below: Personal letters thanking Tyler Young for his advice and attention to his Vashon Island customers. Photo Zach Mazur. At bottom: Vashon Island view. Photo Shannon Tomey

Besides graduating new pharmacists, the initiative envisions helping existing pharmacists expand their services.

"People think of a pharmacist as the person who hands them their prescription and provides counseling on medications, but pharmacists can and do provide care," Stewart says.

Among other things, Washington pharmacists can treat burns, cuts, and rashes and monitor chronic conditions like hypertension and diabetes. They can perform basic screenings, manage medication

therapy, and evaluate and treat patients with strep throat and uncomplicated urinary tract infections.

Rural pharmacists, who often know their patients by name, can catch health problems early, referring clients to physicians for follow-up care.

Nationally, rural pharmacists are recognized as underutilized health care providers, Stewart says. "Many would love to be doing more than dispensing medications and giving immunizations, but they can't see ways to free up time to create some of these services."

To help that happen, the Rural Health Initiative places WSU

clinical faculty at rural health care facilities, such as a hospital clinic pharmacy in Centralia.

"Pharmacists go out into these communities and serve kind of like physician's assistants," Leid says. "Besides Centralia, we've placed a clinical faculty member in Spokane Valley, which isn't rural but serves high numbers of patients from outlying areas. As funding becomes available, we'll continue to expand."

Through a rural residency program, pharmacies will also have access to new graduates. Stewart says the objective is to bring fresh ideas into pharmacies, expand care models, and create new revenue.

"When you put all the parts of the Rural Health Initiative together, I truly think we can make a difference in improving health care for Washington's rural residents," Leid says. "And we can make it happen within 10 years." **

Rx care next door

Being a pharmacist on Vashon Island puts **Tyler Young** ('13 PharmD) on the front lines of health care.

Although it's part of populous King County, the island is a ferry ride—and a minimum of 45 minutes in travel time—from hospitals in Seattle, Tacoma, and Port Orchard.

"We're a mile and a half from big cities as the crow flies, but we're also isolated because you have to wait for the boat," says Young, the owner of Vashon Pharmacy. As a result, "there's a small group of us responsible for the bulk of the health care on the island."

During the pandemic, Young teamed up with other providers and volunteers to roll out Covid vaccinations for Vashon's 10,000 residents. To date, they've administered about 30,000 vaccine and booster shots.

Since he and his wife, Amy, purchased Vashon Pharmacy in 2017, Young has also been interested in expanding primary care services to help islanders stay healthy.

Beginning this year, that could include helping clients manage their high blood pressure, monitor hormone therapy, or treat minor ailments such as rashes, cuts, and burns-all of which pharmacists are allowed to

do in Washington.

"Those are a few of the issues we see on a daily basis," he says. "At a rural pharmacy, you're truly taking care of your neighbor."

Young's interest in rural health care was shaped by his early years. He grew up in Oakesdale, a town of about 400 people south of Spokane, and spent summers working on the wheat farm of family friends.

During his time at Washington State University, Young also spent five years as a pharmacy assistant at Tik Klock Drug and Gift Store in Colfax, where the former owner became a mentor.

"I would ask him all sorts of questions, which he so kindly answered, including 'How do you make money and keep the lights on?" Young says. "The business side of it was fascinating to me. I left with a knowledge of inventory management, payroll, and billing.

I was better prepared to enter the industry simply because I worked for him."

After graduation, Young managed an in-store pharmacy for a large retailer in downtown Seattle. During that stint, he was on an email list that connects Cougar alumni with independent pharmacies looking for







upfront

>> buyers. When the Vashon opportunity came up, Young and his wife were intrigued.

> "Being your own boss has a lot of family perks in terms of flexibility, although that's quickly erased during events like the pandemic," he says. "Now that things have settled down, I'm able to spend more time with our kids."

> Young worked with the former owners for three years before the couple purchased Vashon Pharmacy. The transition period allowed him to get acquainted with the job and the island's residents.

> While Young focused on the pharmacy, Amy used her background in retail management to assess Vashon Pharmacy's sales of gift items, expanding the offerings of toys—which it's now known for.

> The couple also added a nutrition center that sells vitamins and supplements. Their future plans include a building expansion that will add consulting rooms to the pharmacy.

> Diversified revenue streams are critical to pharmacies' financial well-being, particularly for independent operators, says Julie Akers, associate dean of external relations at the College of Pharmacy and Pharmaceutical Sciences.

> Unbeknownst to customers, pharmacies typically break even or lose money on many of the prescriptions they fill, she says. Reimbursement rates are negotiated by middlemen for insurance companies.

> Sales of gifts or sundries play an important role in pharmacies' bottom lines. In addition, the ability to offer more health services can augment pharmacies' revenue while addressing provider shortages in rural areas.

> For rural residents, transportation can be a barrier to accessing primary care. That's why pharmacists' ability to diagnose and treat things like shingles can make such a difference.

> "We're trying to help pharmacists understand what they can do in our state, then help them fill the gaps, whether that's training or other needs," Akers says.

> Young is working with a third party on certification that will allow Vashon Pharmacy to bill insurance companies for providing additional health services. In 2024, he expects to start rolling out some of the services.

> "As we get credentialed with more insurance companies, we'll get an even better idea of what Vashon needs," he says. "We won't get rich doing it, but we'll be serving the community." *



False news often goes viral on social media, spread by algorithms that prioritize novel and sensational content.

Sometimes, it's a harmless hoax designed to generate clicks. But misinformation can have dangerous consequences. During the pandemic, fraudulent "Covid cures" were shared with millions of online viewers while rampant conspiracy theories eroded trust in public health agencies.

"We all can be vulnerable to misinformation," says Porismita Borah, professor at Washington State University's Edward R. Murrow College of Communication. "The early days of the pandemic created the perfect environment for misinformation to spread online. Covid was a brand-new problem, people were fearful, and scientific information about the virus was still emerging."

Borah is part of a team of US researchers developing strategies to slow the online spread of misinformation. Armed with a \$5 million National Science Foundation grant, the effort involves a "detection team" that monitors social media sites and other online hubs for the top-trending falsehoods of the day.

Early on, the detection team focused on falsehoods related to Covid vaccines and the integrity of the 2020 presidential election. But the work is expanding into other areas of health and public policy, such as the risks of drinking raw milk and the benefits of being vaccinated against the human papillomavirus (HPV).

After people were exposed to erroneous information on social media, the researchers tested the effectiveness of corrective messaging, which appeared as advertisements.

The results reinforced what prior research has shown, Borah says: timely corrections can slow the spread of misinformation. Compared to a control group, people who were exposed to corrective messages online were less likely to believe the false information and repost it to friends and followers.

The researchers are also enlisting the news media. They're developing a dashboard where journalists can see the top-spreading misinformation and the platforms and websites where it's gaining traction online.

"Journalists are really on the forefront of this, because they face misinformation all the time," Borah says. "The dashboard gives them tools to spot misinformation and provides tested strategies to reduce its spread."

In addition to Borah, the team includes researchers from the University of Wisconsin-Madison, Georgia Institute of Technology, and media organizations. When the dashboard is tested later this year, the team will also work with the International Fact-Checking Network and Snopes.com.

"We can't completely get rid of misinformation; that's never possible," Borah says. "But we can reduce the size of the audience by slowing down its spread." *





upfront

The future is all a buzz



For decades, science fiction writers have pictured a world where robotic insects perform essential tasks. One of Isaac Asimov's short stories even describes robotic bees.

"There are so many potential uses for robots inspired by insects," says Pérez-Arancibia, an associate professor and director of Washington State University's Autonomous Microrobotic Systems Laboratory. "They could pollinate crops. They could locate people trapped in buildings after earthquakes or other natural disasters. They could collect monitoring data from contaminated areas. They could explore caves."

But building microrobots that crawl, fly, or swim comes with steep challenges. Scientists have long struggled not only to imitate insects' movements but to find an energy source as powerful as their body fat.

Even the best batteries can't compare with animal fat in terms of energy density, Pérez-Arancibia says. By volume, the battery would need to be about 30 times larger than the corresponding unit of fat.

Pérez-Arancibia and two of his former doctoral students at the University of Southern California made breakthroughs in both areas with the 2020 rollout of the RoBeetle, which was listed in Guinness World Records as the smallest liquid-fueled robot.

"We beat the next autonomous robot by a factor of 10 in terms of weight," says Pérez-Arancibia, who continues to refine the RoBeetle at WSU.

At 88 milligrams, the RoBeetle weighs about as much as three grains of rice. Besides climbing inclines, it can haul loads up to 2.6 times its own weight, and walk for two hours without stopping. At top speed, the RoBeetle travels at about 4.5 centimeters per minute.

Methanol fuels the RoBeetle, and its artificial muscles are made with shape-memory alloys—metal alloys that change shape during heating and cooling. A fuel tank on the microrobot's body releases methanol through a vent, causing a reaction with a shape-memory alloy wire that mechanically moves the RoBeetle's legs.

In Pérez-Arancibia's lab, doctoral students conceptualize and build robotic insects out of microcircuit boards, sensors, layers of carbon fiber, and other materials. They also work on controllers, the artificial brains that operate the robots.

Months of work go into designing and testing each new microrobot. The team is constantly challenging itself to improve efficiency and range of motion. Pérez-Arancibia's most recent creation is Bee++, a four-winged flying microrobot that weighs 95 milligrams.

Each of the Bee++'s wings are controlled by separate actuators, allowing the microrobot to fly in all directions and perform pitching, rolling, and twisting maneuvers. Powered by an onboard battery, its flight time is about five minutes. Tethered to an electrical source, it can remain in the air for an unlimited amount of time.

Wings that beat 160 times per second contribute to the Bee++'s flight stability and control. In addition, the team is working on a microrobot inspired by the aerodynamic efficiency of butterflies' flight. Just like butterflies can fly for long periods, the design holds promise for achieving sustained autonomous flight, Pérez-Arancibia says.

He's also developing two swimming microbots, which could someday help with water-quality testing. The designs are loosely based on the movements of eels and water striders.

"We use some of the principles we see in nature, but we aren't trying to replicate nature," Pérez-Arancibia says. *



SHORTSubject

JAMES BECKWOURTH PAINTING BY JAMES GAYLES (COURTESY PUEBLO CITY-COUNTY LIBRARY),
 DETAIL OF A JACOB LAWRENCE PAINTING OF GEORGE BUSH (COURTESY WASHINGTON STATE CAPITOL MUSEUM),
 3. COLORIZED PHOTO DETAIL OF GEORGE WASHINGTON (COURTESY WASHINGTON STATE HISTORICAL SOCIETY)

In the early 1970s, a young assistant professor in Washington State University's new **Black Studies** program launched a project to write a history of Blacks in the Pacific Northwest.

The Black population of Washington, Oregon, Idaho, and Montana was—and still is—small. And some aspects of the Black experience in the Pacific Northwest had been examined. But Quintard Taylor Jr. said he couldn't find a comprehensive look at how Black communities grew, which was surprising to him and, at first, frustrating. "Then I realized it was an opportunity for me to provide that comprehensive history," says Taylor, who went on to become a noted historian and retired from the University of Washington as the Scott and Dorothy Bullitt Professor of American History. He also founded Blackpast.org, a web-based reference center.

Taylor's "A History of Blacks in the Pacific Northwest" was published as his doctoral thesis at the University of Minnesota in 1977, including some highlights here. It's based on his research and on interviews with more than 40 descendants of Black settlers and pioneers in the Northwest.

Taylor wrote in his introduction, "It would be tempting to say that Blacks represented such a small figure in the total pre-1940 population of the region that they were of no historical significance. Yet the opposite occurred." There were Black fur traders, Black cowboys, Black homesteaders, and Black soldiers. There were miners and shipbuilders and newspaper publishers and businesspeople.

The project molded his perspective. "It tempered my idea about where Black history is found," he says. "Black history is wherever Black people are."

SAILORS, SERVANTS, AND SETTLERS

Maritime expeditions brought Black sailors and servants to the Pacific Northwest from the mid-1700s to early 1800s. York, the only Black member of Lewis and Clark's Corps of Discovery, was an integral member of the expedition.

From the early to mid-1800s, Black fur trappers and traders were the first permanent Black settlers, and many forged ties with Native Americans.

1) JAMES BECKWOURTH, born a slave in Virginia, became a famous mountain man and lived in Idaho and Montana.

Free Black people began migrating to the Pacific Northwest for many reasons, including that the region offered greater personal freedom than in the slave states of the South or even the free states of the East. Other Black people came as slaves in fact if not in name, listed as "servants" because the Oregon Territory outlawed slavery.



3 GEORGE WASHINGTON BUSH and his family were among the first party of settlers to enter what would become Washington Territory, arriving in 1845. He became a successful farmer and his land south of Olympia is still known as Bush Prairie.



3 GEORGE WASHINGTON left Illinois after the state passed a law requiring all free Blacks to post a bond of \$1,000 for good behavior. He homesteaded in Lewis County in 1851 and founded the city of Centralia on his homestead in 1872.



