

Fall21
vol20no4

Washington State MAGAZINE

RETHINK

27

Chinese
culture in
the NW

12

A virus
revisited

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OUR **20th** YEAR

Fall21
vol20no4

Feature

While Chinese immigrants were generally welcomed in the Inland Northwest, some faced a **most harsh reality**. **27**

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COVER: A SUN PILLAR RISES HIGH IN THE SKY AT SUNSET OVER THE SILHOUETTE OF THE OLYMPIC MOUNTAINS (PHOTO DAN LEWIS) **LEFT:** A REFLECTIVE SUNRISE ON THE COLUMBIA RIVER SOUTH OF THE TRI-CITIES CAMPUS (PHOTO JOSHUA SNYDER)

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PHOTO DEAN HARE

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1 person		2 people	
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70	4.7%	70/75	4.3%
75	5.4%	75/80	4.9%
80	6.5%	80/85	5.8%
85	7.6%	85/90	7.1%
90+	8.6%	90/95	8.4%

CGA ANNUAL PAYOUT RATES



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Rethink The pandemic was already tough, but the surge in bigotry against Asian Americans and Pacific Islanders made it worse. Nonprofit Stop AAPI Hate started tracking incidents last year and reported significant increases even this past spring. From the spa murders in Atlanta to hateful rhetoric in Seattle, the verbal and physical attacks are inexcusable.

Tragically, we've seen this behavior before. Chinese immigrants have lived and worked in the Pacific Northwest for well over 175 years and experienced outbreaks of racist violence and discrimination. As we reflect on the stories about Chinese residents of the Inland Northwest in this issue's feature, we should acknowledge and embrace their lasting contributions to the region. The pandemic brought out ugliness toward Asian Americans, and it forces us to consider again how we treat each other.

COVID-19 pushed people to rethink many things and at WSU that meant academics, research, student life, public health, and most aspects of campus life. Sometimes there were silver linings in the dark clouds of the last year, from creation of art by online students to innovative research and successful vaccination efforts.

Even before we dealt with the pandemic, WSU had been finding better ways to open possibilities for first-generation and low-income students through TRIO programs. With support and guidance from dedicated staff, hundreds of students navigate the unfamiliar terrain of college and become accomplished Cougar alumni.

The WSU spirit of creativity shows up in research, too. As people age or sustain sports-related injuries, there's a growing need for joint replacements. WSU engineering researchers use 3D printing to make longer-lasting hip and knee replacements that fit better. Other scientists are even working on 3D-printed cartilage for knees, which could have significant impact on treatment of osteoarthritis.

We don't need to be researchers to reconsider the world. It can be what we eat—we should look again at the humble cabbage—or it can be how we're entertained. WSU Vancouver professor John Barber and Dan Wyatt ('96 Comm.) have embraced the new and old with reimagined radio dramas and audioscapes.

We all benefit from taking a puzzle, turning it around, and looking at it from different angles. Whether we are making communities more just by stopping hatred and racism, or we're finding new ways to teach, research, and create music or art, I would encourage all of us to reimagine the world.

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TALKback

DONNA VINGELEN KAYAKS ON THE SNAKE RIVER
(COURTESY DANIELLA VINGELEN)

Realizing the adventure

The Outdoor Recreation Center (ORC) bonded a lot of folks with the love of the natural world and provided a great place to grow. I think some of my favorite trips were the intro to backpacking ones where folks were trying things out for the first time. It's amazing to see someone tackle something new and realize that adventure is accessible to them. Thank you to the ORC family and all the best for the next 50 years!

**DANIELLA "DONNA" RUTH
(DRADER) LORINCZ VINGELEN
('09 MS NAT. RES. SCI.)**



Favorite structure

Washington State Magazine recently asked readers to reflect on—in 200 words or fewer—their favorite structure at any WSU campus for a chance to win a gift card to Ferdinand's Ice Cream Shoppe. Here's the winning entry.

My favorite WSU structure would have to be Stevens Hall. I lived there all four years during college and was very involved in hall government. I love that historical building and fought to keep it safe and sound so other women could enjoy living there for years to come. It is so grand and full of the best history. It's also full of friendships, laughter, hard work, and pride of home. Every time I see photos of Stevens Hall, I light up. I show people, "See! That's where I lived! Isn't it lovely? I became ME in that building." It isn't just part of WSU's history; it's part of my history.

ANNA BURCH ('96 COMM.)

Read more memories of Stevens Hall at magazine.wsu.edu/extra/Stevens-Hall-letters

Read more about Washington's significant structures at magazine.wsu.edu/WA-structures



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FROM THE *president*

ILLUSTRATION DEREK MUELLER



As Washington's land-grant university with a 131-year history dedicated to serving the public good, we have embraced the power of possibilities time and time again throughout the decades. Possibilities to create new opportunities. Possibilities to improve lives. Possibilities to reshape the world for a more just and equitable future for all. Unlocking possibilities is what we do best.

"Go Cougs!" certainly is the well-loved rallying cry for the University's athletic teams, but it's a phrase that transcends sports. "Go Cougs" at its heart is about believing in the power of possibilities, identifying possibilities, and turning possibilities into reality.

Our unwavering belief in possibilities is why nearly a third of our students are the first in their families to attend college. It's why our researchers collaborate with partners across the globe to explore ways to halt deadly diseases and improve the food supply. And why we are reshaping the face of health care in Washington by expanding medical services to underserved communities.

After listening to and engaging with students, faculty, staff, alumni, and other stakeholders for the last couple of years, we concluded that our brand should also reflect the concept of possibilities. The Cougar head logo is the University's most powerful symbol—beloved by generations of WSU supporters—and rated as one of the best college logos nationally. The Cougar head represents possibilities. It represents that special down to earth, resilient, spirited mindset Cougs bring to the table for any challenge. It says, "Go Cougs!"

Over the next few months, you will see an evolution in our brand. You'll see the Cougar head play a more prominent role in the visual identification of the University than at any time in our institutional history. We will feature the Cougar head in WSU's familiar crimson and gray colors, accompanied by a modernized, sleeker typeface, across print, web, and digital spaces.

You'll hear us talking more and more about WSU's possibilities in the coming months. We are continuing to expand our service to the state because of pandemic-related challenges of the past 18 months. And we won't rest—watch for exciting new ideas that will enhance our public service mission. There's no doubt our students, communities, state, and region need a powerful WSU.

Go Cougs!

KIRK SCHULZ
President, Washington State University

upfront

BY LARRY CLARK

Dynamic TRIO

She never expected to work on a bioreactor.

Yet, Zakora Moore, a Washington State University senior from Tacoma, is assisting WSU professor Bernie Van Wie's lab this summer with a prototype to produce T-cell cultures for immunotherapy, through the National Science Foundation's Research Experiences for Undergraduates.

It's a great fit for Moore, a bioengineering student in the Ronald E. McNair Post-baccalaureate Achievement Program, which helps prepare first-generation, low-

income, and underrepresented students for future doctoral studies.

"McNair is an introduction to bigger and better things that are possible for higher education," she says.

Moore joins thousands of students and alumni who have successfully navigated college with the assistance of not only McNair, but other TRIO programs serving low-income and first-generation college students.

McNair was the first TRIO program at WSU in 1999. Raymond Herrera ('96 Soc. Stu., '99 MEd Couns., '05 PhD Couns. Psych.) joined the McNair staff a year later and became director in 2002.

"Directing the McNair program is an honor. I get to work with incredibly determined students who go on to research and academic careers," Herrera says.

Launched in 1965 by the federal government, TRIO programs were the first US college access and retention programs beyond student financial aid to address the serious social and cultural barriers to education in America.

There are 15 TRIO programs across WSU Pullman, Tri-Cities, and Spokane serving about 2,000 individuals, with nearly \$4 million in grant funding annually from the US Department of Education. For example, eight Upward Bound programs across WSU prepare students for college, and TRIO Student Support Services (SSS) provides academic development support at WSU.

The goal is simple across the programs:

bring in, retain, and graduate the scholars they serve.

Lucila Loera ('98 MEd Couns.), executive director of the Office for Access and Opportunity and SSS director, says Washington State launched its TRIO efforts relatively late around 1999–2001.

"WSU was not seen as a place that high schools and community colleges typically sent their students who were first-gen, low-income," says Loera, who helped launch and write grants for TRIO.

Once they got off the ground, TRIO programs had a major impact on many students and the number of first-generation students has climbed. Angie Klimko ('01 Psych., '03 MA Comm.), director of First@WSU (first-generation initiatives), was a single mom who finished her community college degree with TRIO support before coming to WSU.

"These are robust and meaningful programs," Klimko says. "We set high expectations for our students, and we provide individualized support and guidance in order for them to succeed." But, she notes, "it's not just about the adversity they have had to overcome. It's about utilizing their strengths and honing the skills they already have and celebrating the small successes along the way."

Staff members need to know financial aid, academic advising, and a lot about WSU. Just as importantly, they listen and adapt to student needs, such as food insecurity.

"We found some of that secret sauce to make students successful, but it's also recognizing that students have different needs," Herrera says, noting that TRIO students "have grit and a lot of lived experiences that make them resourceful, resilient, and relentless."

Their success echoes across families and communities. "That ripple effect is so important because it changes lives. It changes the trajectory of an entire family," Loera says.

Moore says she's first in her family to attend a four-year university, so earning her doctorate will be especially meaningful. She is considering dermatology. "There are dermatological practices especially for minorities and people of darker skin tone, but I feel like there's not enough research out there," she says.

Herrera and other TRIO staff will be applauding her journey. "You can call it a pipeline, bridge, or pathway," he says, "but it definitely changes lives." *

Re-imagined Radio and CooperCon

BY REBECCA PHILLIPS

listen to Re-Imagined Radio dramas: magazine.wsu.edu/extra/re-radio

Wherefore art thou, D. B. Cooper?

Fifty years ago this November, an audacious act took place in southwest Washington, a crime that remains one of the nation's most compelling unsolved mysteries.

It began the day before Thanksgiving, 1971 when a slight, dark-haired man boarded Northwest Orient Airlines flight 305 in Portland. About age 40, dressed in a black suit and tie, he looked like any other business traveler on his way home for the holiday.

Midair, however, he opened his briefcase revealing the red wires of a homemade bomb, and quietly told flight attendant Tina Mucklow that he would detonate the device unless his requests were granted—\$200,000 and four parachutes in exchange for setting the passengers free in Seattle. His name, he said, was "Dan Cooper."

This fall, fans and sleuths will gather in Vancouver to celebrate the fiftieth anniversary of the night D. B. Cooper skyjacked the Boeing 727 and later jumped from the plane as it flew south from Sea-Tac Airport. A bundle of \$20 bills was eventually found buried along the Columbia River but otherwise, Cooper has not been seen or heard from since.

Long the stuff of lore and conspiracy theories, it's believed Cooper landed somewhere near Vancouver. The details will be debated and analyzed at CooperCon to be held November 20–21. The event is sponsored by Arizonan Eric Ulis and will be hosted by Dan Wyatt ('96 Comm.) owner of Vancouver's historic Kiggins Theatre.

On November 24, the theatre will offer a look at the the absurd and speculative culture surrounding Cooper in a live-performance radio drama written by Wyatt and produced by John Barber, a sound artist and professor in the

creative media and digital culture program at Washington State University Vancouver.

Barber is the creator of Re-Imagined Radio, a sound-based storytelling medium that produces a wide variety of old-time radio programs as well as contemporary works.

"Re-Imagined Radio originally began with live stage performances in Kiggins Theatre," Barber says. "It was thought of as a community arts and culture endeavor. With COVID, I was forced to move to radio broadcasts and 'The Skyjacker,' an earlier scrip by Wyatt, was the first episode of Re-Imagined Radio that we recorded remotely."

Barber also adapts radio shows from the 1930s or 1950s to reflect a local flavor.

"We try to do Orson Welles's 'War of the Worlds' every year to celebrate World Audio Drama Day," he says. "I've adjusted the script to center the activity right here in Vancouver instead of Groves Mill, New Jersey, as in the original.

"The characters all come from Vancouver and there are many references to area land-

marks. It was just north of Vancouver where the original Martian capsule apparently landed, so I changed the name of that place to Battle Ground, the present name of the town."

Barber and his community partners produce monthly broadcasts for two radio stations in the Portland-Vancouver area. The show is syndicated regionally and is also broadcast across Canada.

For CooperCon21, Wyatt has updated Kiggins Theatre with all the necessary COVID-19 precautions and looks forward to once again welcoming the public to live radio drama performances.

"I've heard about D. B. Cooper all my life," Wyatt says. "My mom was actually at Sea-Tac airport the night of the skyjacking waiting to fly to Texas to see my soon-to-be father, her fiancé at the time. Her flight was grounded while Cooper waited for his ransom money, so it held up her plans a bit. I like to say Cooper almost prevented my existence.

"D. B. is a little bit of a local folk hero here in Vancouver. Someone who stuck it to the man and didn't really hurt anybody. But he did commit a criminal act; he hijacked an airplane and stole a lot of money."

Wyatt says Ulis, who appeared in a History Channel documentary about Cooper, invites serious investigators, theorists, and people involved in the skyjacking to speak at CooperCon.

"This year, in the age of podcasts and bizarre conspiracy theories, we're planning to take the radio drama in a wackier route, with a little bit lighter touch," says Wyatt.

"My personal take is I don't want the case solved. I think it's fun as a mystery, like UFOs or the sasquatch. There's no solid suspect. That's part of the lore of this mystery—nobody really knows." *



COURTESY REIMAGINEDRADIO.NET

ZAKORA MOORE (COURTESY THE RONALD E. MCNAIR POST-BACCALAUREATE ACHIEVEMENT PROGRAM)

NORTHWEST AIRLINES NA67JUS (DERIVATIVE FROM PHOTO BY CLINT GROVES/WIKIMEDIA COMMONS)

Mimicking mother nature

As we age, our lifestyle and history of injuries can catch up to us.

Each year, more than a million Americans receive total knee or hip replacements, according to data from the American Academy of Orthopedic Surgeons, and the average age of patients undergoing this treatment is getting younger.



SUSMITA BOSE (COURTESY WSU NEWS)

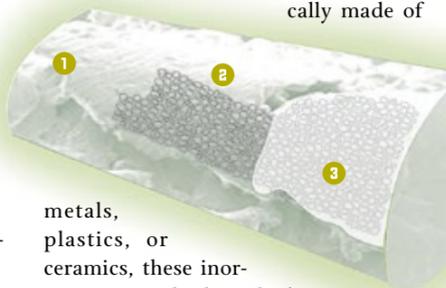
“Because today’s population is more active and there are more sports-related injuries, younger and younger people need these replacement surgeries,” Susmita Bose, professor in the School of Mechanical and Materials Engineering at Washington State University, says. “But if you get your first surgery in your 40s or 50s, and then after one

revision surgery, the second revision surgery may not be possible since the bone is compromised, and the patient may be wheelchair-bound.”

For over a decade, Bose, along with Amit Bandyopadhyay, has been researching ways to use

3D printers to make joint replacements heal better, and last longer.

While implants are classically made of



metals, plastics, or ceramics, these inorganic materials alone don’t bond well with surrounding bone and tissues. This can potentially cause loosening of the implant over time, and eventually bring about the same pain and discomfort that the original surgery was supposed to alleviate.

Most implants last for about 10 to 15 years, though some can fail as soon as 7 years. During a replacement surgery, a new implant is inserted, and the surrounding bone may also need to be stabilized, with calcium phosphate coating, a bone like material to improve implant biocompatibility.

To tackle this, Bose and her team developed a bone-like material made mostly of chemistry-modified calcium phosphate, with additives and natural medicinal compounds, that act as a scaffold for new tissue to grow within 3D printed structures. In small injuries, the material can be absorbed by the body, allowing it to repair itself.

“With chemistry-modified calcium phosphate coating surrounding the metal, the bone tissue can grab it better and stabilize the implant further,” Bose says. This makes it less likely for patients to need revision surgery.

Meanwhile, Arda Gozen, George and Joan Berry associate professor in the School of Mechanical and Materials Engineering, and his team are working toward something a bit more difficult: printing articular cartilage for knee joints.

“Cartilage is such a finicky tissue. When it fails, it fails bad,” Gozen says. “Realistically, we are still a ways away. But,

along with some other critical tissues, this research would have a huge impact on quality of life.”

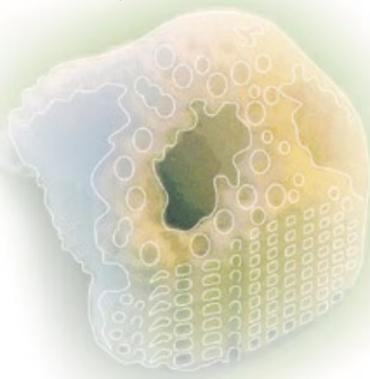
Articular cartilage is what allows joints to glide smoothly. It wears down over time, causing osteoarthritis—the most common arthritis disorder, which affects millions of people throughout the world—and with it, chronic pain.

“It’s not really rocket science anymore to take a number of cells and turn it into something larger,” Gozen says. “You can make living blobs. But making them work with the human body requires quite a bit of engineering, effort, and science.” *



ARDA GOZEN (COURTESY WSU NEWS)

Lower left: 3D printers produce bone scaffolds to support damaged bone as it regenerates tissue and blood vessels. **At top:** On 1 porous titanium 2 TiO₂ nanotubes are “grown” through electrochemical anodization for adherence of 3 calcium phosphate biomimetic coating. This is to help stabilize an implant so to lessen the likelihood of revision surgeries. **Lower right:** 3D printers are also being developed to create custom-made replacement skin, cartilage, or other tissue for patients. (Staff illustrations)



A digital divide, not

The path to reconcile relationships with Indigenous communities needs a modern digital platform.

Free, open source, and available as a mobile app, Mukurtu, a content management system created and maintained by the Center for Digital Scholarship and Curation (CDSC) at Washington State University, intends to be that platform.

From the Warumungu language of Indigenous northern Australians, *mukurtu* (pronounced moo-koo-too) means “dilly bag.” Traditionally made from woven plant materials, dilly bags serve as a “safe keeping place” for sacred items. Mukurtu is a safe place where tribal communities worldwide can engage with, manage, and create digital content according to their own protocols.

It’s a bit of a historical rewrite, as much of the content about Indigenous communities originated outside those communities through journals, maps, legal documents, and especially photographs of people, places, things, and events. That alone creates potential issues, from incomplete metadata to ethnocentric misinterpretations. Unrestricted access to culturally sensitive content is another concern.

And while many venerable institutions such as the Smithsonian National Museum of the American Indian and the National Museum of Natural History are slowly addressing inclusivity and repatriation of artifacts, Mukurtu takes a different tack.

Instead, Mukurtu is driven by the needs of the communities that use it, says Kimberly Christen, professor and director of the digital technology and culture program and the CDSC.

She worked with CDSC technology director Alex Merrill and Trevor Bond (’17 PhD History), codirector of the CDSC and associate dean for digital initiatives and special collections at WSU Libraries, to create the center, part of the College of Arts and Sciences.

Mukurtu provides its roughly 600 user groups ways to both add to and recontextualize existing digital content.

The Plateau Peoples’ Web Portal, for example, is built using Mukurtu, and weaves threads from various repositories: WSU’s archives, the Northwest Museum of Art and Culture, Smithsonian National Museum of the American Indian, and the National Anthropological Archives. A link to a fringed, intricately-beaded elk hide dress from the Nimípuu (Nez Perce) includes conventional metadata—its provenance and timeline—but also extensive cultural narratives from two Nez Perce community members, Joseph Blackeagle Pinkham and Nakia Williamson-Cloud, who also serves as the tribe’s cultural resources program director.

Indigenous communities also use Mukurtu to provide access to new content, such as oral histories and videos that help document language, dance, songs, and other aspects of their cultures.

“These songs are very important because, as Plateau people, Yakama, Nez Perce, Umatilla, and Warm Springs still perform and sing,” says Jolena Tilleguots, who works for the Yakama Nation Library and located her maternal great-grandmother and her siblings

in the national archives as part of her work with the web portal.

Related initiatives run by the CDSC, such as the Sustainable Heritage Network and Tribal Digital Stewardship Cohort Program, further facilitate involvement from Indigenous communities to create and manage content, navigate policymaking, and write grants.

And what you don’t see is just as important. Mukurtu shifts access to content to community members whose lives and culture are being represented in bits and bytes, safekeeping the sacredness of such things as funerary materials.

Mukurtu in general and the Plateau Peoples’ Web Portal specifically represent WSU’s link to its past and its future. In 1997, WSU acknowledged it benefitted from an 1862 Congressional act that essentially converted more than 90,000 acres of historically tribal lands “often taken by coercive and violent acts, and the disregard of treaties” into public land for the University.

Following that, WSU created the Office of Tribal Relations and Native American Advisory Board, which recommended the establishment of a Plateau Center for American Indian Studies. The first Plateau Conference was held in 2005, the same year Christen arrived at WSU from Australia, where she had worked with the Warumungu for more than a decade.

Those relationships helped form the foundation for Mukurtu, which is less about technology than about making connections.

“My work is about collaborations and partnerships driven by the needs, goals, and desires of the communities with whom I form long-term relationships,” Christen says. *



OVERLAY IMAGE COURTESY WSU CENTER FOR DIGITAL SCHOLARSHIP AND CURATION

HILDA DEUTSCH, PIAHOUSELANDSCAPE, 1989. COURTESY SMITHSONIAN AMERICAN ART MUSEUM

Surprising positives in a tough year

THE PANDEMIC profoundly affected Washington State University campuses, students, faculty, staff, and alumni.

