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Cover: “Bridge to Nowhere” (Photo David McNamara) — Remnants of an ocean shores bridge that connected Damon Point to Protection Island

Left: The Jordan Schnitzer Museum of Art WSU’s permanent collection includes approximately 3,800+ works © Nic Lehoux)
New research shows cannabis and some OTC and prescription drugs definitely don't mix.

Our Mount Vernon research and Extension center celebrates 75 years. The NWREC timeline leaves a sizeable legacy.

A View from the Middle, Chasing Ghost Trout, Breaking the Mold NEW MEDIA

CLASS NOTES | Bob Cady x'00 | Chris Winkler '86

IN MEMORIAM

Organic and geometric, reclaimed LAST WORDS

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Washington State Magazine is distributed free to alumni, friends, faculty, and staff. Others can subscribe or gift the magazine for $25 yearly. (magazine.wsu.edu/subscribe)

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

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

We are united in our shared purpose to ensure the financial and educational well-being of our neighbors throughout the Pacific Northwest.

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**Permanence.** The ancient Roman architect Vitruvius conceived of three primary virtues for structures: beauty, utility, and *firmitas,* a term that can be translated as permanence. Naturally, buildings can’t be crafted to last through time immemorial. What is permanence if even stone monuments wear away into sand?

Moreover, as Washington State University architecture professor Ayad Rahmani asks in this issue’s essay, maybe the longevity of structures should be questioned. Rahmani writes about Frank Lloyd Wright’s organic view of buildings and their inevitable decay, and that we should perhaps consider their “measured return to the earth.”

We don’t really expect our buildings to last forever, but we rely on them and other structures, like bridges and roads, to remain stable enough for our safety. As we’ve seen from recent bridge closings and collapses, there’s a pressing need in the United States to evaluate and repair bridges as they age and crack under pressures of increasing traffic and changes in the climate.

WSU researchers in the Voiland College of Engineering and Architecture are leading a national consortium to expand the durability and lifespan of transportation infrastructure, with ideas ranging from self-healing concrete to seismic retrofits with carbon fiber.

The natural landscape certainly isn’t permanent, either. Fires alter forests and fields in significant ways, not all of them bad—if fires don’t burn out of control. Indigenous people across the Northwest and beyond used fire for centuries in a cycle of renewal.

This issue tells how Native Americans in Washington state are bringing back those traditions to prevent massive wildfires. The use of preventive fire is just one piece of knowledge we want to keep. But in the digital era, how do we preserve knowledge stored on obsolete technology? It’s a puzzle that WSU librarians and professors are pondering.

Sometimes knowledge is lost to time, but reminders stay intact. In Ethiopia, mysterious stelae—carved stones—stick out of the ground, but little is known of their history. Thanks to a partnership with Ethiopian universities, WSU graduate students and faculty are starting to unravel the story, and work to preserve the stelae for the future.

Of course, nothing is truly permanent, and we must do the best we can with our time. One fine example is Tim Parish, who retired from the WSU Alumni Association after 18 successful years. He will be missed but his legacy of achievement, expanding the WSUAA in many ways, will remain.
TALKback

Back-breaking work
Truly outstanding work on the asparagus story by Adriana Janovich. I was heartened to see her acknowledge the back-breaking nature of the harvest. Back in 1985, as a young reporter at the Tri-City Herald, I spent two days in the fields cutting asparagus with a migrant farm family, the Acvev. When I say "family," it means every one—mom, dad, three kids ages approximately 14-16, and grandma bringing food to the field for a quick lunch at around 10:30. The back pain lasted more than a week but, more notably, my admiration for the people who bring asparagus to our grocery stores and restaurants has lasted a lifetime. Earnings are based 100 percent on the amount cut and the size, shape and condition of the aspans. As I recall, my poor production equated to about 40 cents per hour. Thanks for bringing the story to Coug Nation.

TIM MELLIN (’72 COMM.)

Editor’s Note: We looked up the 1970-72 Chinks and it does indeed start with a poem featuring Burgerville and accompanying photos over 12 pages. Burgerville closed in 1976 at times had changed and drive-ins began offering more inside dining. Burgerville didn’t have the space, by 1979, the building became the distribution center for the Spokesman-Review and Spokane Chronicle. In 1995, coffee place Daily Grind opened there but closed in 2005. The old Burgerville building was demolished in November 2008 and today is the site of an exhibit welcoming Pullman visitors in many languages.

Memories of Johnson Hall
Johnson Hall at Washington State University Pullman opened in 1962 and is scheduled to be torn down in 2022. A new agricultural research and USDA building will be constructed in its place. We asked alumni, faculty, staff, and friends to share memories of Johnson Hall. Below are just a few of the many responses.

“Many of my classes were held in Johnson Hall as I studied forestry and woodland recreation. I have one very special memory. I posted an ad on a Johnson Hall bulletin board looking to borrow an axe for Dr. Omgé’s silviculture field class. A fellow classmate named John Durkee wrote down my phone number. He didn’t have an axe to loan, but he called and asked me out! We married three years later and were together until his passing in 2016.”
— Karen Durkee ’75

“Woody Kalin was my advisor in ornamental horticulture. I will never forget ‘Plant ID.’ Walking all over Pullman in the dead of winter. Wherever we got the assignment for the class, we had to find the plant to identify. Johnson Hall was never missed.”
— Martha Johnson ’83

“I spent many hours in Johnson Hall as a hort major in 2000-2003. I loved all the indoor plants and the number of plants that were slowly taking over the library, and I loved when the beautiful serviceberry tree would bloom right outside the library doors!”
— Jody Strom ’03

Brad Allen ’10

“It’s spent almost every day of my college career in some room in Johnson Hall. The students dubbed Johnson 22 ‘The Dungeon,’ and that is where I had a 7 a.m. landscape ecology class. The students got together and made a little garden in the basement and they used it for their personal purposes. It was a great class!”
— Vernene Trautman Schauer ’79 MBA, retired staff

Finally in the bag
Thanks for telling me the Burgerville story. I didn’t know what it was until reading the article. I was at WSU 1970-72 and never heard of the place, but always wondered about it because there’s a quote in the 1970-71 blue WSU yearbook that speaks of the place. Early in the yearbook there’s a full-page color picture of a student struggling through the campus snow with the caption: “Burgerville, I am going to murder you… I am going to take a wool muffler & choke your cold weather…”

By the way, when did Burgerville close up shop? What were the circumstances, and what is that spot now?

TIM MELLIN (’72 COMM.)

Congratulations, Galleries!

LAUREATES
Richard and Mary J. Bosser Estate
Rosalie and Harold Rca Brown Foundation
James and Diann Robbers
Joanne R. Washburn Estate

CRIMSON BENEFICIARIES
Jonathan and Kathleen Altman Foundation
Gregory and Jayne Beckel
Cleve and Judith Borth
Bob and Kate Each
Bob Ferguson
Jerry and Linda Klein
Russell K. McCormack
Martha Mullen Estate
Gregg and Judy Nelson
Anonymous (1)

The Washington State University Foundation commemorates the most recent class of WSU’s most generous donors—those who achieved Laureate and Crimson Benefactor giving levels in the previous fiscal year.

Laureates are an exceptional group of donors whose cumulative contributions to the WSU Foundation have reached the $1 million mark, while Crimson Benefactors have reached the $500,000 giving milestone.

Each spring, it is our great pleasure to honor these remarkable individuals, families, and foundations during the Foundation’s annual Recognition Gala. Congratulations to all!

We offer our heartfelt gratitude for all you do to keep the Cougar community strong. Go Cougs!
Hidden in Norway’s icy Svalbard archipelago, the Arctic World Archive holds a collection of cultural treasures and irreplaceable information from nations around the globe. Similar to the Svalbard Global Seed Vault, which safeguards seeds from thousands of essential crops, the World Archive serves as a repository for civilization and knowledge including digital technology and software.

Designed to preserve data into the distant future, the archive holds materials like the source code for the Linux and Android operating systems, and digital versions of political histories, scientific breakthroughs, Rembrandt masterpieces, Vatican manuscripts, and more.

But maintaining our modern digital heritage beyond the Arctic tundra can be tricky. “Software preservation is almost a losing battle,” says Roger Whitson, Washington State University associate professor of English who conducts research in the field of media history. “We can do a lot but at the end of the day, there is no perfect file format that will be accessible forever. Inevitably, these media types degrade, the actual signal we’re trying to preserve degrades, so you always have to be thinking ahead of the current situation. It’s a complicated problem.”

Indeed, computers and formats advance so rapidly that in just a short time, both hardware and software become defunct. And when a floppy disk, CD, or DVD is no longer accessible, all of the information it contains is likewise lost.

Whitson says some scientists fear that massive amounts of the world’s digital information will be lost in what has been called the “digital dark age.” Unlike in the past, very few physical records exist for much of the digital material produced today. On top of that, our digital storage devices are very short-lived. “There’s so much data being produced but we have no real plan to archive that work in any way that’s sustainable,” Whitson says. “Take social media, for example. A lot of people are archiving photos on Facebook or Instagram but these are private companies, not public institutions. What happens if Facebook goes bankrupt one day?”

Whitson says one of the university’s overarching purposes is to act as a citadel of knowledge—to both create new knowledge and preserve old knowledge.
Keeping it green

BY ALEYSN BOSTON

What do potatoes and bananas have in common? Lack of genetic diversity.

It’s not a bad joke. In 1965, Croz Michel bananas went commercially extinct due to a fungal disease that spread throughout the world’s plantations. Today, we eat Cavendish bananas, which is why banana-flavored candy doesn’t really taste like bananas.

A hundred years earlier, the lack of genetic diversity in Irish potatoes left them unable to resist fungal disease, leading to a mass die-off of the crop. The Irish Potato Famine of 1848 claimed a million Irish lives, and millions more escaped the island and migrated elsewhere to survive.

Seed banks are one of today’s solutions to crop diversity, which has been in decline over the past 50 years, and not just for bananas and potatoes. Curators like Barbara Heller, a horticulturist for the Plant Germplasm Introduction Testing and Research Unit at Washington State University Pullman, help maintain a variety of species through cycles of planting and harvesting seeds.

Researchers, hoping to combat climate change, use these seeds to breed more heat-resistant and water-efficient crops. The seeds might also help mitigate plant diseases.

“If researchers don’t have anything to work with, they can’t combat anything new that comes up,” Heller says. “So we provide the source material.”

The Pullman seed bank is one of 18 operated by the US Department of Agriculture’s Agricultural Research Service, and it stores crops that typically grow well in the region.

On a more global scale, in 2004 the United Nations Food and Agriculture Organization founded the Crop Trust, an organization whose mission is to bolster global food security. It operates the Sydnah Global Seed Vault, which stores backups of the world’s crop collections in case of war or disaster, using the island’s location in the Arctic Circle to ensure seed samples remain frozen even in the absence of electricity.

“If we don’t have the building blocks for the future, we’re out of luck,” Heller says. “If we have them in the seed bank ready to go, we’re that much ahead.”

Last fall, he was part of a WSU research team that found that stelae at the Sakaro Sode archaeological site were likely created during the first century CE, a thousand years older than previously thought.