JOBS

Between the Civil War and World War I, Blacks in the Pacific Northwest were successful business owners, miners, laborers, farmers, and cowboys. The largest group included men and women who worked in private clubs, wealthy homes, hotels, and restaurants. The people who held these desirable jobs often were community leaders.

But as more people moved to the region, there was increasing competition—and discrimination. Taylor wrote that Black businesses were denied loans, illiterate Black miners were swindled, and Black workers and soldiers were exploited.

WILLIAM RHODES was one of the first Black miners in Idaho, arriving in 1860. Rhodes Creek near Pierce, Idaho, and **1** Rhodes Peak in the Bitterroot Range are named after him.





6 GEORGE FLETCHER was a cowboy who won first prize in the Pendleton Roundup in 1911. He enlisted in World War I and served overseas in a cavalry unit.



6 SARAH BICKFORD owned and operated the water utility in Virginia City, Montana—probably the first Black woman in the United States to own a utility company.



LAW AND POLITICS

Oregon voters passed "exclusion laws" to prevent Black settlers, and although they were overridden by the 14th Amendment to the US Constitution guaranteeing equal protection, they weren't repealed for another 60 years.

Laws in Oregon, Idaho, and Montana prevented Whites from marrying Blacks and other people of color, with some lasting until the 1950s. Washington Territory briefly banned interracial marriage, but the law was repealed before statehood.

Blacks in the Pacific Northwest came together to fight specific injustices. In Portland, for example, the Black community hired a White attorney and sued when the city said Black children couldn't attend public schools. Taylor said of Black communities in the Pacific Northwest at the time, "Given their limited size and resources they waged a surprisingly aggressive campaign to obtain or defend their civil rights."

The big influx of Black people to the Pacific Northwest in the 1940s brought more Black influence in larger cities and the strengthening of civil rights organizations. By the 1950s, Black communities were pushing for broader civil rights legislation to end discrimination in restaurants, hotels, and entertainment venues. The 1960s brought more direct action, including boycotts and picketing at businesses that still had discriminatory hiring practices, and sit-ins to protest housing discrimination.

OWEN BUSH, son of George Washington Bush, was the first Black legislator in the new state of Washington in 1889 and was instrumental in establishing Washington Agricultural College (later WSU).



HOUSING

The first Blacks to arrive in the Pacific Northwest settled throughout the region. Even smaller cities and towns—like Butte, Helena, Roslyn, and Spokane—had sizable Black populations.

Gradually, though, the Black population in the Pacific Northwest became concentrated in Seattle and Portland. In Seattle, businessman William Grose built a house on land he received in payment for a debt and sold parcels to other Black families that eventually became the Central District. Portland's Black neighborhood organically coalesced east of the Willamette River.

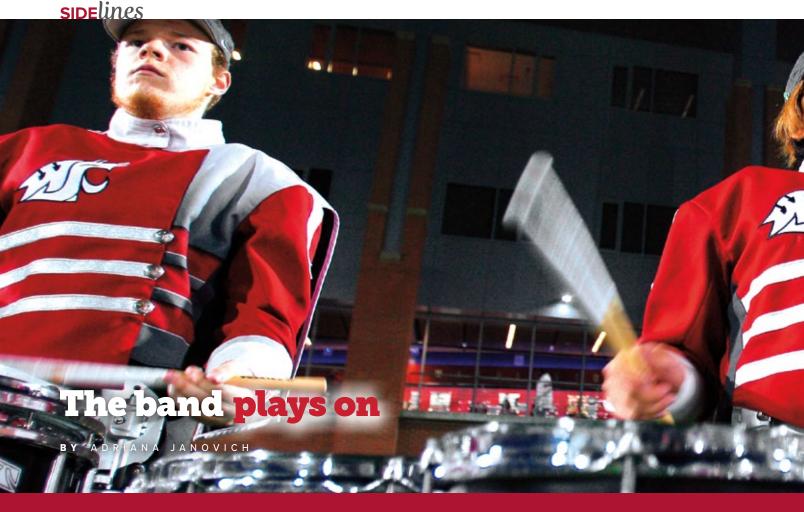
This shift created community—but also segregation. In the 1920s, cities adopted racially based restrictions on real estate sales in many areas, essentially trapping Black residents in Black neighborhoods.

World War II defense-related jobs brought waves of new Black residents to Seattle and Portland. From 1940 to 1950, the Black population in the Pacific Northwest increased 280 percent. This caused severe overcrowding in Black residential areas. By 1944 more than 7,000 Black people were occupying the same buildings that housed 3,700 Black Seattleites in 1940. The US Supreme Court outlawed restrictive covenants in 1948.

WILLIAM GROSE opened the second hotel in Seattle, in 1861, called Our House and eventually became one of the most successful businessmen in early Seattle. **







SIX HOURS BEFORE KICKOFF, Cougar Marching Band takes the field for one final rehearsal. After warming up in the clear but crisp 40-degree weather, they run through the halftime and pregame shows. Then, from the elevated podium at the 50-yard line, the leader of the band instructs his charges to relax and huddle.

They're preparing for the last home football game of the 2023 season, and the energy is electric. Jon Sweet, director of the Cougar Marching Band, amplifies the mood even more, telling the 200-some students gathered around him, "You sound great. You look great. It's going to be a great day for football. Whether the score is in our favor or not, the band will win."

Cougar Marching Band is a Washington State University tradition, providing the pomp and the circumstance, a steady beat, high bar, and sense of pride. The band revs up the crowd, motivates the athletes, and plays the soundtrack of the college experience

for students and alumni alike, often sending shivers up spines, and, sometimes, bringing tears to eyes.

This academic year, the band has a new director whose plans include growing the program, enhancing the student experience, and campaigning for new uniforms as well as establishing a fund to maintain them.

"To me, the marching band is the heartbeat of the university," says Sweet, who ioined WSU on June 1 as associate professor and director of Symphonic Band and athletic bands, including the Cougar Marching Band. "It's the heart and soul of what we do. It's instrumental in the preservation of memory and history."

The marching band performs at all home football games, men's and women's home basketball games, women's home volleyball games, fall convocation, and Pullman's National Lentil Festival.

"Anytime we play 'The Fight Song,' there's a certain emotion that comes with it," Sweet

says. "You can't talk with people about the college experience, especially the college football experience, without the inclusion of the marching band and all the pageantry arts, dance, and cheer. When all those things are firing, it makes for an environment that's different than you can get anywhere else."

In addition to the "Washington State Fight Song," Sweet is a fan of rock-and-roll and music from movies—and it shows in the halftime performances he designs. During his first season with Cougar Marching Band, halftime shows featured songs from the Shrek films, Star Trek, and 2001: A Space Odyssey as well as Elton John's "Rocket Man" and Nirvana's "Smells Like Teen Spirit."

Says Sweet, "Crowds like things they recognize. They like fast, and they like loud. I also like a range of years and styles so that the band can resonate with more people over the course of the season. I want to make sure that our programming covers a broad spectrum."







Besides writing music and formations for Cougar Marching Band, Sweet creates routines for marching bands nationwide through his company, Sweet Marching.

"Jon has a keen sense of detail," says Keri McCarthy, director of the School of Music and a professor of oboe and music history. "He is one of the top drill writers in the country. His shows are known and watched millions of times."

TWO AND A HALF HOURS BEFORE

KICKOFF, Cougar Marching Band welcomes athletes to campus through Cougar Prowl, pumping up players and fans. It's 37 degrees and already dark when band members line both sides of the pathway to the Hollingbery Fieldhouse, forming a tunnel for players to parade through, before the November 17, 2023, game against Colorado. While waiting for the athletes' arrival, Sweet walks down both sides of the tunnel himself, fist-bumping each band member.

"I want everyone in Cougar Marching Band to have a positive experience," he says. "When that happens, we're going to get bigger. It's natural."

Behind the scenes, Sweet has introduced smartphone apps to help students learn everything from music to visuals. He's also launched a fund-raising campaign. "Our uniforms are about 10 years old, and they are splitting at the seams," McCarthy notes. "They are not the right sizes. And we don't have enough of them."

From Cougar Prowl, the band marches on, making a loop around the RV lot on Stadium Way and pausing at each corner to give a short performance. At each of the four stops, fans gather to watch, take photos and videos, and cheer: "The best in the West!" and "Go Couas!"

Next stop: Cougville on Rogers Field, where the band gives an even longer performance. "It's all about getting the energy up," Sweet says. "Everything we're doing is getting the fans into the experience."

MOMENTS BEFORE HALFTIME, band members stream from their section in the west end zone, the Crimzone, to prepare to take to the field. Sweet, outfitted in a crimson buffalo check plaid blazer and bow tie, waits

for them at the bottom of the stands, again fist-bumping students as they file past him.

"The way he carries himself sets an example for the rest of the ensemble that we are all trying to achieve. If he tires, he never shows it," says drum major Walter Pittson, a fifth-year band member and music education graduate student who dreams of becoming a high school marching band director in his hometown of Arlington. Sweet's demeanor, attitude, and sense of camaraderie he's instilled in Cougar Marching Band have impressed Pittson.

"I hope to carry that into my own band someday," Pittson says.

Chicken eggs

BY ADRIANA JANOVICH

Eggs have long represented the arrival of spring. Since antiquity, the perfect little ovals have symbolized renewal and rebirth, growth and fertility. They carry the promise of new life, new ideas, and new beginnings along with the possibility of prosperity and opportunity.

They also make up one of Washington state's top 10 commodities, raking in nearly \$460 million annually, according to the US Department of Agriculture's 2023 Washington Annual Statistical Bulletin. The same report notes Washington's 6.5 million egg-laying hens produce more than 2 billion eggs per year—and they have since 2015.

That information "makes me feel good about the future of egg farming in this state," says Sara Stiebrs (x'02 Int. Des.), chief operating officer at Stiebrs Farms in Yelm. "Americans love eggs."

In fact, the average American ate about 280 eggs, or about 23 dozen eggs, in 2022, according to the US Department of Agriculture (USDA), which reports per capita egg consumption has increased 8 percent since 2000.

"I never get tired of eggs," Sara says. "I love eggs. They are such a huge part of our lives. They're our livelihood. Sometimes, our family will eat up to three dozen eggs a week." Sara owns the egg farm with her husband, Yany, a third-generation egg farmer whose grandparents started the business 70 years ago. Jan and Zelma Stiebrs came to Washington state from their native Latvia in 1949. In 1953, with 100 hens, they started selling eggs door-to-door to neighbors and friends. Jan and Zelma retired in 1978, the same year Yany's parents, Dianna and the late Janis Stiebrs, married and began running the farm. Dianna Stiebrs remains chief financial officer. Yany is chief executive officer.

Sara and Yany wed in 2006. She joined the family business four years later. Today, she leads the farm's animal welfare and food safety compliance. "Growing up on a small cattle farm myself, I understand how much goes into running a farm, and it was important for me to jump in and help," Sara says. "I never thought I would end up here. But I am really proud to be an egg farmer. Egg farming is one of the hardest jobs you can ever do. Those hens need to be cared for 24/7. We're on call all the time.

"I take pride in what our family does to feed families across the Pacific Northwest."

Stiebrs Farms employs about 100 people and has three locations, 65 barns, and about 350,000 hens. It has long specialized in cagefree, cage-free organic, and pasture-raised eggs. Cage-free eggs are now required by law in Washington state. Legislation signed by Governor Jay Inslee in 2019 banned the sale and production of caged eggs—regardless

of where they were produced—by the end of 2023. The law also requires more space per bird as well as enrichments, such as scratch areas, nesting and dust-bathing areas, and perches. Other states are adopting similar laws. Nearly 39 percent of all commercial egg-laying hens in America, or just over 125 million, were cage-free in 2022, up from almost 25 percent in 2020 and 17 percent in 2017, according to the USDA.

More than half of all eggs produced in the United States are sold in their shells at retail outlets and consumed domestically. Stiebrs Farms supplies eggs to community food co-ops throughout the region. Eggs from Stiebrs Farms are also sold by New Seasons Market, Town and Country Markets, PCC Community Markets, Smith Brothers Farms, and many other stores and restaurants in the Seattle and Portland, Oregon, areas.

The 2022 avian flu outbreak, along with increased operational costs such as labor, feed, and fuel for transportation, temporarily drove up egg prices earlier this year, in some states as much as triple. Still, eggs remain a relatively inexpensive way for people to meet their daily dietary needs. Eggs offer



SARA AND YANY STIEBRS POSE WITH THEIR 12-YEAR-OLD TWINS AND A CHICKEN.
(PHOTOS COURTESY SARA STIEBRS)







high-quality protein, complete with all nine of the essential amino acids. A large egg contains just over 6 grams—3.6 in the egg white and 2.7 in the yolk.

Eggs are also an excellent source of vitamin B12, biotin, iodine, selenium, and choline, and are a good source of riboflavin and pantothenic acid. Perhaps the best part: a large egg has fewer than 80 calories.

From creamy custards and ice creams, to classic breakfast and brunch dishes, eggs provide the building block to myriad sweet or savory dishes. In baking, they make a perfect binder—for cakes and chocolate chip cookies, soft rich dough in cinnamon rolls, and brushed glazes that help adhere turbinado or demerara sugar to treats. Whip the whites into a fluffy meringue for a classic lemon pie or crispy French macarons. Add a jammy boiled egg to a rich broth with noodles and vegetables.