Virtual classes, COVID-19 outbreaks, shifts in research priorities and methods, canceled sports, COVID testing, masks, vaccinations, and too-quiet paths and hallways around Pullman, Vancouver, Tri-Cities, Everett, and Spokane—the pandemic's effects reached every corner of WSU.

Despite the jarring adjustments and focus on efforts to contain a deadly disease, there were some bright spots and lessons learned in this time of rapid transformation.

As WSU gradually returns to the buzz and excitement of campus life this fall, we reflect on a few of the silver linings in the dark clouds of the COVID-19 pandemic.

Instructors in all departments discovered ways to deliver knowledge to students wherever they were, building on the strengths and expertise of WSU Global Campus.

Researchers dug into many aspects of the pandemic, such as how it affected people who are incarcerated, the communities around them, and prisons themselves. That was just one area of inquiry among dozens, all done with safety protocols to prevent infections.

Students found new ways to enjoy campus life and build those friendships that last a lifetime.

Nurses and pharmacists, both students and faculty, vaccinated tens of thousands of Washingtonians, while becoming inspired and more experienced health care workers.

Alumni, too, stepped up to support their alma mater, such as the members of the National Guard who volunteered their time to keep up a testing regimen at WSU Pullman.

Some of this work, though deeply appreciated, hopefully won't need to continue, like mass testing for a pandemic. Other aspects of last year's changes can lead to a better WSU: technology that really improves student learning, research findings to help understand the world, health care providers with broader experience in assessing and communicating with patients, and even more unexpected benefits. —LC

MARCH 2020

ALL WSU CAMPUSES MOVE TO DISTANCE LEARNING AND REMOTE WORK AS COVID-19 PANDEMIC SWEEPS ACROSS THE GLOBE ✨ INSTRUCTORS ADAPT CLASSES, WITH TRAINING AND SUPPORT FROM WSU GLOBAL CAMPUS ✨ WSU ASKS STUDENTS NOT TO RETURN TO THE PULLMAN CAMPUS FOLLOWING SPRING BREAK ✨ FACULTY AND RESEARCHERS RECEIVE GUIDELINES FOR RESEARCH ACTIVITIES DURING THE PANDEMIC ✨ WSU PARTNERS WITH UNIVERSITY OF WASHINGTON TO COMBAT CORONAVIRUS MISINFORMATION WITH TOOLS TO PROMOTE AN INFORMED SOCIETY

Academics—a pivot

BY ADRIANA JANOVICH

Ten minutes before the official start time, PAUL T. BUCKLEY

posts the first note in the chat box. “Happy Friday, everyone!” Today’s topics are already listed on the screen: properties of gases, gas pressure and units, and gas laws. As the clock ticks on, more and more Washington State University students log in via Zoom on Blackboard, most without video.

Class is being recorded. Students can rewatch it later or tune in for the first time when it suits their schedule. Buckley begins the 50-minute session at 11:10 a.m. on the dot. While discussing the attributes of gases—they assume the shape and volume of their container, for example—he writes notes and draws graphs in real time, sharing them on his screen through an app called Notability, which also allows him to incorporate photos, PDFs, or type.

“Gas pressure results from (molecular) collisions with the container walls,” he says, drawing a bicycle tire as an example. “The

force of the collisions is related to temperature. The pressure’s going to increase when it warms up.”

A few students type questions in the chat box, and Buckley is quick to answer aloud. A few others audibly ask questions during the lecture, something Buckley also encourages. Class, he says, “should be interactive and fun.” Welcome to virtual Chemistry 105.

Until the COVID-19 pandemic forced classes from lecture halls and classrooms, Buckley, a career-track associate professor in the Department of Chemistry in the College of Arts and Sciences, taught most of his in Fulmer 226, a lecture hall affectionately known as “The Pit.” It holds 352 students.

When WSU went from face-to-face instruction to remote learning immediately following spring break in March 2020, faculty had about a week to make the transition. Most, like Buckley, had never before taught online.

“It was totally stressful. It was definitely jumping into the deep end without knowing how deep it was,” says Buckley, who initially pre-recorded lectures, then posted them on Blackboard. He tried PowerPoint slides with voiceovers and—while that format might work well for some professors—Buckley was “not a fan. It felt a little awkward,” he says.

He was one of nearly a thousand faculty members who participated in system-wide trainings on using Zoom technology to host drop-in office hours and deliver live and pre-recorded lectures. WSU started trainings during spring break 2020 and continued throughout the remainder of the semester.

“It was an all-hands approach, and staff really stepped up. They were working evenings, early mornings, and weekends,” says DAVID CILLAY, vice president for academic outreach and innovation, and chancellor of WSU Global Campus. “Was it without bumps? No. But I think what we had was as smooth as anyone would have imagined with that rapid of a pivot.”

His staff surveyed faculty early on to better understand their challenges, from effectively engaging students to making presentations and executing online assessments. Virtual proctoring services were also offered.

While online teaching and learning were new to most faculty and students, Cillay notes, “WSU has almost three decades of experience in distance and online education. We have infrastructure in place. We have quality standards in place. And we were able to leverage a lot of that history to respond to the pandemic.”

He praises faculty members for rising to the occasion. “If the faculty were resistant,

if the faculty did not engage, we wouldn’t have been effective,” Cillay says. “I’ve been so impressed with the willingness of the faculty to take on things that they would have never normally been asked to take on, not just at a dot on the timeline but throughout the pandemic.”

Through Notability, which he learned about from a colleague, Buckley can download a PDF of the notes he writes in class and post the document on Blackboard. “It’s very intuitive,” he says. “Basically, you have an iPad with a stylus, and it’s just like using a whiteboard. I can give class just like I would in The Pit. I talk. I write notes. I import pictures from my photo gallery and embed them into the lecture.”

By spring 2021, he was planning to incorporate the digital platform into his classes when they return to in-person, projecting the app onto the big screen.

On this particular Friday, he has several gas laws to explain before noon. Buckley goes through at least one example per law, ending class at 12:01 p.m. He apologizes for going one minute over. Students don’t seem to mind too much. In the chat box, they write, “Have a nice weekend!” and “Have a safe weekend!” and “Thanks!” and “Thank you!” before logging off. ✨

Research—a review

BY REBECCA PHILLIPS

As COVID-19 swept the nation in March 2020, Washington State University was forced to shut down all research activities except essentials like feeding animals and maintaining equipment. Faculty with ongoing studies were required to put them on hold or pivot to make the research relevant to the pandemic. So, step-by-step, many began charting unknown territory.

“Science and teamwork are our best hope for a way forward,” said WSU President Kirk Schulz in October 2020. “I am incredibly proud of our faculty whose persistence and innovation will help us get through this crisis and prevent a future one.”

Here are highlights from a year of extraordinary research challenges.

Health

SANTANU BOSE, Veterinary Microbiology and Pathology, patented a treatment to suppress the dangerous inflammatory response, or cytokine storm, that can lead to severe pneumonia during COVID-19 infection.

PATRIK JOHANSSON, Elson S. Floyd College of Medicine, is investigating the impact of the pandemic on the health and well-being of cancer patients living in rural and tribal communities.

OFER AMRAM, Elson S. Floyd College of Medicine, is evaluating the impact of deferred preventive care on cancer patients. He also led a team that developed COVID-19 tracking tools to help rural areas better respond to outbreaks.

COURTNEY MEEHAN, Anthropology, was part of a research team that found mothers infected with COVID-19 pass antibodies to their babies in breast milk without passing along the SARS-CoV-2 virus.

CATHERINE VAN SON and **DEBORAH ETI**, Nursing, suggest that a pulse oximeter is more reliable than a thermometer for diagnosing older adults with COVID-19.

TAHIRA PROBST, Psychology, WSU Vancouver, studies whether COVID-19 economic stressors such as job insecurity and



BESIDES TEACHING CHEMISTRY OVER ZOOM AND BLACKBOARD, OTHER DISTANCING METHODS INCLUDED MAILED AT-HOME LABORATORY KITS (ABOVE), INSTRUCTIONAL YOUTUBE VIDEOS, AND (OPPOSITE) ONLINE VIRTUAL SIMULATION LABORATORIES (IMAGES COURTESY ESCIENCE LABS AND LABSTER, RESPECTIVELY)

APRIL 2020

FOOD PANTRIES STEP UP DELIVERIES TO STUDENTS FACING FOOD INSECURITY ✨ PULLMAN CAMPUS CELEBRATES COUG MOMS VIRTUALLY AND ANNOUNCES "MOM OF THE YEAR" AWARDEE REBECCA KALLMAN, PRESENTED BY BECU ✨ WSU DONORS SUPPORT A "COUGS HELP COUGS" RELIEF FUND FOR STUDENTS EXPERIENCING FINANCIAL EMERGENCIES RELATED TO THE PANDEMIC ✨ WSU BEGINS BREWING BATCHES OF FDA-APPROVED "COUGAR CLEAN" HAND SANITIZER

MAY 2020

GRADUATES AND FRIENDS ATTEND A VIRTUAL CELEBRATION TO RECOGNIZE THE CLASS OF 2020 ✨ WSU ANNOUNCES LIMITED OCCUPANCY IN RESIDENCE HALLS FOR FALL 2020 ✨ CONTACT TRACING EXPANDS TO CONTAIN COVID-19 INFECTIONS ON CAMPUSES

JULY 2020

FALL 2020 SEMESTER MOVES TO A DISTANCE DELIVERY MODEL ✨ WSU URGES STUDENTS NOT TO RETURN TO CAMPUS FOR FALL 2020

AUGUST 2020

STUDENTS WHO NEED EQUIPMENT RECEIVE WIFI HOTSPOTS AND CHROMEBOOKS ✨ WSU PULLMAN SEES A RAPID INCREASE IN COVID-19 CASES

SEPTEMBER 2020

WSU EXPANDS COVID-19 TESTING OF STUDENTS AND EMPLOYEES WITH SUPPORT FROM THE NATIONAL GUARD



COURTESY WSU NEWS

financial strain affect employees' ability to comply with health guidelines.

SARA WATERS, Human Development, WSU Vancouver, surveyed Asian Americans to discover the types of discrimination they experienced during the pandemic and how it has affected their physical and mental health.

TRACY KLEIN and LOUISE KAPLAN, Nursing, WSU Vancouver, study changes in health professional policies, including licensure requirements adopted by states to promote workforce flexibility during COVID-19.

Surveillance

The Paul G. Allen School for Global Health is selected to establish a Center of Research for Emerging Infectious Diseases (one of eleven) by the National Institute of Allergy and Infectious Diseases. Located in Nairobi, Kenya, the WSU center will help prevent future pandemics by studying pathogen transmission, improving pathogen detection, and conducting surveillance studies.

DEDRA BUCHWALD, Elson S. Floyd College of Medicine and director of the Institute for Research and Education to Advance Community Health, was awarded \$4.4 million to study COVID-19 testing in urban American Indian and Alaska Native populations.

MICHAEL LETKO, Paul G. Allen School for Global Health, studies coronaviruses in bats and other animals to help predict and prevent future pandemics.

The Washington Animal Disease Diagnostic Laboratory (WADDL), College of Veterinary Medicine, is conducting limited COVID-19 testing in animals.

Intervention

ERIC LOFGREN and GUY PALMER, Paul G. Allen School for Global Health, are tracking epidemiological factors that facilitate spread of COVID-19 to inform science-based policies for reducing transmission



COURTESY ZGF

in health care systems, schools, and the community.

BALA KRISHNAMOORTHY, Mathematics and Statistics, WSU Vancouver, and ANANTH KALYANARAMAN, School of Electrical Engineering and Computer Science, WSU Pullman, use data analysis to create interactive maps that help identify COVID outbreaks geographically. Their goal is to develop targeted intervention methods.

KEVAN MOFFETT, Environmental Hydrology, and DEEPTISINGH, School of the Environment, WSU Vancouver, are analyzing weather, air quality, demographic, and socio-economic data to determine COVID-19 risks and vulnerabilities in the Pacific Northwest.

Pandemic Fallout

RANDY FORTENBERY and ERIC JESSUP, School of Economic Sciences, and KARINA GALLARDO, Puyallup Research and Extension Center, are assessing the effect of COVID-19 on food supply, agricultural economics, and transportation.

JEN MOSS, WSU Extension, and STEPHANIE SMITH, School of Food Science and WSU Extension, provide guidance on food safety, preparation, low-cost recipes, and locally accessible ingredients. They also offer advice on staying healthy and physically active during the pandemic.

PORISMITA BORAH, Edward R. Murrow College of Communication, and MICHAEL CAULFIELD, Blended and Networked Learning, WSU Vancouver, are combatting pandemic misinformation by studying how it spreads and ways to reduce "fake news." They developed a way to detect coronavirus misinformation in 30 seconds.

ELIZABETH HOWLETT, Carson College of Business, is studying consumer fraud and what makes people susceptible to fraudulent cures, treatments, and tests for COVID-19.

TIM NADREAU, School of Economic Sciences, is assessing the economic impacts of COVID-19 in Washington state and beyond.

ROBERT CROSSLER, Carson College of Business, says COVID-19 social distancing measures have sparked discussion of full mail-in or online voting for upcoming elections. He studies potential concerns with vote security and voter privacy.

ELIZABETH WEYBRIGHT, Human Development, studies boredom in teens caused by social distancing during COVID-19, and the challenges it presents for parents.

CHUN-CHU (BAMBOO) CHEN, Carson College of Business, WSU Vancouver, examines the financial and health impacts of COVID-19 layoffs and furloughs on the hospitality workforce.

STEVE FOUNTAIN, History and Native American Affairs, and DESIREE HELLEGERS, English, WSU Vancouver, are studying heightened food insecurity during the pandemic.

JANE LANIGAN and YOSHIE SANO, Human Development, and LINDA EDDY, Nursing, WSU Vancouver, study impacts of COVID-19 social distancing on health behaviors, many of which cause a decline in subjective well-being. Social support was found to be key in encouraging healthy behaviors.

Creative Responses

SUSAN FINLEY, Education, WSU Vancouver, created digital storytelling outlets for COVID-19 and art expression including an Instagram TV series on coronavirus responses among artists.

SHELLY FRITZ, Nursing, WSU Vancouver, and MARIAN WILSON, WSU Health Sciences Spokane, study the impact and efficacy of homemade masks in a pandemic. ✨

No one in the stands

BY ALYSEN BOSTON

You could hear a pin drop in the CUB. The Glen Terrell Mall was empty. But it wasn't summer break.

"When COVID first started, we were at a swim meet, and they told us we had to come home," CHLOE LARSON, a Washington State University senior swimmer, says.



COUG FANS SENT IMAGES OF THEMSELVES FOR CARDBOARD CUTOUTS TO FILL MARTIN STADIUM SEATS DURING THE NOVEMBER 14, 2020, HOME FOOTBALL GAME (DERIVATIVE FROM PHOTO BY ROBERT HUBNER)

mer, says. "The whole world kind of went upside down."

On March 11, 2020, WSU announced that after spring break, all classes would be virtual. Students were encouraged not to return to campus to stop the spread of COVID-19. No one realized these circumstances would last another year.

"It was a bummer we couldn't finish the season in 2020 because we were doing really well, and we couldn't practice together as a team," NICKLAUS CHIAM, a fifth-year senior and WSU golfer, says.

As the 2020-2021 school year started, athletic events were delayed or canceled,

despite hopes that COVID-19 would be under control. WSU's football season, a staple for students and alumni alike, was delayed until November, and three of the team's seven games were canceled. Even in the football games that took place, there were no fans in the stands.

"Our seasons have been cut short, we can't travel as much, and not many teams were willing to put themselves in positions to compete," SAMANTHA HOWELL, another senior WSU swimmer, says.

JOHN BUSSEY, a materials science and chemical engineering major, had his

high school graduation disrupted before starting his freshman year at WSU in the fall.

"Socially, it's been different than I expected college to be," Bussey says. "But the few people I was able to see I'm even closer to because of the pandemic."

By social distancing and wearing a mask, Bussey was able to participate in undergraduate research in a lab, and he worked with a team of other freshmen for NASA's 2021 BIG Idea Challenge. They studied Mount St. Helens ash to figure out a way to wash lunar dust out of astronaut spacesuits.

see the stand-in fans in action during 2020's singular home football game: magazine.wsu.edu/extra/in-spirit

OCTOBER 2020

WSU HOLDS FIRST FAMILY WEEKEND. IT'S A VIRTUAL EVENT DUE TO THE PANDEMIC ✨ WSU CANCELS SPRING BREAK 2021

NOVEMBER 2020

COUGAR FOOTBALL GAMES BEGIN FOR A SHORT, SEVEN-GAME SEASON WITHOUT FANS IN THE STANDS. THREE GAMES ARE CANCELED DUE TO COVID-19

JANUARY 2021

SPRING 2021 SEMESTER CONTINUES DISTANCE LEARNING ✨ WSU ANNOUNCES A RETURN TO IN-PERSON STUDENT EXPERIENCE FOR FALL 2021 ✨ NATIONAL GUARD ENDS ITS COVID TESTING IN PULLMAN

MARCH 2021

WSU JORDAN SCHNITZER MUSEUM OF ART REOPENS ITS GALLERIES TO THE PUBLIC ✨ STUDENTS BEGIN RECEIVING VACCINATIONS AT COUGAR HEALTH SERVICES

"I've been blown away by the opportunities WSU has given me as a freshman," Bussey says. "While there are COVID precautions, we're still able to do all this research."

Despite the setbacks, WSU students, staff, and faculty are doing what they can to return to normal. A new normal, that is, influenced by what they've learned in the last year.

Through virtual events, the **Division of Student Affairs** worked hard to provide students an opportunity to stay connected despite distance. During the University's Family Weekend in April, students and their



VIRTUAL COUG SPIRIT PAINT NIGHT DURING SPRING 2021 FAMILY WEEKEND (COURTESY WSU STUDENT AFFAIRS)

parents could watch a ramen contest and a performance by WSU opera and music students online. Virtual trivia night, video games, and interactive media were also available.

But for fall 2021, they hope to debut a new Coug experience: socially distanced events in open-air spaces, limited sporting events, and both in-person and virtual classes.

"The whole thing with COVID has been being flexible and understanding, taking things in stride," Howell says. "We've done the best we can this year." ✨

A shot in the arm

BY LARRY CLARK

People aren't usually excited to get their shots, often cringing at the sight of the needle or putting off appointments. The COVID-19 pandemic flipped that familiar trope, with many enthusiastically rolling up their sleeves for the vaccination and chance to return to a more normal life.

Pharmacy and nursing students and faculty of Washington State University shared in that enthusiasm, delivering tens of thousands of vaccinations.

"Every person had a story, and every person had an experience that was unique within this COVID pandemic. I heard those stories, and I felt those emotions," says **SHANNON PATTERSON**, a fourth-year student pharmacist now working at Harborview Medical Center in Seattle. "I felt a very emotional connection to every single person in every vaccination that was given."

As Operation Immunization chair for the student chapter of the American Pharmacists Association at the WSU College of Pharmacy and Pharmaceutical Sciences, Patterson led flu and pediatric vaccination outreach before the pandemic. Operation Immunization, which has been around since 1997, helps nursing and pharmacy students get required experience in inoculation techniques.

But the pandemic accelerated community work for everyone at WSU Health Sciences Spokane. "We partnered with local vendors like Spokane Regional Health District, other health districts, and the CHAS clinics on vaccinations," Patterson says. And by late March, WSU nursing students and faculty had already administered more than 15,000 vaccine doses.

Early on, most patients were health care providers. "We had providers who were literally in tears because they were so happy that there was finally a vaccination," says **KAY OLSON** ('07, '10 MN Nursing), associate teaching professor at the College

of Nursing who teaches community health. "They were hopeful that there was an end in sight, because they had seen the struggle not only themselves, but of patients that they were trying to take care of."

Olson coordinates COVID-19 vaccination programs for Coug nurses. Many volunteered on their days off, evenings, and weekends to deliver shots at homeless shelters, community centers, schools, nursing homes, and other places.

"The way student pharmacists and our colleagues in nursing stepped up to make this happen was really remarkable," says **JENNIFER ROBINSON** ('05 PharmD), associate dean for professional education at the doctor of pharmacy program.

Their outreach extended beyond Spokane to Vancouver, Tri-Cities, and Yakima.

"There were days when we were giving about 200 shots at a clinic," says Isabel Esquivel, a fourth-year student pharmacist who began assisting with vaccinations around March in Yakima and Wapato.

Since she's bilingual, Esquivel was able to answer questions from Spanish speakers. "In the lower Yakima Valley, there are a lot of people who speak Spanish. They appreciate it when I can explain what shot



INSET: SHANNON PATTERSON IS ONE OF MANY STUDENT PHARMACISTS (ALONG WITH WSU NURSING STUDENTS AND MEDICAL FACULTY) THAT ADMINISTERED COVID-19 VACCINATIONS. (COURTESY SHANNON PATTERSON)

ABOVE: STUDENT PHARMACIST TYLER BOLES ASSISTING WITH COVID-19 ARRIVAL TESTING. (PHOTO ROBERT HUBNER)

they were getting, and (that) they should be back in about four weeks if you're getting the Moderna" or the Pfizer.

Olson says COVID-19 taught students more than inoculation techniques. "In the midst of this tragedy and pandemic, there have been some bright spots. The students have really learned what population health is all about, and how something like this can affect people, even if they don't get sick," she says.

Robinson notes that students, under the supervision of professional pharmacist preceptors, also learned clinical skills, communication, and organizational skills.

