

WASHINGTON STATE

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SUMMER 2014

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State of Wonder

GROWING UP IN A STATE THAT FOSTERS BELONGING
ALSO: MACHINE IN THE CLASSROOM :: THE LOST HIGHWAY :: ASK DR. UNIVERSE





SUMMER 2014

WASHINGTON STATE

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FEATURES

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A childhood spent in Washington has never been better. Our abundant natural resources, our trove of teachers and volunteers, and our commitment to child development make this a great state to grow up in. *by Hannelore Sudermann*

31 :: Machine in the Classroom—New tech tools engage young scientists

Teaching with new technology may involve a microscope app for an iPad or an affordable circuit board for a budding engineer. School children have some exciting new tools with which to conduct experiments and explore their worlds, but now teachers have to decide how to use them. *by Larry Clark '94*

37 :: Lost Highway—John Mullan closed the last link of the Northwest Passage and vanished from history—until now

More than 150 years ago, a contingent of road builders and a military escort set out on a rugged pilgrimage to build a wagon highway across the Rocky Mountains and into the west. Historian Keith Petersen '73 has traced the tumultuous life of the lead engineer John Mullan and, in the process, uncovered some fascinating facts about what is now known as Mullan Road. *by Eric Sorensen*

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On the cover: Milky Way galaxy over Mount Rainier from Sunrise Point—meteorites show up as streaks of light. This image was a winner in Smithsonian magazine's 10th annual photo contest. Photo by Dave Morrow. See the entire image at wsm.wsu.edu.



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first words

As spring surrenders to summer, so must we yield our state to its youngest residents, approximately 1.15 million children and teens who will soon take over our communities, yards, pools, beaches, and parks.

One of my early memories is of exploring a campsite on Mount Rainier. I remember roaming around the spot on a cool June morning, exploring a paved road dusted with pine needles and peering into the wet shadows of the woods. Laced into my first hiking boots, I followed my parents along the Sunrise Nature trail, an easy 1.5 mile loop that took us through lush alpine meadows and gave us views of our state's iconic mountain.

My fellow editor Larry Clark grew up on the opposite side of the state. But he has similar memories of exploring the woods around Newport with his dog Sport, fishing and rafting along the Pend Oreille River, and hunting for huckleberries, contending with stinging nettles and a mad badger.

Though we spent our childhoods on different sides of Washington, one of us in a city and the other in a rugged rural community, we've had similar experiences and feel similar attachments to this most amazing state. What a great place Washington is to grow up in!

"You sort of belong to a place and the place belongs to you," says John Lupinacci of the College of Education. His expertise is in place-based learning, but he has expanded his inquiries to reflect on how Washington's unique landscape fosters a deeper connection to the natural world.

In this issue we try to recapture the promise of a long summer ahead, new places to explore, and the wonder that is Washington. We do that through our University, at once a microcosm of the state with students and alumni from every corner, and a conduit to it with the extension of its research and education throughout. As the magazine's new editors, we accept the challenge to tell the stories of our faculty members' passion for their fields, the pride in their students. We also promise to follow our students and alumni on their adventures into the state, region, and world.

Eric Sorensen introduces us to an alumnus historian and transports us back more than a century to tell the story of the man who built the first wagon road from Montana into Washington.

In his feature story, Larry Clark focuses in on several alumni entrepreneurs who are creating new tools—like a device to tie a microscope to an iPad—to help students see more deeply into the world in front of them. And with kids' constant state of wonder in mind, our newest writer Nick Deshais brings Dr. Universe, our intrepid feline guide, back to WSU to continue her important work finding the answers to their intriguing questions.

After working in California, living in Washington, D.C. and Belgium, and finishing graduate school in Illinois, I was delighted to come back to Washington for a job in journalism. Larry's path took him to New Mexico, Oregon, and Japan. But he, too, moved home to Washington, where he and his wife Jenni would start their family. "We'd been gone long enough to appreciate how amazing it is to live here," he says. "This is where we wanted our children to grow up."

Whether you've spent your life in Washington, or were settled here for your years at the University, you must share this feeling of belonging.

Hannelore Sudermann, Content Editor





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There are over twice as many members of the WSU Alumni Association (WSUAA) today than there were just a few short years ago. They joined to support student scholarships, take advantage of all the incredible member benefits, and connect with other Cougars. We extend our thanks to all the alumni, students, friends, faculty, and staff whose membership has helped the WSUAA claim its rightful place among the finest and fastest-growing alumni associations in the country. We salute our Annual, Life, and now Platinum Life Members.