"I keep hard-boiled eggs in the refrigerator at all times," says Sara. She and Yany are raising their 12-year-old twin boys, Cohen and Hayden, perhaps future fourth-generation egg farmers.

Sara uses eggs for holiday baking, quick hashes and breakfasts-for-dinner, her beloved Christmas quiche, Latvian *piragi*—the recipe comes from Yany's grandmother—and more.

"I love the versatility of eggs," she says.
"They are such important staples. They are wholesome and nutritious—nature's perfect protein. They are just everything you could ever want in this perfect little package." **

SARA'S BREAKFAST QUICHE

From Sara Stiebrs (x'02)

A favorite at the Stiebrs household on Christmas morning, this 18-egg quiche features a hashbrown crust stuffed with bacon, green onion, cheese, and spinach. Sour cream and hot sauce make for quick and easy toppings. Sara uses eggs from the family egg farm, Stiebrs Farms. And, she notes, "it's really filling."

For the crust

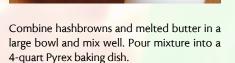
- 2 pounds of frozen hashbrowns, thawed
- 1 stick butter, melted

For the filling

- 18 large eggs
- 34 cup of heavy whipping cream
- 1 12-ounce package of bacon, chopped, cooked until semi-crispy, and well drained
- 1 cup chopped green onion
- 3 cups shredded Mexican-blend cheese
- 1 package of frozen spinach, thawed and all moisture squeezed out
- Salt and pepper
- Sour cream, for serving
- Hot sauce, for serving

Make the crust

Heat oven to 350 degrees.



Gently press down hashbrown mixture with a fork, working the hashbrowns evenly on the bottom of the dish, then up the sides to form a pie-like crust.

Place hashbrown-lined dish in 350-degree oven and bake for 20 minutes.

While crust is baking, prepare the filling.

Prepare the filling

In a large mixing bowl, beat the eggs and heavy whipping cream. Add the bacon, green onion, cheese, and spinach to the egg mixture. Mix well with a whisk, then season with salt and pepper to taste.

After 20 minutes of bake time, pull the hashbrown-lined dish out of the oven. Pour the egg mixture over the hashbrown crust, filling the dish. Place the dish back into oven and bake for 40 more minutes.

To serve

Let quiche sit for a couple of minutes before cutting it into squares and serving. Serve with sour cream and hot sauce.

Note: Eggs should be solid throughout when done. Test to be sure the center is cooked all the way through. Cook times may vary.



It's the Gold standard

BY ADRIANA JANOVICH

WSU'S AWARD-WINNING COUGAR GOLD CHEESE has received rave reviews from the likes of *Bon Appetit* magazine and freshman US senator John Fetterman of Pennsylvania, who gave it a thumbs-up in a viral social media post last June.

Of course, Cougs already understand the appeal of Cougar Gold—and have for a long time. WSU's famed canned cheddar turned 75 last fall.

To celebrate, we're asking fans of WSU's famed signature cheese to share their favorite original recipes for a chance to be featured in the magazine. Send yours to wsm@wsu.edu or via social media.

Ruth Andrews ('71 Ed.) and Jackie L. Randall ('73 Ed.) shared these fun notes via Facebook. "My favorite recipe is cutting a chunk out and eating it," writes Andrews. "Why mix it with anything else?" Randall agrees. "My favorite recipe: open can, cut cheese, eat. Perhaps, get some crackers."

To get your imagination and stomach working, consider this recipe from Jennifer Bliesner ('94 Comm.), which features Cougar Gold and other cheeses in a savory ham strata.

Cougar Gold Cheese and Ham Strata

Unsalted butter or cooking spray

3 cups half-and-half

1/2 cup grated Parmesan, divided

10 large eggs

11/2 teaspoons kosher salt

Freshly ground black pepper, to taste

12 ounces rustic Italian bread, preferably stale, crust removed, cut into 1-inch cubes (about 6 cups)

2 cups shredded Cougar Gold cheese

1 cup shredded Beecher's Flagship cheese

6 ounces diced ham

Butter or spray a 9-by-13 baking dish. Whisk together the half-and-half, ¼ cup of the Parmesan, eggs, salt, and pepper to taste in a large mixing bowl.

In another large mixing bowl, mix together the bread cubes, Cougar Gold and Beecher's Flagship cheeses, and ham. Pour the egg mixture over the dry ingredients and stir to combine.

Transfer the mixture to the prepared baking dish and sprinkle with the remaining Parmesan. Cover with plastic wrap and refrigerate overnight.

The next morning, remove strata from the refrigerator and let it sit at room temperature while heating oven to 325 degrees. Remove plastic wrap and bake until slightly puffed and browned and no longer jiggly in the center, 40 to 50 minutes. Let rest 5 minutes before serving. **

Note: The strata can be assembled the day of baking. Let the mixture stand at room temperature 30 minutes to an hour before baking.









examining substance use

alternatives to misuse

Substance use and addiction

BY LARRY CLARK

It could be your neighbor. It could be a man huddled under a bridge with his dog. It could be a favorite niece injured while playing soccer.

Substance use disorders and addiction touch everyone's life in one way or another. Most have known people who deal with the complicated and sometimes devastating effects of drug misuse or experienced it themselves. Whether it's opioids, excessive alcohol, methamphetamines, nicotine, cannabis, or increasingly a combination of drugs, public health issues around substance misuse are now under a glaring spotlight.

The situation across the United States and in Washington state has grown dire. According to the state health department, 17,502 Washingtonians died from a drug overdose between 2007 and 2021 and 68 percent of those deaths involved an opioid, with fentanyl leading the way. Since 2019, the annual number of opioid drug overdose deaths has nearly doubled, and Washington had the sharpest rise in overdose deaths of any state in the most recent 12-month reporting period, according to the Centers for Disease Control and Prevention.

These are not just statistics. They are people who struggle, or who have died, because of substance use problems. Researchers, Extension staff, and others at Washington State University share that empathetic view as they investigate effective treatments, seek to understand the complex nature of addiction and substance use, and educate people to prevent substance use disorders.

Celestina Barbosa-Leiker, executive vice chancellor at WSU Spokane and a professor in the College of Nursing, is one of those researchers, leading an interdisciplinary research team to assess mothers, infants, and health care providers in order to better care for women with opioid use disorders.

During one study, Barbosa-Leiker ('06 MS, '08 PhD Psych.) and her team looked at what blocked or helped access to medication-assisted treatment for women with an opioid use disorder as they go from pregnancy to parenthood. What she heard from pregnant women and new moms was "so powerful, it was hard to present without my voice cracking from emotion."

Barbosa-Leiker said one participant told her, "I was one of those women that was homeless and pregnant and feeling helpless and hopeless and not having the resources or the support. Having a support team has helped me tremendously. And that includes my treatment and my family and loved ones, friends that are sober. And my kids, of course."

UNDERSTAND AND TREAT

Barbosa-Leiker is part of WSU's Program of Excellence in Addictions Research (PEAR), which brings together scientists and researchers from many disciplines to advance innovative, scientifically rigorous approaches to understand, treat, and prevent addictions.



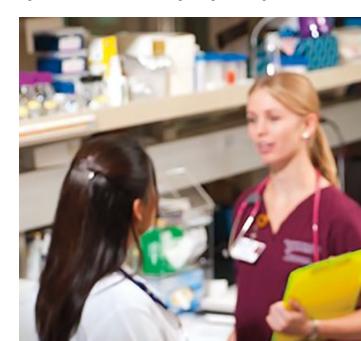
f the largest

Started by **John Roll** in 2006, PEAR houses some of the largest health science projects at WSU Spokane, where Roll is vice dean for research at the Elson S. Floyd College of Medicine.

The holistic approach looks at the effects of drugs on behavior, how behavior contributes to the ways drugs are used, behavioral and pharmaceutical therapies, intersection of mental health and substance use, and other areas.

Roll ('94 PhD Psych.), an internationally recognized expert in the field of drug and alcohol abuse, sees this as the right approach to such a complex problem. "Scientifically, I think it's a mistake to look at addiction in a vacuum. You have to really look at the whole person and the environment in which they exist," he says.

He recalls an incident that changed his approach to helping people with substance use disorders. When Roll, an experimental psychologist, was working on a study on cigarette smoking and people with schizophrenia, he connected with a participant his age. "We





were even both wearing exactly the same blazer, probably bought at Kmart or somewhere. We started talking and I realized we both had very similar aspirations in life. It was also clear to me that, through no fault of his, he was less likely to realize those aspirations. It seemed profoundly unfair, and after that experience much of my research took a decidedly more applied turn."

Roll's broad ideas of substance use research continued with his students and mentees who eventually became leaders in the field, such as Barbosa-Leiker and current PEAR director **Sterling McPherson**.

McPherson ('08 MS, '10 PhD Psych.), also a professor and assistant dean for research at the College of Medicine, says the goal is to improve treatment outcomes with evidence-based therapies.

One is contingency management, a behavioral therapy that rewards patients for staying sober, that "is far and away the most effective treatment for any stimulant right now," McPherson says.

College of Medicine professor Michael McDonell ('01 MS, '04 PhD Clinical Psych.) and his team have led studies that show how well contingency management works. [See "Contingency management," p. 24]

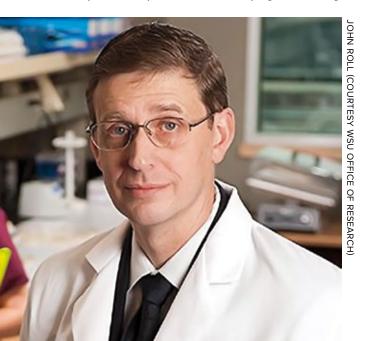
Another trial leverages technology to help people with substance use disorders. Using Bluetooth-enabled caps on therapeutics, such as buprenorphine for opioid use disorder, a patient can be reminded to take medicine and have accountability with health care providers.

"The goal is to intervene and act now before it cascades into a relapse," McPherson says.

Part of McPherson's own research looks at co-addiction—when people use more than one substance. Co-addiction is very prevalent; for example, studies over the last three years show that 70 to 80 percent of people addicted to opioids also take other illicit substances. Stimulants, such as meth, were present in 42 percent of opioid overdoses last year.

He notes that PEAR was one of the first research groups to launch a trial treating smoking and heavy alcohol use together. It's an expanding problem that flies under the radar during the ongoing opioid epidemic.

"It's hard to get society to focus on more than one drug at a time. I always have to say we still have this major public health problem of







smoking, and a major public health problem of alcohol, especially post-pandemic," McPherson says.

McPherson explains that use of multiple substances is linked both neurobiologically and behaviorally, and there's potential to craft some combined therapeutics.

"There probably isn't a single silver bullet therapeutically for addiction," McPherson says. "We're talking about different substances that affect people differently. But no substance use disorder exists by itself."

Substances affect people based on gender as well. Barbosa-Leiker studies these disparities along with nursing assistant professor **Ekaterina Burduli** ('08, '11 MS, '16 PhD Psych.).

"We haven't done a really good job as scientists with making sure that treatment is valid and sound for all demographic groups, and that includes women," Barbosa-Leiker says. "We need more research to look specifically at women with substance use disorders."

The effects of addiction have hit women particularly hard. Heroin deaths among women increased at more than twice the rate than among men from 1995 to 2015. In addition, there has been a drastic increase in the rates of deaths connected to synthetic opioids such as fentanyl; these deaths increased 850 percent in women between 1999 and 2015.

Barbosa-Leiker says many women with substance use disorders face other factors such as early trauma, domestic violence, or other barriers to treatment. She and her team want to highlight their voices.

"We're sharing the stories of folks who have to drive an hour and a half to the methadone clinic every day, before or after work. They have these other burdens, like access to shelters or even daycare for the kids if they need to go and get treatment," she says.

Another crucial element of treating opioid abuse is managing pain. While overprescribed opioids fueled the crisis, now people with chronic pain have difficulty getting help. **Marian Wilson** ('13 PhD Nursing) in the College of Nursing leads work to identify non-medicinal ways to manage pain. A new WSU interdisciplinary program also trains health care practitioners how to prevent and treat their patients' pain. [See "Understanding pain," p. 25]

Other areas of future research, McPherson says, include the interaction of sleep and substance use disorders, tailoring treatments based on genetics, more nuanced methadone dosing, and identifying better biomarkers for substances. The work involves many researchers across WSU.

"This disease does not discriminate," Barbosa-Leiker says. "We really need an all-hands-on-deck approach."

CONNECT AND EDUCATE

Some of those hands include colleagues like **Elizabeth Weybright**, an associate professor in human development who works in addiction prevention and harm reduction.

"We really need to pair treatment and recovery with prevention," Weybright says. "Harm reduction is this perspective that if we want to move the needle, we can't just tell people to stop. And if they're going to continue to use, how do we support them to reduce the negative consequences of use?"