"Patients are asking these really great questions, and then the students have to go to the literature and find out answers," she says. "The first round of people vaccinated were health care providers and so the questions that students were getting, they weren't always prepared to answer."

Students needed to adapt quickly. Large vaccination events, like those at the Spokane Arena, usually "take three to six months to plan," Robinson says. "And we had groups that were pulling it together within two weeks. Our students were placed in situations that were continually evolving and changing."

Olson says students gained practical assessment and communication

skills, too. "We had to do assessments with every single patient that came in to get a vaccine," she says, adding that hesitancy and misinformation also presented challenges.

"I felt like I was trained to approach the conversation with open-ended questions, asking, 'What are your concerns? What are some things that you've read?'" Patterson says. "If we can at least give them the resources, I think that that's the most important."

Another silver lining: the opportunity for nursing and pharmacy students to collaborate.

"It was so nice to see pharmacy students and nursing students working side by side together," Olson says. "They were learning each other's perspective, because it's totally different how they approach patients."

Robinson saw the same partnership. "It was really this beautiful collaboration. Nurses and pharmacists could learn about one another, and they could lean on each other's strengths."

Beyond education, the pandemic and massive vaccination efforts had a profound impact on students and faculty.

"It changed my outlook on health care and my patient interactions," Patterson says. "I believe I am a better health care provider because of this experience." ✨



ABOVE: JENNIFER ROBINSON (COURTESY WSU NEWS)

BELOW: KAY OLSON (COURTESY WSU COLLEGE OF NURSING)



CONTAINING A PANDEMIC

As the COVID-19 pandemic spread last year, WSU launched a concerted effort to prevent the virus on campuses. In addition to required masking and distancing, extensive testing and eventually vaccination were critical.

Here are some of WSU's efforts to contain the pandemic:

- + At the request of the Washington State Department of Health in July 2020, WSU's Washington Animal Disease Diagnostic Laboratory partnered with InCyte Diagnostics to rapidly test for SARS-CoV-2.
- + Testing at WSU campuses launched in August 2020, with help from the Washington National Guard, as cases surged in Pullman [see page 18].
- + WSU Pullman was tapped to store Whitman County's first shipment of COVID-19 vaccine in mid-December in ultra-cold freezers, which are capable of maintaining the -80 degree Celsius temperature required for the Pfizer-BioNTech vaccine prior to being diluted and administered for use.
- + Wastewater testing for the disease began in spring 2021 semester at WSU Pullman. The targeted screenings at 11 residence halls were designed to quickly identify and contain potential infections before they became outbreaks.
- + Cougar Health Services at WSU Pullman was authorized to begin vaccinating eligible students at the end of March, looking to get shots for several thousand students before the end of spring semester. Campuses at Tri-Cities, Vancouver, Spokane, and Everett also organized vaccination efforts for students and employees, often in partnership with local pharmacies and others.
- + WSU announced in May 2021 that students, employees, and visitors traveling to a university location will need to be vaccinated or be granted an exemption.
- + WSU joined more than 350 colleges and universities across 46 states in the COVID-19 College Vaccination Challenge, to encourage as many people as possible to get vaccinated before returning to college campuses for the fall.

▶ COVID vaccines questions answered: magazine.wsu.edu/extra/covid-vaccine

APRIL 2021

VACCINATIONS REQUIRED FOR STUDENTS, FACULTY, AND STAFF ✳️ WSU HOLDS SECOND FAMILY WEEKEND. IT'S ALSO A VIRTUAL EVENT

MAY 2021

WSU HOLDS A VIRTUAL CELEBRATION AND COMMENCEMENT FOR THE CLASS OF 2021 ✳️ WSU DISCONTINUES MASK MANDATE FOR PEOPLE WHO ARE FULLY VACCINATED

JUNE 2021

WSU JOINS WHITE HOUSE'S COVID-19 COLLEGE VACCINATION CHALLENGE

JULY 2021

CAMPUSES START A PHASED REOPENING FOR EMPLOYEES AND BEGIN PREPARING FOR STUDENTS TO RETURN FOR FALL 2021 SEMESTER

?...

Always ready, always there

BY ADRIANA JANOVICH AND RJ WOLCOTT

They didn't wait to be called.

The Washington National Guard reached out to Washington State University, offering to help the WSU Pullman campus face the unprecedented challenges of the persisting COVID-19 pandemic.

conducted more than 4,700 COVID-19 tests.

Not only did they volunteer, they extended their stay, leaving their own families, friends, and homes to care for the Cougar community. Members of the Washington National Guard were originally slated to leave Pullman on November 20 but they extended their stay, ultimately serving through mid-January.

In a special video message to the Guard, Mary Jo Gonzales ('95 MA Comm., '01 PhD Higher Ed. Admin.), vice president of student affairs, said, "We're so appreciative of your sacrifice, work ethic, willingness to help, and ongoing efforts to serve our students, faculty, and staff."

WSU President Kirk Schulz thanked the Guard for its "invaluable service to



(COURTESY WSU STUDENT SUPPORT SERVICES)

MANY NATIONAL GUARD AS WELL AS OTHER MILITARY PERSONNEL COMPLETE THEIR COLLEGE DEGREES THROUGH WSU GLOBAL CAMPUS.

August 24, though, it was an all-volunteer effort.

Guard members, including WSU alumni, set up mobile testing sites around campus and the city of Pullman, including on basketball courts and in the "Apartment Land" neighborhood near campus. That's where they saw an increased number of test requests, with landlords giving incentives like rent reductions and gift cards for their residents to get tested. They also saw an increase in tests when they were made available to WSU faculty and staff on September 29.

On a typical day, the outfit was set up by 9:00 a.m. and administered anywhere from 30 to 90 tests. Swabs were counted and stored for collection by Incyte Labs, which tested samples in coordination with WSU's One Health Diagnostic Laboratory.

The site's officer in command, Lieutenant Darcy Ailles ('19 Arch.) had lived in Pullman for six years. So, he says, "I wanted to come back and help those who helped me."

US Air Force Technical Sergeant Angela Brown ('18 Nursing) called the experience "extremely rewarding." While still on campus helping with testing, she told WSU News, "You can see the appreciation and thankfulness in the faces of those who come for testing and hear it when they say thank you." ✳️

our campus, and for keeping Cougs and the greater Pullman community safe and healthy during this challenging time. We are grateful for your assistance."

When the Washington National Guard was activated in response to the pandemic, it was considered an involuntary action, meaning all hands on deck. From



LT. DARCY AILLES AT THE NATIONAL GUARD'S COVID-19 TESTING SITE ON THE PULLMAN CAMPUS IN NOVEMBER 2020. (PHOTO ROBERT HUBNER)

Despite transitioning to mostly distance learning for the 2020–2021 academic year, an unexpected number of students returned to Pullman in the fall, and the campus experienced an outbreak.

The Guard ramped up WSU's response to help #CougsCancelCOVID. From September 8, 2020, to January 13, 2021, Guard members

COVID reveals jail "cracks"

BY REBECCA PHILLIPS

Jails are linked to their communities by a thousand intimate threads.

Unlike prisons, jails are staffed by local clerks, corrections officers, doctors, and other employees. The inmates themselves are typically released back to their home neighborhoods within days of an arrest.

It's a risky recipe that turned crowded jails into infectious hot zones during the COVID-19 pandemic and helped fuel widespread community outbreaks.

Washington and other states reacted to the situation by ordering a flurry of criminal justice changes—including arrest deferral and early release from jail—that will likely influence policy decisions going forward.

Washington State University epidemiologist ERIC LOFGREN took part in a 2020 collaborative study that modeled these changes in the Allegheny County Jail system in Pittsburgh, Pennsylvania. He says jails are clearly an important part of the super-spreader equation.

"Given the unique COVID-19 challenges for incarcerated populations due to limited social distancing, limited access to hygiene and cleaning products, and a higher rate of existing health issues, we developed a model to reveal how certain interventions can decrease that spread and save lives," says the assistant professor in the Paul G. Allen School for Global Health.

The researchers found that practices like arrest deferral combined with early release of prisoners resulted in a 15.4 percent reduction of COVID-19 cases in the community and numerous lives saved within the jail system itself.

"We looked at those practices over a broad swath of categories, things like bail-eligible individuals, nonviolent offenders, and those who commit property crimes."

Lofgren says many jails used a system to isolate COVID-19 patients that essentially

forced them into solitary confinement. The move was viewed by inmates as a penalty for being sick and discouraged them from reporting illness. The upshot was an increase in severe cases, death, and infection rates.

"We emphasized putting incentives in place so people feel safe and secure reporting their illnesses," he says. "Jail populations are an important group to think of when we talk about protecting our communities and we want to make sure it's equitable. Personally, I don't think anyone should get COVID because they can't afford bail."

WSU sociology professor JENNIFER SHERMAN studies rural jails in eastern Washington. Together with fellow WSU sociology professors JENNIFER SCHWARTZ

"Jails are not really built to rehabilitate people," says Schwartz. "They don't offer the therapeutic interventions that might be found in prisons. The community and jail populations are the same, the people go back and forth, and these are some of the most vulnerable people in that community."

"Our question is how can we divert some of those people through means that are actually beneficial to the larger community?" Sherman says. "We feel that community health can be improved by improving the lives of all its members."

Mosher says if arrest deferrals and early release have little or no impact on public safety, the question becomes, "Are we able



(COURTESY WASHINGTON STATE ARCHIVES)

and CLAY MOSHER, she investigates why rural jail populations are on the rise despite declines in urban and suburban jails.

"Our research began before the pandemic hit, so we did our best to adapt and used COVID as a natural experiment to see what happens when you bring fewer people into the jails," Sherman says. "We learned a lot about the resilience of our communities by watching their responses to the outbreak."

"One of those things was the impact of being held in quarantine during COVID. These are people who were arrested and sent to solitary confinement for up to 14 days, and not even proven guilty," she says. "Some introverts were OK with it but for others, it was very difficult and exacerbated already fragile mental health and left them very unstable when they were released."

to sustain those lower levels of incarcerated people in local jails? Are there other ways we can handle low-risk offenders?"

"On the ground, many people are concerned," says Sherman. "There is a lot of anxiety about what will happen if we don't catch criminals. But there's not much data to show a rise in crime."

Moving beyond COVID, the sociologists are forming coalitions to address rural jail issues at the policy and local level—issues that are not easily solved by methods used in large urban areas.

"Rural communities have a small tax base and can't implement things that work well in better-funded regions," says Sherman. "So, there is often a lack of resources, infrastructure, medical services, mental health, and addiction services." ✳️



Custom-engineered solutions for national clients from a small town company. *Courtesy Colmac Coil*

And an easy commute

BY LARRY CLARK

Manufacturing jobs have declined across the United States, but the picture isn't bleak in some rural Washington towns.

According to the US Department of Agriculture, manufacturing is more important to rural economies than to urban economies and provides more jobs and higher earnings than other sectors in rural areas.

That's certainly true for Colmac Coil in Colville, a city of about 4,800 in rural northeastern Washington. The company builds heating and cooling solutions for industrial customers, such as custom-engineered refrigeration units for national food processors and, this year, for vaccine storage during the pandemic.

As the second-largest employer in Colville, Colmac Coil is a steady presence in an area that has seen declines in natural resources jobs like logging and mining. The family-owned business was founded in 1971 and continued to grow steadily under both former company president Bruce Nelson ('80

Ag. Eng.) and current president Joe Fazzari ('01 Mech. Eng.).

Fazzari first worked with Colmac as a student in WSU mechanical engineering professor Charles Pezeshki's design class. After graduation, he eventually returned to the Colville company.

"Little did I know that a senior design project was going to lead me to becoming president of the company," Fazzari says.

Small town life was definitely a draw. "I love to visit big cities and travel all the time, but I don't like traffic," he laughs.

While it is sometimes difficult to recruit new professionals to Colville, there are distinct advantages to the location. Eleven WSU alumni work for Colmac Coil, including Joseph Schweitzer ('19 Mgmt. Info. Sys.) in marketing. They like the lower cost of living, easy pace, and proximity to nature.

Schweitzer's home is only a five-minute walk from work. He loves skiing, which is really close to Colville. He also says, as a small company, he knows his work is crucial for Colmac Coil even as a recent graduate.

"I have higher-level responsibility, like strategizing on campaigns and coordinating trade shows," Schweitzer says.

Fazzari agrees that "even an entry-level person in a small company makes a big difference." *

1978–1979 WSU Yell Squad members Bill Boettcher with Sue McKenna (in front) and Kim Gage with Ardy East. *From the Chinook yearbook*



SIDELINES

Three cheers for a shoe

BY LARRY CLARK

Gage says. "There had to be a way to improve this."

He started Championship Cheerleading in 1984, with coaching clinics as well as one-day stunt clinics in which they would teach teams how to stunt, throw, and catch cheerleaders safely—the first such clinics in the western United States. It was also the first cheerleading company to be sponsored by Nike. They outfitted the 35 staff members, and provided T-shirts for attendees and gear for everyone at the camps.

At the peak of Championship Cheerleading, they were teaching 2,000 cheerleaders a summer in seven western states. Gage also presented at national conventions. He continued the relationship with Nike for 25 years, connecting the company with cheerleading organizations, giving input into new shoes, and promoting products.

"Nike even flew me to the Final Four in 1987 to run a cheerleading competition right outside the stadium," Gage says.

He judged and directed many cheerleading competitions on the West Coast and started the Arizona State High School Cheerleading Pom Tournament. It grew from 11 teams in a rec center to the second-largest cheerleading competition in the West with 2,500 competitors at Arizona's Veterans Memorial Stadium.

Gage became a teacher and cheerleading coach at Murrieta Valley High School in Murrieta, California, in 1994. He coached seven years with different teams that placed 20 times in both state and national competitions. In 2002, his last year there, they were a finalist for national cheerleading team of the year. Gage was also a finalist for national cheerleading coach of the year for the second time.

After 27 years as a teacher and administrator in San Diego and Riverside Counties in California, the Gages retired in 2020 and moved to McKinney, Texas.

But Gage still faced a tough challenge: sorting through dozens of pairs of shoes he'd collected over the years. Many he sent back to Nike for museum displays. *

KIM GAGE FELT LIKE RAZOR BLADES were digging into his shoulders and hands.

It was 1979 and Gage ('81 Phys. Ed.), a cheerleader at Washington State University, knew his team had the wrong shoes for doing stunts and rousing the Cougar faithful. The tread of the Nike low-top Senorita Cortez shoes might be great for walking, but they didn't work for holding up other cheerleaders.

Gage was one of six men and six women on the cheer squad from 1978–80. As cocaptain of the cheer team, along with Susan McKenna ('80 Comm.), Gage wanted to get some better shoes for the increasingly athletic cheerleading team. He asked men's basketball coach George Raveling to connect him with Nike, but Nike didn't have cheer shoes...yet.

Gage didn't catch the cheerleading bug at WSU. He became the first male cheerleader at Central Kitsap High School in Silverdale. Gage followed his brothers Scott and Kevin to WSU. Their sister Melissa joined WSU cheer the year after Gage. He joined the cheer squad his junior year and says it must have been destiny: Central Kitsap has the same fight song and mascot as the Cougs.

"I just love football and sports," Gage says. "At WSU games, the cheerleaders would go ahead of the football team and I would tumble down the field and find myself on about the 10- or 15-yard line, then wander off the field because I'm so dizzy."

After graduation, Gage was student teaching and working with WSU Athletics. He was

asked to contact Nike for the shoe order, and he worked with Nike rep Juli Millard. It was an opportunity to bring up the cheer shoe problem.

"I explained to Juli that Nike's shoe was not a very good shoe, and did they have anything else," Gage says. "She stated they had a design team that was working on a cheerleading shoe and would I mind being part of that group."

He eagerly joined the Nike team and helped them come up with a variety of sole and upper designs to accommodate stunts and cheerleader lifts. Nike crafted about 20 shoe samples and shipped them to Gage at WSU, where the cheerleaders wear-tested them during the fall season. Gage wrote a report to Nike and, in the spring, the first Nike Spirit and Glacier shoes hit the stores.

"No crazy soles to tear up shoulders and hands," Gage says.

Gage gained more than a cheer shoe first at Nike. He and Millard started dating and married in 1984. She was a nationally competitive featured baton twirler at Oregon State University and then a coach for 25 years. She had many students compete at the national level, and Gage would teach her students gymnastics if they needed it.

Meanwhile, his passion for cheerleading kept growing.

"As a PE major, I understood body motion, gymnastics, kinetics, and how to stunt safely. I watched high school cheer teams climb on each other, fall, and get hurt with regularity,"

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find these recipes and more: magazine.wsu.edu/extra/cabbage-recipes

Cabbage

BY ADRIANA JANOVICH

Cabbage rarely receives the attention it deserves



Inset photos (clockwise from top left): Detail of Mango Cabbage Slaw. Photo E.J. Armstrong; Corned Beef, Cabbage Slaw, and Buttered Potatoes. Courtesy Jamie Callison; Grilled Chicken Chop Salad and Grilled Coleslaw with Cilantro Vinaigrette. Photos Linda Burner Augustine '83. **Background photo:** st-design/iStock

Often overlooked in favor of its trendier cousins, kale and Brussels sprouts, this humble cool-weather crop really does warrant praise. It's hardy and healthful, abundant and affordable, and very, very versatile. Just ask James Beard.

"Lowly though it may seem, cabbage has no rival in versatility except the potato," the famed chef and cookbook author wrote in his classic *The James Beard Cookbook*. "It is available year round; it can be eaten raw or cooked in almost any manner—boiled, steamed, braised, sautéed, baked; and a list of recipes calling for cabbage would fill a book."

Fresh cabbage packs a satisfyingly crisp crunch, super for salads and slaws or topping tacos. Cooked, cabbage leaves are durable and pliable, perfect for stuffing with rice and ground beef, then going for a nice long bath in tomato sauce at 350 degrees.

Low in calories and rich in nutrients, particularly vitamins K and C, cabbage (*Brassica oleracea*) is consumed around the world, particularly in Slavic and Asian cuisines, and traditional German and Irish fare. It pairs well with duck and pork, especially bacon. It also lasts several weeks in a refrigerator or several months in a root cellar.

Top consumers and producers are China, India, and Russia. And global marketing projections through 2025 show expected

growth. But US cabbage consumption has been dropping since 2000, from 8.9 to 6.5 pounds per capita in 2019. Americans ate the most cabbage in the 1920s, when per capita consumption peaked at 22 pounds.

It's budget-friendly, bountiful, easy to grow and store, and has lots of culinary uses. So why is it so unsung?

"Cabbage is so underrated because it has been abused," says Jamie Callison, executive chef at Washington State University's School of Hospitality Business Management at Carson College.

By abused, he means overcooked, boiled too long, turned to mush. "It's the application that has stirred along the stigma. I think people are looking for new and innovative ways to cook it."

Callison pairs cabbage with mango and ginger in the sweet-and-tangy slaw in his 2013 cookbook *The Crimson Spoon*, published by WSU College of Business. At home, his preparation depends on the season. "I eat more braised and cooked cabbage during winter, and I have it fresh in slaws or on fish tacos in summer."

Cooking cabbage quickly in butter, oil, or other fats helps alleviate its distinctive odor, which intensifies the longer it stews. According to Harold McGee's 1984 *On Food and Cooking*, the sulfur smell doubles between the fifth and seventh minutes on the stove. Adding lemon juice or vinegar helps neutralize the odor. It also keeps red cabbage from turning an unappetizing gray-blue.

Due in part to its smell, cabbage, which comes from the old French "caboche," or "head," began garnering a reputation as an inelegant ingredient as early as the Middle Ages. It was commonly regarded as peasant fare.

By contrast, ancient Romans prized it. "It is the cabbage which surpasses all other vegetables," Marcus Porcius Cato, or Cato the Elder, wrote in *De Agri Cultura*, the oldest surviving work of Latin prose. He specifically praised the cruciferous vegetable for preventing hangovers. "If you wish to drink deep at a banquet," he recommended eating "as much raw cabbage as you wish, seasoned with vinegar, before dinner, and likewise after dinner eat some half a dozen leaves."

Invading Celts helped spread cabbage throughout Europe. And Genghis Khan's armies brought its fermented form west from China, where cabbage represents wealth, prosperity, and luck. French explorer Jacques Cartier carried cabbage to present-day Canada during his 1541–1542 voyage, and English and Dutch settlers later brought it to the colonies. By the eighteenth century, Native peoples were also cultivating the crop. Captain James Cook helped pioneer new methods for staving off scurvy, carrying 7,860 pounds of sauerkraut aboard the HMS *Endeavour* during his 1768 voyage to the South Pacific.

In the Pacific Northwest, cabbage is among the first vegetables planted each year—as early as the beginning of March in western

Washington, the top US producer of cabbage seed. Skagit, Snohomish, Island, and Clallam Counties supply three-quarters of the country's and one-quarter of the world's production.

"The cool maritime environment of western Washington is ideal for overwintering *Brassica oleracea* seed production," Lindsey J. du Toit, vegetable seed and plant pathologist at WSU Mount Vernon Northwestern Washington Research and Extension Center, noted in her *Crop Profile for Cabbage Seed in Washington*. "Winters are generally not cold enough to freeze the crop, yet are cold enough to vernalize the plants properly ... Summer weather is moderate, providing optimum conditions for plant and seed development."

One acre produces 2,000 pounds of seed, which plants 10,000 acres and produces up to 50 million pounds of cabbage.

There are more than 400 varieties. Green—cheapest and mild—is most popular in America. Savoy, with its frilly leaves and delicate flavor, is sexier but still hard-working. Red cabbage looks stunning in salads and slaws.