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- I am:** Jairo Torres, a May 2014 graduate in biological sciences.
- My dream:** To educate people about health. When I become a physician's assistant, I hope to develop personal relationships with my patients and encourage them to maintain healthy lifestyles.
- Next step:** Now that I've graduated, I'm focusing on getting into a physician's assistant program. I will forever be grateful for how WSU embraced and prepared me for this.

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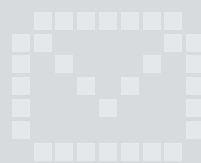
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posts

Recollecting Washington's landscapes

Tim Steury's article "Mountains and Rivers and Prairies Without End—Recollecting Washington's Landscapes" is a great read for this student of all he writes about.

But the narration also brought back fond memories of places and people significant to me. As a WSC freshman in 1956 I hitched a ride with Ed Claplanhoo, who was a senior at that time, from our farm near Port Ludlow back to Pullman after the between semester's break.

Then in 1988 my wife Louise (Morse), WSC '59, and I took a class in anthropology of the North Cascades taught by Bob Mierendorf. To get to Stehekin, where Bob taught the class, we hiked over Cascade Pass and caught the bus to town at Cottonwood. Bob affirmed our knowing that removing people from wilderness is as ridiculous as removing bear, deer, or any other species that has been a significant part of the natural history of this landscape.

Washington State Magazine continues to be one of my favorite reads.

Richard Guthrie '61 DVM

Thoroughly enjoyed Tim Steury's article in the Spring 2014 edition of *Washington State Magazine*, "Mountains and Rivers and Prairies Without End." I was wondering if the article was available online. Seems like it would lend itself to an ever growing blog, where readers could input their own experiences. It may become a wonderful travelogue, giving endless possibilities for exploring the state.

I have some very fond memories of my own travels in the state. My family is from the Northwest, with my grandmother's family moving to the Yakima valley around the beginning of the 20th century. Dad grew up in Grandview and graduated from WSU in '39. He worked in Alaska during the war, and moved back to the DC area in '48, but every 3-4 years we would drive back out to the NW to visit with his family, and my mom's family in Idaho. Then I attended WSU '64-'68, moved to the Navajo Reservation in the SW to use my education degree, and returned to the Renton area in '80-'81. Since then I have been back to Washington a few times for brief visits with my family.

Reading your article has brought back many good thoughts of those times and travels, and I am sure other readers have had similar recollections. And I would guess more than one of us would be interested in contributing to a shared tale-telling time. I bet it could provide some very intriguing stories about some of the out of the way places, as well as the better known locations in this great state. Just a thought....

Fred Danes '68

*Editor: The article is indeed online at wsm.wsu.edu where each issue can be found in its entirety along with additional material. We also have a place online where you can tell intriguing stories—**Our Story**, which chronicles WSU history, and **myStory**, where you can share personal experiences.*

It is a shame that Prof. Andrefsky decided to discuss Marmes Rock Shelter (Spr. 2014 issue, pp. 24-25). This site was excavated by WSU personnel (I was there as the second season crew chief), but the research on the excavated collection was never carried out. Stored at WSU, the collection deteriorated over the years to that point that most of it (records and artifacts) have disappeared. At this point, there is nothing about Marmes for anyone to be proud of. WSU dropped the ball on that one—big time. Why bring it up?

Roger Nance '66 MA

Editor's note: We checked with Bill Andrefsky and the WSU Museum of Anthropology and have learned that yes, the immediate follow up to the Marmes excavations was problematic. But in 1995, the Army Corps of Engineers financed a rehabilitation of the collection and located and catalogued 14,826 individual artifacts, project records, and many floral and faunal remains. In the ensuing years, several studies of the collection have resulted in significant publications, says Mary Collins, who recently retired as the museum's director. Andrefsky, whose tenure at WSU started in the 1990s, long after the Marmes excavation, notes that anthropologist Brent Hicks, working for the Confederated Tribes of the Colville Reservation, has edited a complete overview of the collection which is available through WSU Press.

Road trips

Having retired in southern Arizona, I am going to frame the Spring 2014 cover as a great reminder of the

many road trips I have taken over the years by myself or with family and friends. Enjoyed the last article about the hills of WSU. Brought to mind the somewhat clandestine use of cafeteria trays to slide down the SE Nevada Street hill from Waller Hall to the dorm complex.