She also emphasizes the importance of engaging youth in addressing substance use disorders. As co-director of the Northwest Rural Opioid Technical Assistance Collaborative, for example, Weybright oversaw a program in which teens in Yakima, Spokane, and Clallam Counties helped peers and neighbors understand the opioid crisis.

Through WSU Extension's 4-H Youth Development Program, they wanted to address stigma around opioid use and start conversations. The participants increased their familiarity with opioid misuse and medication safety.

Weybright sees teens as agents of change, especially in rural counties that are more impacted by opioid addiction than urban areas. She stresses the need for a team approach in rural communities, involving youth, pharmacists and other health care providers, Extension services, and community members, to effectively address substance use disorders with trusted partners.

Nicole Rodin, clinical assistant professor in the College of Pharmacy and Pharmaceutical Sciences, works with PEAR and on outreach with Weybright. As a practicing pharmacist, she agrees with Weybright that prevention requires community support.

Rodin also explains the need to treat substance use disorders as health care. "It is a disorder. It is a medical condition, and we have yet to treat it that way as a society," she says.

PEAR and WSU, Rodin says, recognize the public health needs. "Instead of keeping it in papers and journals, they're working a lot with our community partners and expanding their efforts so that it gets translated to our communities."

REDUCE THE STIGMA

Addiction is treatable and much can be done to get people the treatment they need. Many people living with substance use disorders want help, but stigma often blocks the way.







"We hear from our pregnant participants that they're often stigmatized when they go in for their prenatal health care. If they feel stigmatized, there is a good chance that they're not going back. And if a mom is not getting prenatal health, that's sometimes the most dangerous thing for mom and baby," Barbosa-Leiker says.

Weybright says rural outreach, too, requires local credibility. "It needs to come from trusted individuals to reduce stigma and support folks where they are, whether that's prevention, treatment, or recovery."

Reducing stigma, and getting people the help they need, comes down to open discussion and connection. Substance use disorders cross all differences, affect everyone, and need all of us to engage.

"We thrive on human interaction, and I think in our world there's so much loneliness, despair, and lack of hope. We need to help people in the world have hope," Roll says.

Contingency management works, so why isn't it being widely used?

BY ADDY HATCH

Contingency management is an addiction treatment that works.

Odds are you've never heard of it, though.

Contingency management, usually called CM, rewards people to avoid the behaviors they're trying to quit. That means someone in a CM program visits a clinic a couple of times a week for a urine test; if it's drug-negative, they immediately get a gift card or prize. If the test is drug-positive, they get encouraging words to keep trying.

CM rewires reward pathways in the brain that have been hijacked by drug use. It's simple and effective, with decades of evidence and studies to back it up.

"It's a powerful tool for changing behaviors related to day-to-day struggles," says **Michael McDonell**, professor at the Washington State University Elson S. Floyd College of Medicine and a leading CM researcher.

While CM has been shown to be effective in treating multiple addictions, it's one of the only treatments available for addiction to stimulants, such as methamphetamine and cocaine.

So why isn't it widely used?

Partly because of federal restrictions around monetary incentives in health care. And partly because it hasn't been covered by Medicaid, the state-federal insurance program under which most people with addiction receive care.





Based on the success of WSU-led pilot programs, however, Washington last year became the second state to provide a waiver allowing CM to be offered as treatment to Medicaid-covered patients. The goal is to expand CM to 90 sites in the state over five years, McDonell says.

Expansion will include innovation.

A pilot project in Seattle, for example, will bring testing to residents in supportive housing facilities. It will make CM more convenient for the people who are participating. And reducing substance abuse in a communal living situation could improve life for everyone at that location.

CM can't become a widespread treatment option without action from the federal government. But with the state of Washington agreeing to cover contingency management under Medicaid, CM might be at a tipping point.

"It's frustrating to think that there's all this great science that's gone into developing this intervention and it works so well, but very few people have access to it," McDonell says. "There's so much interest from states and cities because they don't want people to keep dying from drug overdoses. They're looking to CM as part of that solution."

Understanding pain

BY ADDY HATCH

Pain is the most common reason people seek health care.

That means many future health care providers will need to know how to prevent and treat their patients' pain. They'll also need to understand how treatment might lead to unintended consequences like opioid addiction.

To get out in front of that reality, Washington State University Health Sciences educates students from multiple programs so that they have a common, basic understanding of chronic pain and opioid use.

Under a five-year federal grant, WSU researchers developed materials based on scenarios of patients taking opioids for chronic pain. Groups of students from medicine, nursing, pharmacy, physician assistant, athletic training, social work, and other programs from regional colleges and universities study the scenarios, then work together through treatment options and risks.

That makes sense, says **Connie Remsberg**, an associate professor at the WSU College of Pharmacy and Pharmaceutical Sciences. "Out in the real world, health care's not a silo," she says. "You don't just interact with a pharmacist or a nurse."

The sessions help health care students understand that everyone on the health care team has a role combating the public health crisis that is opioid addiction. Over 75 percent of the nearly 107,000 drug overdose deaths in the United States in 2021 involved an opioid, the Centers for Disease Control and Prevention said. That number includes deaths from prescription painkillers, from heroin, and from synthetic opioids, especially illegally manufactured fentanyl.







"The trainings encourage students to ask themselves, 'What can I contribute? In real life, what would I be doing to help this patient?" says **Dawn DeWitt**, senior associate dean in the Elson S. Floyd College of Medicine.

Similar training is offered to people already working in health care, such as the CHAS Health clinics in eastern Washington and north Idaho. More recently, trainings have been offered at pain conferences and professional society meetings. The grant also has funded a podcast on health care provider well-being, and outreach to rural clinics.

More than 3,000 students have participated in the WSU-developed training, and close to 1,000 clinicians. Federal and state grants to fund the work total more than \$3 million.

Students who've gone through the training give it high marks, and following a pandemic lull, demand for the clinical training has sometimes outrun WSU's capacity to provide it, says DeWitt. The next challenge is moving beyond grant funding to build a sustainable, permanent program.

"This opioid problem is not somebody else's problem," she says.

"People become dependent, not because they're weak or bad people, but because there's a physiology to this. This work is really important."

How to talk about substance use

BY ADRIANA JANOVICH

The right message can help prevent and combat substance misuse, but it has to be crafted correctly.

"Health communication and media messages are important for public health, but they're not a cure-all," says **Jessica Willoughby**, associate professor and Lester M. Smith Distinguished Professor of Communication in the Edward R. Murrow College of Communication at Washington State University. "Messaging has to be done in conjunction with access to resources. Campaigns are certainly useful, but they cannot work alone."

Crafting campaigns about substance misuse and prevention is Willoughby's niche.

"My interest has been very much in harm reduction and helping people find a path to being healthy and well," says Willoughby ('08 Comm., '10 MA Comm.), a WSU faculty member since 2014. While her specialties are preventing alcohol and cannabis misuse, strategies could apply to other substances, such as fentanyl. "Fentanyl

is more popular in the media right now because there is an increase of fentanyl overdose cases," she says. "It is problematic, so people are paying attention."

The fact that people are paying attention could be a good thing. Messaging around substance misuse and prevention might reach more people. Audience and goals are key factors. "You have to know who you are trying to reach," Willoughby says. "Your message is very different to someone who is already using than to someone you want to prevent from using."

In prevention, the goal is often simple: Don't start using a particular substance. "Once someone has started using a substance, it can be very hard to stop, depending on the properties of that substance," Willoughby says.

In a harm reduction strategy, "You might already be using, but can we get you to reduce your use? Or, is there an alternative strategy that could get you to stop using altogether?"

No matter the target audience, **Stacey Hust** ('00 MA Comm.), a professor and associate dean of faculty affairs and college operations at Murrow College, recommends market testing for all messaging to understand audience members' motivations to use the drug or how they are using that substance.

Hust, who specializes in health communication around preventing substance misuse and sexual assault, recently led a prevention campaign that was "interested in the physical risks that people take when they are inebriated, in order to prevent those behaviors," Hust says. The message for members of the Greek community was about climbing a bus stop while under the influence.

Since there are not many bus stops on Greek Row, they altered the message to an example of car surfing, or trying to ride atop a moving vehicle, "because that was what our male focus group participants told us they were doing when they got drunk," Hust says.

While emotional appeals can be effective, messages of fear don't always work. They aim to scare people into doing or not doing something, such as saying that using a particular substance even one time can prove fatal.

"If someone is already using and it's gone OK for them, the message doesn't really resonate," Willoughby says. "If you're going to scare someone out of doing something, then you need to make sure you give them information to make them feel empowered."

Services and support should combine with messages. "We have to think about not only the messages we're creating but the structures that are in place to reduce misuse and help people be successful in seeking treatment," Willoughby says. **





ALUMNIpedia



A versatile voice

BY ADRIANA JANOVICH

It was New Year's Eve in 1983 or 1984. **Bill Swartz** was covering the countdown to midnight for ABC News Radio. But he needed a location in downtown Seattle with a phone jack.

"I found a dentist at the clock level of Pike Place Market and asked if I could string my phone cord out the window and onto the roof, and he said, 'Sure, just mention me on the radio,'" recalls Swartz ('78 Comm.), an award-winning radio journalist. "So there I was, doing this live report on the

7 alumni profiles
4 new media
5 class notes
3 in memoriam
2 alumni news

roof over the phone, tethered to a dentist's office."

Swartz has broadcast from a lot of interesting locations during his 45-year career. A phone booth in England makes the list. So does a gym in Kona, Hawaii, where he did play-by-play coverage for a college women's basketball game. Then there's the rooftop from which he covered the Rose Bowl for the 2018 season with the University of Washington Huskies.

"They didn't have any room for us in the broadcast booth, so they put us on the roof where the sharpshooters were," Swartz says. "We did the whole pregame show up there."

Swartz is a sports anchor for Northwest NewsRadio KNWN AM 1000 and 97.7 FM, where he also hosts a public affairs program that airs on three Seattle stations, including News Talk 570 AM and Star 101.5. "I've done a little bit of everything in my career," he says. "If you don't make yourself versatile, you'll never last in the business. You have to be adaptable."

He's won a number of regional reporting awards, including the 2023 Edward R.

Murrow Award for sports reporting from the Radio Television Digital News Association. Swartz's two-minute segment spotlighted the two founders of the Seattle Pride Hockey Association and Seattle Pride Classic.

Swartz has covered countless athletes and coaches at the recreational, college, and professional levels—including former Seattle Seahawks quarterback Matt Hasselbeck and Sue Bird, who played for the Seattle Storm for 21 seasons. "This is going to sound sacrilegious, but for 10 or 11 seasons I was the sidelines reporter for Husky football. Getting to know 'the Dawgfather' (Husky football coach from 1975 to 1993) Don James was also a career highlight."

So was getting to work with the late Bob Robertson, the radio voice of Cougar football for 52 years and basketball for 23. (Fans will remember his signature sign-off: "Always be a good sport, be a good sport all ways.") Swartz grew up listening to Robertson on the radio. Working Apple Cup weekends with him "was great fun."

Swartz started his broadcast career in high school, helping deliver morning

announcements over the public address system. At Washington State University, the late Val E. Limburg, who taught media law, media ethics, and broadcast management, was a favorite professor. So was the late John James "Jim" Dunne, WSU's director of news and sports reporting, assistant professor of journalism, and mayor of Pullman.

After a year at KREW AM in Sunnyside right out of college, Swartz was recruited to Kirkland radio station KGAA. The move led to one of the most memorable experiences of his career: covering the 1982 Little League World Series.

The Kirkland National Little League Team defeated a team from Taiwan to take the championship. "They were the toast of the town," says Swartz, who traveled to Pennsylvania to provide play-by-play coverage. Two and a half decades later, he was interviewed for ESPN's 30 for 30 episode "Little Big Men," which aired in 2010 and documented the win.

The first day on the job of a temporary role at KOMO News Radio, Swartz covered a hostage situation at a Bellevue bank. The short-term gig led to a permanent position. He stayed 18 years. After KOMO, he was the morning sports anchor for KIRO News Radio from 2002 to 2013 and a cohost and sports anchor at the Fan 1090 AM from 2014 to 2016, when he made the move to KNWN.

In his early radio days, "everything we recorded was over the phone or a cassette tape deck," he recalls. "Now I have an app on my phone. I can go anywhere in the world and it sounds like I'm in the studio."

Swartz has specialized in impersonations. At KOMO, "we'd bring in wacky guests, and if we couldn't get them, we'd do impersonations of them, like (former Seattle mayor) Norm Rice or (former Washington governor) Booth Gardner or (former Seattle Mariners manager) Lou Piniella. We did this comedy skit live every Saturday morning for two hours. It was what radio is supposed to be: theater of the mind.

"To me, that's what radio has always been about—your voice coming out through a little box, trying to get into people's ears, so they can visualize a story." *



Rico's owner Tawny Szumlas with a "Pippy" cocktail behind the counter

Traditions

BY ADRIANA JANOVICH

Rico no longer owns the place. But this is still the place. Where alumni reunite. Where families gather on Family Weekend for a bite and a beer. Where students and professors discuss their departments. Where School of Music faculty and students regularly perform.