“This is working with Andrew Duff, a WSU archaeology professor and department chair, and the Ethiopion Department of Archaeology and Heritage Management to determine how to manage the stela sites better,” Heller says. “Two of the big challenges of preserving the sites are population pressure and development.”

Melrose says, “We are trying to come up with ways where conserving the monument will benefit the people whose land they are on.”

He explains the Gedeo Zone is located in a rapidly growing region with as many as 1,000 people per square kilometer in some areas. By comparison, the United States has an average population density of 35 people per square kilometer.

This population growth makes land a precious commodity, and some stelae are being torn down to make way for agriculture or development.

To address this challenge, Melrose and his collaborators are proposing a system where revenue from visitors to the sites would be given back to the people whose land is occupied by the stones.

While the largest stelae sites are fairly well protected and fenced, there are a lot of smaller clusters of the stones and individual isolated stelae that are being torn down, Melrose says.

Another local revenue generator for communities could be construction of heritage centers in villages near the stela monuments that could serve as regional museums and provide a place for local goods and crafts to be sold locally.

While the project has been slowed due to the COVID-19 pandemic, Melrose and his collaborators hope to begin implementing their plans in the next couple of years. Their ultimate goal is to develop the Gedeo Zone into one of a tourist destination for Westerners.

“In terms of archaeology, cultural and ethnic diversity, Ethiopia is just a totally fascinating place to visit,” says Barry Hewlett, a WSU anthropology professor who has been working in Ethiopia for more than a decade.

Hewlett played a key role in establishing the relationship between WSU and several universities in Ethiopia that has made much of the recent conservation work and research at the stela sites possible.

He originally went to Ethiopia on a Fulbright scholarship in 2010 with his wife Bonnie Hewlett, also a WSU anthropology faculty member, to teach and conduct research. Since then, Hewlett and WSU have established formal relationships with Hawassa and Addis Ababa Universities in Ethiopia. Now, in part due to WSU connections, Hawassa offers its own doctorate in archaeology and cultural anthropology, with a student who is working in Ethiopia for more than a decade.

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As the snow fell on a frigid Pullman campus last December, family, friends, and cadets gathered in the warm and decorated Lewis Alumni Centre for a ceremony that has taken place on campus for over 125 years. Lucas LeMaster and Thomas Schuett were receiving their commissions as US Army lieutenant colonels from the Washington State University Army Reserve Officers’ Training Corps (ROTC) program.

A familiar face for LeMaster stepped up to the podium as the guest speaker: his father, Major General Dennis P. LeMaster, a distinguished member of the WSU ROTC in 1987 before embarking on a successful US Army career that culminated in 1999. An estimated 10,000 Washington State students have participated as part of the Morrill Land Grant College of Agriculture College, and military science courses were required for all male students as part of the Morrill Land Grant Act until 1976. An estimated 19,000 Washington State students have participated as cadets, with over 7,000 becoming Army lieutenants.

For Major General LeMaster, “the whole experience began for me personally in 1984 and culminates with commissioning my son, so this is the best part of my ROTC experience.” He adds, “I am eternally grateful for the support that the university administration gives to the ROTC program.”

Lucas, who received his civil engineering degree, says it felt like destiny to join the program. “I have always just kind of seen myself coming to Washington State University and joining ROTC, especially after visiting as a junior in high school.”

“I've always just kind of seen myself coming to Washington State University and joining ROTC, especially after visiting as a junior in high school.”

Major General Dennis P. LeMaster (’87 Forest & Range Mgmt). It was a ceremony the general knew well. He was also commissioned through WSU ROTC in 1987 before embarking on a successful US Army career that culminated in his current station as commanding general of the US Army Medical Center of Excellence (MEC).

Major General LeMaster shared his lead with cadets and audience, along with his own memories from his time with WSU ROTC’s Cougar Battalion.

He noted that WSU ROTC “offered me what I’d been looking for since high school—the three generations of LeMaster officers represent an ROTC tradition at Washington State that hails from the beginning of the institution. Army ROTC is the university’s oldest program, in continuous operation since 1892.

Military science was one of eight original departments at Washington Agricultural College, and military science courses were required for all male students as part of the Morrill Land Grant Act until 1976. An estimated 19,000 Washington State students have participated as cadets, with over 7,000 becoming Army lieutenants.

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Another unexpected honor was also given at the December ceremony. The WSU Alumni Association presented both Dennis C. and Dennis P. LeMaster with the Alumni Achievement Award, the highest honor from the WSUAA.

“Army strong” by Larry Clark

If cannabis is your remedy for aches and pains, take note—new research shows its ingredients could potentially cause serious interactions with over-the-counter and prescription drugs.

Since Washington legalized medical marijuana in 1998, cannabinoids like tetrahydrocannabinol (THC) and cannabidiol (CBD) have been used to treat everything from sore joints and anxiety to migraines and the side effects of cancer treatments. But actual data on the effectiveness and long-term impact still lags behind.

Philip Lazarus, Boeing Distinguished Professor of Pharmaceutical Sciences, Washington State University Health Sciences Spokane, recently added clarity to the discussion with studies showing that several chemicals in cannabis interfere with the body’s most important enzyme systems in the liver and kidneys.

“The main focus is on the enzymes which metabolize everything we inhale, ingest, or absorb through our skin,” says Lazarus. “We’re most interested in the cytochrome P450 and UDP-glucuronosyltransferases (UGTs), which metabolize and excrete in urine or feces over 70 percent of the most commonly used drugs.”

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Lazarus says occasional cannabis use in young people is typically not a concern, but for older people who are taking multiple medications, there could be problems.

His studies are based on 30 years of research examining nicotine addiction and the effects of tobacco on enzymes and human health. Four years ago, he extended those studies to cannabis.

His recent findings were published last winter in the Journal Drug Metabolism and Disposition. They are the first studies to investigate the most abundant cannabinoids, their metabolites, and the way they interact with enzymes. Those cannabinoids include THC, CBD, and cannabimimetics.

College of Pharmacy and Pharmaceutical Sciences graduate student Shamsana Naznin was first author on the findings and explained in a press release that although the body breaks down cannabinoids within about 30 minutes, the metabolites can linger in the bloodstream at higher concentrations than the cannabinoids for days.

Lazarus says, “We’re showing that these metabolites are very inhibitory to the metabolism of a variety of compounds. For example, the breast cancer drug tamoxifen needs to be metabolized by cytochrome P450 enzymes into endoxifen, which is the main active compound. But the enzyme necessary for this metabolism is inhibited by cannabinoids.

“A lot of cancer patients are taking or being prescribed medical marijuana and it’s probably not a good idea for breast cancer patients,” he says. “The tamoxifen may not be as efficacious and hypothetically you might see a higher rate of secondary tumors. It has to be studied.”

Another example is ibuprofen. Lazarus says cannabis strongly inhibits both the P450 and UGT enzymes necessary to metabolize ibuprofen.

“If a person is taking cannabis and ibuprofen, it’s a synergistic and long-term, the concentrations of ibuprofen in the body will be higher than normal as it’s not getting metabolized and excreted as quickly. So, the toxic effects of ibuprofen on the kidney and GI tract may be stronger and could happen earlier.”

Lazarus also says many of the major UGT enzymes in the kidney are inhibited by cannabinoids, so people with kidney problems might have trouble metabolizing drugs they previously handled well.

“I think doctors and pharmacists need to be thinking about this, especially those with older patients who might be prescribed CBD or medical marijuana,” he says.

Despite the drawbacks, Lazarus says cannabis offers hope as a potential treatment for opioid and nicotine addictions.

“It’s something we want to study,” he says. “In our lab, we see there’s an interaction between cannabis and the metabolism of opioids like oxycodone and morphine. There are also interactions with benzodiazepines like valium.

“If we could inhibit an opioid user’s metabolism through cannabinoids, maybe they won’t need to take the opioid as much,” says Lazarus. “Maybe they could have less toxicity and addiction.

The same holds for cigarette smokers who might not need to light up as often if nicotine levels stayed high in the body for longer periods of time. A smoker might be able to go from two packs a day to only a few cigarettes a day.

Lazarus makes it clear he is not advocating a ban on cannabis. Drug interactions are common for many medications, including status whose metabolism is inhibited by grapefruit juice.

“Cannabis is used,” he says. “Even though it inhibits enzymes, it’s not enough to cause problems for most people. It’s only when you introduce other drugs into the system that it’s a concern.”
In the early 1940s, global demand for vegetable seed was great and Washington state was a major player, producing spinach, beet, turnip, and cabbage seed for the world market. In fact, it dominated the cabbage seed industry, with 90 percent of the supply.

At the same time, disease was devastating local seed crops. The blight was so bad in winter 1942 that nearly the entire cabbage seed harvest was lost. A "Skagit Area Vegetable Seed Survey" recommended immediate action.

"It was a crisis," says Debra Ann Inglis ('78 MS, '82 PhD Plant Path.), a retired longtime professor and plant pathologist at Washington State University’s Northwestern Washington Research and Extension Center (NWREC) near Mount Vernon.

The cabbage seed calamity—and stakeholders who mobilized around to sow the seeds for the center which celebrates 75 years this year. A commemorative Field Day is planned for July 13, the same day as the center’s first Field Day in 1948. Since its inception one year earlier, the center, part of WSU’s College of Agricultural, Human, and Natural Resources Sciences, has played an integral role in agriculture in northwest Washington and beyond.

The research conducted at NWREC—one specialty potatoes, blueberries, strawberries, red raspberries, cucurbits, carrots, onions, peas, cider apples, soil, pollinators, and cabbage, beet, spinach, and other seed crops—has not only helped local farmers but has made an impact on agriculture worldwide. And, importantly, the community support that helped make the center possible continues today.

The community, over time, has taken action on behalf of the center, and the center has taken action on behalf of the community," says Inglis, who served as interim director of NWREC from 2004 to 2008, two years before and after the center’s revitalization.

In state-of-the-art Agricultural Research and Technology Building opened in 2006 with support from WSU, state and federal monies, and members of the local agricultural community—just like in the beginning.

"What was really exciting for me was, at that time, I was working with the children and grandchildren of some of the people who did the same thing in the ’40s," Inglis says. "That was really meaningful for me, to see history repeat itself."

On June 1, 1943, the US Department of Agriculture, Washington State Department of Agriculture, and other stakeholders agreed to establish a research program to address seed crop problems. Growers, grangers, community groups, and more began raising funds. WSU was asked to help staff the effort.

Thomas Randall, a horticulturist from what is now the Puyallup Research and Extension Center, went to Mount Vernon to oversee the program. C. W. Pounds came from the USDA Bureau of Plant Industry to conduct emergency research. It was his first assignment.

Within a year, Pounds broke the disease cycle by isolating cabbage seedling transplant beds from seed production fields, preventing transmission of the aphid-borne virus. Average cabbage seed crop yields jumped from 402 pounds in 1942 to 908 pounds in 1947. Growers decided they wanted a permanent program, forming what is now the Northwest Agricultural Research Foundation. "They just persevered," Inglis says.

During its first six decades, NWREC, originally known as the Northwest Seed and Truck Crop Laboratory, was a small outfit focused on agricultural problem-solving. It was managed by the Puyallup center and employed two to four faculty scientists and about a dozen staff members, along with five graduate students.