Irene Tichelaar Silverman '68

Thank you, Tim Steury

A very sincere thank you to [former] editor Tim Steury for his relentless commitment to telling the compelling stories of WSU and residents of our state. I have long appreciated the subject and focus of his articles and issue themes. Of course I have my favorites, but Tim has brought many important stories to light during his career and has made the *Washington State Magazine* something to savor and share. Thank you for so much Tim, and I hope you find a way to keep telling your stories.

Anne Schwartz '78

Covered old ground

I read with relish "A True Story Fraught with Peril" in the Spring 2014 issue of *Washington State Magazine*. Although it was fascinating, the article unfortunately covered little new ground for me.

The final class I took for my DDP bachelor's degree in humanities was Geology 210, in spring 2010. I'd been dreading taking a science class, so antithetical to my concentrations in English and history. However, as I researched what lies beneath Walla Walla Valley and the rest of the Columbia Plateau I found the class to be a revelation. I learned



a vast amount about the Missoula Floods, the various basalt flows and the original land that lurks beneath these.

Thanks for the enjoyable refresher course.

Brenden Koch '10

Kudos

My husband and I want to thank you for putting out such a wonderful magazine. Your articles are high quality and keep us informed on what is happening around our state. Your articles cover a wide range of topics and keep us up-to-date on the latest research. I recently was surveyed and a lot of the questions dealt with my knowledge of agriculture in our state. The surveyor was surprised at how much I knew!

Our whole family enjoys reading this magazine.

Keep up the good work!

Elaine '88 & Dale '87 Kvamme

Walked a little taller

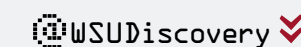
I was saddened to learn of Dr. Terrell's passing. I have a fond memory of him to share with you.

During my freshman year (1981), I was walking along the mall near Todd Hall. It was early morning, overcast, drizzling, and nobody was out except for one man walking toward me. As he came closer, I recognized him... Holy smokes, it's the President! What is he doing out here this early?

Much to my surprise he walked straight up to me and said "good morning!" We introduced ourselves, had a brief chat, then continued on our way. Three years later in almost the exact same situation ... Early morning, drizzling, few people around ... Here comes Dr. Terrell. Once again, he walks straight for me,

Wes Wilkerson '85

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Richard Daugherty dies at 91; archaeologist studied Makah tribe site <http://fw.to/AAGeFNh> via @latimes.

A viscous goo promises to solve that pesky burning-battery problem we keep hearing about. <http://ow.ly/tmoeH> via @Gizmodo

Nothing says unwieldy quite like a grizzly bear in an MRI machine. <http://ow.ly/sHGaj>

but this time he says "good morning Wes, how are you?" How on Earth did he remember my name? I was stunned. There are thousands of students at this school, we met only that once for a matter of seconds and he remembered me! Who does that? I walked a little taller that day and I will never forget Dr. Terrell.

Correction

The story "Dose of Reason" (Winter 2014) should have noted that a series of three shots of the human papillomavirus (HPV) vaccine could prevent 70 percent (not 90 percent) of all cervical cancer. A newer version, which is in the licensing process with the Food and Drug Administration, will prevent 90 percent.

What's new?



The new home of the College of Pharmacy and the Medical Science unit opened on the WSU Spokane campus last November. Photo Lori Maricle

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STAFF ILLUSTRATION

SUMMER 2014

Charting the course of a globe-trotting pathogen

by *Eric Sorensen* For more than half a century, West Nile virus was someone else's problem.

The mosquito-borne pathogen was first isolated from a feverish human in 1937 in northern Uganda's West Nile district. It then lay low for a decade before emerging in an actual epidemic in Israel in 1951. With several Egyptian outbreaks in the early '50s, researchers started to see the disease infect non-humans, particularly crows and horses. Mosquitoes of the *Culex* genus appeared to be its chief transmitter, or vector.

By the time the virus hit the United States, in 1999, it had taken on a more sinister character. Where before it mostly struck children, giving them feverish symptoms, it was now hitting older people. About one in 150 of those afflicted got central nervous system

maladies like encephalitis and meningitis, and more people were dying.