December and February are among the country's top cabbage-consumption months. March is highest. The most overall consumption occurs in the South. The lowest, in the West. Maybe Washingtonians could help change that if, this winter and beyond, they give the dependable, versatile cabbage the respect it deserves. *



OURstory

celebrating 50 years

1 Sunset Paddle Board & Yoga on the Snake River 2 Zion National Park Spring Break Eco Adventure 3 Crisp morning Sunrise Ski Tours at Moscow Mountain 4 Gym to Rock Climbing Series 5 Annual Bouldering Competition at the ORC Climbing Wall 6 Earth Day Eco Adventure: Clean Up & Paddle at Illia Dunes 7 DIY Bike Series at ORC 8 ORC is part of University Recreation and integrates activities with the Student Recreation Center. 9 Excitement at the 2015 Color Me Coug 5K race (Photos courtesy ORC/Facebook except 1 Shelly Hanks and 8 Robert Hubner)

Don't just do it

BY ADRIANA JANOVICH

THEY HAD JUST REACHED the site where the snowfield meets the rocks when they heard the sound. Looking up, they clocked one climber on the rock face where, just moments before, there had been two.

"We looked at each other and realized we had to figure out what to do," recalls Elise Bugge ('19 Env. Sci.), who was preparing to climb the rugged West Ridge of Forbidden Peak in the North Cascades with her boyfriend, Andrew Larson ('19 Fin.).

They wouldn't reach the 8,815-foot summit that day. But, thanks to experience and training from the **OUTDOOR RECREATION CENTER** at Washington State University, the pair knew how to respond. "The ORC would have us practice emergency scenarios and run through what to do if we needed to do an evacuation," says Bugge, who worked for the center for three years.

The morning the climber fell, she and Larson helped establish a fixed line to the injured alpinist—bleeding and drifting in and out of consciousness—then warmed him with an emergency blanket, kept him from dehy-

dration, and monitored his vital signs for four hours before rescuers arrived via helicopter. Bugge credits the ORC's regular skills reviews and audits as instrumental in her ability to recall her training and help the hurt mountaineer. A year after the incident, she says, "We're thankful he's OK."

The ORC has been introducing Cougars and community members to the wild since 1971. While trips are among its most popular offerings, it's not all camping and kayaking. Participants can learn lifesaving skills, from wilderness first aid to backcountry bear safety. For adventure facilitators, like Bugge, training and skills checks are required.

Jonathan Stahl, director of the ORC and assistant director of adventure programs and experiential learning for University Recreation, wasn't surprised to learn Bugge and Larson, a former climbing wall supervisor, helped save a life in Washington's wilderness. He experienced Bugge's skills firsthand when he tore knee ligaments during a backcountry ski trip in Oregon's Wallowa Mountains two years ago.

Since its inception five decades ago, the ORC has grown considerably, developed a loyal following, and, hopefully, Stahl says, created thousands of lifelong outdoor enthusiasts and stewards of the environment. "Students find community and different ways

to move and explore beyond Pullman, and feel comfortable in their bodies," he says. "It does change people's lives."

Colt Fetters had been planning a construction career. "I wouldn't be where I am now if it wasn't for the ORC," says Fetters ('14 Const. Mgmt.), operations coordinator for outdoor pursuits at Fort Lewis College in Durango, Colorado. Stahl and the ORC, part of University Recreation, "helped me understand there are careers in outdoor education. It opened doors for me and helped me see the possibilities."

Fetters worked for the ORC for four years at the climbing wall, in the rental shop, and as an adventure facilitator, guiding several trips to Nevada's Red Rock Canyon National Conservation Area and numerous excursions closer to campus, such as kayaking on the Snake River. "There were a lot of afternoon trips and weekend trips—too many to count. Sometimes, I was leading trips once a week throughout the semester."

The ORC started out as the Outdoor Activities Program (OAP), a service organization of the Associated Students of WSU, sharing a roughly 10-by-10-foot office with gym supervisors in the Physical Education Building. "The rental shop was a metal cabinet in the corner, and staff was a .25 full-time-

equivalent graduate assistant and me, teaching classes and organizing trips," Chris Tapfer ('73 Rec.) told the *Daily Evergreen* in 2001.

The OAP's earliest volunteer, Tapfer ended up running the center for nearly three decades, retiring from WSU in 2011 as the University's emergency management coordinator. "I'm proud that I was involved right from the beginning," he says. "The Outdoor Activities Program started out as an experimental program at WSU to both provide recreation and education for the WSU community. It was and is a success due to the hundreds of students who have worked for the program and the many, many thousands of students, faculty, staff, and community members who have taken part in using its resources and participating in its activities and programs."

Today, the rental shop is stocked with more than \$250,000 worth of equipment, and the ORC typically employs five professional staffers, two graduate assistants, and 30 to 40 students. There are two participation levels: members of the Chinook and Student Recreation Center, who receive subsidized rates, and nonmembers. Most participants are students.

A longtime advocate of Leave No Trace principles and practices, the ORC participates in Earth Day activities as well as regular trail and other cleanups at Illia

Dunes, Granite Point, and more. Every year for the past ten years, it has delivered about 175 Leave No Trace certifications. It also hosts several annual events, including the Pullman Pulldown Bouldering Competition, Outdoor Photography Contest, and Palouse Outdoor Festival. Its noncredit classes and clinics cover everything from basic backpacking, beginning bouldering, and building primitive shelters to women's wilderness hygiene and route setting. And its resource center is stocked with guidebooks and maps to help adventurers plan their own outings.

Or, they can go with ORC leaders. Backpacking in the Selkirk, Grand Canyon, and Yosemite. Snowshoeing and cross-country skiing in Montana's Lolo National Forest. Whitewater rafting on Idaho's Salmon River. Kayaking on Lake Powell and in Glen Canyon in Utah and Arizona. Trail running on campus. "We've even camped in the WSU Arboretum," says Stahl, noting participation has stayed strong throughout the pandemic via virtual clinics and physically distanced activities. "We're not providing transport, but we've been meeting people at Moscow Mountain or Kamiak Butte or the Snake River. Every weekend, we have multiple trips going and most are full."

Two years postgraduation, Bugge remains grateful the ORC hired her at the start

of her sophomore year. "Coming to WSU, I really had no idea what I wanted to do," she says. "The ORC helped me find what I love—as a hobby as well as a career as an environmental scientist. I would definitely not be the same person without the ORC."

Until last August's emergency in the North Cascades, she had mostly helped treat trekkers' blisters on the trail. "That's a good thing," she says. "You never want to have to actually use those emergency skills."

Bugge and Larson have both been back out climbing. Forbidden Peak, one of the "Fifty Classic Climbs of North America," remains "on the to-do list," she says. "We're definitely planning to try it again at some point in the near future." ✨

memories and timeline of ORC: magazine.wsu.edu/extra/rec





The missing lynx

Canada lynx aren't known for dumpster diving in the suburbs or poaching cattle off the range. They have yet to be filmed chasing a biker down a trail. Instead, lynx tend to give wide berth to humans, preferring isolated forested areas filled with snow and their favorite prey, snowshoe hare.

Although they avoid people, lynx cannot escape our impact. In Washington state, they are beset by wildfire and snow melt, hemmed in by a boundary line with human predators on one side and shrinking habitat on the other. Canada lynx could be a poster child for human and climate change impacts—if it would only pose for the picture.

Since lynx won't come to us, a research team led by Washington State University wildlife biologist Dan Thornton has been bringing cameras to them. Last year, the researchers published results of a massive project to place camera traps across more than 4,300 square miles of northeastern Washington. They found lynx present on only about 20 percent of their potential habitat.

Their disappearance is indicative of impacts to Washington's wilderness, and the researchers are working on a long-term monitoring project to track Canada lynx to aid conservation efforts.

"Because lynx are so endangered in the state, they are impacted by changes that are happening every year," Thornton says. "If we

have a monitoring program in place, we can look at the effects of any management practices we might implement. This is really important for a species that's on the edge. It's such a dynamic landscape with both fire and changes to snowpack. We want this type of continuous data, so we can examine those changes."

In addition to their namesake country, Canada lynx are found in Alaska, Maine, Minnesota, Montana, Colorado, Idaho, and Washington. The 2020 study provided much needed data on the lynx range in Washington—and raised concerns about the US Fish and Wildlife Service's push to delist lynx as a threatened species, showing they were losing ground in at least one state.

The population in Washington is one of the most threatened, Thornton says, which is why WSU and its partners are setting up the long-term monitoring project.

One of WSU's collaborators on the project is raising a stink: Seattle-based Woodland Park Zoo helps track lynx with a novel scent-dispensing device it codeveloped with Microsoft Research and an Idaho Fish and Game biologist to monitor wolverines.

While scent lures are not new, the zoo's slow drip dispenser has greater staying power. With a pungent mix of smells including skunk and anise, the devices have been drawing everything from cougars to deer and even squirrels. The scent, however, when paired with a remote camera, is intended to help survey carnivores like wolverines, which are rare and travel long distances.

"Carnivores are at the top of the food chain," says Robert Long, one of the zoo's senior conservation scientists. "They require large, healthy landscapes that are fairly well intact and protected from a lot of human disturbance, so by monitoring carnivores, we can

BY SARA ZASKE

get a good sense of whether our ecosystems are intact. Also, if you lose carnivores, there will often be cascading effects down the food chain."

Doctoral student Travis King ('15 Zool., '19 MS Nat. Res. Sci.), first author on the 2020 lynx study, saw a lot of those ecosystems firsthand, placing about half of the study's 650 cameras. Camera traps are less invasive than physically trapping and radio-collaring animals. Some cameras can be placed on accessible roads or trails, but others require overnight hikes deep into the wilderness.

"This project gave me a huge appreciation of the beauty of Washington," King says. "When you live and travel to these really remote corners, you begin to see the huge diversity in wildlife, like black bears or moose that would stare me down, the howling of wolves at night, and seeing cougar tracks and your tracks together."

King also saw the aftermath of wildfires, which is one of the main pressures on Canada lynx. After a devastating fire, it can take decades for the landscape to recover to the point the animals can return.

"We've been having so many catastrophic, large-scale wildfires that we've probably lost about half of the best lynx habitat in the state," says Scott Fisher, a Washington Department of Natural Resources biologist. "Habitat is key, so if half the habitat is gone about half the lynx are gone. We're probably down to a very small population left here in Washington."

The lynx also need snow to thrive, and Fisher helped place many camera traps in the snowy extremes. Big-pawed lynx have a predatory advantage in deep snow. Cougar and bobcats simply sink in it.

Yet that snowpack is shrinking because of warming temperatures from climate change. While lynx can follow the snow to the north, they risk being caught in fur traps in Canada, where they can be legally hunted.

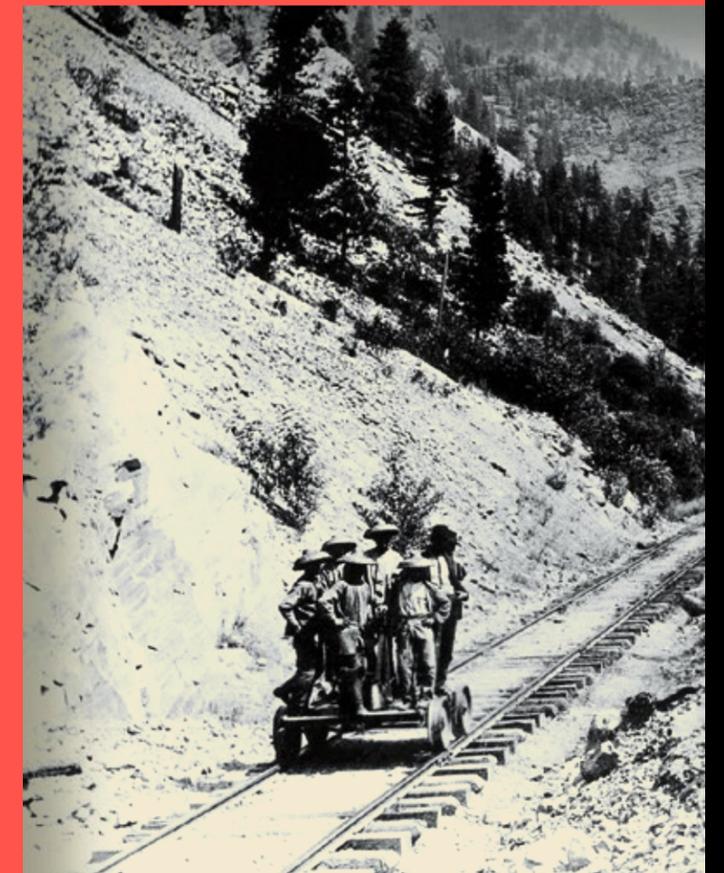
Even for a predatory cat that does its best to avoid humans, the future of the Canada lynx—and the landscapes it relies on—depend on what humans decide to do.

"Under the worse models, if we don't do anything, they are pretty well extirpated from the state," says King. "But if we do take some level of climate action, we can at least reduce that chance." ❄️

feature

How Chinese pioneers helped build the Pacific Northwest

BY REBECCA PHILLIPS



CHINESE LABORERS WORKING ON THE NORTHERN PACIFIC RAILROAD TRACKS ALONG THE COLUMBIA RIVER GORGE (COURTESY UNIVERSITY OF WASHINGTON LIBRARIES)



CHINESE GOLD MINERS AT DEEP CREEK ON THE SNAKE RIVER ARE BELIEVED TO HAVE BUILT THIS SHELTER WALL AT WHAT IS NOW CHINESE MASSACRE COVE. (PHOTO FROM MASSACRED FOR GOLD: THE CHINESE IN HELLS CANYON BY R. GREGORY NOKES, OSU PRESS, 2009)

The memorial stands in a patch of brush near the Snake River as it winds through Hells Canyon in rugged northeast Oregon. When the light is just right, the rocky cliffs above the isolated nook resemble ancient faces silently watching.

The site is called Chinese Massacre Cove in memory of the day in May 1887 when a gang of seven horse thieves, including schoolboys, shot and killed more than 30 unarmed Chinese men who had been placer mining on the river. The miners' bodies were thrown in the water and their gold, estimated to be worth about \$4,000 to \$5,000, was stolen.

Though the murderers were identified and accused of the crime, no one was ever punished. Over the years, the incident was slowly forgotten.

Today, a slab of white granite, installed in 2012, recognizes the event as one of the worst atrocities leveled against the nearly 300,000 Chinese immigrants who entered the United States during the nineteenth century, many looking for work in the railroad and mining industries.

Though often surprising to people today, Chinese immigrants once had a thriving population in the Inland Pacific Northwest, which embraces parts of Washington, Oregon, and Idaho. The 1870 census, for example, shows that Chinese comprised nearly 30 percent of the Idaho population. From their earliest days searching for gold to their later work constructing the Northern Pacific Railway, the Chinese endured discrimination and, in many cases, extreme brutality.

Yet, with hard work and a frugal lifestyle, many Chinese Americans also successfully established dry goods stores, restaurants, laundries, and vegetable gardens. Over time, they built homes, brought their families to the United States, and enriched their communities with a heritage that remains vital today.

Despite their role in the development of the Inland Northwest, however, the history and contributions of the Chinese have largely faded, relegated mostly to small museum exhibits and library special collections. There, in neatly framed black and white photos, their smiles and stoicism whisper from the past.

THE STORY BEGINS IN THE EARLY 1800S IN THE SOUTH CHINA AREA OF TOISHAN, OR CANTON, IN THE GUANGDONG PROVINCE. AFTER YEARS OF GREAT PROSPERITY AND POPULATION GROWTH, THE IMPERIAL NATION WAS NOW FACING A DEVASTATING SEASON OF DROUGHTS, FLOODS, FAMINE, AND POLITICAL UNREST.

During this time, China would accept only silver from the British in trade for their valuable silks and spices. Preferring to keep their silver, the British offered to trade opium instead, and threatened the Chinese with gun boats if they refused. The conflict led to the Opium War in the 1840s, which opened China to a turbulent narcotics trade that ultimately devastated household industries and farming. The crisis was amplified by the Taiping Rebellion from 1850 to 1864, leaving many peasants in poverty and struggling to survive.

When word came that gold had been discovered in central California in 1849, many Chinese, mostly men from the Guangdong area, jumped on boats headed to San Francisco or "Land of the Gold Mountain" hoping to strike it rich. What began as a trickle of immigrants soon became thousands of Chinese traveling to the United States, many with plans to make money and then return to their families in China.

"Chinese merchants in San Francisco organized into a group called the Six Companies, or Chinese Consolidated Benevolent Associations," says Phil Gruen, architectural historian and associate professor in the Washington State University School of Design and Construction.

"Six Companies was based in Chinatown and became the most powerful umbrella organization in the country for looking after the Chinese who immigrated to the US. They helped with fares, food, lodging, finding employment, as well as return passage to China."

Guided by Six Companies agents, the newcomers quickly established mining claims in California. Most of these sites had been previously scoured and abandoned by White miners. The Chinese, however, were diligent and managed to work the tailings for a profit. As the gold supply ran out, they moved up the coast in the 1860s to Portland and Seattle and the early Washington Territory.



ABOVE: CHINESE MASSACRE COVE MEMORIAL (PHOTO LYLE WIRTANEN, COURTESY BOISE STATE PUBLIC RADIO)

BELOW: THE CHINESE SIX COMPANIES (CHUNG WA WOY KOON) IN SAN FRANCISCO (COURTESY BANCROFT LIBRARY / UC BERKELEY); PHIL GRUEN (COURTESY WSU SCHOOL OF DESIGN + CONSTRUCTION)





POLLY BEMIS SITTING OUTSIDE A CABIN IN WARREN, IDAHO (COURTESY WSU MANUSCRIPTS, ARCHIVES, AND SPECIAL COLLECTIONS)

From there, many traveled further inland along the Columbia, Snake, and Clearwater Rivers in pursuit of gold fields in the mountains. Vibrant Chinatowns sprung up along the way in cities like Lewiston, which at that time was the region's mining supply center.

SET SERENELY ON A WINDSWEEP HILL IN RURAL COTTONWOOD, IDAHO, ST. GERTRUDE'S MONASTERY IS THE KEEPER OF A COMPREHENSIVE LITTLE MUSEUM THAT INCLUDES DETAILS OF THE MINING HEYDAY AND THE STORY OF POLLY BEMIS.

Under glass and soft amber lights, a sepia photo is captioned, "At the time of the 1870 census, Chinese made up a remarkable 28 percent of Idaho's population, including most of its miners."

In 1872, Lalu Nathoy was among those immigrants traveling by ship and then pack train into the rugged and remote Idaho wilderness. She was a nineteen-year-old Chinese girl who had been sold into slavery by her destitute parents and smuggled into the United States. By most accounts, she was probably intended to be a sex worker or concubine, and was one of the few Chinese women who came to the Inland Northwest at that time.

"It had to be a long and arduous trek," says Gruen. "From the rivers, most miners headed up by horseback to Pierce, Florence, and Elk City. The trek to the Clearwater Mountains or Salmon River to reach the gold fields was a major effort."

For Lalu, her destination was a boomtown called Warren where placer gold had been discovered in 1862. As the White miners moved to hard-rock underground mining, they sold their claims to the Chinese who carefully washed the tailings in pans or wooden rockers that allowed the heavier particles of gold to settle out at the bottom. For most of the nineteenth century, Chinese outnumbered Whites in the town.

When Lalu arrived in Warren, the story goes, someone called her "Polly," and the name stuck. She was indebted to work for a wealthy old Chinese saloon owner but by 1880, she had won her freedom and was living with a kind-hearted White man named Charlie Bemis. They later married and built a log cabin on a remote Salmon River ranch where they grew and sold fruits and vegetables.

Polly Bemis was hard-working, fun-loving, and had a great sense of humor. She knew the names of everyone in town and often carried candy in her apron pocket for the children. She readily shared her story and the townspeople respected her.

Polly remained by the Salmon River until her death in 1933 and her cabin has since been restored as a pioneer museum. Polly's life is chronicled in a book and a 1991 motion picture entitled *Thousand Pieces of Gold*.

Gruen says many other stories, often less celebrated and far more brutal, played out in small towns throughout the Northwest, including the Hoodoo Mountains on the eastern edge of the Palouse.

"There were several small gold strikes on the North Fork of the Palouse River out beyond Potlatch," he says. "Like Lewiston to the south, the town of Palouse was a mining center for the region supplying prospectors with clothes, food, and equipment."

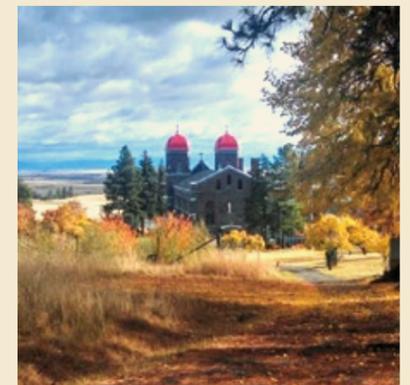
"It was on the North Fork of the Palouse in the Hoodoo Mountains that the area's most heinous case of violence toward the Chinese occurred on what is now called Strychnine Creek," Gruen says.

According to a book by Eddy Ng ('76 Asian Stu., '79 MA History), *From Sojourner to Citizen: Chinese of the Inland Empire*, the incident occurred around 1889 near what is now Laird Park. White miners had abandoned a small gulch after extracting gold there proved difficult and unprofitable. The Chinese miners, as they often did, came in behind them to work the tailings. They dug ditches to carry enough water for the sluicing—or sand washing—operation and were rewarded with a rich take. They also used this water for washing and cooking.