Rico's Public House, established in 1909, has provided a second living room for the Washington State University and greater Pullman community for 115 years. Recently, the beloved pub was recognized with the 2023 statewide Legacy on Main Award for its contribution as an economic and cultural anchor in downtown. The honor was presented to Rico's owner TAWNY SZUMLAS ('02 Hosp. Busi. Mgmt.).

"It's truly wonderful to be recognized, and it holds even greater weight knowing that my children can take pride in our family's rich heritage," says Szumlas, a mother of three and the second generation of her family to own and operate the landmark establishment. It's been in her family longer than that of any of its previous owners, including Rico himself.

Tony Talarico, the "Rico" of Rico's Public House, owned the watering hole for 30 years. It's been in Szumlas's family since 1980. And her family has been in Pullman since 1888.

Szumlas is a descendant of Thomas Neill, who came to America from Ireland in 1879, started Pullman's first newspaper, and served as an early Whitman County Superior Court judge. He was instrumental in helping establish Washington State Agricultural College, now WSU, in Pullman. And it's possible he would have visited Rico's in its early days, when it was still known as the Smokehouse.

Rico's started as a place where men came to play pool and cards and, most of all, to smoke. In 1927, it relocated to its current site. The following year, owner E. W. Thorpe sold the Smokehouse to Merle Ebner, who—in the early 1930s—began selling beer and wine.

Talarico acquired an interest in 1947. He's credited with turning the Smokehouse into a true public house, making it welcoming for women, adding jazz nights as well as other shows, and encouraging college students to perform.

A 1966 advertisement in the Daily Evergreen called for "strictly amateur" performers 21 and older—"folk singers, musicians, combos, dancers, etc."—to "come out in the open and give us some new talent to check!!!" The ad noted that performers would receive "chow" and "liquid refreshment."

After three decades, Talarico sold the business and, in 1978, according to his obituary, retired to Clarkston. He died in 2006.

Szumlas was a year old when her father, Roger Johnson, bought the business. She worked there during her WSU days. "My dad told me he would pay for college in Whitman County, the rub being that there was only one," she says. "I didn't apply anywhere else."



Happy Valen Mines Day

After graduation, he encouraged her to live outside Pullman. For two years, she worked in the bar at the luxe JW Marriott Desert Springs Resort and Spa in Palm Desert, California. But her heart remained at Rico's.

"I think of Rico's Public House as the 'Cheers' of the Palouse," says Washington Main Street director Breanne Durham, who presented the Legacy on Main Award to Szumlas. "There is no limit to how long you can hang out at Rico's. Professors, graduate students, families, and children—everyone gathers here."

Szumlas started managing Rico's in 2005 and bought the business from her dad 10 years later. He still owns the building and comes in most days to tally receipts. In the 1980s and '90s, Johnson remembers, "Graduate students and professors came in in huge groups, discussing their departments any night of the week. I remember entomology down here discussing the nature of prey-predator relationships."

They would walk down from College Hill. And, in winter, they would ski down. "I'd have a dozen sets of cross-country skis out front," Johnson says.

These days, open mic and trivia nights, along with live music, draw students downtown. So do holidays. On St. Patrick's Day, Rico's often becomes so packed that Szumlas has to turn away patrons at the door.

"There are two, and only two, kinds of people in this world," says Alan "Mike" Klier ('75 Physics). "Those who smile a faint, knowing smile and those who look confused when I say, 'Yes, this is a nice place, but it's not Rico's." *



Celebrate your Valen Wines 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
Cougar-connected wines delivered right
to your door, four times a year.

alumni.wsu.edu/valenwines



Feeding time at the zoos

BY BRIAN HUDGINS

ERIN (KUHN) KENDRICK vowed to save giant pandas when she was a child.

It was 1989. One of the five cubs born to Ling-Ling and Hsing-Hsing, the Smithsonian's National Zoo and Conservation Biology Institute's giant pandas, had just died. None of the pair's offspring lived for more than a few days.

"At the age of eight, I decided I was going to save giant pandas by figuring out why their cubs weren't surviving," says Kendrick ('03 Zool., '06 MS Nat. Res. Sci.), a clinical animal nutritionist at the National Zoo in Washington, DC.

The pandas' plight prompted Kendrick to pursue pre-veterinary medicine at Washington State University. Working at clinics during summers showed Kendrick veterinary medicine wasn't exactly what she wanted to do. So she switched her focus to zoology and wildlife management.

Kendrick worked at the St. Louis Zoo, then as a consultant. In 2012, she landed the nutritionist job at the National Zoo. Lisa Shipley, a professor in the School of the Environment, helped guide her there as her graduate advisor. "She recognized my interest in exotic species and offered the opportunity to realize my dream, if not in the way I'd originally imagined," Kendrick says.

Shipley said Kendrick just had to find or create the perfect job. "I learned so much from her about nutrition and research, but I'll never forget her passion and how she encouraged me to find that for myself," Kendrick says.

A wildlife nutrition course taught by Shipley and Charlie Robbins, director of research at the WSU Bear Center, "really sparked my passion for animal nutrition. Everything I was interested in—health, behavior, reproduction, conservation—I realized had a foundation in nutrition. Zoo nutrition is a small field, but I knew I could have an impact."

The baseline knowledge for zoo nutritionists comes from well-studied domestic species and is then adjusted for the dietary needs of exotic animals. "If I'm formulating a diet for an elephant, I'll consider what we know about horses," Kendrick says. "For an otter, I'll look at dog and cat requirements. Where it gets more interesting is when a species doesn't fit the model. What about a vulture? It's a bird, so perhaps poultry. But it eats only meat, so some nutrients might be better modeled by cats."

Kendrick and her peers are learning more every year about species' needs and how those differences shift dietary husbandry in zoos

Seemingly simple cases sometimes become challenging. Pelicans in the wild receive enough vitamin E from fish, a dietary mainstay. However, when fish are frozen, stored, and thawed for zoo animals, that nutrient is depleted and must be supplemented. But supplementation regimes for other fish-eating animals don't always work for pelicans. "We're still working to get that right," Kendrick says.

It isn't just solid foods on the menu. The National Zoo houses the largest collection of exotic animal milks in the world, with more than 16,000 individual samples taken from more than 200 mammals. Milks are analyzed to see how much fat, protein, calcium, and other necessities are present. "Looking at milk on that level allows us to help with exotic species here, and at other zoos," Kendrick says.

By the time Kendrick joined the staff at the National Zoo, both Ling-Ling and Hsing-Hsing had long since passed. Two new giant pandas, Mei Xiang and Tian Tian, came to the zoo from China in 2000. The pair had seven cubs, four of which lived to adulthood. Last November, the panda parents and their fourth cub returned to China, where the three older siblings had already relocated. Kendrick was responsible for their nutrition, along with the other 400 species at the National Zoo.

"I am so grateful to be part of this conservation program, contributing to the success brought about by decades of work by so many professionals," Kendrick says. "For me, this all started with my fascination with the giant pandas, but I couldn't imagine how things actually turned out. I love working with all the species we work to conserve, and I love what I do." *



Erin Kendrick manages food, diet, and nutrition for pandas and other animals at the National Zoo.

A paper drive for our times

BY WENDA REED

There's nothing quite like small-town newspapers, full of local history and anecdotes, promoting nearby sights, celebrating achievements big and small, and connecting people with needs to those who want to help.

As more newspapers crumble under the pressures of increasing costs and declining revenue, MICHAEL SHEPARD ('85 Comm.) has found an unusual place to help resurrect that connection: magazines distributed by local electric utilities and broadband providers.

Shepard is CEO of Pioneer Utility Resources, based in Hillsboro, Oregon. The 67-year-old communications cooperative helps more than 250 not-for-profit public utilities, broadband providers, and state associations communicate with their customers. Utilities from around the country and as far afield as Liberia, Africa, take advantage of the company's expertise in publishing print materials, designing websites, running social media and marketing campaigns, and implementing 24/7 responses to outages and emergencies.

"Our biggest thing is our magazines," Shepard says. In this age of digital media, "the growth has been stunning." *Ruralite* and six other magazines, a mix of utility information and local content, are delivered to more than 1.4 million mailboxes from Barrow, Alaska, to Key West, Florida. "We are sometimes one of the few sources of local news," Shepard adds.

Recent issues explored stargazing, hotair balloons, a paralyzed teen who does barrel racing, and a company that makes elaborate cakes for hospitalized children. Northwest-focused *Ruralite* magazines ran a yearlong series on the changing face of rural health care and another on the robot revolution.

The "Readers Exchange" section prompted a group of women in Pendleton, Oregon, to collect buttons for a Walla Walla woman's request for her granddaughter's button collection. They keep on meeting monthly to socialize and fulfill other requests, from heirloom seeds to doll clothes.



"The history of electric utility publications is fascinating," Shepard says. "In the early days of installation of electricity, there was no profit for electric companies running wire over so many miles in rural areas. So farmers started not-for-profit entities to electrify their areas, federal government gave loans, and there was a substantial aspect of altruism within the co-ops. The same thing is happening with broadband."

A desire to get back to a rural lifestyle prompted Shepard's move to Pioneer in 2016, after 31 years in the traditional news business. He and his wife, Rhonda ('87 Socio.), live on a 20-acre hobby farm outside Hillsboro with dogs, goats, and chickens.

He started his journalism journey in the small town of Friday Harbor, where he edited the high school newspaper, and continued at WSU as reporter and then managing editor at the *Daily Evergreen*. After college, he took a job with what's now the *Moscow-Pullman Daily News*.

In his next small town, Silverdale, he edited the *Reporter* newspaper, and was

eventually promoted to managing editor of 16 Washington newspapers run by Sound Publishing. "I kept asking questions about advertising and distribution, and so they said, 'Why don't you try running the *Port Orchard Independent?*" he remembers. "I felt I had more business sense than reporting skills, and you end up where your skills take you."

After almost 12 years with Sound Publishing, his business acumen and love for local news led him to the Seattle Times Company, where he served as publisher of the *Walla Walla Union-Bulletin* and the *Yakima Herald-Republic*. He rose to senior vice president of business operations for the *Seattle Times*, overseeing circulation, buildings, presses, and human resources, then held a senior management position with Wick Communications.

At Pioneer, he manages about 100 communications, digital, and energy efficiency professionals. "My goal is to unleash the talent of the team," says Shepard, using baseball to describe his management style.



"In baseball, there are five key tools that a non-pitcher can have: hitting for average, hitting for power, speed on the basepaths, fielding ability, and throwing-arm strength. Having all five tools at a major-league level is exceedingly rare. The key to success in baseball, as it is in building a company, is building a successful team that can give you those skills where and when they are needed—a collection of two-, three-, and four-tool players.

"I'm not a five-tool CEO, but I think I am decent at assembling good teams and leveraging those major-league skill sets." *

Women's Leadership Summit



Cougs near and far are invited to participate in the fourth annual Women's Leadership Summit hosted by the WSU Alumni Association.

This 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 all campuses and showcase how WSU played an integral role in their professional journeys.

@ Learn more at alumni.wsu.edu/wls2024.

A cause celebrity

BY WSM STAFF

TRICIA RAIKES ('78 Comm.) was recently included among *Inside Philanthropy*'s 50 Most Powerful Women in Philanthropy.

Raikes is cofounder of the Seattle-based Raikes Foundation, which she and her husband, Jeff, started in 2002. Since its inception, the foundation has awarded more than \$201 million to charitable causes.

"Raikes is a hands-on leader, working with her husband ... to guide the foundation's efforts in the areas of youth homelessness and mental health, equitable education, and resourcing democracy," wrote *Inside Philanthropy*.

Raikes says her mom, Aileen McGinnis, was a tireless volunteer during her childhood, and inspired her to work to achieve social change through philanthropy.

"She was the first to volunteer for whatever needed to be done, treating everybody—regardless of their circumstances—with dignity and respect," she says.

Raikes and her husband created the foundation with the goal of helping young people succeed, drawing upon their experience as parents of adolescents dealing with challenges, including bullying.

"I was troubled by a looming question," Raikes says. "If our children, who had every resource and advantage in the world, were struggling, what about the millions of other less privileged kids?"

By working with partners on education and stable housing for youth, the foundation supports essential systems that all young people need to reach their potential, she says.

Last year, the Raikes Foundation launched a new portfolio, Resourcing Equity and Democracy, that aims to support partners to create a more fair,



representative, and effective democracy and civil society.

"My optimism is rooted in my faith in young people," Raikes says. "Over the past 20 years, I've had the chance to see the passion and energy of our next generation in action.

"They are eager and ready to make a better world. And they will, if we create the conditions for their success."

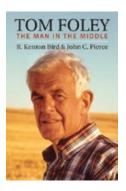
Raikes is a past trustee for the Washington State University Foundation and a Hall of Achievement inductee for the Edward R. Murrow College of Communication.