Its arrival was like a sequel to Alfred Hitchcock's *The Birds*. Birds started showing up dead in New York, and eight people in a 16-square-mile section of the borough Queens were diagnosed with encephalitis. By summer's end, 62 people had acute cases. Only three years later, North America saw the largest outbreak ever recorded of West Nile meningoencephalitis, the form that invades the brain and swells the brain lining. The virus reached the Pacific Coast.

An infected human in Washington state was reported in 2006, after which only a few people were diagnosed each year, with the exception of 2009, which had 38 cases. But a curious trend appeared in the detection of infected mosquitoes, birds, and horses: Almost

all were in Yakima County and its surrounding agricultural counties.

Enter Jeb Owen and David Crowder, Washington State University entomologists and, in the parlance of a Pacific Science Center exhibit, "disease detectives." Owen is also a disease ecologist, tracking infection through the living landscape.

Until now, researchers have had a hard time charting the interplay of West Nile's hosts, victims, and the worlds they inhabit. But one day, Owen and Wade Petersen, '09 MS, are looking at several maps when something jumps out. There is a U.S. Department of Agriculture map of irrigated agriculture in the Pacific Northwest—Petersen is looking for water sources that could support juvenile mosquitoes. They also have a map of West Nile virus cases.

» panoramas

They are, in Owen's words, "totally congruent."

"Right then I thought, 'There's something going on here with irrigated agriculture.' This has been seen in other parts of the country. But paired with the history, it becomes something else."

"If you looked at all the patterns in the other states, you would have predicted the virus would quickly sweep the state. But it never did. It would flare up and then flame out. It never really became established, until the last few years, which was always perplexing."

The species of mosquitos and birds that can be affected are found everywhere in the state, but they tend to carry the virus in just four counties.

"So there was something special about those counties that we were trying to explain," says Owen.

Owen asks undergraduate Emily Martin '13 to plot the acreage of irrigated land against the prevalence of infected mosquitoes. He also ponders three pools of data on mosquitoes, infected horses, and infected people. The data on infected people is notoriously unreliable, though, as the numbers are small, only one in five infected people show symptoms, and they could be getting infected outside the county where their illness is reported to health officials.

The datasets confirm that counties with more land dedicated to irrigated agriculture have more infected mosquitoes. But lots of different types of agriculture use irrigation. To get a more detailed look, Owen and Crowder study just what kinds of things are being grown throughout Washington, Oregon, and Idaho. They categorize areas into orchards and vineyards, natural habitat, and vegetable and forage crops. They also look at temperature, humidity, and the densities of sparrows, robins, and crows.



And there it is: clusters of orchards and vineyards, mostly around Yakima County, with infected mosquitoes and birds and consistently warm temperatures.

"All of that is this perfect storm of actors that allow the pathogen to get amped up quickly and get transmitted into people and horses," says Owen.

Owen and Crowder speculate that a nexus of water, warm temperatures, orchards, and vineyards provide key resources for birds and mosquitoes to live near each other. The water is necessary for larval mosquitoes, the flowering crops attract and feed birds. The habitat becomes a focal point for the virus as female mosquitoes pick it up from bird blood and thrive on nectar long enough to transmit the pathogen when they feed again.

The findings, one of the most finely scaled looks at the interplay of land use and the virus's activity in key hosts, were published last year in the journal *PLOS ONE* and are now part of an exhibit in the Pacific Science Center's Portal



to Current Research. The display, which runs through June, features a large photo of a smiling Owen among a group of fellow "disease detectives." Visitors to the interactive exhibit can overlay different Washington state maps to see the connections between farmlands and the virus.

The notion of disease detectives is a "fun invitation to visitors," says Mary Olson, the center's current science project manager, with the West Nile story being a vehicle to describe epidemiology and how a pathogen moves.

"When we read his study," she says, referring to Owen, "it was really intriguing and I think it worked really well with what we're trying to show, the current science of what people are doing out there in the field."

Owen says he likes how the exhibit reinforces the "One Health" concept, which aims to look at the dynamic human, animal, and environmental interactions underlying a disease, not just its human victims and possible treatment.

The One Health approach, a focus of WSU's Paul G. Allen School for Global Animal Health,

makes people aware of holistic concepts in medicine, says Owen, "and the exhibit shows that."

"There continue to be these little mysteries in the system," Owen says. "If we can understand them, it will help us to better understand where we have opportunities to exercise control and it will help us better predict where the disease will occur."

in her Johnson Tower office. "There's been a big shift in the last 20 years in people's interest in it. And of course being in one of the two states where voters recommended legal recreational use of marijuana, there's even more onus on researchers in Washington state to try to discover more about the effects of marijuana, and if there

tiptoeing our way back to, 'OK, maybe there are some medical uses here.'"