Watching in dismay, the White miners grew angry and devised a plot to take back the site. To avoid bloodshed, they decided to poison the Chinese by putting strychnine in the ditch. Their plan was successful, and an unrecorded number of Chinese suffered an excruciating death. The White miners then destroyed their camp and stole the gold.



CHINESE FAMILY IN PULLMAN, 1879 (COURTESY WSU MANUSCRIPTS, ARCHIVES, AND SPECIAL COLLECTIONS)



MONASTERY OF ST. GERTRUDE, COTTONWOOD, IDAHO (COURTESY UNIVERSITY OF IDAHO EXTENSION); POLLY BEMIS EXHIBIT IN THE HISTORICAL MUSEUM AT ST. GERTRUDE (STAFF PHOTO)

“This kind of discrimination and violence against the Chinese began in San Francisco but it has been repeated time after time all across the region and nation,” says Gruen.

According to a 1982 article in *Bunchgrass Historian*, author William Wilbert says the first Chinese to arrive in Washington Territory were generally admired and well tolerated by Whites. But the peaceful sojourners were soon taken advantage of.

If the Chinese managed to find gold, they were often short-changed when cashing it in. Special poll taxes were imposed on Chinese workers and their gold fields—but not on White miners. Landlords, too, leased land and shanties to Chinese at exorbitant rates.

Early on, the Chinese were also denied certain voting rights and forbidden from testifying against White people in court. Acts of violence committed against them were rarely punished. A few years later, the territory reversed its stand and allowed Chinese to provide evidence in legal cases.

In many ways, Wilbert writes, the Chinese were punished by the dominating White class simply because of their diligent work ethic. Whites often grumbled that the Chinese worked for day-laborer wages that no person of European descent could survive on. By the 1880s, as competition for unskilled labor grew fierce, White workers began forcing the Chinese out with cries of, “The Chinese must go!”

RORY ONG (STAFF VIDEO FRAME); CHINESE SECTION CREWS WITH THE OREGON RAILROAD AND NAVIGATION COMPANY, JULY 4, 1889 (COURTESY WSU MANUSCRIPTS, ARCHIVES, AND SPECIAL COLLECTIONS)



Rory Ong, third-generation Chinese American and WSU associate professor of comparative ethnic studies, says this kind of discrimination can be traced back **to the 1790 Naturalization Act**, which limited citizenship in the United States to White immigrants only.

“Basically, we decided it was only going to be free White men who were going to be citizens of the US,” says Ong. “That meant they were landowners or had some other wealth, came from western or northern Europe, and were male. This set up centuries-long conditions to bring in the ‘right’ people for the democracy.”

“So, when Chinese immigrants started coming in for work, they didn’t fit the bill. Neither did the Irish or those from southern Europe nor women,” he says. “At first, they tried to assimilate Native Americans but when that didn’t work out well, they pushed them to the reservations.”

“Mexicans, at the time, were categorized as White due to the 1848 Treaty of Hidalgo but it didn’t take long for the US to start taking land away from Mexico and we started seeing the stereotypical image of Mexicans emerge that is still seen today.”

Ong says those stereotypes were also applied to Chinese who were often dismissively referred to as “The Heathen Chinee” or “Sons of Confucius.”

“When the Chinese came to work in the mines and railroads, and even though they were hard working, the issue became about them not being White and therefore, not fit to participate in the democracy,” Ong says. “That they didn’t have the moral or intellectual capacity to participate in the democratic system.”

In addition, Chinese immigrants who planned to save money and return to their homes in China tended to keep to themselves, retaining their simple blue tunics, queue pigtails, and traditional religions. This apparent lack of interest in the majority culture aroused suspicion and fear in more than a few White Americans.

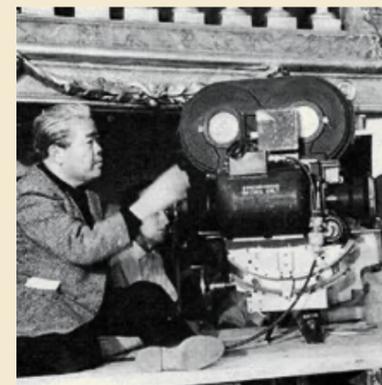
Businessmen in the United States, however, saw the Chinese as an opportunity to cut labor costs and make more money. The railroad barons, in particular, hired workers directly from China with offers of lower wages than Whites received. Such actions angered Whites who also needed jobs and led to widespread protests of unfair competition from “cheap” Chinese labor.

As a result, Congress passed the Chinese Exclusion Act in 1882, which prohibited unskilled Chinese laborers from entering the United States and denied citizenship to all Chinese already in the country, even those born here.



ABOVE: “THROWING DOWN THE LADDER BY WHICH THEY ROSE,” CARTOON BY THOMAS NAST, *HARPER’S WEEKLY*, JULY 23, 1870 (COURTESY ENCYCLOPEDIA BRITANNICA)

BELOW: ROBERT BAUMAN (COURTESY WSU DEPARTMENT OF HISTORY); “JIMMY” HOWE ON LOCATION FOR COLUMBIA PICTURES’ *SONG WITHOUT END* SHOT IN VIENNA (COURTESY AMERICAN SOCIETY OF CINEMATOGRAPHERS)



“It’s the only law we had on the books that was directed toward one particular group,” says Ong. “Later, it was extended to other Asian groups such as the Japanese and Filipinos.”

The Exclusion Act followed the 1875 Page Act which had effectively barred Chinese women from entering the country, an unveiled attempt to stop Chinese from establishing US homes and families.

In 1892, the Exclusion Act was amended, adding the requirement that Chinese must carry a Certificate of Residence, a precursor of the green card system, to prove they had entered the country legally. Those caught without the documents could be detained and deported.

Congress finally repealed all the exclusion acts in 1943.

“It wasn’t until China became a US ally during World War II that immigration began loosening up a bit,” Ong says. “With the passage of the War Brides Act in 1945, soldiers were allowed to bring their spouses and children home from other countries. Then came the Immigration Act in 1965, which scholars see as a watershed moment for Asian immigrants. Finally, whole families, siblings, and parents, could come to the US.”

“So, when you see people raging about Mexicans or Asians in particular ways, to me it’s just part of the rhetoric that’s long been embedded in everyday US life, how we define ourselves against one another,” says Ong. “It’s a constant.”

“It will be quiet for years but when it raises its head again, it’s not too surprising. It comes out in those moments when tensions rise. When certain groups feel left out.”

It’s a trend still evident today. A recent investigation by University of Chicago political scientist Robert Pape into the January 6, 2021, Capitol riots showed that those same fears of losing out permeated the towns Capitol rioters came from.

Pape told the *New York Times* that most of the people who took part in the assault came from towns awash with fear that minorities and immigrants were crowding out the rights of White people in American politics and culture.

“The Capitol insurrectionists were mainly middle-class to upper-middle-class Whites who are worried that, as social changes occur around them, they will see a decline in their status in the future,” he said.

WHILE THE FIRST CHINESE IMMIGRANTS CAME TO THE UNITED STATES IN HOPES OF FINDING GOLD, MANY MORE FOUND GAINFUL EMPLOYMENT IN THE CONSTRUCTION OF THE TRANSCONTINENTAL RAILROAD. THEY ALSO PLAYED A CRITICAL ROLE IN BUILDING THE NORTHERN PACIFIC AND GREAT NORTHERN LINES.

“In the 1880s, the Northern Pacific Railroad came through this area and crossed the Snake River,” says WSU Tri-Cities history professor Robert Bauman. “Pasco became the largest railroad hub in central Washington.”

“It was a community largely of railroad workers including 300 Chinese laborers. They also had a Chinatown that lasted until it was raided for opium during Prohibition.”

It was in the lively town of Pasco that pioneering Hollywood cinematographer, and “poet of the camera” James Wong Howe got his start.

“James’s father, Wong Howe, was a railroad labor contractor who had come to the US alone,” Bauman says. “But he was allowed to bring his family over from China during the Exclusion Act because he had a high-paying job and was seen as a permanent resident. He also ran a successful business called Wong Howe Notions. His was one of very few Chinese American families at the time.”

Bauman says that James was born in China but grew up in Pasco. “The story is that someone gave him a camera when he was just a little guy,” he says. “James loved to photograph everything and took that camera everywhere.”

“At some point, James moved away and ended up in southern California. It was the 1920s and the film industry was just developing, and James wanted to be a part of it. He began his career as an assistant to legendary film director Cecil B. DeMille.”

“James became a really influential cinematographer and was recognized for the innovative techniques he used,” says Bauman. “He worked on dozens of movies over his forty-year



ABOVE: JAMES WONG HOWE WON HIS FIRST ACADEMY AWARD FOR *THE ROSE TATTOO* CINEMATOGRAPHY IN 1956. (COURTESY UCLA LIBRARY SPECIAL COLLECTIONS)

BELOW: EDDY NG, OWNER OF EDDY'S CHINESE AND AMERICAN RESTAURANT IN COLFAX, IS A FOURTH-GENERATION CHINESE AMERICAN WHO CAME TO THE UNITED STATES IN HIS TEENS. (COURTESY EDDY NG)



career including *Hud* and *Funny Lady*. He won two Academy Awards and was nominated for several others.”

Howe continually faced discrimination, however, and wasn't allowed to become a US citizen until the 1950s after the repeal of the Exclusion Act. He was also prohibited from marrying a White woman thanks to the prevailing laws that banned interracial marriage.

Howe and his wife married in Paris instead, but their union was not legally recognized in the United States for over a decade.



“I wouldn't have made a good pioneer,” says Eddy Ng over a cup of green tea at his Colfax restaurant. “I'd say, ‘The hell with it’ and leave! Can you imagine when it's cold and you have to build the railroad doing really difficult tasks like setting off dynamite? Many Chinese died while building branches of the Palouse railroads. It was a tough life.”

Ng, owner of Eddy's Chinese and American Restaurant is fourth-generation Chinese American, although he didn't come to the United States until his teens.

“We are from the Toishan area of South China,” he says. “I grew up in Hong Kong due to complex political reasons; my family was scattered all over the world.”

Over the years, many of his family members reunited in the Inland Northwest.

“My great-grandfather, Gin Sing Ng, was born in San Francisco and traveled to Seattle by train,” says Ng. “From there he moved to the Lewiston Chinatown where he worked at a 24-hour operation called the Majestic Café. At the time, men had to return to China to wed and couldn't bring their wives to the US until after World War II.”

Ng's grandfather, Owen Ng, eventually joined great-grandfather Gin Sing in Lewiston.

“My grandfather was Americanized and loved Cadillacs and beautiful women,” Ng says. “But we were not allowed to marry other races. Well, you can't stop human interactions—I just found out a couple years ago that he had an affair with a Caucasian lady, and they had offspring. Now, I have more relatives.”

It was Ng's great-grandmother who managed to take young Ng out of the People's Republic of China after the government imposed a lockdown and shut the Bamboo Curtain in 1949. Her husband, Gin Sing, had passed away in America, so she was eligible to move to Hong Kong, which had a US consulate.

“She asked if she could take a companion and they said, ‘OK, you can take your little grandson,’” says Ng.

“Later, as a teen, she asked me to take her to America so she could be buried next to her husband. I wrote to my folks who were legal immigrants and asked them to apply for us to come to the US. And that's how I came to Colfax where my dad and mom worked for the Colfax Coffee Shop.

“In the beginning, I wasn't used to the small-town life and I was surprised to learn there had been Chinese in Colfax in the early years,” he says. “They mainly did laundry and there was a Chinese vegetable garden. Then, they disappeared. The old men went back to die in China.”

Ng says that, overall, Chinese in the Inland Northwest were generally welcome, although they certainly faced discrimination and injustice.

“Personally, I feel we were not treated too bad except for the horrible Snake River massacre and some other incidents,” he says. “It was an ugly chapter driven by greed.”

Today, the Ng family feels at home in the little town of Colfax, where people are supportive and have made them feel part of the community.

“I'm so proud—we are here and diversified and able to help kids understand other ethnic groups,” Ng says.

“I believe we're a positive influence and when the kids grow up, they realize there's nothing to be afraid of. Their minds are open to learning about different cultures and ideas and it's good for them. I think education is key.” ✨

WSC history professor Thomas La Fargue researched the Chinese Educational Mission (1878–1881). Photos and story at: magazine.wsu.edu/extra/chinese-mission



FROM TOP: XIUYU WANG (COURTESY XIUYU WANG); PENDLETON UNDERGROUND (PHOTO DON BRACKER); EYES OF THE ELDERLY IN SITU (COURTESY WSU ELSON S. FLOYD CULTURAL CENTER)

ON A MISERABLY COLD NOVEMBER DAY IN 1885, a mob of 500 White businessmen, police, and political leaders stormed Tacoma's Chinatown. Methodically, they forced the entire Chinese community to pack up and march eight miles in a downpour to the train station. There, the Chinese had to buy their own tickets to Portland. Those who couldn't afford it rode in boxcars or were made to walk 140 miles along the tracks. Two men died of exposure. Days later, their homes and businesses were burned to the ground.

“This so-called, and notorious, ‘Tacoma Method’ was lauded by Tacomans and other city leaders as a lawful and orderly way to expel the Chinese population from town,” says Xiuyu Wang, a first-generation Chinese immigrant and associate professor of history at WSU Vancouver.

“To be sure, the avoidance of violence and bloodshed was an improvement over the tactics of lynching and murdering used elsewhere against ‘the Chinese’ during the 1800s. But it nonetheless left a sad legacy in the city's history without producing compensatory employment benefits or lasting effectiveness. Tacoma, in fact, suffered economic loss after expelling its Chinese residents.”

Wang says not all Whites at the time approved or joined such attacks against the Chinese. Many White leaders in government, churches, and companies opposed the illegal assaults.

Yet, a few months later in February 1886, a similar mob with anti-Chinese sentiments descended on Seattle's Chinatown demanding that residents pack their bags and report to the steamship *Queen of the Pacific*. This time, Washington Territorial Governor Watson Squire ordered the release of the Chinese and when the rioters ignored him, federal troops were called in. Chief Justice of the Supreme Court of Washington Territory Roger Green also stepped up and prevented the ship from leaving until the Chinese were given a chance to stay in Seattle. Most chose to leave.

“American immigration politics has always been more difficult and divisive in moments of economic downturn, when resource competition was most intense,” says Wang. “These events occurred in the 1870s and 1880s when the railroad boom had ended, and recessions set in causing economic distress among blue-collar workers and intensified labor disputes.

“But the larger cultural backdrop of this behavior has been the slow process in which America learns to find elements in Chinese and Asian culture that are compatible, acceptable, and valuable,” he says.

“That level of unwillingness and inability to recognize mutual worth has tended to coincide with the moments of self-doubt and ideological crisis which periodically grip this otherwise generous and good-willed nation.”

PENDLETON UNDERGROUND

Hidden beneath the streets of Pendleton, Oregon, a secret network of tunnels once sheltered Chinese immigrants. The tunnels were dug for safety at a time when it was dangerous for Chinese to be out after dark. Built in the late 1880s, the Pendleton Underground eventually housed both legal and illegal businesses including saloons, apothecaries, bordellos, a butcher shop, and an opium den. It was also reportedly a hideout for gamblers, bootleggers, and train robbers.

pendletonundergroundtours.org

THE EYES OF THE ELDERLY

Created by Seattle sculptors Judith and Daniel Caldwell
Inlaid in the floor of the WSU Elson S. Floyd Cultural Center, sixty-six cast bronze eyes lead visitors along a pathway celebrating elders and ancestors such as Chief Joseph, Mother Teresa, Coyote, Salmon, and Bear. Among the sculptures is the eye of Ho Feng-Shan, known to many as the Chinese

Schindler. During his time as Chinese Consul-General in Vienna during World War II, Feng-Shan took great risks by issuing thousands of visas to Jews desperate to escape Nazi Germany.

culturalcenter.wsu.edu



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MEMORY PHOTO: COUGAR SPIRIT EN MASSE IN MARTIN STADIUM (PHOTO M. S. ROOPESH)



YAKIMA TOWN HALL (PHOTO ANDY SAMWEN/YAKIMA HERALD-REPUBLIC)

Talk the walk

He was working on another podcast when he got the idea for a new one.

Enrique Cerna, semi-retired and cohosting *Life on the Margins* about Seattle's historically marginalized groups, shared tidbits about those segments with a former colleague and longtime friend from their early days at KING TV. Cerna ('75 Comm.) and Matt Chan, creator of the A&E show *Hoarders*, had been Zooming once a week during the pandemic. In one of those virtual visits, he said, "You and I should do something."

That something became *Chino y Chicano*.

The two friends—"He's Chinese American, I'm Mexican American," Cerna explains—wanted to explore issues of race following the police killing of George Floyd, global protests supporting the Black Lives Matter movement, and increasing national polarization. Or, as Cerna

wrote in the description: "the good, bad, and ridiculousness of life for people of color in America."

They recorded a test episode last December. "I think we did it in one take," says Cerna, noting that the two combined have more than 80 years of experience in the television business. "Our goal really was to bring the experience we had as two people of color—two men of color—and focus on communities and issues that are often overlooked, to share a perspective that a lot of people don't seem to hear. We're going through this racial reckoning now. But we still have a long way to go to deal with racism in this country. We want to have a conversation about that with different people. This is very important."

One of Seattle's most respected broadcast journalists, Cerna is known for his specials on social issues as well as political analysis and fair and balanced moderation of mayoral, gubernatorial, and

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national debates. He retired from KCTS public television in 2018 after 23 years. Overall, his broadcast career in Seattle spanned nearly 45 years, including stints at both KOMO Radio and TV as well as KING TV. He has won ten regional Emmy Awards and was inducted into the Silver Circle of the Northwest chapter of the National Academy of Television Arts and Sciences in 2013.



Interviewing Dreamer Jessica Esparza. Courtesy Big Bend Community College

In 2020, he joined the Board of Regents at Washington State University, where he almost failed the first semester of his freshman year in 1971.

First, there was the culture shock. Cerna came to Pullman as a first-generation college student from the small farming community of Wapato in central Washington. “Going in,” he says, “I didn’t know how to do college. It was sort of trial by fire.”

Then, he got sick. Pneumonia coupled with bronchitis and a fever as high as 104 degrees Fahrenheit kept him from classes and schoolwork. By mid-term, his grade point average had sunk below 1.0. “I just felt like I was failing all around.”

Rather than give up, Cerna says, “I became determined. I decided I’m going to stay here, and I’m going to work really hard. And

I did. Having made my way through that, as tough as it was, was a good thing. It was about adversity. I thought, ‘OK, if I can get through that, maybe I can get through school’—and whatever else might come his way.

He and Chan “were often the first or one of the few people of color in our business,” Cerna says. “We had many challenges—the challenge to be accepted, the challenge to

be represented—and it wasn’t always easy. It still isn’t easy.”

Overcoming adversity is one of the themes of *Chino Chicano*, which has featured guests such as retired KING TV news anchor Lori Matsukawa, National Public Radio journalist Maria Hinojosa, Seattle mayoral candidate and former Seattle Super-Sonic James Donaldson (’79 Socio.), *South Seattle Emerald* founder Marcus Harrison Green, and Michael Flor, one of the country’s first cases of COVID-19.

Because of the pandemic, Cerna, owner of Cerna Media Services, has been recording the

podcast from the living room of his Ballard condo. He and Chan connect with their guests over Zoom. Cerna edits the podcast, reviews it with Chan, then uploads it to their podcast platform for distribution. He also creates a video version and posts that to YouTube.

Their target audience: “Anyone who will listen,” Cerna says. “I don’t say that facetiously. It would be nice if we can get White people to listen, in general, just to have some understanding. It feels like a chance to educate and maybe even change people’s perspectives, particularly (those of) White people who tune in.”

They keep the tone conversational and approachable, exploring serious and often tough topics “through individual stories and experiences. We’re here,” Cerna says, “to give people a platform so they can tell their story.” *

Compassion comes naturally

BY JOSH BABCOCK

It was a sickly stray cat that brought **Min “Maddie” Liu (’21 DVM)** to tears on her first day at Bonnie L. Hays Animal Shelter in Hillsboro, Oregon.

She didn’t know his owner or his story. But she cared and wept for the cat when veterinarian Nicole Putney (’11 DVM) determined euthanasia was the most humane option.

“I just remember crying and Dr. Putney said, ‘This cat is lucky there is a person that cares so much for him,’” Liu recalls. “I will always remember that day.”

Liu could have decided she didn’t have what it takes to be a veterinarian, but Putney provided reassurance, and they formed a bond. Putney became Liu’s mentor and ultimately hired her as a veterinary assistant in 2013.

“I shadowed her for hundreds of hours,” Liu says. “We became very close. Dr. Putney’s the one who told me to apply to vet school.”

In her late 30s, Liu walked away from an established, 14-year career in human resources and enrolled at Portland State University to earn the credits needed to apply to veterinary school. She previously worked for Motorola Asia and IBM Asia in China before moving to the United States for a position at Tektronix, headquartered in Oregon.

Her career change was inspired by a simple trip to a local veterinarian’s office after her nine-month-old yellow Lab, Jade, suffered a leg injury. Liu was struck by the compassion shown to her pet. “I didn’t know animals could get that quality of treatment,” she says.

Compassion comes naturally to Liu, a small animal veterinarian who regularly volunteers at spay and neuter clinics. She once adopted a senior dog with multiple systemic illnesses just to give him a home during his last days. She’s also been known to travel to neighboring states to say goodbye to a dog with a terminal illness.