Tricia Raikes shares more about the importance of investing in young people and why the next generation fills her with optimism:

magazine.wsu.edu/extra/Raikes-QA.



newmedia



Tom Foley: The Man in the Middle

R. KENTON BIRD '99 PHD AMER. STU. AND JOHN C. PIERCE

UNIVERSITY PRESS OF KANSAS: 2023

Spokane native Thomas S. "Tom" Foley made history in 1989 as the first Speaker of the US House of Representatives to hail from west of Texas. He was a Democrat in a traditionally conservative district who served 30 years in Congress before, R. Kenton Bird and John C. Pierce argue, increasingly partisan politics ended his career.

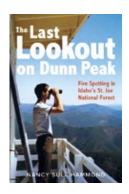
Bird, a journalist, and Pierce, a political scientist and former Washington State University research professor, draw heavily on the Thomas S. Foley Congressional Papers at the WSU Libraries Manuscripts, Archives, and Special Collections to present this impressive biography, part of the Congressional Leaders series from University Press of Kansas.

WSU has a special connection to the former Speaker of the House. Not only does its libraries house 480 boxes of Foley's correspondence, reports, and other materials concerning his legislative efforts, WSU is also home to the Thomas S. Foley Institute for Public Policy and Public Service. The authors are WSU-connected too. Pierce chaired the Department of Political Science for 8 years and was dean of the College of Liberal Arts for 11 years. From 1970 to 1971, he was an American Political Science Congressional Fellow, serving part of that time in Foley's office. Bird was a fellow in the same program from 1988 to 1989. Ten years later, he wrote his WSU dissertation on Foley's congressional career. He's a professor at the University of Idaho's School of Journalism and Mass Media, which he directed for 12 years.

Together, Bird and Pierce expertly examine the contributions of the skilled, longtime Washington state politician, particularly known for his civility and collaborative leadership style. "He was inclusive, bipartisan, and committed to cooperation, comity, evenhandedness, and institutional effectiveness of the legislative process," they write. And he remained that way even as the seasoned statesman faced growing "partisan polarization and political attacks."

Bird and Pierce portray Foley as a transformative leader with a remarkable career, exploring his steady political climb, strength and influence, challenges, and, ultimately, life after Congress. Their thoroughly researched and well-organized account provides plenty of political and historical context and analysis, focusing on Foley's years as an elected official, from 1965 to 1995. Aside from Foley's own cowritten autobiography in 1999, this is the first comprehensive work documenting Foley as a central transitional leader.

- Adriana Janovich



The Last Lookout on Dunn Peak: Fire Spotting in Idaho's St. Joe National Forest

NANCY SULE HAMMOND

BASALT BOOKS: 2023

Don Hammond dreams of being a fire lookout for the US Forest Service. It seems both altruistic and romantic, scanning the remote horizon for smoke and living in a primitive tower away from the rest of civilization.

He gets his wish as a young groom in 1972 and 1973, and again in 2010 when he revisits the second of his two posts. Each time, his wife, Nancy Sule Hammond, accompanies him for all or for portions of the experience. In *The Last Lookout on Dunn Peak*, she recounts memories of their time in two towers, hauling food and water to the 15-foot-by-15-foot rooms two stories up, enduring storms, picking huckleberries, and encountering unexpected, even menacing, visitors.

The high school sweethearts from Pennsylvania spend two summers in their 20s living in fire lookouts in the Idaho forest. They are married just two years that first summer at Dunn Peak. She visits from Moscow, Idaho, driving to the mountain on weekends. Don hopes to be rehired the following summer but, due to budget cuts, he becomes Dunn Peak's last fire lookout. It shutters after summer 1972.

The next summer, the couple lives on Middle Sister Peak. Nancy is there the whole summer this time, pregnant with their first son. Those two summers, when the couple is newly married and full of hopes and dreams for their life ahead, make up the bulk of the book from Basalt Books, an imprint of WSU Press. Nancy is an affable narrator, describing in an easily relatable manner their early years in Pennsylvania, way of life in the lookout, and starting a marriage and a family.

Along with their personal story, she provides historical context, noting the Great Fire of 1910, its Big Blowup of August 20 to 21, and the fire prevention and suppression policies that came as a result. Two chapters in the middle of the memoir stray from the fire lookout theme, summarizing the decades from the early 1970s to 2010, and glossing over the couple's more than two dozen moves, mostly for Don's work as a minister. Nancy also devotes an entire chapter to their youngest son's misdiagnosis of cancer in 1993. He's nearly 14 and headed off to summer camp when they endure that drama, which leads Don to chance upon a one-night watch on Middle Sister.

The final section—which starts with a chapter titled "What Were We

Thinking?"—details a second summer on Middle Sister, much later in their marriage. They are in their 60s this time. And, by the end of the summer 2010 and the 100th anniversary of the Great Fire, also known as the Big Burn, the romance of working in the wilderness is wearing off.

- Adriana Janovich

BRIEFLY NOTED

The Forest That Fire Made: An Introduction to the Longleaf Pine Forest

CAROL DENHOF, BYRON LEVAN, AND JOHN MCGUIRE '93 ENV. SCI., '95 BIOL.

WORMSLOE FOUNDATION NATURE BOOKS: 2023

The longleaf pine forests featured in this book are fixtures in the American Southeast. John McGuire's studies at WSU Pullman three decades ago set him on a path throughout Alabama, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Texas, and Virginia. His well-researched but approachable guide describes more than 40 longleaf pine forests in those nine states, along with their flora and fauna—including lots of birds, bugs, and berries—as well as how fire fuels their unique ecosystem. The guide includes more than 300 color images and more than 40 detailed drawings. The Alabama-based McGuire is the director of the Private Lands Prescribed Fire Program at Tall Timbers, Inc.

The Sky and the Patio: An Ecology of Home

DON GAYTON '71 AGRO.

NEW STAR PRESS: 2022

The seventh book from ecologist and nature writer Don Gayton melds personal insights with the geography and natural and human history of the Okanogan Valley in 25 essays that pay close attention to

the interconnectedness and complexity of living things in the varied environment that shapes his backyard.

Surviving the Sand: My Family's Struggle to Farm the Pasco Desert HELEN LINGSCHEIT HEAVIRLAND

BASALT BOOKS: 2022

When they arrived at their new home, writes Helen Lingscheit Heavirland, "The land lay flat in every direction as far as I could see." The only structures: a roofless outhouse, an 8-by-16-foot shack, and a sheep-and-goat pen. Her father had dreamed of farming. And, in 1954, he got a chance through the Columbia Basin Project. Irrigation provided opportunity. The author, seven at the time, chronicles the hardships of breaking ground and battling the elements along with simple pleasures such as fresh apricots.

Golden Ratio: Lost KADY NICOLS '12 MS GEOL. AUSTIN MACAULEY: 2023

This Albion sci-fi author, writing under a pen name, introduces the country of Miribeaux, where intelligence officers don't know what to make of an unusual new prisoner. The confounding Lia, caught trespassing, claims to be an explorer. But none of what she says could possibly be true. Yet every other explanation seems even more dangerous. Will she be able to escape before being forced to share secrets that could cause two worlds to collide? Time is running out in this imaginative first novel.

The Cyborg Caribbean: Techno-Dominance in Twenty-First-Century Cuban, Dominican, and Puerto Rican Science Fiction

SAMUEL GINSBURG

RUTGERS UNIVERSITY PRESS: 2023

Science fiction allows authors who span the Hispanic Caribbean and their respective diasporas to challenge oppressive narratives linking technological and sociopolitical progress. Writers—such as

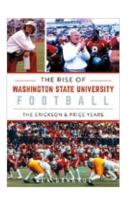
Pedro Cabiya, Alexandra Pagán Vélez, and Rita Indiana Hernández—explore legacies of historical techno-colonialism and techno-authoritarianism in this literary and historical study that traces four different technologies: electroconvulsive therapy, nuclear weapons, space exploration, and digital avatars. Ginsburg is an assistant professor of Spanish, comparative ethnic studies, and American studies at Washington State University's School of Languages, Cultures, and Race.

The Rise of Washington State University Football: The Erickson & Price Years

BEN DONAHUE

THE HISTORY PRESS: 2023

Coug football fans, this one's for you. Spokane author Ben Donahue documents WSU football history with detailed interviews from former coaches Dennis Frickson and Mike Price as well as late coach Mike Leach. Erickson came to WSU in 1987; his second year, the Cougs finished 9-3 and won the Aloha Bowl. It was the Cougars first bowl win—and only their fourth bowl appearance—since 1916. Erickson moved on after two seasons. but his successor, Price, stayed for 14, compiling a record of 83-78, including five bowl appearances and three bowl wins. Each shares personal stories, mentoring players such as Timm Rosenbach ('05 Soc. Sci.), Drew Bledsoe ('x93), Ryan Leaf ('05 Hum.), and Gardner Minshew ('x18). The volume also details the 1988, 1992, 1997, and 2002 seasons.





CLASSNOtes

When a local Vancouver church invited MICHAEL BLANKENSHIP ('13 Anthro., Psych.) to visit its LGBTQ+ group in 2017, he talked about his college experience as an openly gay student who went to school full-time, maintained a 3.86 GPA while finishing two



degrees, was intensely involved in campus life, and worked full-time. As a token for his efforts, they passed the hat and

"That is so kind," Blankenship told the group. "I'm good on money now, but since we talked about what it was like to be LGBTQ+ in college, I've always wanted to start a scholarship fund for LGBTQ+ students. Are you OK if I use this money to start a scholarship fund?"

Of course, they said yes. Since fund raising began in 2018, Blankenship and the WSU Vancouver alumni and development office managed to raise \$25,000 to qualify as an endowed scholarship and has awarded five \$1,000 scholarships on top of that.

Blankenship went all out, raising money via social media, personal connections, and CougsGive, a 24-hour university-wide fund raising event. Several faculty and staff members signed up for direct contributions from their paychecks. Blankenship and his grandparents provided matching funds as incentive. Some donors had never been to college themselves.

"People jumped in to support the goal and vision of assisting LGBTQ+ students," he says.

The LGBTQ+ Empowerment Endowed Scholarship started by Blankenship is the first officially endowed scholarship specifically supporting LGBTQ+ students across the WSU system. Its first scholarship was awarded in 2018.

After graduation Blankenship went to work at the WSU Vancouver Office of Admissions. He also earned a master's degree in school counseling from Lewis & Clark College in Portland. Last fall he began a job as a high school counselor in the Evergreen Public Schools in Vancouver.

BY STAFF

KATHRYN BAYNE ('82 MS Psych., '86 Vet. Sci., '86 PhD Wildlife Biol., '87 DVM) received the 2023 Bennett J. Cohen Award, the highest honor given by AAALAC International, the world's largest accrediting body for animal research and education programs. 🛠 HELEN DIGGS ('85 DVM) is senior director for North America at AAALAC International, a nonprofit organization dedicated to improving the welfare of animals in science and education. Diggs has 38 years of experience in veterinary and academic laboratory animal medicine and has served as a senior director for AAALAC since 2019. Previously, she was

attending veterinarian, director of the Laboratory Animal Resources Center, and a professor at the Carson College of Veterinary Medicine at Oregon State University.

MARTY DICKINSON ('91 Gen. Stu.) will serve another six-year term on the WSU Board of Regents. Dickinson has been on the board since 2018. She has more than 27 years of experience in marketing, branding, communications, and organizational management, and she has served with the Spokane Regional Chamber of Commerce, the Downtown Spokane Partnership, Umpqua Bank, and STCU. **5 JOHN FRANSON** ('93 MS Zool., '94 Ed.) has joined the medical staff of Franklin Health Primary Care in his hometown of Farmington, Maine. Previously, Franson worked at Caribou Memorial Hospital in Soda Springs, Idaho, for 21 years. A DAVID MAY ('94 MA, '98 PhD Poli. Sci.) is president of Bellevue College. Previously, he was president of Eastern Washington University, having started his career there as an assistant professor in 1999.

JUSTIN RODGERS ('06 Mech. Eng.) is principal at BCE Engineers, a consulting firm in Fife, Washington. Rodgers has been with In recognition of a more than four-decadelong career dedicated to helping others, veterinarian **LAURELLE DANTON** ('83 DVM) was awarded the Washington State University Alumni Association's most prestigious honor, the Alumni Achievement Award.

"Your dedication to nurturing the profound connection between humans and their beloved pets, especially during those tender moments of the pet's final journey, represents an extraordinary talent that has given solace to innumerable families grappling with loss," Lynne Haley, College of Veterinary Medicine's senior director

of development, said during the awards presentation for Danton in Albuquerque, New Mexico.

Since 2009, Danton has owned and operated Kokopelli Veterinary Care in Edgewood, New Mexico, just outside of Albuquerque. Danton offers house calls and provides much-needed services to clients who may find it difficult to travel.

"I've been really lucky to be able to do what I do to help people. I meet wonderful people, and probably the majority of the friends who I have started out as clients," Danton says.

While Danton offers many services, she specializes in home euthanasia for pets.

"This allows them to be in their special place," she says. "They're on their special bed. They're outside under their favorite tree. I've



done several at parks. One the dog took his last swim in the pond. Another one all of the friends and their dogs were there to say goodbye."

Her empathetic approach to the grieving process involves actively listening to pet owners and encouraging them to share joyful memories of their pets' lives.