By the 1990s, facilities were deteriorating. "Tractors were breaking down," Inglis recalls. "Moriale was low. We were working out of a cement block building that had big cracks in it. The threat of closure was very, very real, and the local agricultural community was concerned. They didn’t want it to close."

Growers advocated for the center, chartering a plane to Pullman to make their case. A vision committee formed. Fundraising efforts procured about $2.5 million. WSU allocated $6 million.

Today, the 183-acre center has six faculty, 40 staff members, and 25 graduate students. "Our scientists," says interim director Carol Miles, "are world-class."

Their disciplines are vegetable seed pathology, vegetable and small fruit horticulture and pathology, soil science, and plant breeding. They explore alternative crops and herbicide substitutes, crop irrigation optimization, pollination improvements, and new ways to control diseases affecting potatoes, cruciferous seed crops, and blueberries.

They also investigate biodegradable mulches, biofuel crops, high tunnel systems, riparian buffers, pest and disease control measures for conventional and organic production systems, soil quality resilience, managed fruit harvest systems, vegetable grafting, and much more.

"We continue to do what we did at the start," says Miles, a professor of vegetable horticulture at WSU since 1994. "We continue to help growers solve their problems. New issues emerge all the time, and they affect everybody. Our work extends far beyond Washington. It has worldwide significance."

For example, Miles says, NWREC is one of four sites in the world that researches diseases affecting spinach seed crops. And the center played a pivotal role in the current international hard cider industry, partnering with Cornell University to hold classes for people from all over the world on modern hard cider production methods.

The center also hosts many agricultural-themed meetings—from congressional visits to grower workshops and gardening symposiums. The WSU Master Gardeners hold meetings at the center. So does the Washington Farm Bureau and Western Washington Agricultural Association.

"It is a hub," says Sue Christianson ('76 Food Sci. & Tech.), who spearheaded fundraising efforts for the center’s revitalization. She and her husband, Ken, received the 2012 Weldon B. Gibson Distinguished Volunteer Award, the WSU Foundation’s highest volunteer honor.

NWREC is "a community fixture," Christianson says. "It has withstood the test of time."

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Their disciplines are vegetable seed pathology, vegetable and small fruit horticulture and pathology, soil science, and plant breeding. They explore alternative crops and herbicide substitutes, crop irrigation optimization, pollination improvements, and new ways to control diseases affecting potatoes, cruciferous seed crops, and blueberries.

They also investigate biodegradable mulches, biofuel crops, high tunnel systems, riparian buffers, pest and disease control measures for conventional and organic production systems, soil quality resilience, managed fruit harvest systems, vegetable grafting, and much more.

“We continue to do what we did at the start,” says Miles, a professor of vegetable horticulture at WSU since 1994. “We continue to help growers solve their problems. New issues emerge all the time, and they affect everybody. Our work extends far beyond Washington. It has worldwide significance.”

For example, Miles says, NWREC is one of four sites in the world that researches diseases affecting spinach seed crops. And the center played a pivotal role in the current international hard cider industry, partnering with Cornell University to hold classes for people from all over the world on modern hard cider production methods.

The center also hosts many agricultural-themed meetings—from congressional visits to grower workshops and gardening symposiums. The WSU Master Gardeners hold meetings at the center. So does the Washington Farm Bureau and Western Washington Agricultural Association.

“It is a hub,” says Sue Christianson ('76 Food Sci. & Tech.), who spearheaded fundraising efforts for the center’s revitalization. She and her husband, Ken, received the 2012 Weldon B. Gibson Distinguished Volunteer Award, the WSU Foundation’s highest volunteer honor.

NWREC is “a community fixture,” Christianson says. “It has withstood the test of time.”
WHEN HIS SCHOOL CALLED: Tim answered.
Washington State University President V Lane Wail-was convinced Tim Pavish (BIO Comm.)
was a longtime volunteer, in 2003 and encouraged
him to apply for executive director at the WSU
Alumni Association.

Pavish got the WSSA position and, 18
years later, still loves it. He notes how,
as new leader of the Alumni Association, he
was called every day to the executive director
desk to deal with all kinds of questions and
issues.

Tim spent 18 years as the Alumni Association's
executive director. Pavish retired from WSUAA in
2021. Over the years, Pavish recruited new leaders
and built new programs. One of his proudest
moments was when the Association was named
NNI to the WSSA Board.

Pavish certainly leaves a legacy stamped
with his hallmark energy, smile, good-natured
smile, and dedication. He was a leader who
was always there for his team, always ready to
help.

Pavish's leadership, the Alumni Association grew
from 13,000 members to around 44,000 mem-
bers. When he started, they held 100 events a
year and now average over 1000 events annually.
The WSU license plate program also brings in
about $710,000 a year for scholarships.

Even when the COVID-19 pandemic struck, Pavish
wasn't phased. “Membership actu-
ally grew in the last couple of years, as Pavish
and the team converted popular programs,
like the Feast of the Arts to a virtual, a virtual
gathering of Cooks with wine, food, and
special guests. In the month prior to each event,
Pavish notes other events, too, like a video meeting
with farmers and former in Bolivia.

President Spangler gives a tremendous deal of
credit to Tim Pavish for the growth of the Alumni
Association. But Tim made this a very
time-consuming job, yet Pavish managed to
balance his work with his family: wife Carol, child
and his dog, Ollie.

When he started, they held 100 events a
year and now average over 100 events annually.
The WSU license plate program also brings in
about $710,000 a year for scholarships.

As Pavish left, he left behind a legacy
that will continue to grow and flourish under
new leadership.

I've always considered myself extraordinarily
fortunate to have received the education I
did,” Pavish says.

After graduation, he credits every job to
Coug connections: communications for the
state's Apple Commission, roles up to managing
director at DDB Worldwide, and eventually leading
WSUAA.
Pavish was also an ambassador on the
Foundation Board of Trustees, and a
member of the WSU Athletic Foundation Advisory
Committee, Advancement Communications
Committee, and the Professional Advisory Board
of the Maroon Course.
Fish Fans made waves

BY ADRIANA JANOVICH

Goggles weren’t allowed. But nose plugs were encouraged: “If you ran out of air and you didn’t have your nose plugs on, you created a vacuum and water would rush into your nose,” explains Marlene Giese ('67 Ed.).

Giese, a member of Washington State University’s synchronized swim club from 1965 to 1967, was part of a once-longstanding Cougar aquatic tradition. Fish Fans drew sold-out audiences during Mom’s Weekend crowds for 70 years, often entertaining the natatorial program wasn’t even an entire century as ornamental swimming, or water ballet. The sport combines costumes, music, and choreographed moves in routines meant to look elegant and effortless. But they require tremendous flexibility, endurance, breath control, and core strength. “You have to be a really strong swimmer to be able to do this,” Chevrier says. “A lot of people don’t realize what a disciplined sport it is.”

When he was in Fish Fans, practice was held twice weekly in Smith Gym pool and increased in frequency leading up to shows. “We would run through the entire show over and over again,” he says. “It was exhausting.” Chevrier doesn’t remember having to try out. But archives show Fish Fans used to hold tryouts twice in October—including finals. The Manuscripts, Archives, and Special Collections at WSU Libraries includes a hand-written, undated skills test for would-be members. Among them: jump in, straight-arm crawl, alternate ballet legs, back pike somersault, front pike somersault, dolphin.

The first mention of what would become Fish Fans appears to be an April 1929 Evergreen article. The story in the student newspaper detailed Mother’s Weekend activities in three paragraphs. The part about the natatorial program wasn’t even an entire sentence: “A swimming exhibition by women students will be given during the afternoon in the new gymnasium.” It reads. The new gymnasium was Butler Gym, which opened in 1928 with a basketball court, pool, and handball courts.

That initial exhibition was organized by Lois Carrell, a physical education instructor and Special Collections at WSU Libraries for 1979’s “Time Passages” show, advised the club from 1944 to 1952. Sue Duranti ('02 MS Phys. Ed.) served from 1962 to 1968. Diane Albright took over in 1968, retiring in the late 1980s. By then, Fish Fans was treading water. A 2000 Evergreen story noted the now-defunct team had three members “for the past two years,” but was now up to six. “...we don’t want to have to put an end to a club that has been around for so long,” freshman Ellie Diehl ('03 Nursing) told the student newspaper. At that point, the Evergreen noted, “the club will accept anyone who is interested.”
IN SEASON

**Strawberries**

**BY ADRIANA JANOVIĆ**

**THESE LUCIOUS RUBY COLORED GEMS** embody the gentle, fleeting sweetness of summer. Their season is short, just two to four weeks for most June-bearing varieties. You don’t want to miss it.

Pacific Northwest strawberries—delicate, flavorful, highly perishable—are mostly grown for processing. The fresh fruit is too fragile to travel far.

“Most Pacific Northwest strawberries are not going to stand up to shipping and handling,” says Wendy Hoashi-Erhardt, who directs the small fruit breeding program at Washington State University’s Puyallup Research and Extension Center. “But, as a frozen export, our strawberries are enjoyed all over the world.”

Washington state is known, she says, for its “really deeply colored and richly flavored fruit.” But only a small portion of its strawberry crop is sold for fresh use. So when you find locally grown strawberries at a farm stand or farmers market, snatch them up.

They’re best enjoyed the day they are picked—paired with whipped cream, dipped in chocolate, tossed with baby spinach leaves and balsamic vinegar, arranged atop a tart or Pavlova, or puréed into sauces for pancakes, desserts, or a rich and savory entree. Strawberry sauce goes great with tangy goat cheese and tender beef steak, the signature dish at Amsterdam’s cozy and popular Van Kerkvliet restaurant. Why not attempt to recreate it at home with WSU Premium Beef and WSU-developed strawberries?

Several of the most popular varieties grown today in Washington, Oregon, and British Columbia were developed by WSU or are derived from WSU cultivars. The newest WSU strawberry release, Puget Crimson, debuted 12 years ago. The extra-plump and juicy variety was first cultivated by now-retired WSU strawberry breeder Patrick P. Moore and Hoashi-Erhardt. Moore also developed the Puget Reliance and Puget Summer varieties, respectively released in 1994 and 1998.

WSU breeds strawberries (Fragaria × ananassa) for hardness, high yields, disease resistance, and characteristics such as firmness and stase—along with that aforementioned intense color and flavor. These qualities are coveted for use in high-value products such as ice cream, yogurt, jam, and frozen whole-berry mixes.

Most Washington state strawberries are produced in Skagit and Whatcom Counties. But strawberries grow well throughout Western Washington, which offers an “an ideal environment” for growing strawberries, Hoashi-Erhardt says. “Strawberries tend to grow well where temperatures are mild in both winter and summer.”

Washington state has a long history of cultivation, dating to the 1830s. But, during the last 50 years, Hoashi-Erhardt says, “The market has changed a lot. Washington and Oregon used to be major strawberry producers in the US. Starting in the 1970s, California became the dominant player.”

Puget Crimson—grown more than tripped between 1974 and 1994. Today, California grows more than 90 percent of the nation’s strawberries. Washington grew about 1 percent.