Her dedication hasn’t gone unnoticed. “Maddie had all the qualities we hope for in an applicant; she was prepared, organized, compassionate, and ready,” says Stacey Poler, director of recruitment at the Washington State University College of Veterinary Medicine. “Maddie never does anything halfway, and the field of veterinary medicine is lucky to call her their own.”

A native of Wuhan, China, she faced many hurdles during her nascent veterinary career, including the death of her mentor. Putney wasn’t there to congratulate Liu when she received her acceptance letter to WSU’s DVM program. Putney took her own life on May 29, 2015. She was 32.

Suicide is an increasing problem in the veterinary profession, to the point that the American Veterinary Medical Association (AVMA) is providing special resources directed at suicide prevention. According to the AVMA, 11,620 veterinarians took their own lives from 1979 through 2015.

Sometimes, on her toughest days, Liu will sit down and write to Putney, knowing her friend will never read the words. “I write my feelings that day, how I feel about school, if I made the right move, happy thoughts, sad thoughts. We were really close,” Liu says. “Dr. Putney is my mentor, and she’s always there with me.”

Tragedy struck again in 2020 when Liu’s father, Guiyun Liu, the last member of her family in China, died at the height of the COVID pandemic due to heart complications and an inability to receive prompt care at Wuhan’s packed hospitals. “I couldn’t go



MIN LIU (PHOTO: HENRY MOORE, JR.)

back, and I didn’t even say goodbye. It hit me hard,” Liu says. “Honestly, coming back to school and having my classmates there helped me settle down.”

Liu found where her biological family would have stepped up, her Cougar family did.

“I had so many people ask me, ‘Do you need a hug?’ and offering to help,” Liu says. “That’s what’s different about WSU, that sense of family doesn’t go away; it’s not a first impression.”

While it’s been years since that sickly cat brought her to tears and much has changed since then, her sincere care for and love of animals hasn’t wavered.

Says Liu, “The happiest moment for me is seeing an animal wagging their tail out of the hospital.” *

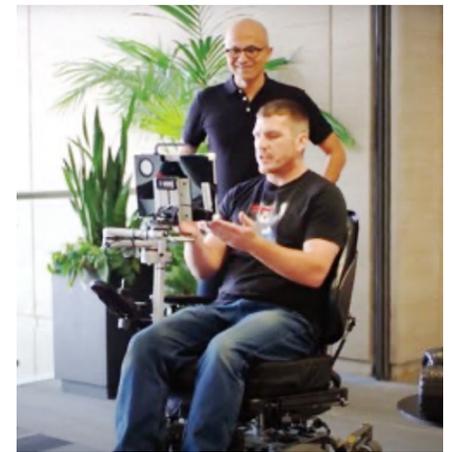
Eyeing accessibility

BY RACHEL WEBBER

Imagine a world where you could play an instrument, drive a remote-controlled car, or move a wheelchair with your eyes. That’s the world **Jon Campbell (’03 Comp. Sci. & Comp. Eng., ’05 MS Comp. Sci.)** and his team at Microsoft have made a reality, as they develop technologies people can use to communicate and connect.

As a senior research software development engineer on the Microsoft Research Enable Team, Campbell works directly with people who have been diagnosed with neurodegenerative diseases such as amyotrophic lateral sclerosis, or ALS, a disease that ultimately results in loss of movement, including speech.

“We’ve had some really beautiful interactions because they have such a great perspective on the world and their place in it,” Campbell says. “At the same time, there’s also the other side of the coin, which can be tragic.”



Jon Campbell shows Microsoft CEO Satya Nadella how Eye Control software can operate a remote-control wheelchair. (Courtesy Microsoft)

While there isn’t yet a cure for ALS, eye-tracking technologies can help improve the quality of life for people living with ALS and strengthen connections between their caregivers, friends, and families.

Just five years ago, Campbell didn’t know much about eye-tracking technology or ALS. After a meeting at work one day, he happened to browse through a list of Microsoft projects. One of the project goals that stood out to him was the need for a wheelchair a user could move with an eye tracker.

The idea on the list originated with Steve Gleason (’00 Busi.), a former NFL player and an advocate for people with ALS, who ten years ago was diagnosed with the disease. Gleason was interested in technology that would make it possible to play with his son, talk more easily with his wife, move a wheelchair independently, and power on and off a Surface tablet independently.

When Campbell and his team created the Eye Gaze Wheelchair as part of Microsoft’s company-wide Hack-A-Thon in 2014, they not only took home first prize but also demonstrated the technology would work in the real world. That was just the start.

After the Hack-A-Thon, Campbell joined the Enable Team full-time, working on a remote-controlled car, drums and pianos, and games, puzzles, and mazes—all played or controlled through an eye tracker.

One area he and his team are focused on now is making it easier for people to gain access to eye-tracking technology,

ALUMNI profiles

which is often expensive and not widely available.

"We are asking, what are the things that we can do to make it so that if you get a diagnosis, you can get an eye tracker really easily right away," he says.

The other challenge is standardizing how eye trackers talk to computers and ensuring the trackers respond to differences in a user's specific traits, such as skin color, eye color, or posture.

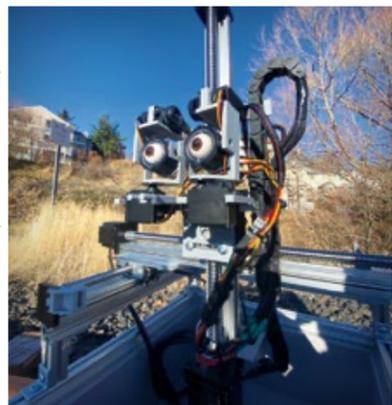
Before he graduated from WSU last year, Leif Harfst ('20 Mech. Eng.) had the chance to work on a team of mechanical engineering students and help address some of those challenges. The student team engineered a rig that has anatomically correct eyes and can ultimately be customized to fit a user profile and test different eye trackers. In the coming years, WSU engineering students will build on the new ideas and work to advance the technology.

It's an ongoing student collaboration with Campbell as their mentor in partnership with WSU's Gleason Institute, named for Steve Gleason, which aims to improve the lives of patients with neurodegenerative diseases and their caregivers.

"Jon brought us out into the real world," Harfst says. "You feel like you're making an impact as far as helping develop a way to test these eye trackers and find something that better suits a person with certain needs."

Campbell says his job is to find ways to move forward. While the idea for a particular technology may start with one person in mind, he says, the impact ripples out.

EYE TRACKER TESTING RIG (COURTESY LEIF HARFST)



"If we all live long enough, we will all end up with a disability because aging brings with it a myriad of poly-disabilities, whether it's vision, our ability to grab and hold on to things, hearing, mobility, speech, or vision," Campbell says. "We all benefit when we serve the needs of people who have differing abilities." *

Never say never

BY DANIEL P. SMITH

Matt Pearce ('02 Crim. Jus.) was not supposed to live.

But he also refused to die.

On March 15, 2016, Pearce, then in his seventh year as a patrol officer with the Fort Worth Police Department in Texas, joined the pursuit of a fugitive suspect wanted on felony charges of aggravated assault with a deadly weapon.

When the outlaw, Ed McIver, reached a rural area on Fort Worth's western edge, he ditched his silver Ford Escape and ran into a thickly wooded area. His teenage son, meanwhile, bolted in the other direction carrying a rifle and handgun.

In chasing the elder McIver, Pearce landed on the ground after climbing over a barbed wire fence. At that moment, McIver emerged from the high brush and began shooting Pearce.

"He wasn't but seven yards away," Pearce says of McIver.

Two bullets entered Pearce's shoulder. Another shattered his femur, while another broke his jaw. Bullets plunged into his lung and liver.

While McIver fled, wounded by Pearce's return fire and soon after fatally shot by a Fort Worth Police sergeant, colleagues rallied around a vulnerable Pearce to provide immediate aid and plot an evacuation plan. Pearce was transported via helicopter to John Peter Smith Hospital, the area's Level 1 trauma center. Doctors pegged his prospects for survival below 10 percent.

Following surgery, four weeks in the intensive care unit, and another month in in-



COURTESY CBS

patient therapy, Pearce improved well enough to leave the hospital—wearing a white WSU Cougars hat, no less. Still, doctors prepared the married father of two young girls for a limited future.

"I heard a lot of 'You'll never be able to,'" says Pearce, a Yakima, Washington, native who would not walk until four months after the shooting. "I was motivated to prove people wrong."

And that included resuming his law enforcement career.

"I could have medically retired and no one would have said a word," Pearce says. "But I love my job and wanted to make it back."

After seven months of recovery and diligent rehabilitation, Pearce returned to light duty with the Fort Worth PD in October 2016. Thirteen months later, he resumed full-time work with the tactical medic team, a group of officers cross-trained in emergency medical services. His role today is to provide immediate care to others facing life-threatening conditions on the street.

"Look at how the cards were stacked against me," Pearce says. "To win that battle and not come back to work would have meant that the bad guy won, and I wasn't going to let that happen."

Earnest and thoughtful, Pearce acknowledges the lasting impact of the near-fatal event. He considers himself more patient and analytical today, perhaps even more tranquil.

"I slow down and smell the flowers a bit more," he says.

However, Pearce's longstanding commitment to serve, which began as a reserve firefighter in Pullman following his WSU graduation, remains as steady as ever.

"I want to continue to serve my community," he says, "and that's what I'm going to do." *

Back to art

BY WENDA REED

There's the proverb that "it takes a village to raise a child." If so, it took a whole town of Pullman and Washington State University artists to inspire the work of prolific photographer and pastel painter **David Patterson** ('76 Fine Arts).

His inspiration began with his mother Maxine (Weeks) Patterson ('46 Fine Arts). She specialized in oil paintings and watercolors and was represented by a Pullman gallery. She was still sketching into her late 90s, dying last October in Pullman at 101. She and her husband Eugene G. Patterson ('46 Poli. Sci.), a state legislator and director of

WSU alumni relations from 1952 to 1976, had seven children.

"My mother was a huge influence on all of us," Patterson remembers. There were always art materials around the house. "All of us dabble in the arts," he adds, especially his brother Michael, an architect and sculptor, and Sarah (Patterson) Hamilton, a painter living in Pullman who took a few art classes at WSU. His parents gave him a camera for high school graduation, sparking his lifelong love of photography.

"My inspirations do not just come from many of the great masters, but from the artists I have studied under during my education," Patterson says. Chief among them was Victor Moore ('70 MFA), his middle and high school art teacher in Pullman. Moore is best known for his carved wooden whirligigs and for the "Junk Castle," a fantastical edifice of recycled metal he erected on his property off of Highway 195 near Pullman as his master's thesis.

Patterson credits his professors in the WSU Department of Fine Arts for giving him a grounding in all the visual arts, including photographer Frances Ho, world-renowned painter Gaylen Hansen, department head Keith Monaghan, illustrator Richard Thornton, modern art and expressionist painter Robert Sterling, longtime WSU professor and all-around artist Andrew Hofmeister ('47 MFA), and landscape and sports figure painter Robert Feasley.

Patterson's degree emphasized photography and graphic design before computers, but he found it difficult to find a job in that field. He ended up working for a sporting goods company before beginning a 29-year career as a methods analyst at Boeing. "I worked with blueprints and interactions with the shop—very analytical."

In 2004, a decade before his retirement, he got back into art and photography "in a big way." He mastered high dynamic range photography, in which the camera takes multiple images of the same scene using



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ALUMNI profiles

different exposures then combines them into a single image. He makes luminous landscape photos and photos of farms and buildings, emphasizing the play of light on clouds and water and mist. Some of his favorites are in black and white.

He also developed his second passion, pastels, which he had not studied in college. He took a dozen workshops and participated in online forums to develop a style of “realism, conveying an image of calmness and wonder.” He leans toward Impressionism, using what he calls “implied detail,” for example, putting in a line to suggest a window. Although he says he is still learning and gaining in confidence, he was pleased to receive signature status in the Northwest Pastel Society last year.

For about eight years, he rented space at a glass-blowing studio and created solid glass sculptures, most of which have been sold.

After a three-year sojourn in Old Forge, New York, Patterson moved back to Pullman in 2017 to be near his mother and some of his siblings. He turned to the Palouse hills and farms and the WSU campus as subjects for his photography and pastels. As he has come full circle back to Pullman in his artistic endeavors, he has also managed to get into graphic arts, his original college major, in the digital age. Through the website Fine Art America, his art is imprinted on items from pillows and towels to phone cases and mugs—and, of course, during the pandemic days, masks.

View Patterson’s 6,157 photographs and pastels at david-patterson.pixels.com.

COURTESY DAVID PATTERSON



Thank you for keeping our communities healthy and safe.

From testing to vaccinations, WSU Doctor of Pharmacy students have stood on the frontlines in the fight against COVID-19. Show your gratitude by giving back to the next generation of Cougar pharmacists so that they can continue to protect the health of communities across the nation. Funds will go towards scholarships, professional travel for students to attend conferences, and other programs to help foster their growth within our Doctor of Pharmacy program.

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Alumni Association News

2021 Top Ten Seniors

IT'S ONE OF WSU'S LONGEST-RUNNING TRADITIONS

For more than 80 years, WSU has recognized ten top seniors from each graduating class. These men and women across all WSU campuses represent the highest standards in five areas of college life: academics, athletics, campus involvement, community service, and visual and performing arts. And the WSU Alumni Association and Student Alumni Ambassadors oversee the award program. A committee of faculty, staff, and students chooses two winners in each category based on criteria such as leadership activities and academic achievements.

MEET THIS YEAR'S TOP TEN SENIORS

ACADEMICS

Samantha King-Shaw ('21 Women's Stu.) will be pursuing a doctorate in global gender studies. **Patrick Robichaud** ('21 Civ. Eng.) aims to help increase access to water as the climate changes.

ATHLETICS

Dallas Hobbs ('21 Digi. Tech. & Cult.) was creative director, executive board member, and cofounder of the Black Student-Athlete Association. The WSU defensive lineman also served as a representative on the Student-Athlete Advisory Committee. **Charisma Taylor** ('21 Hosp. Busi. Mgmt.) has her eyes on the Olympics. She was a board member and team representative on the Student-Athlete Advisory Committee and treasurer of the Black Student-Athlete Association. Taylor holds the WSU women's record for triple jump and 60-meter hurdles.

CAMPUS INVOLVEMENT

Mikayla Beckley ('21 Biol.) served as vice president of the Disabled Students and Allies Club and represented the Access Center on WSU's Transit Advisory Group. She plans

to take a gap year before graduate school to work as a post-baccalaureate fellow at Seattle Children's Hospital. **Alicia Campos Macias** ('21 Elec. Eng.) served as a senator and secretary for ASWSU Everett, where she was also involved with the WSU student branch of the Institute of Electrical and Electronics Engineers, Society of Women Engineers, and more.

COMMUNITY SERVICE

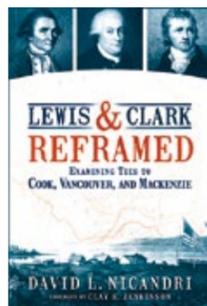
Crystal Campbell ('21 Acc.) served as president of the Volunteer Income Tax Assistant Club, which she founded at WSU Vancouver, and coordinated a holiday card campaign for residents of a retirement home. As coordinator for the WSU Center for Civic Engagement Palouse Fresh Food project, **Ariel Medeiros** ('21 Ecol., Psych.) helped divert 15,769 pounds of food from the landfill so it could be shared with local families.

VISUAL AND PERFORMING ARTS

Brandt Fisher ('21 Music) performed with WSU Jazz Big Band, SaxBand, Saxophone Quartet, and Latin Ensemble, and served as vice president of the WSU Jazz Society. **Kyle Kopta** ('21 Digi. Tech. & Cult.) helped organize the WSU Tri-Cities Undergraduate Research Symposium and Art Exhibition at the end of each semester. *



DERIVATIVE STAFF ILLUSTRATION FROM PHOTO COURTESY WSU CAHNRS



Lewis & Clark Reframed: Examining Ties to Cook, Vancouver, and Mackenzie

DAVID L. NICANDRI
WSU PRESS: 2020

Meriwether Lewis and William Clark, along with the rest of the Corps of Discovery appointed by President Thomas Jefferson, inspired the young nation and gave credence to US claims across the continent.

But the journey did not take place in a vacuum.

David Nicandri takes the Lewis and Clark story beyond the almost mythical narratives of the expedition as an exceptional, first-of-its-kind event and makes connections to earlier British explorers of the Pacific Northwest: James Cook, George Vancouver, and Alexander Mackenzie. As the book notes, there is a tendency to view the Corps of Discovery's journey as a tabula rasa, rather than occurring in the longer and wider context of prior exploration and the search for the Northwest Passage.

The American explorers, once they crossed the Rocky Mountains, relied heavily on Mackenzie's 1801 book, *Voyages from Montreal*, almost as a trail guide and even plagiarized entire paragraphs in their journals. Cook's literary writings about his journeys through the North Pacific and along the West Coast also informed how Lewis and Clark wrote about their travels up the Missouri, across the mountains, and along the Columbia River.

Much has been written about Lewis and Clark and the expedition, but Nicandri carefully analyzes the explorers' journals as more than scientific information because "to an extent that is too little appreciated, exploration was also a literary phenomenon."

The literary aspects of Lewis and Clark's journals owe quite a bit to Cook, the iconic explorer of the time, and to the Scotsman Mackenzie, who crossed North America a decade before the Corps of Discovery. Lewis, in particular, emulated Mackenzie and Cook in his literary flourishes, such as descriptions of waterfalls and insistence that words were inadequate to capture sublimity.

Lewis & Clark Reframed goes beyond the literary analysis and probes other questions about the Corps and expedition. It describes how Lewis often sought full and first credit for important discoveries. Nicandri also speculates on missing journals from the Corps.

The book examines Lewis's homesickness during the journey and his friendship with future US Senator and New Jersey Governor Mahlon Dickerson, providing insight into Lewis's inability to complete his book about the expedition, mental decline, and eventual suicide.

Nicandri, former director of the Washington State Historical Society, also wrote *River of Promise: Lewis and Clark on the Columbia*. As a prominent historian and writer about Lewis and Clark, he shines new light on how the famous expedition was influenced by other Enlightenment-era explorers who visited the Pacific Northwest before the American captains. Each essay is written clearly, rich with details that deliver insights into the explorers within their global context.

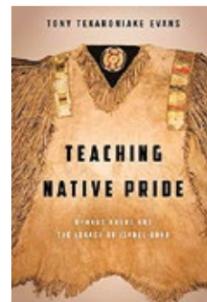
—Larry Clark

Teaching Native Pride: Upward Bound and the Legacy of Isabel Bond

TONY TEKARONIAKE EVANS
WSU PRESS: 2020

Beginning in the 1970s, Native high school students traveled in the summer to the University of Idaho (UI), often in a repurposed limousine nicknamed the "Gray Goose," for life-changing experiences led by Isabel Bond.

Pulling from interviews with students and staff, *Teaching Native Pride* tells the story of the federally sponsored Upward Bound program that offers Native and other at-risk and low-income students academic support



and a unique curriculum at the Moscow, Idaho, university.

Bond became director in 1973, after Upward Bound started in 1969, and remained in that position at UI for more than three decades. A non-Native from north Idaho, Bond educated herself about the Niimiipuu (Nez Perce) and Native issues, while bringing Native students into academic life as they never had been before.

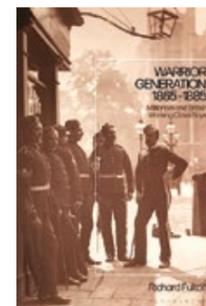
Experimental initiative Upward Bound, as part of Lyndon B. Johnson's War on Poverty, required participants to be the first in their family to pursue a college degree. The students, who historically were denied these opportunities, received six weeks of intensive instruction in mathematics, laboratory sciences, composition, literature, foreign languages, and study skills. Since the UI program participants had to live within 200 miles of the university, many of them were members of the Niimiipuu and Coeur d'Alene Tribes.

A good number of the Upward Bound students went on to become leaders in Indian Country. Chris Meyer was part of Upward Bound's inaugural group at UI and the first Coeur d'Alene tribal member to receive a doctorate. She now oversees the tribe's Department of Education.

"Upward Bound had a profound effect on my life," Meyer told author Tony Tekaroniaka Evans. "It planted a seed. Back then, there were no counselors meeting with us to discuss college. ... Only Upward Bound could provide us with these possibilities."

Evans, an award-winning reporter and columnist in Ketchum, Idaho, is an enrolled Bear Clan member of Quebec's Kahnawake Mohawk Community. He brings to life an inspiring story of how one dedicated person made a difference and inspired many Native students to celebrate their heritage, break cycles of poverty, and teach non-Natives about Indigenous cultures.

—Larry Clark



Warrior Generation, 1865–1885: Militarism and British Working-Class Boys

RICHARD FULTON '75 PHD ENGLISH
BLOOMSBURY ACADEMIC: 2020

"For lower-class young men," in Victorian Britain, Richard Fulton writes, "life was pretty much black and white. There were survivors and there were losers."

Life was a struggle with sickness, the weather, other boys, parents, teachers, policemen, bosses, and simply getting something to eat. Tough guys prevailed. And, Fulton notes, they were admired. "They grew up in a culture that accepted physical force as the proper and inevitable method for reaching a desirable conclusion, which is a roundabout way of saying that one of their common experiences was being beaten by their parents to make them behave, being beaten by their schoolmasters to make them learn, being beaten by the establishment to keep them in place, being beaten by older boys and outsiders just for the hell of it."