Danton has long served her communities, including as a trained volunteer peer counselor from 1996 to 2003 at the El Dorado Women's Center, where she helped people dealing with domestic violence and sexual assault. She also served as a firefighter and emergency medical

technician from 1995-97 in California.

The Alumni Achievement Award was established in 1970 to recognize and honor WSU alumni who have served or provided significant contributions to the university or their community, profession, or nation. Since its inception, the award has been presented to more than 550 alumni.

BY DEVIN ROKYTA

COLLEGE OF VETERINARY MEDICINE

Laurelle Danton shared some of her memories with Washington State Magazine's Coug Story Corps last summer. Read recollections from her and others at magazine.wsu.edu/extra/coug-story-corps.

the company for 17 years, during which he has worked with nearly 20 school districts across the state and numerous projects for the Department of Defense. Sposhua BERNING ('08 PhD Econ.) is a professor in the Department of Agricultural and Resource Economics at Colorado State University. His areas of research include food marketing, food insecurity, consumer demand, and consumer health outcomes.

ALIX BERGLUND ('10 Zool., '14 DVM) is an assistant professor at the University of Maryland. She is the principal investigator of the Immunology and Regenerative Medicine Laboratory in the Department of

Veterinary Medicine. SEAN HARRIS ('13 Sport Mgmt.) is associate commissioner for sports administration and championships for the NCAA Mountain West Conference. He previously served in the same role for the West Coast Conference and spent nine years with the Pac-12 Conference. At WSU, Harris competed as a decathlete. TREVOR BOND ('17 PhD History) is one of five 2024-25 Foley Speaker Fellows for the Humanities Washington Speakers Bureau program. Bond is associate dean for digital initiatives and special collections at the WSU Libraries and is director of the David G. Pollart Center for the Arts and Humanities. His book Coming Home to

Nez Perce Country: The Niimîipuu Campaign to Repatriate Their Exploited Heritage was a finalist for the 2022 Washington State Book Award for nonfiction. ** RYAN YOUSEFIAN ('17 Busi.) was recognized by Forbes in its "30 Under 30 Local" for Seattle. Yousefian, founder of ApnoMed, created an FDA-approved dental device called ApnoDent to treat sleep disorders caused by blocked airways. He secured more than \$100,000 in prize money from competitions, including the University of Washington's Health Innovation Challenge and Dempsey Business Plan Competition, to bootstrap his company.

OURSTOWN

GOODBYE TO JOHNSON HALL

After more than 60 years in service to agriculture, Johnson Hall came down.

Last fall, the Pullman campus's fourth-largest structure was Washington State University's biggest-ever demolition project.

It will be replaced by a new federally funded building to house USDA Agricultural Research Service scientists as well as university researchers. Construction will take about three years.

Opened in 1960, Johnson saw many advances in agriculture such as useful new crop varieties. Increasingly costly to maintain, the building had reached the end of its useful life.

"Research has changed a lot since Johnson Hall was built," says Tim Murray ('80 MS, '83 PhD Plant Path.), chair of the Department of Plant Pathology. "At that time, agricultural research was field- and greenhouse-based. Electricity and cooling worked for the time but aren't really adequate to support modern research."

But for all its faults, Johnson Hall felt like home for many.

"It was filled with so many people that it made collaboration easy," says Rich Koenig, chair of the Department of Crop and Soil



WASH. GOV. ALBERT ROSELLINI (LEFT) WAS PRESENT FOR THE DEDICATION OF JOHNSON HALL IN 1961. (COURTESY WSU MASC)

Sciences. "One could walk down a hall and bounce ideas off someone from a completely different department and discipline. Often, these conversations led to new ways of looking at things. This is critical for students and faculty."

Johnson Hall housed wheat breeders Bob Allan and Clarence

Peterson, mycologist Jack Rogers, barley scientists Steve Ullrich and Andy Kleinhofs, and turfgrass professor Bill Johnston and his wife, Ellen Johnston, curatorial assistant of WSU's mycological herbarium. Wheat breeder Orville Vogel, who made possible the "Green Revolution" in agriculture, worked here during the 1960s and '70s.

"We felt like a cohesive unit," says Murray, who worked out of Johnson Hall from 1978, when he arrived at WSU as a graduate student, until this year. "Our USDA colleagues were there—we saw everybody, and our students saw us."

A number of alumni, faculty, and staff shared their memories with *Washington State Magazine*, which can be found at **magazine.wsu.edu/memories-of-johnson-hall**.

BY CAHNRS STAFF

Inmemoriam

PATRICIA R. (ELLIOTT) SWANSON ('47 Gen. Stu.), 97, November 2, 2023, Wenatchee. ROBERT L. LOEFFELBEIN ('48 English), 98, August 21, 2022, Clarkston. NORMAN DAM ('49 Elec. Eng.), 95, August 29, 2022, Greenville, South Carolina. THEODORE R. HOMCHICK ('49 Accounting, Phi Kappa), 95, March 9, 2019, Wenatchee. GEORGE PERKINS ('49 Gen. Stu.), 96, April 24, 2023, Portland, Oregon. GRETCHEN PERKINS ('49 Music), 93, September 3, 2021, Portland, Oregon.

BLANCHEE. GOODFELLOW ('50 Math.), 95, October 5, 2023, Wenatchee. VINCENT LANDIS ('50 Chem.), 94, February 23, 2023, Lakeside, California. KATHLEEN MAE PEARSON ('52 Soc. Sci.), 92, September 25, 2023, Caldwell, Idaho. DUANE I. SCOTT ('52 Ag.), 93, June 26, 2023, Walla Walla. EUNICE LYNN (BRANDT) SPROUL ('52 Nursing), 93, September 12, 2023, Spokane. CORA JEAN MCPHAIL WESTBROOK ('52 History, Kappa Kappa Gamma), 93, September 11, 2023, Issaquah. DARLENE JOY (DEIBERT) BRUNER ('53 Pharm.), 91, November 10, 2022, Palm Desert, California. NANCY TURNQUIST SANDBLOOM ('53 Spanish, Ed.), 92, October 20, 2023, Silverdale. KENNETH C. SCHMAUDER ('54 Ag., '70 EdD), 92, August 19, 2023, Camas.

Ken Schmauder had a long and impactful career as a teacher and school and district administrator, ending his career as superintendent of Evergreen Public Schools in southwest Washington, where he served from 1976 until 1997. Even in retirement, he kept busy educating future educators at the Vancouver campus of City University of Seattle for 10 years.

HARRY BERRYMAN JR. ('55 Int. Design, Sigma Nu), 89, August 23, 2023, Kent. ELLIS BOWHAY ('55 Wildlife Biol.), 93, December 6, 2022, Yakima. JANET C. (THOMSEN) JACKSON ('56 Home

Inmemoriam

Econ.), 86, November 4, 2019, Wenatchee.

CALVIN O. FANKHAUSER ('58 Comm.),
87, October 8, 2023, Spokane. BILL

DAVID OGILVIE ('58 Ed.), 98, October 14,
2023, Tonasket. WAYNE S. TATE ('59

Busi.), 91, August 17, 2023, Pullman.

RICHARD "DICK" W. AXELSON ('60 Accounting), 86, October 9, 2023, Ketchikan, Alaska. ANITA ARLENE FOSTER ('60, '67 MAT Home Econ.), 85, August 29, 2023, Centralia. WILLIAM TAYLOR HENRY (x'60 Pharm.), 87, August 19, 2023, Spokane. WILLIAM JOHNSON ('60 Mat. Sci.), 85, March 11, 2023, Temperance, Michigan. RICHARD R. MORGAN SR. ('60 Police Sci.), 88, November 13, 2023, Longview. E. JOANNE (ILES) SHEELY ('60 Elem. Ed.), 84, August 29, 2023, Leander, Texas. RANDOLPH W. CRIPE ('61 Poli. Sci.), 83, October 29, 2022, Yorba Linda, California, CARIN C. FENTON NELSON ('61 Gen. Stu.), 83, January 25, 2023, Poulsbo. PAULT. TOGAWA ('61 Psych.), 84, March 13, 2023, Mission Viejo, California. ROBERT FOTY BOEHM ('62, '64 MS Mech. Eng.), 83, October 6, 2023, Henderson, Nevada. KATHRYN LOIS MAHRT BRANNON ('62 English), 83, October 11, 2023, Wenatchee. PAT CROOK ('62 Busi., Sigma Nu), 83, August 18, 2023, Pullman. GERALD DAVID CURRY ('62 Poli. Sci.), 83, June 18, 2022, Alexandria, Virginia. HOWARD S. MECK ('62 Busi., Tau Kappa Epsilon), 85, September 18, 2023, Winston-Salem, North Carolina. IRVIN JOSEPH MOORE ('62 MS Zool.), 87, January 9, 2022, Provo, Utah. BARBARA QUAIFE-HOPKINS ('62

Ed., Alpha Chi Omega), 80, December 28, 2020, Spokane. PERRY FLETCHER BRAKE ('63 Chem.), 78, October 25, 2023, Gig Harbor. SUSAN E. BUGGE ('63 Elem. Ed.), 82, April 14, 2023, Seattle. BARBARA L. FITTS ('63 Home Econ.), 83, September 18, 2023, Ramah, Colorado. DOYNE HALL **BAILEY INFANGER PALMER ('64 MEd** Couns.), 89, November 22, 2017, Moses Lake. ALLEN HENRY QUIST ('64 Gen. Stu.), 81, March 4, 2023, Vancouver. MARILYN KAY KLOCK ('65 Soc. Stu.), 80, November 13, 2023, Spokane. GARY PETERSON ('65 Comm.), 82, October 27, 2023, Richland. BEVERLY JEAN EHLERS ('66 Socio., Alpha Gamma Delta), 80, September 14, 2023, San Diego, California. ERWIN P. JONES JR. ('66 Pharm.), 84, September 18, 2022, Sequim. RALPH "NICK" NICKERSON ('66 Poli. Sci.), 78, April 7, 2021, Silverdale, JIM LE ROY COOK ('67 DVM), 86, September 21, 2023, Spokane Valley. ARTHUR "ART" G. ECKMAN ('67 Comm.), 81, November 4, 2023, Atlanta, Georgia. WILLIAM LEE **SCHWERIN** ('67 Ag.), 78, February 28, 2023, Walla Walla. GERALD G. BRIGGS ('68 Pharm.), 85, August 28, 2023, Huntington Beach, California.

Gerald Gregory Briggs, nationally recognized expert on drug therapy during pregnancy and lactation, authored a textbook on the subject, cowrote Diseases, Complications, and Drug Therapy in Obstetrics: A Guide for Clinicians, and broke new ground for pharmacy in maternal and fetal health. He worked in hospitals in Alaska and California and private

companies, and held several academic appointments. Briggs was named 2008 Outstanding Alumnus by the WSU College of Pharmacy and Pharmaceutical Sciences

CHARLES LESTER NORLIN ('68 Police Sci.), 78, October 25, 2023, Wenatchee. SIDNEY "SID" CURTWRIGHT ('69 DVM), 79, May 2, 2023, Moclips. MAUVEEN ANNE "SUE" STADLER ('69 Socio.), 77, July 28, 2023, Boise, Idaho.

VERGENIA ABEDEJOS CAEL ('71 Phys. Ed.), 71, December 25, 2019, Santa Cruz, California. ERNEST B. RAJENDRA ('71 Econ.), 73, February 2, 2023, Los Angeles, California. EMILY J. STRADER ('71 German), 73, September 1, 2022, Lacey. PHILLIP LAFER ('72 MA, '74 PhD Math.), 95, September 5, 2023, Pullman. L. KIRK LEWIS ('73 Gen. Stu., Math., Phi Sigma Kappa), 82, October 11, 2023, The Villages, Florida. GREGORY ROSS DURBIN ('74 Bacterio.), 69, March 18, 2020, University Place. WILLIAM L. INMAN ('74 Bacterio., '79 DVM), 71, August 18, 2023, Coeur d'Alene, Idaho. **ANTHONY "TONY" TENISCI ('74, '79** MS Phys. Ed.), 74, October 28, 2023, Philadelphia, Pennsylvania. DAVID M. BACKSTROM ('75 Forest & Range Mgmt.), 70, April 3, 2023, Olympia. RICHARD CRAIG CLAYTON ('75 Math.), 69, July 2, 2022, Anchorage, Alaska. TOTTEN "TK" WARFIELD JR. ('75 DVM), 73, March 16, 2022, Tucson, Arizona. PAMELA ANN HAMILTON ('76 Ed.), 69, October 13, 2023, Gig Harbor. CAROL HILLIARD ('76 Elem. Ed.), 67, September 22, 2021, Richland. WALTER

Inmemoriam

WINTER SHUFORD ('76 Biochem., '82 MS Bacterio.), 70, August 6, 2023, Redmond. JAMES CONRAD FISCHER ('77 Elec. Eng.), 63, March 19, 2019, Sequim. RICHARD NOEL VINEYARD ('77 Env. Sci.), 68, November 11, 2023, Sparks, Nevada.

As "Dr. Bugs," **Richard Vineyard** filled kids across Nevada with wonder as a science educator. He shared his insect collections and wove stories around them to inspire others to save the natural world.