Hoashi-Erhardt is part of a team of regional researchers proposing to study the state of the Pacific Northwest strawberry in an attempt to strengthen the industry following the dissolution of the Washington Strawberry Commission in 2018. The project includes an economic analysis as well as establishing a grower task force to determine the feasibility of organizing a new association to oversee marketing and set priorities.

Strawberries—not true berries, but aggregate accessory fruits—have been part of the breeding program at WSU Puyallup since the early 1940s. Chester Schwartz (24, ’55 PhD Hort.), Washington State’s first official strawberry breeder, developed nine varieties before retiring in 1970. In all, WSU has released 13 varieties.

Fun: “Lots of important varieties are derived from WSU material,” Hoashi-Erhardt notes, such as Sweet Sunrise, released in 2014 by the USDA in Corvallis, Oregon. The offspring of WSU’s Puget Reliance, Sweet Sunrise is one of the earliest varieties to ripen. It has high yields, large fruit, and sweet flavor, and is suited for both processing and fresh use.

WSU’s focus has historically been on June-bearing varieties. In the 2010s, the program was also developing day-neutral and ever-bearing strawberries, productive from May to October in Washington and well-suited for the fresh market.

US consumption of fresh strawberries has nearly doubled in the past 20 years, up from 4.86 pounds per capita in 2000 to 8.5 in 2020. The demand is there, says Hoashi-Erhardt, the fifth person to direct WSU’s small fruit breeding program. She took the helm in 2020.

“I personally think strawberries have a special place in Washington as a specialty crop,” she says. “Everyone loves strawberries. And we produce some of the best strawberries in the world.”

One of her favorite ways to enjoy them is to simply buy a flat of Puget Crimson and take it to a party. Says Hoashi-Erhardt, “They are gone in 15 minutes.”

**Popular WSU-developed strawberries**

**Puget Crimson (2010)** is a late-season, high-yielding, large-fruited, June-bearing strawberry with excellent flavor and color. It’s moderately firm and well suited for both processing and fresh use, but generally favors fresh use. “It is, in my opinion, the flavor standard of strawberries grown in the Northwest,” Hoashi-Erhardt says. “People ask for it by name at farm stands because of its fresh-eating quality. It’s one of the best-flavored strawberries you can get here.”

**Puget Summer (1998)** is a medium-sized, very late-season strawberry with excellent flavor and low fruit rot. Plants peaked at 780,500 in 2012 in Washington, Oregon, and British Columbia.

**Puget Reliance (1994)** is a virus-tolerant, mid-season, high-yielding strawberry with good flavor and color. Its fairly soft large fruit is best suited for processing, but some growers also produce this variety for fresh use. Plant sales peaked at 1.823 million in 2007 in Washington, Oregon, and British Columbia.

**Rainer (1972)**—still widely grown today, features large fruit and excellent fresh flavor.

**Shuksan (1970)**—a hardy variety also with excellent color and flavor, is still widely grown.

**Other WSU-developed strawberries:**

- Tillikum (1983)
- Olympian (1973)
- Quinault (1967)
- Nisqually (1957)
- Columbia (1960)
- Cascade (1950)
- Puget Beauty (1956)
- Northwest (1949)

**FUN FACT:** National Pick Strawberries Day is May 20

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20 IN SEASON

21 Populor Wsu-DelopDed Strowberries
When Seattle engineers spotted cracks rapidly widening in 2020, the city made the tough call to shut down the bridge, one of the busiest in Seattle, disrupting a major route in the interest of safety. The repairs, slated for completion this summer, will restore the thoroughfare.

To the east, near downtown Spokane, a major bridge on I-90 in poor condition also desperately needs structural fixes, even as an estimated 40,000 vehicles traverse it every day.

Just a few miles from there, Rosamond Avenue Bridge crosses over I-90, but the bridge was closed last April because of cracks and heaving on the deck—and no funding to fix it.

Millions of vehicles rumble across more than 634,000 bridges every day in the United States. Many of them are in poor condition and getting worse, along with countless miles of roads requiring maintenance in the Pacific Northwest and across the country.

Yet, it’s not just about steel, concrete, and asphalt.

“The risks to reliability and safety of the overall system affect everybody’s daily life,” says Xianming Shi in the Voiland College of Engineering and Architecture at Washington State University. “We’re at a stage where we can send people to Mars, we can think about flying cars or autonomous vehicles, but our bridges are in such a dire condition and roads are full of potholes.”

Shi studies ways to improve bridges and roads as a professor in the Department of Civil and Environmental Engineering. He also leads the National Center for Transportation Infrastructure Durability & Life-Extension (TriDurLE), a consortium of 11 universities funded as the only national center with the focus on infrastructure durability, sponsored by the US Department of Transportation. The researchers from WSU and around the United States aim to make bridges and roads more durable and significantly increase their lifespans.

It’s a driving need. The bridge collapse near Pittsburgh, Pennsylvania, that injured ten people earlier this year alerted people again to the desperate state of the largest transportation infrastructure system in the world.

The American Society of Civil Engineers gave US roads a “D” and bridges a “C” grade in 2021, with nearly $790 billion needed in immediate investment. Those structures face wear and tear hastened by climate extremes, natural disasters like earthquakes, and increases in traffic as populations grow.

Through advanced and cost-effective technologies such as nano-sealers for concrete, carbon fiber reinforcement of bridge columns, and AI-driven monitoring, Shi and the national center’s members work with state and federal transportation departments, as well as business partners, to better secure bridges and roads for travelers.

Mark Gaines, state bridge engineer with the Washington State Department of Transportation (WSDOT), has worked for almost 22 years on the state’s transportation infrastructure. He doesn’t sugarcoat the problems.

Gaines says Washington state is only about 40 to 50 percent funded on preservation needs for bridges. “That means our bridges get about 50 cents on the dollar for what they actually need to be maintained in a state of good repair,” he says. “The consequence is that, over time, we’re going to see the condition deteriorate. Right now, we’re at about 6 or 7 percent poor bridges.”

He does note that poor conditions are different than safety issues. “Safety is managed by our inspection teams and if we see a bridge isn’t safe out there, we take quick action to restrict or to shut it down.” The city of Seattle made a similar call with the West Seattle span, which is not managed by WSDOT, Gaines notes.

Still, he says, if poor conditions aren’t eventually addressed, there will be more closures, more load postings, and more restrictions on bridges as they deteriorate. In 2021, WSDOT managed 3,143 bridges and 111 of them were load-restricted or load-posted.

The deferred work on many bridges adds to the state’s fix-it list, too. WSDOT-owned bridges in poor condition increased from 164 bridges in June 2020 to 179 in June 2021. The number...
of bridges 80 years old or older — those with the most significant needs — climbed from 292 in June 2020 to 302 in June 2021.

It’s not a problem unique to Washington state. About 8 percent of US bridges are considered poor. One out of every five miles of highway pavement is in poor condition.

The TriDurLE consortium works with WSDOT, Idaho Department of Transportation (ITD), and other state transportation departments to not only mitigate existing issues, but also find new ways to extend the lifespan of bridges and roads. The universities in TriDurLE, led by WSU, cover the United States and are charged with innovative research that’s high risk and high return at times, Shi says.

“We have around 50 ongoing seed-grant projects looking at, for instance, self-healing concrete, greener ultra-high performance concrete, and drone-enabled bridge inspection,” he says. “We can quickly diagnose the post-earthquake condition and residual load-bearing capacity of bridge piers, coupling artificial intelligence algorithms with images captured by drones.”

A few other areas of inquiry include using resources such as recycled plastic and fly ash in asphalt and concrete, repurposing agricultural waste for concrete and, designing bridges to be more resilient in earthquakes. The national reach of the center helps the scientists understand regional differences, as well.

“WSU researchers are also looking at alternatives for the more than 20 million metric tons of salt dumped on US roads to keep them clear of ice and snow,” Shi says. “This work could make a big impact on bridges that are already compromised.”

“Once the concrete’s cracked, all the water, salt, CO2, everything gets in much faster. So, from that point it’s usually three to ten years before a bridge is failing,” Shi says. “You don’t want to get to that stage; you want to intervene earlier.”

The typical lifespan of a bridge is 50 to 75 years. But with this kind of intervention early on, you can make that bridge last 100 years or 150 years.

While WSU researchers are also looking at alternatives for the more than 20 million metric tons of salt dumped on US roads to keep them clear of ice and snow, Shi’s work could make a big impact on bridges that are already compromised.

The novel sealer developed by Shi and Li is also water-based and more environmentally friendly. It’s not just something happening in the lab. They’re looking at how to engage students, especially those in diverse and underrepresented groups, to join research and get them interested in a transportation career,” he says.

Shi’s own academic background gives him an interesting perspective on transportation infrastructure. Although he’s a fellow of the American Society of Civil Engineering, Shi studied industrial management and chemistry, and in particular polymer chemistry and corrosion protection, which are highly relevant to bridge engineering.

Shi’s research team, for example, has applied understanding of chemistry to develop nano-engineered penetrating sealers to keep moisture out of concrete and fill cracks in bridges and other structures.

Roadway debris (including rock salt) and moisture can accelerate the failure of concrete structures that endure freeze and thaw cycles. With some cracks smaller than the human eye can see, such culprits make their way inside the concrete and could corrode the steel rebars.

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The novel sealer developed by Shi and WSU graduate student Zhipeng Li showed a 75 percent improvement in repelling water and a 44 percent improvement in reducing salt damage in laboratory studies compared to a commercial sealer.

They added two nanomaterials, graphene oxide and montmorillonite nanoclay, to a commercial penetrating sealer, which further repelled water and made concrete denser. That makes it more difficult for moisture to penetrate and forms a barrier against physical and chemical damage from deicing salt.

The sealer developed by Shi and Li is also water-based and more environmentally friendly. They have applied for a provisional patent and, after a pilot study in Pullman over the next two years, the researchers would like to see the technology commercialized.

WSU had already started seismic retrofitting on bridges built before 1983. Bridges constructed from 1983 on were designed for seismic events and are expected to perform reasonably well during an earthquake. In recent years, Gaines says, the department concentrated on “linking” bridges, ones designed so that emergency vehicles and suppliers can use them even in the worst disasters.

After 2001, WSDOT completed retrofits on 323 bridges and partial retrofits on 114 more. Several high-profile bridge projects in the central Puget Sound area increased seismic resilience, especially the 2016 opening of the new SR 520 floating bridge and the 2019 Alaskan Way Tunnel replacement of the original damaged viaduct.

A number of bridges, particularly 103 of them along lifeline routes, still await work. It’s a pressing concern for the department, especially with the possibility of a massive earthquake along the Cascadia Subduction Zone.

Gaines says that older bridges “are not designed for lateral movement of the ground shaking that you’re going to see during a significant event. So, one of the susceptibilities for most of the bridges from before the 1970s is in the columns.”

The traditional method of reinforcing bridge columns against seismic damage is surrounding them with a steel jacket. It leaves a bit of a gap between the concrete columns and the jacket, which is filled with cement grout to ensure full contact between the column and the jacket. The department is looking at moving more toward carbon fiber and composite type materials, which are generally as effective as steel jackets in confining the columns but are often easier to install.