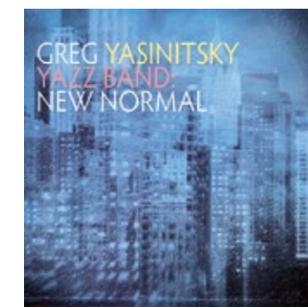
That didn't make them soldiers. And, it turns out, neither did the establishment's attempts at indoctrination.

In this narrowly defined but deeply researched study, Fulton explores the activities that shaped the lives and attitudes of lower-class boys in late Victorian Britain. He shows that pervasive messaging in education, entertainment, and popular media contributed to a growing culture of masculinity and adventure, but generally failed to militarize a generation. His richly nuanced account delves into boys' work and family lives, schooling, leisure time, reading materials, and more, including petty crime. Among the most interesting observations are those that come directly

from the boys themselves via memoirs and autobiographies.

While focusing on a particular period, age group, and issue, Fulton offers a porthole to Victorian culture as a whole. Readers learn how these boys viewed warfare, masculinity, fighting, recreation, and work. Their employment options were extremely limited; joining the military was one choice. Despite national discourse, propaganda, and the prevalence of mythologized war heroes in the press and fiction, most working-class males preferred to stay local, taking jobs as laborers rather than enlist.

—Adriana Janovich



YAZZ Band: New Normal

GREG YASINITSKY
ORIGIN RECORDS: 2021

Listen to a review and tracks from the new album, recorded during the pandemic lockdown by Regents Professor of music Greg Yasinitsky along with guest musicians, on **Viewscapes**, the podcast of *Washington State Magazine*.

magazine.wsu.edu/podcasts

You can also follow *Viewscapes* on Apple Podcasts, Spotify, and other popular services to regularly listen to stories about Washington State University research, alumni spotlights, and *Coug Life*.

BRIEFLY NOTED

Boosting a New West: Pacific Coast Expositions 1905–1916

JOHN C. PUTNAM
WSU PRESS: 2020

Inspired by Chicago's successful 1893 Columbian Exposition, promoters in Portland, Seattle, San Diego, and San Francisco held fairs between 1905 and 1916 that drew in millions of people.

Embracing new consumer marketing techniques, fair publicity directors sought to shape a new western identity. Putnam, associate professor of history at San Diego State University, explores the fairs' cultural and social meaning in his book, and shows how organizers articulated the significance of the expositions to national and regional audiences.

Architecture and Sacrament: A Critical Theory

DAVID WANG
ROUTLEDGE: 2020

WSU architecture professor David Wang considers architectural theory from a Christian theological perspective. The book argues that retrieval of the sacramental outlook, which informed centuries of art and architecture in the West, can shed light on current architectural issues such as "big box stores," the environmental crisis, and the loss of sense of community.

Negotiating Abolition: The Antislavery Project in the British Strait Settlements, 1786–1843

SHAWNA HERZOG
BLOOMSBURY: 2020

Sex and gender complicated the enforcement of colonial anti-slavery policies in the nineteenth-century British Straits Settlements of Southeast Asia. Local officials faced difficulty in identifying slave populations because reclassification of slave labor to systems of indenture or "free" labor created a new illicit trade for women and girls. Shawna Herzog, a history instructor at WSU, provides new perspectives on this often overlooked region in British imperial history and its challenges with slavery and abolition.

Cougs Talk Stock
WSU EXTENSION
PODCAST: 2021



WSU experts from Extension and the College of Agricultural, Human, and Natural Resource Sciences focus on science-based, relevant animal science topics in this new podcast for those who are interested in livestock production, raise livestock, and want to learn more—such as 4-H and FFA members. Each episode, an industry expert is interviewed by *Cougs Talk Stock* hosts Don Llewellyn, Hannah Brause, Natasha Moffitt-Hemmer, and Sarah Dreger. Listeners can find the podcast at soundcloud.com/cougstalkstock.

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more about Goldsworthy: magazine.wsu.edu/extra/goldsworthy

CLASSnotes

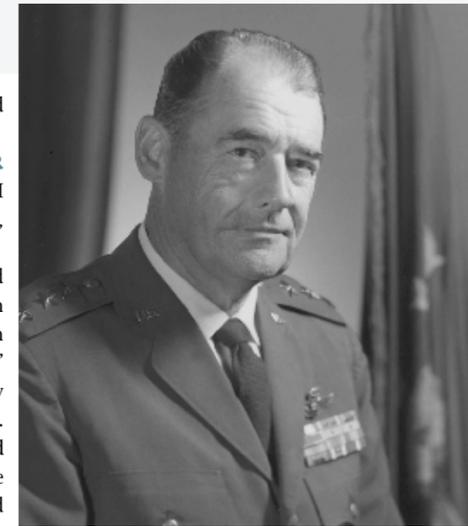
He's believed to be the oldest living retired US Air Force general.

Lieutenant General **HARRY EDGAR GOLDSWORTHY** ('36 Ed.), a World War II veteran who later worked at the Pentagon, turned 107 in early April.

"It was a wonderful career, and I've had a great life," Goldsworthy told military.com two days before his April 3 birthday. "I'm just looking forward to surviving, I guess."

Throughout his career, Goldsworthy flew more than 30 different kinds of aircraft. He received the Air Force Distinguished Service Medal, the Legion of Merit, and the Air Medal with four oak leaf clusters. And his service took him all over the world—from Spokane to Texas, Virginia, South Carolina, Pennsylvania, Ohio, Florida, Morocco, Libya, Montana, and more.

Born in Spokane and raised on a farm near Rosalia, Goldsworthy joined the US Army in 1936, serving as a reserve infantryman until the Army Air Corps accepted him for flight training in 1939. He earned his wings a year later and was soon flying submarine-hunting patrols near Puerto Rico and Trinidad. He later flew patrols and combat missions in the South Pacific, where—at the end of July 1945—his B-25 bomber was hit. He and his crew bailed out, landing in the jungle on the island of Luzon in the Philippines.



COURTESY US AIR FORCE

Goldsworthy returned stateside after World War II and, in 1948, became commander of the 11th Bombardment Group at Carswell Air Force Base in Texas. A year later, he was transferred to the Pentagon. He returned to the Pentagon in two more roles—as director of production and programming for the Air Force's deputy chief of staff of systems and logistics in 1963, and as the deputy chief of staff for systems and logistics in 1969.

Before his second stint in Washington, DC, he was transferred to the Ballistic Missiles Center of the Air Material Command, commanding the Site Activation Task Force for the first Minuteman Intercontinental Ballistic Missile Wing. After retiring from the US Air Force in 1973, he consulted for Boeing. He celebrated his 107th birthday in Riverside, California, with a motorcycle ride, military tribute, special certificate, and sheet cake.

"All my Air Force buddies are long gone. That's one of the penalties to living to be 107," Goldsworthy told military.com, noting he's humbled knowing he's among the oldest living former military commanders in the world. "I didn't aspire to be the oldest."

BY ADRIANA JANOVICH

60 DAVID A. LONGANECKER ('68 Socio.) authored *The Late Truck Driver: Following the Dream*, which details how he became a truck driver after retiring from a career in higher education, including six years as assistant secretary of education for higher education under President Bill Clinton.

70 DEREK BROWN ('76 Elec. Eng.) retired after 44 years with the Pacific Gas and Electric Company, where he was a senior consulting engineer. He is a member and working group chair for the Institute of Electrical and Electronics Engineers Hydro Power Subcommittee and provides engineering consulting services. ✨ **ALAN GROSS** ('76 MS, '79 PhD Psych.) is a Distinguished Professor at the University of Mississippi, where he's served as a faculty member for more than 30 years. His research has been presented at nearly 150 workshops, conferences, and addresses, and he has coauthored five books and

140 peer-reviewed articles. He has also directed 49 theses and 73 dissertations as a mentor. ✨ **FRANK ANDREWS** ('79 Bacterio., '83 Vet. Med.) heads the Veterinary Clinical Sciences Department at the Louisiana State University School of Veterinary Medicine. He joined the LSU faculty in 2008 as director of equine health studies and his research focuses on gastric ulcer disease in horses.

80 KEN COLLINS ('84 History), a longtime coach, teacher, principal, and administrator for the Lake Stevens School District, is the new superintendent. ✨ **SUSAN CARY PAGANELLI** ('89 Ed.) was appointed to the Pierce County Council Citizens' Advisory Board. She is co-owner of VIA Unlimited, a consulting company.

90 PETER MAYER ('91 Rec. & Leis. Stu.) is the new director of Washington State Parks and Recreation, where he oversees

124 state parks and approximately 1,000 employees. He had previously served as deputy executive director of Metro Parks Tacoma. ✨ **CHUCK ARNOLD** ('94 Sport Mgmt.) is president of the Seattle Seahawks. The team extended his contract through 2027 as he enters his fourth season as president. ✨ **BENNIE L. HARRIS** ('95 MBA) is the chancellor at the University of South Carolina Upstate. He is a former director for the Center of Human Rights at WSU and served in leadership positions at Lipscomb University, DePaul University, and the University of Alabama at Birmingham. ✨ **LINHDA SAGEN** ('98 Nutr., '00 Food Sci.) is the 2021 WSU Alumna of Distinction, an award bestowed at the annual Women of Distinction ceremony, for her work with the Pullman Schools Pantry Program. During her time as president, the program has provided 350 bags of food each week to families in need.

CLASSnotes

MICHAELA (SHELTON) BANACH ('00 Busi.) is a 2021 Super Lawyer in San Diego, a list cultivated by *Super Lawyers Magazine*. She is a partner of Noonan Lance Boyer & Banach and past president of the San Diego County Bar Foundation. ✨ **TROY BRAGA** ('04 MBA) is the resident director of the Merrill Lynch office in Coeur d'Alene, Idaho. A wealth management adviser and senior vice president with the Baldwin-Braga Group, he has worked for Merrill Lynch for six years and is a certified financial planner and a certified plan fiduciary adviser. ✨ **MIKE MCNICKLE** ('04 Pub. Affairs) is the new director of Grays Harbor County Public Health and Social Services. He is responsible for the county's COVID-19 response as well as homelessness and opioid addiction response. ✨ **KRISTIE VAN BOXTEL** ('06 Int. Des.) is an interior designer at Convergence Architecture in Portland, Oregon. ✨ **JENNIFER (SMITH) GANGWISH** ('07 Psych.) is transitioning to the chief executive officer position at College Hill, a custom apparel company in Pullman. Smith previously served as vice president and sales manager.

BECCA DE KLEINE ('11 Hort.) has been re-elected for another three-year term as a board member of the Washington Winegrowers Association. She is director of winemaking and general manager at Four Feathers Wine Estates in Prosser and president of the Washington Wine Technical Group. ✨ **MARCUS LATHAN** ('12 Busi.) is a contestant on the 2021 season of *The Bachelorette*. He is a real estate broker and operations manager at Affinity Property Management in Portland, Oregon. ✨ **EMILY UHLIG** ('14 Biol.) is an associate of Adams Leclair, a litigation law firm in Rochester, New York, where she focuses on commercial and construction cases. ✨ The Western Society of Weed Science awarded **NEVIN LAWRENCE** ('15 Crop Sci.) this year's Outstanding Weed Scientist for the Early Career category. He is an integrated weed management specialist at the University of Nebraska-Lincoln Panhandle Research and Extension Center. ✨ **FLOR MALDONADO** ('16 Ag.

& Food Sec.) is a board member of the Washington Apple Education Foundation. As a student, she received a scholarship from the WAEF. She and her brothers run their family's organic orchard company. ✨ **GARRETT SNEDEKER** ('19 Music) won the Barzun Prize for Youth Engagement for founding a community music program in London. The program teaches students to compose, play, and perform original pieces of music.

BRYNNA JONES ('21 Int. Des.) is an interior designer at MMEC Architecture & Interiors in Spokane. ✨ **ETHAN SANDERS** ('21 Arch.) is an unlicensed associate architect with MMEC Architecture & Interiors in Spokane.

INmemoriam

CHARLES FERGUSON ('40 Ag.), 104, March 20, 2021, Woodland. **WILHO E. WILLIAMS** ('44 Civ. Eng.), 99, April 30, 2021, Spokane. **PATRICIA A. STEPHENS** ('45 Home Econ., '47 Ed.), 94, December 20, 2017, Roseville, California. **RUTH MARIE SCHAEFER** ('46 Home Econ., '48 Ed.), 97, April 16, 2021, Spokane. **ELWOOD HOWARD SHEMWELL** ('47 Gen. St.), 98, December 17, 2020, Copperas Cove, Texas. **WILBUR EARL STEPHENS** ('47, '50 MS Mech. Eng.), 96, December 17, 2018, Roseville, California. **HOWARD G. HALLGARTH** ('48 Entom.), 97, June 13, 2019, Wapato. **BETTY B. OSTHELLER** ('48 Fine Arts), 93, January 29, 2021, Spokane. **MARCELLA FROMBERG SWARTTZ** ('48 Gen. St.), 91, October 9, 2020, Pine Mountain Club, California. **FRED WILLIAM BURGESS** ('49 Ag.), 97, March 24, 2021, Gold Beach, Oregon. **CECIL G. FLESHMAN** ('49 French, '50 Ed.), 92, January 23, 2020, Silverton, Oregon. **WILLIAM H. NOTEBOOM** ('49 Phys. Ed.), 93, November 29, 2020, Longview. **DELPHINE J. PETERSON** ('49 Home Econ., '51 Ed., Delta Kappa Gamma), June 21, 2020, Granger. **FRANK M. WATTS** ('49 DVM), 99, February 27, 2021, Portland, Oregon.

CAROL ANNE BUCKLIN ('50 English), 92, May 21, 2019, Shoreline. **WILLIAM E. CAMERON** ('50 Civ. Eng.), 92, April 3, 2020, San Clemente, California. **RICHARD WAYNE FOWLER** ('50 Pharm.), 92, May 11, 2021, Lynnwood. **WALLACE R. MIDDLETON** ('50 Ani. Sci.), 98, October 24, 2020, Stanwood. **WEYMETH "WEY" MURREL SIMPSON** ('50 Comm.), 94, March 24, 2021, Spokane Valley. **RYOMI TANINO** ('50 Arch.), 94, December 8, 2017, Renton. **MARGARETTE L. (SCHARFF) UNRUH** ('50 Ed.), 92, December 6, 2019, Richland. **LESTER "LES" EUGENE VEA** ('50 Civ. Eng.), 94, January 21, 2021, Woodinville. **JAMES ATWOOD BAER** ('51 Elec. Eng.), 93, March 21, 2018, Medford, Oregon. **MARY "POLLY" MORGAN BARTLETT** ('51 MS Ani. Sci.), 93, April 6, 2021, Shelburne Falls, Massachusetts. **HENRY EUGENE FORRESTER** ('51 Ag. Ed.), 92, December 18, 2020, Tumwater. **CARROLL JAMES KLETT** ('51 MS Psych.), 93, December 13, 2020, Carmel, New York. **BURTON JOHN FADICH** ('52 Pharm.), 92, September 23, 2020, San Pedro, California. **NORMA DREAM (PORT) HENRY** ('52 Ed.), 92, May 4, 2021, La Quinta, California. **DON C. KIRSCHBAUM** ('52 Forest & Range Mgmt.), 91, November 21, 2016, Dubuque, Iowa. **CHARLES N. MCLEAN** ('52 Busi.), 90, July 11, 2018, Tacoma. **ANDRE PAUL NEBOLON** ('52 Phys. Sci.), 92, March 11, 2020, Bend, Oregon. **MARGARET H. NEBOLON** ('52 Ed.), 88, April 20, 2019, Bend, Oregon. **FRANZ KARL SCHNEIDER** ('52 English), 93, April 14, 2021, Albany, Oregon. **BEVERLY BRACKETT WANNER** ('52 Home Econ.), 90, April 8, 2021, Kirkland. **EDITH LEOLA WEST** ('52 MA Ed.), 89, October 1, 2016, Rural Hall, North Carolina. **ROBERT G. WITSER** ('52 Socio.), 89, February 7, 2020, Oakland, California. **MARY JEAN BAUMHOFER** ('53 Home Econ., Ed.), 88, July 12, 2020, Lake Oswego, Oregon. **GRAEME C. GALBRAITH** ('53 Mech. Eng.), 90, May 17, 2021, Idaho Falls, Idaho. **SARITA JANE (VEATCH) MCCAW** ('53 Comm., Kappa Delta), 88, November 6, 2020, Walla Walla. **KATRINA PIERSON** ('53 Ed., Kappa Delta), 89, March 4, 2021,

Curiosity was her driving force. Regents Professor Emerita **SUE RITTER** was fascinated by what she described as "the controlling grasp of biological need on brain function." That fascination led her to make discoveries in how the brain senses and responds to changes in circulating metabolic fuels.

"What I really admired and respected about Sue's work was the clarity and attention to detail," says Steve Simasko, a longtime friend, collaborator, and chair of the Department of Integrative Physiology and Neuroscience in the College of Veterinary Medicine at Washington State University. "Sue had high standards, but she held herself to those high standards and led by example. She was the consummate professional and a hard worker. She was a very careful researcher and very thorough."

Wilma Sue Ritter died March 14, 2021, at home in Viola, Idaho. She was 75.

During her 46-year career at WSU, Sue published 121 peer-reviewed studies, maintained 43 years of continuous funding from the National Institutes of Health, chaired 11 doctoral thesis committees, and coauthored two books with her husband, Robert "Bob" Ritter, a professor emeritus of physiology. Their offices were next door to each other for decades.

"Our sons always teased us at the dinner table about trying to keep the conversation to something other than science," he says. "We edited each other's papers. We criticized each other's ideas for grants. We were partners in everything we did except in actually doing research."

In her essay "I Wondered as I Wandered," Sue wrote, "In discovering Bob, I discovered myself." They wed the day after he graduated with his bachelor's degree and moved west in 1974 after completing their doctorates—hers in physiological psychology at Bryn Mawr College, his in biology and neuroscience from the University of Pennsylvania—for appointments in Pullman.

That first year at WSU was "trial by fire," Bob recalls. "I didn't have any teaching experience, and Sue had very little. We had lots of credits to teach, and we were trying to write grants. It took us awhile to find our feet."

Back then, he notes, there were "very few female faculty at WSU and very few women in our (vet med) classes." His wife faced challenges he didn't. "Most of them were products of the time and sound trite now in the retelling," Sue wrote. "Like discovering that the male graduate student in the program where I was accepted



COURTESY ROBERT RITTER

INmemoriam

received a graduate assistantship that was three times more than mine ... Like having the vet students file a formal complaint because they found it hard to take a pregnant professor seriously."

Her research significantly influenced the fields of nutrition, diabetes, and obesity. Sue Ritter is best known for demonstrating that the ability for the brain to control blood glucose levels and repair deficits depends on groups of neurons in the caudal brainstem. "She identified those neurons," Bob says, "and demonstrated that there were two subgroups of neurons that use the same neurotransmitter. However, one group projects up to the front part of the brain and controls steroid secretion and food intake while another projects down

the spinal cord and controls hormone secretion from the adrenal medulla, which affects blood glucose."

Throughout her career, she gave more than 70 invited presentations and was actively involved with the Society for the Study of Ingestive Behavior, serving on several committees as well as the board of directors. She helped establish WSU's neuroscience baccalaureate degree program, served as a visiting professor of medicine in London and Australia, and won the Sahlin Faculty Excellence Award for Research, Scholarship, and the Arts in 2009. In 2015, the same year she was diagnosed with stage-four ovarian cancer, she was inducted into the Washington State Academy of Science.

The Ritters retired in 2019. In addition to her husband, she is survived by two sons—singer and songwriter Josh Ritter and Lincoln Ritter, a software engineer—as well as four grandchildren.

"There are plenty of colleagues who remember her as a thought-leader," Bob says. "But the things that everybody—from people in sciences to people in her church congregation—remembers her for are her warmth and her smile."

Outside of science, Sue was a painter and a poet who loved cooking, sunsets, and the way wild grasses move in the wind.

"She was a keen observer of nature," Bob says. "She called my attention to the natural world. She was really interested in the way the Palouse hills changed their textures in different kinds of snow and in different seasons. I remember her as a person who noticed everything. That's one of the things that brought us together."