Among other things, cannabinoids have an ability to affect our perception of pain. This is of particular note since research has shown that women suffer a lot more pain throughout their lives than men, both in frequency and intensity—even if we disregard the experience of childbirth. Craft hopes to find another way to alleviate chronic pain using cannabinoids, which have potentially fewer side effects than drugs already approved by the federal government, such as opium derivatives like oxycodone and morphine.

The difference between male and female response to cannabinoids may not be as shocking as it seems. In fact, we just don't know the sexual differences in drug responses because most biomedical research is done on men. A 2006 study in the *Journal of Women's Health* showed that women made up fewer than a quarter of patients enrolled in 46 examined trials that took place two years earlier. A 2008 study published in the *Journal of the American College of Cardiology* found that women comprised between 10 percent and 47 percent of the subject pools in 19 separate heart related trials, even though more women than men die from heart disease every year.

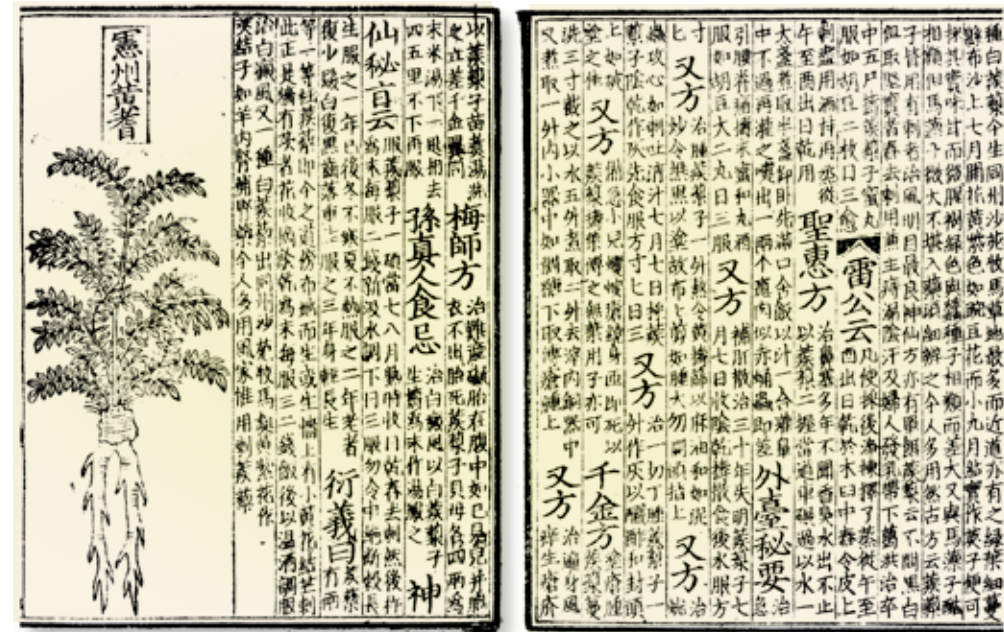
This paucity of women subjects in drug trials comes well after the National Institutes of Health suggested in 1993 that clinical trials start to include women, or give a good reason not to. There's still no federal, state, or local mandate requiring even animal research to include female subjects. Craft, for one, thinks this is bad science.

While it's true that we're all human and the potency of a drug varies from person to person, it's a desire for simplicity that prevents clinical trials from including women. The reason? Men don't have a menstrual cycle and its concurrent swings in hormonal levels. In this way, men are a stable bunch of guinea pigs. Women, on the other hand, harbor complexity.

"But we need to understand that complexity," says Craft, pointing out that we know very little about the interactions between drugs and hormones. She's trying to remedy that with her work.

"One thing we do routinely is manipulate hormones and follow females across their cycle and see if their drug sensitivities change," she says. "And they do. Very frequently. What we're finding with THC is you get a very clear spike in drug sensitivity right when the females are ovulating. Right when their hormones have peaked and are coming down."

Regardless, the simple truth in cannabinoid research is there's just not enough of it. Years



The *Pen ts'ao*, 1249 C.E., discusses medicinal use of cannabis. Courtesy Wikimedia

Sex, drugs, and differences

by *Nicholas Deshais* :: After decades of researching gender differences in the effects of drugs, Rebecca Craft has found that females using marijuana are likelier than men to become dependent on the drug and suffer more severe withdrawals.