WSU civil engineering researchers Chris Motter and Adam Phillips, both part of TriDurLE, have been analyzing bridge column jackets made of steel and carbon fiber, as well as resilience in a large and long seismic event.

“Seismologists are starting to better understand what we can expect from the fault,” Motter says. “They’re talking about a large magnitude, long duration earthquake. So, it could be strong shaking for multiple minutes. We’re trying to really get that feature of the earthquake into our study.”

**WASHINGTON STATE**

**BAD BREAKS**

**WASHINGTON STATE MAGAZINE**

**SUMMER 2022**

**WASHINGTON STATE**

**BAD BREAKS**

**WASHINGTON STATE MAGAZINE**

**SUMMER 2022**
20 years. "Generally, a longer bridge is going to have a longer period of vibration. It will oscillate back and forth slower than a shorter bridge."

Many bridge columns, they say, tend to be pretty brittle if they don’t have much rebar in them. A jacket, steel or otherwise, maintains the integrity of the column. In a long duration earthquake, though, the vertical rebar actually fractures from the fatigue. According to Motter and Phillips, the advantage of a carbon fiber jacket is mostly twofold. First, there’s less corrosion than steel, which is even more important in places close to salt water. Second, as Gaines noted, installation costs less and is more convenient.

Steel jackets require heavy equipment and possibly shutting down lanes of traffic. With carbon fiber, Motter says, “they can show up in a pickup truck, pull off the road and just do it. And the vertical rebar actually fractures from the fatigue.”

Phillips says they’re encouraged by the results of their study so far which show that bridges with retrofitted columns can withstand a powerful, longer earthquake.

Gaines says the most important thing is that, by designing new bridges and retrofitting older ones for larger earthquakes, WSDOT and other transportation departments in seismically active states can keep the bridges standing and save lives.

The pair work with University of Washington and US Geological Survey experts, who simulate Western Washington ground motions from a rupture of the Cascadia Subduction Zone. Motter and Phillips use that information to run bridge failure simulations, also using materials donated by Simpson Strong-Tie.

Phillips says the structural dynamics of a bridge change the reaction, too. "Generally, a longer bridge is going to have a longer period of vibration. It will oscillate back and forth slower than a shorter bridge."

A ROAD TO SOMEWHERE

While earthquakes might not be as much of a concern in the Inland Northwest, weather and other conditions wear down roads as well as bridges. Drive east from Spokane on I-90 and you’ll end up on Idaho roads and bridges that face, like Washington and all states, a backlog of needs to make sure people can travel safely.

One way to prioritize that list of projects is to use machine learning to determine the best use of funds. In coordination with TriPartLE and Shi, the ITD is developing better prediction models powered by artificial intelligence to more reliably determine when to intervene and prevent deterioration.

Riley Bender (’16 Civ. Eng.) is the district materials engineer for the ITD based in Lewiston. He coordinates with WSU researchers on the project, which wraps up this summer.

“We use the data that we collect on roads every year, on things like cracking, rutting, and smoothness of the road, to help us plan future paving projects. That’s something that every transportation department does as part of a requirement for federal funding,” Bender says.

The new model is a more advanced prediction of how pavement deteriorates. Asphalt will fail, he notes, and “if we can better predict the failure of pavements over time, we can apply the right fix at the right times, which in turn helps us preserve the whole statewide highway system.”

Weather and traffic factor into the algorithms, too, allowing the ITD to take a targeted approach to their road fixes. In 2020, 87 percent of Idaho’s roads were in good or fair condition, and Bender would like to see that get even better.

“I drive on the highway, just like everybody else,” Bender says. “I want to make sure that it’s to the requirement that we need.”

A BETTER PATH TO TRAVEL

Shi compares the growing problems with bridges and roads to deferred car maintenance that ends up costing more. “If you intervene at the right time early on, then you spend $10. But if you don’t, five to ten years later you end up spending $60 to $100 to fix the problem.”

With that domino effect, he says, we cannot keep up with maintenance in an annual budget and thus need a boost in funding. The federal infrastructure funding could help in that regard, says Shi, but more is needed—possibly from states or the private sector.

“One thing I took away from my education as an industrial engineer is that no matter how good the system is, there’s always room for improvement,” Shi says. “We’ve talked about infrastructure for decades. We can’t keep kicking the can down the road.”

Shi says one big task is getting ideas from the lab to the streets. Partnerships with companies such as Kiewit and Simpson Strong-Tie could really bolster the work, Shi notes. “They’re more experienced in bringing technology to practice. We need better coordination and collaboration between industry and academia.”

What are Washington state’s bridge conditions? Check the map at: magazinews.wsu.edu/extra/bridge-work
Rethinking a virtue at long last

BY Ayad Rahmani

Of all the virtues of architecture, permanence ranks among the highest. Throughout history, cultures have relied on it to impress upon the future values of the past. This is why we know so much more about Egyptian kingdoms, Greek democracy, and Roman jurisprudence, than, say, the Marsh Arabs of Iraq. Where the former built with brick and stone and later concrete—materials that outlast the onus of time—the latter did so using reeds, harvested from waters gathered at the confluence of the Tigris and Euphrates Rivers. The former is permanent, the latter inherently impermanent and subject to the perennial cycles of biological life.

It is said that the Roman emperor Nero, CE 37-68, intentionally set Rome on fire just so that he could rebuild it using materials more robust and lasting than the ones in place, and to match in architectural grandeur Rome’s imperial power. That story was never fully corroborated, except that it was well known that Nero hated Rome’s merk and ticky appearance. He wanted more.

Some claim the same happened in nineteenth-century America, when cities simply did not match in power and ambition the locomotion of industrial expansion across the country. Every year a new devastating fire seemed to consume yet another town, taking down ticky buildings and laying bare the potential for a new civilization. We know of the big one in Chicago, the “great fire” of 1871, which took place just about that time when the city was quick to acquiring power as the “economic hub of the great Midwestern hinterland,” as one historian put it. “Though the 1880s, lumber companies continued to cut white pines in the great north woods of Wisconsin and Michigan and float them by barge down Lake Michigan to Chicago…. The flimsy buildings couldn’t abide anymore: they lacked the ability to inspire the imagination and complement in strength and promise the activity on the ground. They had to go in favor of sturdier and more sophisticated structures. The fire was blamed on a cow which allegedly tipped a candle. If so, it is likely that someone with a mind for renewal covered the cow in that direction.

Closer to home, Spokane suffered the same fate in 1889, the fire there taking out 32 blocks, just in time for the great mining and lumber prospectors to set up shop and rebuild anew, with more permanent materials. Which they did, including an auditorium building and several great mansions to rival similar ones in Chicago. Investors took note, as far away as Holland, impressed by the plan underway. Of this change, one investor said, “I have never seen a small town which offers such an overwhelming impulse to building as Spokane does.” Still, flimsy buildings couldn’t abide anymore: they lacked the ability to inspire the imagination and complement in strength and promise the activity on the ground. They had to go in favor of sturdier and more sophisticated structures.

Or to take as an example the letters of Horatius Greenough, Emerson, Thoreau, and other nineteenth-century American thinkers. Like a plant, architecture, he thought, must grow from the seed out, feed a need and a culture, but then return to the soil. To think and do otherwise was to risk suffering the consequences of obsolescence, ridicule, and, perhaps worst of all, a culture too eager to turn everything into a spectacle. As arrogant as Wright may have at times seemed, the last thing he wanted was for his buildings to fall victims to commercialized worship. Better let buildings go than turn them into tourist attractions, putting the onus on the present to bear fruit. The design of a house should emanate from a clear understanding of current conditions, be they related to time, family, budget, and more. Once gone and those parameters are no longer valid, however, the house should subsist, its power and worth now a function of the lessons it affords, not the style it had up.

It is not for nothing then, that when asked which of his buildings he liked the most, Wright always answered “the next one,” the last one, and all previous ones, having already entered a process of decay. What worth they had, it was embedded in the way they inspired a new generation of buildings. It is also not by accident that when he came to design walls and roof, he often made them paper thin, and this to invite nature in, quickening the process of erosion. Clients often complained, calling the architect at odd hours, unhappy about the fact that water had entered the building and ruined their dinner. Upon one such call, Wright simply asked the client to move his chair three feet to the left and ended the call. Absurd and insensitive, absolutely, but profound nonetheless in the way that Wright urged Americans to contend with the forces of nature. Too often they resisted it, shutting the world out and inhaling bad air. To be sure, Wright never designed anything with the intended purpose that it should leak or fall apart, but he did, at least conceptually, challenge the distinction between inside and outside and with it modern resistance to weather and time.

In California, in the 1890s, he would quicken the effect and give us what in essence were architectural ruins. These were homes designed for modern and progressive clients but which looked like they had been around for 3,000 years, synonymous with some of the more prominent Mayan ruins in Mexico. Dubbed the “textile homes,” for the way Wright designed their cladding to look like woven fabric, they seemed to succumb to the march of time. The results were influential, impacting more than one architect around the world, most famously the Venetian architect, Carlo Scarpa, active throughout the middle of the twentieth century. No sooner did Scarpa come across Wright’s work early in his career than he adopted it as his philosophy back in Italy, appropriately so, given the historic context of that country. Unlike other modernists who produced polished works, using glass and steel, he followed Wright and gave us what amounted to ruins. At the Brion Cemetery, near Treviso, Italy, he would step the concrete back and forth in such a way to achieve that effect, as if the whole mass of the building had been eaten by time and restored back to nature.

In the end, and despite Wright’s passion for dissolution, his work had acquired a following, loved across the world and certainly America. As much as he wanted it to subside and return to nature, the whole nation had rallied to protect and keep it around. In the 1980s a small group of scholars and architects, but also from other walks of life, would gather and form the F.L. Wright Building Conservancy, to preserve as many of the architect’s buildings as possible. Hard work on that front was soon underway in earnest, finding great accomplishment in 2018 when eight of Wright’s most iconic buildings were finally selected to become UNESCO World Heritage Sites, on par with the likes of Babylon, the Parthenon, and Chartres Cathedral.

Cultures have always had a contentious relation with architectural permanence: in one sense an important contribution to heritage and national identity, on the other a shackle from which to break and find intellectual freedom. America has had a particularly bad case of the cosmopolitan, monumental buildings. “To be true,” said Wright, “is not the fire that first inspired the Dutch to invest in the Inland Northwest, but the arrival of rail. Still it was the fire and the promise of building activity that kept the foreign bankers around. Investors took note, as far away as Holland, impressed by the plan underway. Of this change, one investor said, “I have never seen a small town which offers such an overwhelming impulse to building as Spokane does.” Still, flimsy buildings couldn’t abide anymore: they lacked the ability to inspire the imagination and complement in strength and promise the activity on the ground. They had to go in favor of sturdier and more sophisticated structures. The fire was blamed on a cow which allegedly tipped a candle. If so, it is likely that someone with a mind for renewal covered the cow in that direction.