BY ADRIANA JANOVICH

✦ from the *Washington State Magazine* archives: magazine.wsu.edu/first-we-eat
 ✦ *Moscow-Pullman Daily News* obituary: magazine.wsu.edu/sritter-dnews

In Memoriam

Burlington. **DONALD MAX ROSER** ('53 Wildlife Biol.), 89, March 14, 2021, Walla Walla. **ROBERT DEWEY ADKINS** ('54 Comm.), 87, May 5, 2019, Seattle. **ANN M. BARNECUT** ('54 Hotel & Rest. Admin.), 88, September 24, 2020, Petaluma, California. **ALICE MARIE PETERSEN BRISLAWN** ('54 App. Merch. & Textiles), 89, February 17, 2021, West Seattle. **JEAN (KIENBAUM) KOCH** ('54 Hort.), 88, January 29, 2021, Spokane. **ROBERT GRANT LOGAN** ('54 Pharm.), 89, November 1, 2020, Lincoln, California. **ROGER LIONEL PUGMIRE** ('54 Gen. Stu.), 88, June 20, 2020, St. George, Utah. **DONNA J. (REESE) MONTZHEIMER** ('55 Ed., Kappa Kappa Gamma), 88, May 16, 2021, Spokane. **WAYNE KAY PLANK** ('55, '62 MA Music), 84, May 2018, Gig Harbor. **J. ANN SMITHWICK** ('55 Ed.), 87, June 20, 2020, Seattle. **FRANK ARTHUR CROSBY** ('56 Gen. St.), 86, March 19, 2021, Bellingham. **LESLIE "LES" EDWARD HILBY** ('56 Socio., Beta Theta Pi), 87, March 14, 2021, Spokane Valley. **VINCENT H. BROEMELING** ('57 Gen. St.), 87, January 19, 2019, Boise, Idaho. **RICHARD LEE LUKINS** ('57 Pharm.), 88, February 25, 2021, Portland, Oregon. **RICHARD W. PIERSON** ('57 Poli. Sci.), 85, March 27, 2021, Anacortes. **JACKIE VIRGINIA SATTERHWAITE** ('57 Ed.), 84, September 7, 2020, Huntington Beach, California. **CHELLIS (SMITH) SWENSON** ('57 Theatre Arts), 85, May 31, 2021, Tacoma. **MARVIN GAIL ANDERSON** ('58 Gen. St., '68 MAT Biol.), 82, August 5, 2018, Spokane. **JIMMIE D. CHAMBERLAIN** ('58 Hort.), 86, March 5, 2021, Vancouver. **JAMES H. HUBENTHAL** ('58 Arch.), 87, March 10, 2021, Olympia. **JUDITH F. (PEARSON) PARKER** ('58 Lib. Arts), 84, May 9, 2021, Phoenix, Arizona. **ALLEN ROYCE SHULER** ('58 Ani. Sci.), 85, April 30, 2019, Warden. **JACK SPEIR ARMSTRONG** ('59 Zool.), 85, February 10, 2021, Olympia. **ROYAL THAIR CARVER** ('59 DVM), 92, March 6, 2021, Logan, Utah. **HELEN M. (PHILLIPS) DODSON** ('59 Elem. Ed.), 82, June 3, 2020, Yakima. **LAWRENCE J. MCDEVITT** ('59 Civ. Eng.), 84, November 16, 2016, Milton-Freewater, Oregon. **MARIANN**

FAYE MOORE ('59 Math.), 83, May 17, 2020, Huntington Beach, California. **ROBERT DWAIN NELSON** ('59, '62 MS Wildlife Biol.), 88, February 24, 2021, Raymond. **GRACE ALICE PAINTER** ('59 Home Econ.), 81, February 25, 2019, Helena, Montana. **DANIEL MATSON TOMPKINS** ('59 Poli. Sci.), 83, March 23, 2021, Kailua, Hawaii.

60 **DORRENE C. GILBERT** ('60 Ed.), 83, April 14, 2021, Richland. **JOHN CARL SAGERSER** ('60 Bacterio.), 81, June 12, 2020, Lacey. **J. IRVINE BINGHAM** ('61 Biol., '63 DVM), 84, December 28, 2020, Placerville, California. **WILLIAM H. BRUBAKER** ('61 Comm.), 83, May 2, 2021, Edmonds. **MARTIN SAMUEL FAVERO** ('61 MS, '64 PhD Bacterio.), 83, March 28, 2021, San Clemente, California. **MARVIN A. JOHANSON** ('61 Arch.), 81, March 19, 2021, Payette, Idaho. **W. GREG NELSON** ('61 DVM), 83, March 21, 2021, Kuna, Idaho. **MARLENE C. BRUBAKER** ('62 Fine Arts), 80, February 14, 2021, Edmonds. **SHAIKH MOHAMMED "GHAZI" GHAZANFAR** ('62 Busi., '64 MA, '69 PhD Econ.), 84, March 11, 2021, Acworth, Georgia. **BARBARA ANN RATCLIFF** ('62 Anthro.), 80, July 3, 2020, Seattle. **GAIL DIANE TAYLOR** ('62 Soc. Stu.), 80, July 8, 2020, Port Gamble. **CHARLES FREEMAN** ('63 MS Phys. Ed.), 82, January 20, 2019, Saint George, Utah. **TORGEIR A. HAUGLAND** ('63 MAT Math.), 89, July 19, 2017, Kent. **WORTHEN N. HUNSAKER** ('63 MA, '67 PhD Math.), 81, March 31, 2021, Farmington Hills, Michigan. **GEORGE RICHARD OUIMET** ('63 Elec. Eng.), 83, July 27, 2020, Bothell. **WHITLOW WAI LOY AU** ('64 MS Elec. Eng., '70 PhD Eng. Sci.), 79, February 12, 2020, Kailua, Hawaii. **CONSTANCE "CONNIE" JO COOPER** ('64 Socio., Delta Gamma), 81, November 10, 2019, Yakima. **SUSAN ANN ELS** ('64 Gen. St.), 79, May 7, 2021, Davenport. **WILLIAM L. MCLEAN** ('64 Ani. Sci.), 77, April 28, 2019, Coulee City. **ROBERT A. PRIVETTE** ('64 Ed.), 80, February 16, 2020, Sandpoint, Idaho. **ROBERT LYLE WHITE III** ('64 Comm.), 79, April 12, 2021, Ocean Park. **EDWARD A. MCLARNEY** ('65 English), 78, July 20,

2017, Carson. **BARBARA E. MEYN** ('65 Int. Des.), 74, January 8, 2018, Baxter, Tennessee. **LYNNE MARIE NICHOLSON** ('65 Psych.), 78, May 3, 2021, Hailey, Idaho. **CHARLES LEE TOST** ('65 Econ.), 80, May 19, 2021, Fremont, California. **WILLIAM PAUL WELLS** ('65 EdD), 90, June 5, 2020, Penn Valley, California. **RICHARD GUY COWAN** ('66 Chem. Eng.), 78, February 26, 2021, Camas. **DOUGLAS NORMAN HEAD** ('66 Civ. Eng.), 77, March 13, 2021, Carmel, Indiana. **LOIS MERVYN** ('66 MA Speech & Hearing Sci.), 88, October 20, 2020, Pueblo, Colorado. **FLINT TAYLOR** ('66 DVM, '75 MS Microbiol.), 80, February 27, 2021, Taos, New Mexico. **GLORIA MAE WING** ('66 Elem. Ed.), 76, November 22, 2019, Steilacoom. **JOHN AARON BEASLEY** ('67 EdD), 85, May 23, 2017, Hempstead, Texas. **HERMAS JOHN BERGMAN** ('67 PhD History), 92, October 26, 2018, College Place. **JERRY DEAN DAVIS** ('67 Geol.), 74, October 29, 2019, Richland. **LOUISE LAVERN (ROBINSON) NICHOLS** ('67 Busi.), 84, July 31, 2019, Spokane. **DORIS (DULGAR) RUIZ** ('67 Home Econ., Delta Kappa Gamma), 91, May 19, 2021, Henderson, Nevada. **JAMES HOWARD WADDLE** ('67 Arch.), 73, May 31, 2017, Portland, Oregon. **BILL LON ARMSTRONG** ('68 English), 71, January 19, 2017, Redmond. **CHARLOTTE ANN GURNEY** ('68 MAT Ed.), 78, June 26, 2020, Grove City, Ohio. **RODNEY THOR HANSEN** ('68 PhD Math.), 76, November 29, 2016, Colbert. **JACQUELYN L. JANULIS** ('68 Socio.), 75, January 18, 2021, Portland. **LYNN EDWIN VANCIL** ('68 Forest & Range Mgmt.), 74, December 30, 2019, Tualatin, Oregon. **GLEN GERALD KRAUSE** ('69 Hort.), 75, June 8, 2019, Spokane Valley. **TOM LEROY MCLAUGHLIN** ('69 PhD Amer. Stu.), 83, December 24, 2019, University Place. **ANN MARIE MCVICAR** ('69 Psych.), 69, January 1, 2017, Maple Valley. **DOUGLAS GARY SCHLESIER** ('69 MFA), 74, December 16, 2016, Bellevue, Iowa.

70 **NANCE BAFFARO BRACKEN** ('70, '87 MFA Fine Arts), 74, February 26, 2021,

Yakima. **JILL EYMER GREER** ('70 Ed., Alpha Delta Pi), 72, March 16, 2021, Camano Island. **WALTER E. HALL** ('70 MA Poli. Sci.), 83, September 11, 2020, Everett. **LINDA JEAN MATHIS** ('70 Socio.), 71, January 23, 2019, Newport. **MARILYN H. PERKINS** ('70 History), 73, May 19, 2021, Kennewick. **KATHLEEN MAUREEN BAXTER** ('71 Home Econ.), 69, May 3, 2019, Marysville. **DANIEL CHARLES JACKSON** ('71 Ani. Sci.), 79, September 20, 2020, Ronan, Montana. **HENRY JESSE** ('71 MEd), 96, June 25, 2020, Denver, Colorado. **ROBERT GIBSON LINK** ('71 Hotel & Rest. Admin.), 72, September 29, 2020, Tucson, Arizona. **RICHARD R. JOHNSON** ('71 Poli. Sci.), 71, March 26, 2021, Yakima. **FRANKLIN A. NASH JR.** ('71 PhD Psych.), 87, February 17, 2020, Hopkinsville, Kentucky. **FRANKLIN D. WILSON** ('71 MA, '73 PhD Socio.), 78, December 22, 2020, Fitchburg, Wisconsin. **DAVID LEE CHASE** ('72 Entom.), 72, February 20, 2021, Vancouver. **CAROLE A. SEEMAN** ('72 Anthro., '78 MA History), 74, April 2, 2020, Spokane Valley. **CHRISTINE A. SLUSARENKO** ('72 Nursing, Alpha Phi), 71, March 23, 2021, Portland, Oregon. **ROBERT KARL JOHNSTONE** ('73 Forest & Range Mgmt.), 75, November 30, 2020, Kent. **DONALD JOHN LANGAN** ('73 PhD Comm.), 72, September 13, 2016, Babbitt, Minnesota. **DAVID A. MATHIASON** ('74 Gen. St.), 69, April 20, 2019, Seattle. **GERALD LEE MCGINLEY** ('74 Poli. Sci.), 68, February 6, 2021, Mukilteo. **ROBERT "TERRY" PAVLAK** ('74 Busi.), 73, April 7, 2020, Haymarket, Virginia. **GISELA INGE WEIRICH-JONES** ('74 Elem. Ed.), 69, November 12, 2020, Seattle. **RONALD ALAN WYSASKE** ('74 Acc., '89 MBA, Delta Sigma Phi), 69, May 30, 2021, Camas. **JOHN "JACK" LYNN BROWNSON** ('75 Ed.), 64, May 25, 2016, Spokane. **DEL JOHN WINTERFELD** ('75 Music, Ed.), 68, March 31, 2021, Enumclaw. **MARK W. JAMES** ('76 Ag. Ed.), 66, April 17, 2020, Walla Walla. **ALFRED "BUD" LAWRENCE PACE III** ('76 PhD Higher Ed. Admin.), 83, July 29, 2020, Logan, Utah. **MICHAEL BERRY SARTAIN** ('76 Police Sci.), 69, August 19, 2019, Riverton, Wyoming.

TERI ANN ATTEBERRY ('77 Socio.), 61, November 20, 2016, Bellevue. **DENNIS ALAN BASK** ('77, '78 MS Psych., Acacia), 65, November 28, 2019, Snohomish. **DANNY LEE BURGETT** ('77 Env. Sci.), 64, April 20, 2018, Hayden, Idaho. **CHRISTINE MARY DAVITT** ('77 Bacterio., '87 PhD Zool.), 70, January 11, 2021, Pullman. **DEL RAY GEORGE** ('77 DVM), 72, March 12, 2021, Seattle. **JAMES D. WEDDELL** ('78 Arch.), 73, April 8, 2021, Pullman. **MICHAEL FRANK ALBERT** ('79 Hotel & Rest. Admin.), 70, August 30, 2018, Palm Harbor, Florida. **DUANE S. KROSEMAN** ('79 MS Comp. Sci., MEd Couns.), 76, October 21, 2020, Rochester, Minnesota.

80 **RUSSELL "RUSTY" SHELDON CURD** ('80 Gen. Stu.), 61, June 21, 2018, Snoqualmie. **SIMON JOHN MAWSON** ('80 MS Env. Sci.), 67, September 15, 2020, Anchorage, Alaska. **LARRY JAMES MCCONNELL** ('80 Phys. Ed.), 64, December 11, 2020, Clarkston. **DAVID DEAN OLSEN** ('80 Bacterio.), 61, April 25, 2020, West Richland. **GALE S. KENNEDY** ('81 Forest & Range Mgmt.), 63, July 3, 2017, Pasco. **MATTHEW THOMAS PARTLOW** ('81 Comm.), 64, February 24, 2021, Newcastle. **CHARLES P. SMITH JR.** ('82 EdD), 84, April 29, 2020, Spokane. **MARY ANN WIEST** ('82 PhD Math.), 69, March 15, 2018, Clarkston. **CRAIG VANCE WILSON** ('82 PhD Poli. Sci.), 69, October 18, 2017, Shepherd, Montana. **JOHN ALBERT FLYNN** ('84 Elec. Eng.), 59, October 26, 2020, Seattle. **KIRBY DOUGLAS DINGER** ('85 Mktg.), 57, March 13, 2021, Tumwater. **SHIRLEY CHEUVRONT ERICSON** ('85 EdD), 87, January 4, 2018, Placitas, New Mexico. **GEORGE ALLAN FUHR** ('89 PhD Ed.), 83, March 8, 2021, Oak Harbor.

90 **PAMELA JANE CONOVER** ('90 MEd), 71, May 2, 2021, Walla Walla. **BOB BURTON WILLARD** ('90 Fin.), 59, August 21, 2019, Kennewick. **JOHN BURTON RITTER** ('91 Soc. Sci.), 69, November 22, 2016, Vancouver. **CAROL MOHR BATT** ('92 PhD Psych.), 75, March 6, 2021, Federal Way. **ADDIE**

KATHLEEN WILCOX ('92 MA Comm., '98 PhD Lib. Arts), 71, September 29, 2019, Eugene, Oregon. **TRACY L. LARSEN** ('93 Busi.), 50, June 5, 2020, Lake Stevens. **KATHLEEN MARIE (STONE) MOSS** ('93 Soc. Sci.), 64, August 17, 2018, Oro Valley, Arizona. **TRUC Q. TRAN** ('93 Biol.), 55, April 1, 2021, Santa Fe, New Mexico. **BILLIE LOREEN SAAVEDRA** ('94 Pharm.), 78, June 29, 2020, Phoenix, Arizona. **JOHN W. CODDINGTON** ('97 PhD Chem.), 47, January 13, 2019, Kennewick. **THOMAS ANDREW DOUVILLE** ('98 Arch.), 54, March 21, 2021, Tualatin, Oregon. **SCOTT MURRAY REED** ('99 Hotel & Rest. Admin.), 44, April 26, 2021, Bremerton.

00 **TERIE GERILYN (TUMAN) ELLIS** ('00 MBA), 67, May 19, 2021, Yakima. **JEFFREY DEAN KNUTSON** ('00 Crop & Soil Sci.), 54, December 5, 2020, Davenport. **JAMES EDWARD LEONARD** ('00 Acc.), 70, January 9, 2020, Kiona. **ROBERT RUSSELL NIELSON** ('02 MS Civ. Eng.), 55, June 27, 2018, Richland. **SUE ANN WILLIAMS** ('02 Busi.), 66, August 28, 2020, Vancouver. **BETHANY JOANN HOWELL** ('03 MIT Ed.), 42, March 3, 2021, Vancouver. **GAY NELSON** ('09 Soc. Sci.), 80, February 23, 2021, Bellingham.

20 **YANELY V. MENDOZA** ('20 Nursing), 25, May 10, 2021, Richland.

FACULTY AND STAFF

JIMMIE D. CHAMBERLAIN, 86, WSU Vancouver, 1958-2000, March 5, 2021, Vancouver. ✨ **DAVID CROZIER**, 50, Facilities Services, 2018-2021, April 14, 2021, Moscow, Idaho. ✨ **R. WESLEY LEID**, 75, Animal Sciences, 1980-2007, May 8, 2021, Dayton. ✨ **ROBERT MICHAEL LEMON**, 79, Facilities Services, 1967-2004, May 3, 2021, Colfax. ✨ **MICHAEL S. OWEN**, 77, Architecture, 1984-2006, April 13, 2021, Potlatch, Idaho. ✨ **JERRY L REYNOLDS**, 71, Nursing, 1980-2017, March 30, 2021, Spokane. ✨ **WARREN N. WRIGHT**, 75, Educational & Public Media, 1984-2009, March 16, 2021, Viola, Idaho.

BY JEFF WILLADSEN



Io Palmer's large-scale sculpture currently at the PDX (airport) Rotating Art Program (Courtesy Port of Portland)

Artistic distancing

Students crafted sculptural pieces and unleashed their artistic visions from the comfort of their homes this summer.

IO PALMER, associate professor in Fine Arts at Washington State University, created and taught the online course for WSU Global Campus. It was made possible through the use of air-drying clay, eliminating the need for a specialized kiln for firing ceramics. As a result, students could learn the skills required for making ceramics through creating and painting their own unique works of art at home.

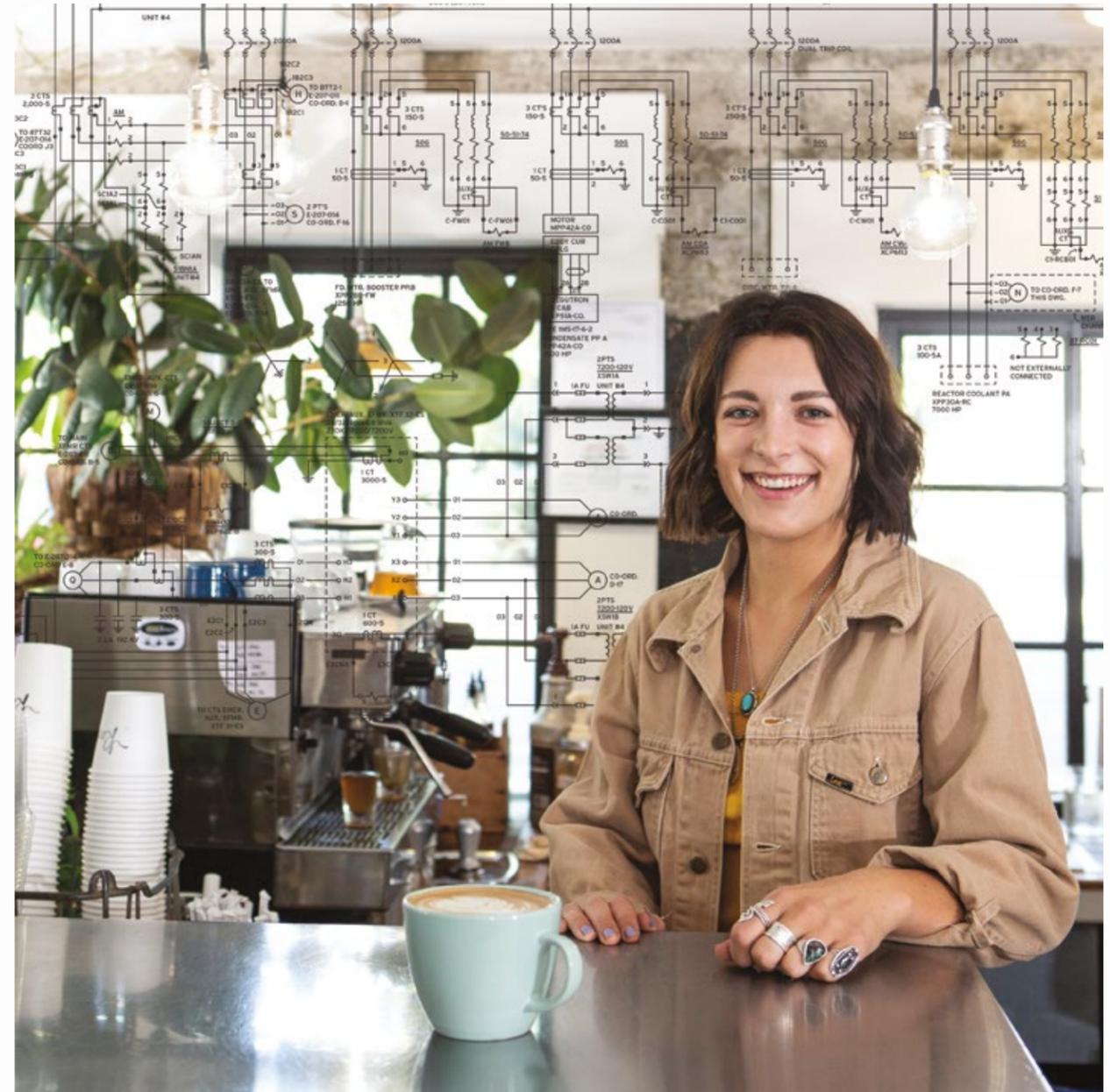
"As a department, we are trained to be resourceful and creative in our thinking," says Palmer. "Creating new and innovative courses like this is really a test for us as creative academics."

Palmer says she got the idea to develop the online ceramics course from observing the popularity of ceramic tutorial videos on platforms like YouTube.

"There is definitely a demand to learn skills like this from home, and I wanted to be able to provide a quality learning experience for online WSU students in Washington state and around the world," she says.

Palmer also says that her passion for elevating underrepresented voices drove her to develop the course.

"In observing the online tutorial videos involving ceramics and 3D art, I saw a lot of room for more diverse and underrepresented voices. It made me want to add my own voice to the conversation, especially from my perspective as a woman of color," she says. "I also want to be an example to my students, encouraging them to fully embrace and express their own unique backgrounds and perspectives." ✨



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