KLEAL M. HILL ('78 DVM), 71, August 24, 2022, Arco, Idaho. DEAN THOMAS SCHAU ('78 MA Econ.), 71, October 19, 2023, Richland. DANIEL DUANE

STEWART ('78 Ani. Sci.), 69, November 14, 2023, Spokane. WILLIAM (BILL) F. SILVERS ('79 Criminal Justice) 72, August 28, 2023, Coeur d'Alene, Idaho.

LOIS ELIZABETH BENDER ('80 Hum.), 89, October 19, 2023, Spokane. ROBERT "BOB" CHARLES LANGE ('80 Phys. Ed.), 67, October 2, 2023, Eagle, Idaho. PATRICIA M. RUSTANIUS ('81 Biol., Ed.), 65, August 26, 2023, Lafayette, Colorado. NANCY KAY OLSEN ('83 Busi. Info. Sys.), 62, May 24, 2022, Des Moines. DALE MORFORD ('84 Mgmt.), 63, September 9, 2023, Auburn. DEBRA J. MENIN ('85 Comm.), 60, September 14, 2023, Pacific Palisades, California. NEIL MANNING ('86 Soc. Sci.), 88, January 3, 2023, Lewiston, Idaho. BRYAN W.

LUBBERS ('88 Math.), 59, February 13, 2023, Walla Walla.

ALICE M. EMERSON ('90 PhD Anthro., '06 PhD Couns. Psych.), 69, October 18, 2022, Jefferson City, Missouri. THOMAS JOHN MICHNICK ('90 PhD Chem.), 65, November 13, 2023, Brier. EDWARD J. WEISE ('90 Mktg.), 55, October 11, 2023, Glen Allen, Virginia. SCOTT STEPHAN WILME ('92 Soc. Sci., Pi Kappa Alpha), 53, December 30, 2021, La Conner. ELIZABETH JANE "JENNY" CALVERT ('98 Intl. Busi.), 48, November 8, 2023, Jupiter, Florida. VICTOR VASKELIS III ('98 Civ. Eng.), 47, October 21, 2020, Maple Valley.

TED BOUCHER ('02 Ag.), 61, November 9, 2023, Port Orchard. KENNETH E. ROBINSON ('01 PharmD), 77, February 16, 2023, Rapid City, South Dakota. MARK WILLIAM STANHOPE ('03 DVM), 52, August 3, 2023, Portland, Oregon. DARRELL SPARKS HOGGE ('08 Hum., Socio., Psych.), 75, March 10, 2023, Farmington. YO SEAP LEE ('09 Mech. Eng.), 35, February 1, 2022, Federal Way.

WANDA ANN FRANCIS ('10 Digital Tech. & Culture), 46, September 1, 2020, Vancouver. ROBERT OLIVER WESTMORELAND ('12 Comm.), 34, October 19, 2023, Issaquah. BENJAMIN P. QUATIER ('17 Mgmt.), 29, March 2, 2023, Vancouver. KEVIN LINDQUIST ('19 Intl. Busi.), 33, June 8, 2021, Kirkland.

KIM ZIRKER ('20 Nursing), 48, September 30, 2023, Kalama.



FACULTY AND STAFF

STACIE BERING, 74, Medicine, 2017-2023, September 7, 2023, Spokane.
MALCOLM J. CAMPBELL, 86, Civil and Environmental Engineering, 1973-1997, November 7, 2023, Portland, Oregon.
KATHRYN MARIE COX, 83, Civil and Environmental Engineering, 1983-2005, October 11, 2023, Colton.
MARGARET LUCILLE DAVIS, 94, Sociology, 1970-1991, August 27, 2023, Pullman.
REX STUART DAVIS, 91, Kinesiology and Tennis Coach, 1966-1994, October 10, 2023, Pullman.
WILLIAM "BILL" DITTMAN JR., 68, Medicine, 2015-2023, October 31, 2023, Spokane.
CLARENCE

N. HART, 75, Facilities Services, 1980-2010, September 29, 2023, Moscow, Idaho. ANNE LAFRANCE, 71, Veterinary Medicine, 2007-2015, August 1, 2023, Medford, Oregon. MARK E. MARTIN, 72, Facilities Services, 1983-2014, October 30, 2023, Lewiston, Idaho. 🛠 JOHN H. NILSON, 73, Molecular Biosciences, 2003-2015, September 26, 2023, Taos, New Mexico. FROGER G. NILSON, 86, Facilities Services, 1977-1999, November 3, 2023, Colton. 5 DIANA L. **OLSON**, 67, Washington Animal Disease Diagnostic Lab, 1991-2017, October 14, 2023, Elk River, Idaho. 5 LORIS VAN RATHBUN, 92, Facilities Services, 1951-1989, October 7, 2023, Moscow, Idaho.

FERIK STAUBER, 86, Veterinary Clinical Sciences, 1988-2010, August 17, 2023, Genesee, Idaho. 🧩 KENT MARTIN STEEN, 87, Crop and Soil Sciences, 1958-1992, October 20, 2023, Colfax. 🛠 WAYNE S. TATE, 91, Statistics, 1959-1994, August 17, 2023, Pullman. 🛠 THOMAS F. TRAIL, 88, Extension Human Development, 1971-1994, November 2, 2023, Moscow, Idaho. 5 TIMOTHY RAY TROUTT, 72, Mechanical and Materials Engineering, 1980-2006, August 22, 2023, Pullman. 🧩 DOUGLAS LEONARD YOUNG, 77, Economic Sciences, 1976-2009, October 7, 2023, Pullman. A ALICE WOO, 97, Dining Services, 1962-1991, August 24, 2023, Edmonds.







As a mother of two young children, scholarships help alleviate the financial stress of attending pharmacy school. Being a student in the WSU Rural Health Initiative has given me the opportunity to research the possibility of bringing telehealth access to veterans in rural communities.

Amanda Whitehead, third-year pharmacy student. Prior to pharmacy school, she also worked as a volunteer firefighter.



Help students like Amanda by giving to the Rural Health Initiative



Alumni Association News

WSU ALUMNI ASSOCIATION MULTICULTURAL CHAPTERS

While most Cougs know about the WSU Alumni Association's various geographic chapters and clubs throughout the country, many don't know about the WSUAA's **multicultural chapters**.

The WSUAA has four multicultural chapters: the **Asian American Pacific Islander Alumni Chapter** (AAPI), **Black Alumni Chapter**, **Chicana/o/x Latina/o/x Alumni Chapter** (La Alianza de WSU), and **Native American Alumni Chapter** (Ku-Au-Mah Society).

The WSUAA formed these multicultural chapters to support the historically underrepresented groups within WSU's student and alumni populations, foster collaboration between the chapters, promote the welfare of all WSU alums of color, and support the diversity initiatives of WSU and the WSUAA.

"These chapters are not only important for welcoming future generations of students and alumni, but they also foster communities of Cougs who have common backgrounds with one another," WSUAA president **Lester Barbero** says. "They serve to bring people together who share an affinity for something."

The WSUAA **supports several programs for multicultural chapters**, including leadership scholarships for students of color, mentorship programs, reunions, networking events, social activities, and recruitment efforts for students and alums. Multicultural chapters also strive to foster relationships with current WSU students, assuring them that there is a welcoming place for them to stay connected with WSU now and after they graduate.

"Everyone needs community to build their support networks. Although some students may already have these connections, there are still a lot who may not yet have that," says **Mariah Maki**, executive director of the WSUAA. "It's so important for current and future Cougs to know that there is a safe place after graduation with our WSU alumni communities, especially those who identify with our multicultural chapters, where they can share experiences and be supported."

Many chapters are hosting reunions and alumni weekends in 2024, so mark your calendars:

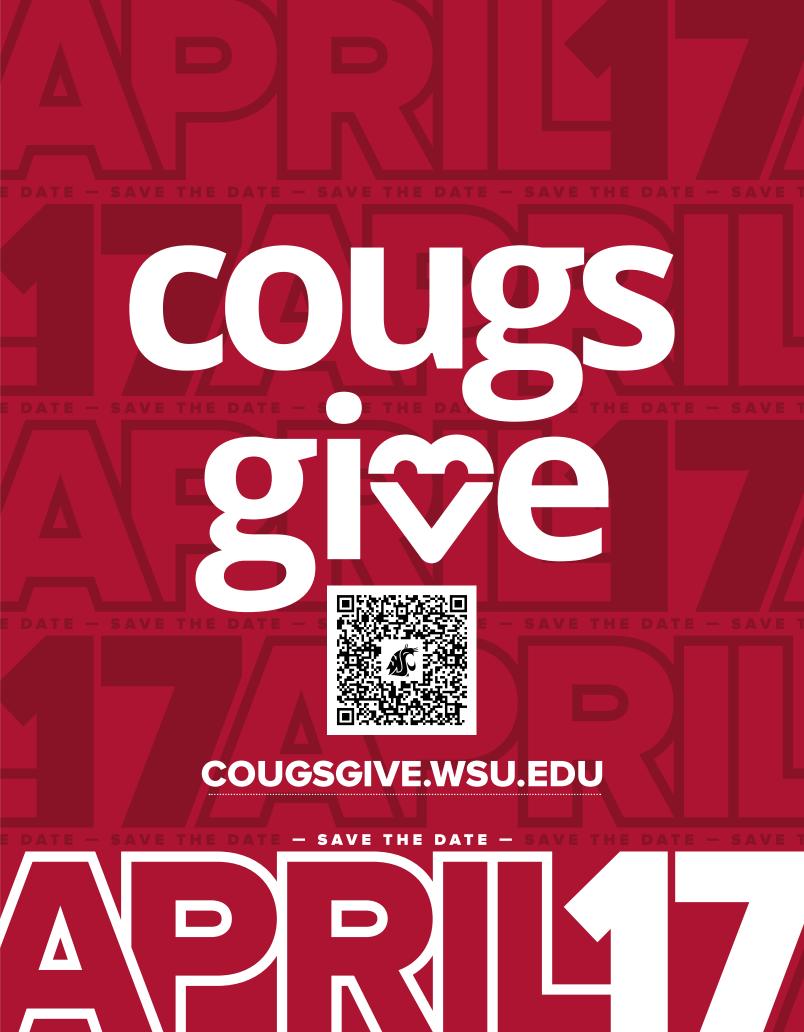
March 30, 2024: Ku-Au-Mah Alumni Reunion

April 19–21, 2024: La Alianza de WSU Reunion and Gala **August 30–September 1, 2024:** Black Alumni Weekend

For more information about the WSUAA multicultural chapters, visit alumni.wsu.edu/MulticulturalAlumni.







BY BECKY KRAMER



WHEN COHO AND CHUM SALMON return to spawning grounds in Washington's Kitsap Peninsula, "salmon docents" are there to greet them.

The docents provide streamside education about the salmon's life cycle, migration, and habitat needs, helping local residents appreciate and protect the natural wonder in their midst.

"Many people in our community have never seen the salmon runs," says Anna McClelland, interim water stewardship coordinator for Washington State University's Kitsap County Extension program, which trains the docents.

Each fall, the coho and chum return to fertilize and lay eggs after spending their adult years in the ocean. Male coho turn a brick red as spawning approaches, while the chums' olive-brown bodies are streaked with purple. The salmon swim up small streams in search of gravel for nests. Sometimes, half the fish is out of the shallow water as they navigate from pool to pool.

"Once you show someone these big, flashy fish, they get really excited," McClelland says. "When they learn about the struggles these fish face, they're more interested in the conservation side."

Docents complete a two-day training, where they dissect hatchery salmon and study the fishes' life cycle from newly spawned alevins to adulthood. They also learn how the ocean, streams, and estuaries support salmon at various life stages, and the importance of cold, clean water to the fishes' survival.

Several dozen docents graduate from the program each year. Many volunteer at the Kitsap Salmon Tours, an annual event put on by local agencies, WSU Extension, nonprofits, and tribes. Some docents go on to volunteer for other organizations supporting salmon restoration.

"We provide research-based information to individuals, and they go out and share it, creating a ripple effect," McClelland says. "It builds community awareness and advocacy for the salmon."



JOHN F. WILLIAMS/COURTESY WSU EXTENSION





WASHINGTON STATE MAGAZINE PO BOX 641227 PULLMAN WA 99164-1227

Washington State

WHAT'S ONLINE SPRING 2024

magazine.wsu.edu



WEB EXTRAS

Black history in the Northwest;
egg recipes; misinformation;
marching band memories;
Rico's history; Cougs in
recovery; Kitsap water
conservation



FACEBOOK

Like the WSM page on Facebook for extra content



TWITTER

Follow us on X/Twitter for frequent updates

eLetter

Subscribe to WSM's monthly email newsletter





eMAG VERSIONS

Read the magazine as you like it—on your tablet, phone, or computer



CONTACT US

wsm@wsu.edu magazine.wsu.edu/contact





PHOTOS & VIDEOS

Catch the spirit with the Cougar Marching Band; robotic bugs



PODCASTS

Fighting misinformation on social media; extreme weather; a conversation with the new Cougar Marching Band director



INSTAGRAM

Photographs from WSU campuses and around the state