In their book On Weathering, Mohsen Mostafavi and David Leatherbarrow start by writing, “No building stands forever, eventually everyone falls under the influence of the elements, and this end is known from the beginning.” How true and yet also how difficult to accept, not least because we need monuments to help us shape cultural identities. Perhaps, in the end, what matters is less permanence or impermanence but the manner with which we pace the transition between the two. Not all structures need to stay but all deserve a measured return to the earth, commensurate with the pace of those who had lived and come to rely on them.
Lightning shattered the hills surrounding the Colville Indian Reservation late in the night of July 12, 2021. By the next morning, wind-driven flames had devoured more than 10,000 acres near Nespelem in north central Washington.

“It hit so unexpectedly that it destroyed at least seven structures including family homes,” says Linda McLean, Washington State University Extension director for the Colville Reservation. “The fire killed wild horses on the range and livestock in pastures with nowhere to go. It burned within yards of the Tribal Government building and was very scary for everybody.”

The Chuweah Creek fire was one of five blazes ignited that night and led to the evacuation of the Nespelem community as well as the Confederated Tribes of the Colville Reservation Government Center. Sweeping across the reservation, the combined infernos eventually threatened the towns of Keller and Inchelium.

“The power was out for several days,” says McLean, who is an enrolled member of the Colville Confederated Tribes. Her work as an Extension educator includes helping the reservation respond to emergency situations.

In our Northwest forests...

for thousands of years ... it has been ...
A W A T C H  F O R  O N E  T R E E  I S  O U R  M I S S I O N

The last six years probably wouldn’t be that far outside historic fire and where that was appropriate. The number of acres burned over reservation. If it was more than 10,000 acres, we considered to help maintain a healthy landscape more in line with the practices 1.4-million-acre reservation. His program utilizes prescribed fires, Confederated Tribes who oversees fire management within the enrolled member and the natural resource director of the Colville agencies are taking a closer look at those methods in hopes of better productive habitat. Today, US federal and state forest management new effort “will require a paradigm shift within the US Forest Service, etation thinning as well as the use of controlled burning. The move supplements a recent $328 million investment by Washington state. US Secretary of Agriculture Tom Vilsack told PBS NewsHour this new effort “will require a paradigm shift within the US Forest Service, from an agency devoted to stamping out fires a la Smokey Bear, into one that uses what ‘Native Americans call ‘good fire’ on forests and prairies to prevent even bigger blazes.” For thousands of years, Indigenous people in North America relied on controlled burns to shape their landscape and ensure a diverse productive habitat. Today, US federal and state forest management agencies are taking a closer look at these methods in hopes of better using prescribed fire as a tool to create more resilient forests. It’s a familiar concept for Cody Desautel (’18 Civ. Eng.), an enrolled member and the natural resource director of the Colville 0-derided Tribes who oversees fire management within the 1.4-million-acre reservation. His program utilizes prescribed fires, mechanical treatments, forest health treatments, and targeted planting to help maintain a healthy landscape in line with the practices of his ancestors. “I started fighting fires in 1995 with the Forest Service and later worked for the tribe while going to college,” he says. “Back then, a big fire was 10,000 acres. If it was more than 10,000 acres, we considered it a rough summer for us.” Then in 2001, we burned about 100,000 acres. Over the next 20 years, the biggest fires kept getting a little bigger and a little bigger. In 2015, we had a huge fire year that broke all the records here.” We kinda hoped that was a once in a generation event and that things would slow down but that hasn’t been the case,” says Desautel. “Since 2015, we’ve burned almost 700,000 acres on a 1.4-million-acre reservation.” “Historically, the tribes burned a lot, often in the spring and those June and September fires in our region. “Those are very destructive, high severity fire compared to what you would’ve seen historically,” he says. “We’re seeing those fires more in the past 15 or 20 years.” “The problem is when we don’t catch a fire during initial attack, it’s usually because we’re in the wrong place at the wrong time: the weather, the lowest humidity, the highest winds,” he says. “When we have these kinds of condi- tion, you have a disproportional amount of weather, the lowest humidity, the highest winds,” he says. “When we have these kinds of condi- tion, you have a disproportional amount of very destructive, high severity fire compared to what would’ve happened in the past.” “We’ve not had a fire that burned the Colville reservation on the shoulder of fire season, those June and September fires in our region. “We’ve used to see consumption of fuels in the understory but not necessarily in the over- story. And we would’ve seen a different tree species composition in pre-contact forests—those species adapted to fire like Ponderosa pine and Western larch would’ve survived and done well. And there would be less Doug fir.” Desautel says a 1958 forest inventory showed as much as 80% forest cover. Fire exclusion was once primarily populated with pine trees and fires typically burned through those habitat types about once every fifteen years. “Now, Doug fir is the most prominent species on the reservation,” he says. “For the last 10 years, we’ve been trying to reverse that trend through our forest management program. It took a century to get here but we’re making progress.” The Colville Tribe uses both prescribed fire and mechanical fuel reduction treatments to decrease underbrush, debris, small trees, and other combustible fuels in the area. “We also do a lot of forest stocking and species manipulation to ensure we have fire-resistant species on the landscape,” Desautel says. “We want to create that mosaic in age and species that would’ve existed before. “We know historically, there would’ve been big trees but in lower densities—primarily species like larch and pine which are drought and disease resistant and very fire tolerant. But we also have open patches with huckleberries and other culturally significant species. We’re trying to ensure our reserva- tion landscapes are resilient now and into the future with considerations for a chang- ing climate. “So, when we have a large fire event, the post-fire conditions will more closely mimic what you would’ve seen historically,” he says. “By comparison, when you see a large fire on federally managed land, a big percentage of that fire is high severity. letztenly by the case here since we’ve changed our forest management program.” Their efforts are a race against time, however, as climate change continues to equal

CODY DESAUTEI (PHOTO MADIELE STRAUSS-LINDAIRE)

PHOTO (TOP) T.A. CHANDLER, (BOTTOM) JASON HOLLINGER/ WIKIMEDIA COMMONS

SEAN ALEXANDER (’18 FORESTRY, ’20 MS NAT. RES. SCI.), WSU EXTENSION FORESTER FOR NORTHEAST WASHINGTON IN COUVERTON

PHOTO LIV STECKER

LINDA MCLEAN (PHOTO ROBERT HUBNER)

AFTER THE 2021 NESPELEM FIRE (PHOTO LIV STECKER)
People may not understand that, from the Indigenous perspective, tribal elders were active land managers,” Desautel says. “For example, in the act, they want forest conditions to go back to or be retained in pre-European conditions when it was untrammeled by man. That’s an unrealistic statement made in ignorance or a lack of education about how many tribal people lived here prior to colonization.”

He says Europeans vastly underestimated the population of Native peoples before the West was settled. Research shows that diseases like smallpox, influenza, and measles traveled faster than the wagon trains and, in some areas, killed 80–90 percent of Indigenous people.

As a result, European settlers saw fewer Indians left on the landscape and less burning than they would have seen just a few decades prior.

“So, I think there’s a big disconnect between what modern science considers natural ignition—lightning fires—versus how much Native burning actually happened,” says Desautel. “We don’t account for those Native ignitions when we look at forest disturbance regimes.”

He recently took part in a forest management planning session for the Colville National Forest that was said to be modeled on historic fire regimes and fire return intervals.

“I said ‘Well, where are those ignitions coming from?’” Desautel says. “Historically, there would’ve been a lot of Natives on the landscape who lit the highest percentage of those fires.

“Since we’re no longer allowed to do that, how are you going to mimic that historic regime? Lightning won’t get us there—there’s simply not enough to burn the acres we need to retain those historic fire intervals.

“Now, one had an answer for that,” he says, “I’m not sure anyone in the West does.”

And the animals

Wildfires affect many aspects of a community beyond the charred and devastated landscape. During a major blaze, residents must deal with smoke, fire retardant dust, evacuations, power outages, disrupted supply chains, and more.

Smoke-induced respiratory problems, exposure to firefighting chemicals, and injuries from running through barbed-wire fences are common.

Other forgotten in the equation are the damaging effects wildfires have on domestic animals. Smoke-induced respiratory problems, exposure to firefighting chemicals, and injuries from running through barbed-wire fences are common.

Linda McLean, WSU Extension director for the Colville Reservation, helps residents prepare for wildfire season through public workshops and a variety of fire-related resources. She urges all pet and livestock owners to create an emergency evacuation plan for the safe transportation and shelter of animals before the need arises.

McLean says it’s important to take photos and keep accurate records as animals often become separated from their owners during wildfires. It’s also advisable to keep pets and livestock away from retardants and other wildfire fire chemicals. If they do come in contact with them, animals should be bathed and observed for signs of illness.
BY JOSH BABCOCK

The ding alerting Craig Nishimoto (’82 Bacterio., ’83 Vet. Sci., ’84 DVM) of a new Facebook message prompts him to quickly check the social media site. The communiqué could be related to an animal in need some 2,600 miles away on a small island chain in the South Pacific.

For much of the past decade and throughout the COVID-19 pandemic, American Samoa has struggled to retain a practicing veterinarian. The absence has left animals in need of veterinary care and Nishimoto’s Facebook Messenger dinging more and more often with notes from government officials seeking advice on everything from skin conditions to respiratory infections. Nishimoto didn’t always operate over Facebook.

Before the pandemic, the Kauai, Hawaii-based veterinarian and his family made a handful of trips to American Samoa in support of animals and public health. During his first trip, his family hosted a low-cost, four-day spay and neuter clinic. They spayed or neutered 80 animals, examined another 16, and performed two amputations. Nishimoto also helped two families receive health certifications so their pets could enter the US mainland.

This work was partly why he was recently awarded the Washington State University Alumni Association’s highest honor: the Alumni Achievement Award. Nishimoto was nominated for the award by Alofa mo Meaola Love for Animals, a grassroots nonprofit alternative humane society dedicated to the welfare of animals in American Samoa.

This work is also why many on the island say Nishimoto is aiga, meaning “family” in Samoan.

“I enjoy giving back to the community, both locally and throughout the world,” says Nishimoto, a dedicated Rotarian at Poipu Beach.

“This is selfish, it gives me joy to help others.”

His Rotary Club raised enough money to construct and manage a preschool in Cambodia’s Pursat province. Now, when children in the small village are done with their daily classes, they get extra education and nourishment, and a crash course in English, too.

“His Rotary Club raised enough money to construct and manage a preschool in Cambodia’s Pursat province. Now, when children in the small village are done with their daily classes, they get extra education and nourishment, and a crash course in English, too.”
There, but we wanted to do a more lasting project,” Nishimoto says. “Part of our preschool program is that the students have a high-protein breakfast, to give them a good meal.”

While the urge to give back has led Nishimoto to humanitarian work, it’s also the same thing that attracted him to veterinary medicine more than four decades ago. That’s what first picked up late veterinarian medicine more than four decades ago. That’s what first intrigued him to veterinary medicine, Paradise Animal Clinic, the same thing that attracted him to veterinary medicine.

He hopes to pass on the trait to his two children, Matthew ('21 Neuroscience), and Christine (’17 Microbiol.), who has been at WSU since 2013 and is in her final year of WSU’s doctor of veterinary medicine program. The plan is for her to take over the family practice, Paradise Animal Clinic, the same thing that attracted him to veterinary medicine.

“They were instantly enamored.”

He and his wife, Jennifer “Jen” (Deminizek) Ellison (90 Bus.), were in France for a family wedding when they first encountered the novelty pot, an antique work of functional folk art. Gluggle or glug-glug jugs date to at least the mid-to-late nineteenth century. Their signature gurgling sound is produced when air trapped in the pitcher’s hollow, fish-tail handle releases as the vessel returns to an upright position.

When the Ellisons first saw—and heard—one in October 1995, they were delighted by its functional whimsy. They were staying in a village south of Dijon. They didn’t speak French. And their host family didn’t speak English. To help fill long silences during dinner, Matt found himself repeatedly refilling his water glass to unleash the giggling sound of the gurgling pot—and smiles from everyone at the table.

Back home in Western Washington, he says, “we couldn’t find any similar pots being sold in the States, so I decided to make my own.” Matt designed a contemporary rendering of the vintage pitcher.

Since then, the Ellisons have sold more than a million gurgling, fish-shaped pitchers. Their GurglePots are available in the United States, Canada, and Australia. Last year, they were featured on the New York Times list of “33 of the Best Housewarming Gifts” and “The 71 Best Gift Ideas for Dad.”

“Top-selling colors are cobalt, aqua, white, and bright red. And ‘I Spy’ moments keep getting shared by fans on GurglePot’s Facebook page. A peacock blue GurglePot appeared on the shelf behind Stephen Colbert when he was hosting The Late Show from home early in the COVID-19 pandemic. Another GurglePot appeared in the fourth episode of the PBS series Diving with Julia Child. Still another appeared in season four of the Hulu original series The Handmaid’s Tale. And, on January 15, actor Matsly Petukhov commented “My favorite thing” and “is there any better invention” on an Instagram video of himself using a GurglePot.

Matt created the prototype for GurglePots at the kitchen table, drawing on mold-making skills he learned in an elective sculpture class as a college freshman. “It’s funny how almost didn’t come to be. I sculpted the positive and made it into a negative to make the plaster mold, and I learned how to do that through a WSU class,” taught by sculptor Jack Dollhausen, now a professor emeritus of sculpture.

Matt shelved the project for 10 years while the couple, who met at WSU and dated throughout college, raised their boys, then a toddler and a baby. When Matt’s dad was clearing out his garage, he found the original sculpture mold, and asked him what he should do with them.

“The kids were older so I had more time to work on the pot,” says Matt, who fashioned a few more molds by hand beforeperfecting the design. “I was doing it all by eye. I didn’t do it with CAD,” computer-added design. “Now you could use 3D printing to create it and make it.”

He glared and fired the first one at a U-paint pottery shop. Unlike vintage versions, which typically feature intricate fish scales and other ornate details, his embraced clean lines and a smooth finish.

The GurglePot got its “big break” in 2006, at a gift show at New York City’s Javits Center, says Jen, whose background is in marketing and publicity. “An editor from Coastal Living stopped by and did a story on us, and it just kind of exploded from there.”

So many orders came pouring in that Matt had to quit his job in agricultural sales with no notice. Two more WSU alumni—Matt’s mom and dad, Russell Ellison (85 DVM) and Lanita Ellison (’82 Ed.D.)—helped package pots in the Ellisons’ Lake Tapps garage to meet demand.

Today, GurglePot has a warehouse and office in Pacific and a team of about six employees. Most sales come from the nearly 2,000

small, independently owned boutiques across the country that carry and demonstrate the product. “It makes people smile when they try it out,” Jen says—just like it did for her and Matt in France nearly 30 years ago.

Matt’s creativity didn’t stop with the GurglePot. More recently, he designed another sound-making culinary product: a bird-shaped wine-bottle topper that makes a “chirping” sound while pouring. His patented ChirpTop hit the market in 2015.

His advice: Never underestimate the power of an eclectic. “It gets people out of their comfort zone,” he says. “That’s the beauty of going to college and broadening your knowledge. At some point in life that random class could become the most important one you ever took.”

As a Washington State University soccer player in 1990, a gunky Spring Faussett walked into the Cougars’ athletic training room. With persistent tightness in her quadriceps hampering her performance on the pitch, Faussett pleaded with an athletic trainer for help.

“If there anything we can do?” a hopeful Faussett inquired.

The trainer invited Faussett to sit, and then proceeded to press her thumb deep into Faussett’s quad. Faussett shrieked as pain radiated outward from the trainer’s forceful pressure—a practice now widely known as trigger point therapy. Within minutes, Faussett’s quad muscle tightened. “It gets people out of their comfort zone,” he says. “That’s the beauty of going to college and broadening your knowledge. At some point in life that random class could become the most important one you ever took.”

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create a slick rolling pin like device athletes could use to relieve muscle knots, aches, cramping, spasms, and stiffness. Through additional iterations, Faussett, a naturally curious soul who began her WSU academic career in mechanical engineering before switching to communications and marketing, perfected the mechanics of the grip, maximized the spindle, and experimented with different foams to balance comfort and flexibility.

Satisfied with her design, Faussett constructed 125 units and took them to the 2006 Seattle International Bicycle Expo to gather feedback and, hopefully, notch a few sales. “I sold every single one,” Faussett beams. “I was a VP by 29 years old. There weren’t many at that age at that level. And I attribute many at that age to our friends ‘could play to our strengths,” Harding says. “He and I just hit it off.” Harding grew up in Walla Walla next door to Chris Figgins (‘05 MBA), president and winemaking director for Figgins Family Wine Estates. His parents, Gary and Nancy, founded Leonetti Cellar, the oldest winery in the Walla Walla wine region.

Nocking Point started small, with not quite 1,700 bottles of Year One, a Bordeaux-style blend made by Marie-Eve Gilla, founder and then-winemaker of Walla Walla’s Forgeron Cellars. Harding and Amell affixed the labels by hand, and Amell posted about the wine’s availability on Facebook. It sold out within 24 hours. “Our problem was not selling the wine but having enough product,” Harding says. “We’re very lucky.” He first connected with Amell soon after the Hollywood hopeful drove to LA from Canada in 2009. Harding’s wife Jen, is Canadian, and Amell found her on Facebook. All three met up at a sports bar, and Harding says, “He and I just hit it off.”

Harding was still at MTV, where he says, “I was a VP by 25 years old. There weren’t many at that age at that level. And I attribute some of the knowledge and confidence I gained by going through the MBA program at WSU. It was an absolute turning point for me. I was challenged in ways I’d never been challenged before.”

“Nocking Point was going to be a little wine tasting. The Canadian actor, who would soon become known for portraying Oliver Queen—aka Green Arrow—on the CW show Supernatural. Since then, collaborators have included actor Jason Momoa, TV and film celebrities in 2015, partnering with friends Kutcher and Kunis, help fund charities such as Hawk’s The Skateboard Project, which helps build skate parks in underprivileged communities, and Thorn, co-founded by Kutcher and Demi Moore. It builds technology to defend children from sexual abuse. Outside Wine follows Quarantine Wine, an Oregon pinot noir selected by Kutcher and Kunis to raise funds for charity during the early part of the COVID-19 pandemic. Before the pandemic, Harding and Amell, both based in the LA area, would travel several times a year to Walla Walla, where Harding’s twins Sitara Harding, manager of customer service, fulfillment, and the tasting room.

In 2020, the company received more than 130,000 orders, and produced and sold nearly 30,000 total cases.

“When Walla Walla makes world-class wine,” Harding says. “I’m proud to be part of it, that’s for sure.”
NEW media

A View from the Middle: How an Unknown Actor Managed to Stay That Way

Larkin Campbell ’91 Comm.
2021

Clint Eastwood. Tom Cruise. Steve Carell. Larkin Campbell has crossed paths with them and more. But, as the daughter of a 125th episode of The Office, in which he plays Coach Shane, husband of the girlfriend of main character Michael Scott.

Campbell has made a career of playing non- recurring TV roles and serving as a movie stand-in. He’s written screenplays that haven’t sold and short films seen by, he says, “hardly anyone.”

Still, Campbell writes, “This business is nothing short of magical. There is no other art form like it.”... and although at times, my career felt elusive, it’s more to some of the stories, such as anecdotes from when he was an intern to Roseanne Barr and Tom Arnold.

Campbell moved to Los Angeles—or, as he calls it, “the land of undiscovered actors”—right before getting his degree. He drove down for an interview at Entertainment Tonight, where he sometimes brought Mary Hart and Larry King into his dorm.

He more or less left La La Land. It’s where he met his wife, assistant director Maria Battle Campbell, who’s working on the Avatar sequels. While her career climbed, his went up and down—and for long periods of time—dallied. He once went 28 auditions in a row without landing a gig. Other times, according to IMDb, he scored roles like Martin Luther King Jr., in Million Dollar Baby; the FBI take-out leader in The Pink Panther; and a movie stand-in. He’s written screenplays that haven’t sold and short films seen by, he says, “hardly anyone.”

Camping deals with the rejection, disappointment, and anxiety of life as a struggling, “nonathletic, average-looking” actor with humor and by throwing himself into his favorite roles: husband and father. His amusing memoir details 30 years of adventures in the industry—from a young Hollywood hopeful to wild trout in Oregon’s Blue Mountains. Nostalgia runs deep. There’s joy, of course, but plenty of heartbreak, too.

“Dennis doesn’t shy away from the tough stuff, including his flight with cancer, loss, and his last fishing trip with Grandpa Harry, who looms large in his memory.

A former fisheries scientist who also taught fish ecology, biology, and management at WSU Tri-Cities, Campbell married young and became a father at 21 with the birth of daughter Diana. Son Matthew Dauble (‘98 Fine Arts) later drove the family’s beloved Ford Ranchero to WSU Pullman. Wife Nancy remains his “best friend for over 50 years and counting.” You don’t have to enjoy fly fishing or have had a small-town Pacific Northwest childhood to enjoy this 206-page softbound collection of essays.

“Dennis’s latest book, his fifth, resonates with those who feel a wistful affection for the past. His approachable, casual, relatable style makes for easy reading.” — Adriana Janovich

Chasing the Ghost Trout

Dennis Dauble 78 MS Biol.
Fishhead Press, with Keeke Books.
2021

In this deeply personal memoir, Dennis Dauble moves quickly through the stages of his life, starting with a cancer diagnosis in 2010 when he was 59, then jumping back to his earliest memory: fly fishing for fat-bellied trout with Grandpa Harry and making his first cast.

“Hand me a fly rod and once again I am a skinny little kid with a handful of chewed-up flies and something to prove,” writes Dauble, who remembers about growing up in a tiny Oregon town in the 1950s and 1960s with four siblings—all of their names start with D—plus Dogwood the dog, a border collie.

Dauble document decades of family fishing for wild trout in Oregon’s Blue Mountains. Nostalgia runs deep. There’s joy, of course, but plenty of heartbreak, too.

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Break the Mold

Blanca Blanco ’03 Psych.
Briton Publishing: 2021

When she was nine and newly arrived in Washington state, Blanca Blanco performed scenes with her sisters in the garage in which they lived. Putting on these “homemade plays,” the self-made starlet writes in her autobiography during the COVID-19 lockdown, “I have done, then I’ve won the California Derby. You don’t have to enjoy fly fishing or have had a small-town Pacific Northwest childhood to enjoy this 206-page softbound collection of essays.

“Dennis’s latest book, his fifth, resonates with those who feel a wistful affection for the past. His approachable, casual, relatable style makes for easy reading.” — Adriana Janovich

Blanco attended Spokane Falls College, an community College on scholarship. At one point, she was working three part-time jobs to put herself through school. When she first arrived in Spokane, "I had nowhere to stay and lived in my car until I eventually found two roommates."

At WSU, she was a self-described “happy nerd,” more likely to be found in the library than at a party. She includes her graduation photo in her book with the caption “I was so proud of my achievement.”

After finishing her master’s degree in social work at Eastern Washington University, Blanco moved to Los Angeles where she pursued acting and modeling. She worked in hospice care while going to auditions, taking classes at The Groundlings Theatre and School, and studying under Gordon Hunt, father of actress Helen Hunt.

“I am a strong believer that education is key to breaking the cycle of poverty and that coming from poverty does not have to dictate your future,” she writes. “I believe in overcoming and achieving goals with tenacity, dedication, and commitment. And while it can be challenging, it’s always possible—it proved with my own education.”

BRIEFLY NOTED

Beyond “Thank You”

“Thank you” seems entirely inadequate when we try to express the level of gratitude we have for you. The members of the WSU Alumni Association provide the fuel, passion, and enthusiasm for everything we do. Without you and WSU, we don’t exist. Keeping that fact in mind, we knew we needed to do big. A simple thank-you note would not do. We needed an entire month to get our point across.

The month of May is our second annual Member Appreciation Month, powered by BECU. From May 1 to 31, the Alumni Association is offering a bunch of exclusive and exciting member-only opportunities, such as the New Cosmic Crip: Cider Exploration. A Virtual Cider Tasting Event with 2 Towns Ciderhouse, a Cougar Collectors’ Series wine sale, an annual Member Appreciation Month, or our Annual Member Appreciation Month possible. We invite you to check out what BECU has to offer members of the WSU Alumni Association. You have something special, a thing no one in the world can touch, no one can replace—your Alumni Association. You’re not just a member; you’re a member of the WSU Alumni Association. You’re not just a member; you’re a member of the WSU Alumni Association.

For a complete list of Member Appreciation Month events and benefits, visit alumni.wsu.edu/MemberMonth
When a relative who was recently visiting Pullman for the first time asked Maddie Freiberg (99 Comm.) for restaurant and bar recommendations, one spot immediately came to mind. “I spent a fair amount of time at The Coug,” she says. “It was always my number one choice. Whenever I’m in Pullman, stopping at The Coug is one of my top priorities.”

Generations of Washington State University students have come to Cougar Cottage, commonly called The Coug, to relax after class or finals, meet friends, and forge bonds that last lifetimes. And they continue to return as alumni with their old college buddies or parents, children, and grandchildren—often Cougs themselves—to reminisce over burgers and beers.

“The Coug, at its best, represents Cougar spirit,” says owner Rob Cady (‘00 Hosp. Busi. Mgmt.), who frequented The Coug as an undergraduate and bought the business 18 years ago. “It represents the multigenerational shared experience that surrounds WSU.”

The ever-popular pub, which opened in 1932 and has always catered to students, celebrates 90 years this year. New signage is expected to arrive this summer. And the highly Instagrammable east interior wall where patrons leave their signatures is set to be repainted in early August to accommodate a new round of names. It’s a tradition that started before Sharpies and paint pens. Patrons have been making their mark on The Coug since its earliest days, when students would carve their names into tables with pencils.

Back then, The Coug was known for its toasted sandwiches, house-made cake and pie, and, according to a menu found in a 1935-to-1939 scrapbook in the Manuscripts, Archives, and Special Collections at WSU Libraries, “thick malted milks.” Cady refers to those times as the “good old college buddies or parents, children, and grandchildren — often Cougs themselves—to reminisce over burgers and beers.”

The legendary WSU watering hole and eatery routinely makes lists ranking best college bars in the state and country. And that’s no surprise to Freiberg, a member of The Coug’s exclusive Mug Club. Just 25 new members are selected each semester. “It’s an honor to be surprised by Freiberg, a member of The Coug’s exclusive Mug Club. Just 25 new members are selected each semester. “It’s an honor to be a member of The Coug’s Mug Club,” she says. “It’s so steeped in tradition. You’re a part of something special, like being in a Coug in general. It’s a forever tie to a really special place.”

The Mug Club dates to at least the late 1970s, when The Coug featured Quarter Pounder Nights and patrons could buy a beer for 25 cents. While some members take their mugs with them when they move or graduate, Cady says, “We still take care of about 1,200 mugs between our storage unit and on site at The Coug.”

When out-of-town members visit, staff unearth their mugs. “We prefer a week notice,” Cady notes, adding, “While The Coug might look different than it did in the ’30s, ’40s, or ’50s, the general feel and atmosphere of undergrad Cougs spending time together with their friends and enjoying their company is still what we do. That’s the heart of The Coug.”

BY ADRIANA JANOVICH

Alumni Association

An Entire Month to Celebrate YOU

(You are one of our AMAZING MEMBERS which is why you are getting this members-only edition of Washington State Magazine)

alumni.wsu.edu/MemberMonth

PHOTO BY KATHERINE MARYOTT

Photography by Katherine Maryott.

Does Cougar Cottage hold a special place in your heart? Share your memories of The Coug with Washington State Magazine at wsm@wsu.edu.
CHRISt WINKLER wanted to concoct a longer ride. He had already biked from Seattle to Portland a half-dozen times. Once, he cycled from Tri-Cities to Sun Lakes, a particular street in Sun Lakes that was a “perfect stretch of what my appetite,” he says. “I toyed with a 48 states ride. Then I thought: how about a coast-to-coast tour?”

From June through August 2021, Winkler (86 Chem. Eng.) cycled from Portland, Oregon, to Portland, Maine. Technically, he started his ride on the Oregon Coast, so it was truly a coast-to-coast tour. From June through August 2021, Winkler (“86 Chem. Eng.) cycled from Portland, Oregon, to Portland, Maine. Technically, he started his ride on the Oregon Coast, so it was truly a coast-to-coast tour. From June through August 2021, Winkler (“86 Chem. Eng.) cycled from Portland, Oregon, to Portland, Maine. Technically, he started his ride on the Oregon Coast, so it was truly a coast-to-coast tour.

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In all, the former Coug basketball player biked 3,797 miles in 69 days across the northern United States, pedaling through 14 states.

“You just enjoy the ride,” he says. “You’re in the fresh air. I’m really fortunate to be out there. It’s about the experience and not knowing what’s going to happen and what you’re going to do to overcome it. I like riding long distances on my bike. I’m a pretty good solo rider. It gives me time to think.”

The entire trip took 88 days, and he and his wife, Cheryl, put just over 10,400 miles on the RV they bought for their adventure.

She drove and tracked his progress, meeting him along the route to refill his water bottle. He rode around 65 miles per day, sporting a 95% jersey most of the ride.

“And I tell you what: I loved it. If I could, I’d be out there doing it still. You have hard days. But that’s the beauty of it. I enjoyed the hard days as much as the good days because it’s all part of the experience.”

COURTNEY CHris WINKLER

...at the 1996 Olympic Games in Atlanta, Georgia, an athlete from the former Soviet Union, who was an all-around athlete, and now a professor of mathematics at Idaho State University.

The award honors individuals or companies for their contributions and efforts in championing the small brewing industry. Brussels is one of twelve Brewing Co. and Münchener Haus in Lewes. 

“JAVA” (BUNKE ROGER) (96 Land Arch.) is a landscape architect, an artist, and a sculpture consultant. She was one of the founders of the Turlock and Ceres, California. She is a licensed civil engineer in both California

“He has more than 30 years of experience in manufacturing and distribution.

He is the general manager of the Ridgefield School District.

He served as the director of governmental and public affairs for the Ryan Seacrest Foundation. He was previously the chief information officer at Central Washington University. He has more than seven years of commercial underwriting experience.

andes BOHMAN

(’07 Crim. Jus.) to the University of Ephrata.

Shipley is the director of media relations for the Los Angeles Lakers. He was most recently vice president of communications for the Chicago Padres. He is a member of the League’s board of directors and vice chair of the Seattle Mariners.

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IN memoriam

BRIAN MCLEAN (’91 Elec. Eng.), 57, December 5, 2021, Spokane.

SCOTT ALAN RICHEY, 57, December 5, 2021, Spokane.


RAYMOND VANDEVEREY (’94 Hotel & Rest. Admin.), 49, May 12, 2018, Kirkland.

GREGORY JAY MCKNIGHT, 44, March 23, 2019, Liberty Lake.

RUTH ANN ROYAL, 96, August 24, 2021, Pullman.


BOB OLDS ‘67. White became a donor to Veterinary Medicine through alumnus

MAGAZINE

WE DO OUR PART

YOU CAN DO YOURS.

Actor and comedian Betty White became an honorary WSU alumna in 2011. White had a long-standing relationship with the WSU College of Veterinary Medicine through alumnus

Betty White became a donor in 1992 and served on the founding steering committee for the Center for the Study of Animal Well-Being at WSU.

She’s finding a cure for infectious diseases.

We protect the supply of electric power to her lab. Together we power the future.

Learn more at selinc.com/suppart.

We do our part so she can do hers.
Even when I was still a student, I heard that small donations can make a big impact, so I’ve always found a way to give to WSU. And now that I’ve launched my career, I’m giving more—and in more strategic ways—to programs that are most important to me. It means so much to have a direct impact on the next generation of Cougs.

— Lindsey Elhart Baker, ’14
WSSUAA Life Member / Former President of WSSUAA Seattle Chapter
Honors College Advisory Board / Carson College of Business Mentor

Every year, WSUAA members make a huge impact on the entire Coug community through their gifts to Washington State University.

How huge? Since 2018, WSUAA members like you have given more than $10 million per year in support of programs across the WSU system: scholarships, Athletics, academic departments, faculty research, and so much more!

And this year, you’re on track to break all previous records!

It’s all because of you that we can share such a spectacular success story.

We appreciate your loyalty, your support of your beloved WSU, and your impressive Coug Spirit.

With gratitude,

Your friends at the WSU Foundation

ORGANIC AND GEOMETRIC, the 11 large light fixtures that illuminate the new Podium sports complex in Spokane dynamically shift light and ambiance throughout the day and night. Washington State University architecture professor Taiji Miyasaka and Seattle artist and engineer Clayton Binkley collaborated to create the installation, titled “Chromasphere.” They used reclaimed western redcedar, cut the planks into regular hexagons to be stacked spirally, then hung the fixtures in three clusters. The largest fixture measures 12 feet tall by 9 feet in diameter. The project was commissioned by the Spokane Public Facilities District and administered by Spokane Arts for the new sports facility.

The installation, which resembles pinecones, has interiors painted with a plaster made from recycled drywall waste that Miyasaka researches with David Drake at WSU. Miyasaka and Binkley designed the multicolored lights to adapt and express a different feeling as daylight shifts.

PHOTO BRUCE ANDRE