At the same time, females seem to be more sensitive to the drug's pain-relieving qualities.

Craft, a Washington State University psychology professor who studies the effects of psychoactive drugs on rats, has reported these findings most recently in journals such as *Life Sciences* and *Drug and Alcohol Dependence*. Her work, funded in part by the National Institute on Drug Abuse, focuses on the medical side of cannabinoids, the class of drugs found in marijuana.

"We shifted to cannabinoids just in the last few years, in part because of the expanding medical use of marijuana in this country, and really in many places in the world," Craft says

are any differences in effect between males and females."

Medical cannabis has been legal within the United States since 1996, when California voters approved its use. Since then, 19 other states and Washington, D.C. have joined the ranks, and 13 more have pending legislation to legalize its use. As Craft points out, a major shift in how medical researchers viewed marijuana came in 1988 when an "endogenous" cannabinoid system was discovered in the human nervous system. This means there are specific docking sites, or receptors, that bind THC, the primary psychoactive chemical in cannabis, within all of us, and that our bodies already create chemicals very similar to those found in marijuana.

The medical use of cannabis goes back centuries, and was first recorded as therapeutic 2,000 years ago in the Chinese pharmacopeia commonly called *Treatise on Medicine*, which also described ephedrine.

"But about a hundred years ago in this country, we went through this purge and it became *evil weed*," says Craft. "And we've been gradually

Above, left to right: Entomologists Jeb Owen and David Crowder. Photos courtesy Jeb Owen, and by Nella Letizia. Below: "Disease detectives" exhibit, courtesy Pacific Science Center.





of political warfare over the drug, and its relative benignity compared to harder drugs such as opioids, methamphetamine, and alcohol, have left a lack of studies from which to draw results. Craft says there have been “maybe a dozen clinical trials for marijuana and synthetics for serious clinical pain.” There’s only been one study looking into the difference between men and women in cannabinoid pain relief, and it wasn’t a full-fledged clinical trial.

All of this is to say that Craft has faced challenges furthering her research. “Maybe if we continue to show that female rats are more sensitive than males to a range of these cannabinoid drugs on a range of measures, like pain and other things, then folks who conduct clinical trials in people will pay attention to gender as an important variable,” she says. “But it hasn’t happened yet.”

The time in between

by *Hannelore Sudermann* :: England came late to the Renaissance. But by the time it arrived, its greatest contribution would be literary. John Donne, William Shakespeare, and Ben Jonson served a literate aristocracy eager to be informed and entertained.

Into the late sixteenth century comes the observant figure of Michel de Montaigne, a French statesman and prolific essayist who wrote about nearly everything his mind encountered, “... from cannibals to codpieces, suicide to faith,” as Will Hamlin, WSU’s English literature and Renaissance scholar, puts it. For most English readers of the time, Montaigne’s French *Essais* were made accessible by a translation undertaken by his

contemporary John Florio, a language teacher who also wrote dictionaries and linguistic guides.

The son of Italian Protestant refugees, Florio was born in London in 1553 and moved to Switzerland with his parents when England reverted to Catholicism. As a young man, Florio returned to England and taught at Oxford in the 1570s. He was known for his fluency in French, English, and Italian. He worked with the support of wealthy patrons, eventually landing in the household of Lucy Russell, Countess of Bedford, as a language tutor. It was she who asked him to translate Montaigne. “And he really couldn’t say no,” says Hamlin.

The project took at least five or six years, much of which Florio spent living at the countess’s country house. He dedicated his book not only to the countess, but to five other women of the aristocracy, effectively tying himself to several of England’s leading families. By trading Montaigne’s French details for ones more familiar to English readers—a vineyard becomes a farm—Florio succeeded in reaching the English audience.

Florio knew Shakespeare personally, says Hamlin. And Shakespeare lifts a large passage of Florio’s translation of Montaigne’s essay “Of Cannibals” in *The Tempest*. “We already know that lots of published writers in England read Montaigne,” says Hamlin. “But who else did?” To answer his question, Hamlin focuses on the period between the first publication of the translation and when it becomes widely recognized as a great work.

“I wanted to know about the readers before they knew Montaigne was going to be read for the next 500 years,” says Hamlin. “There are hundreds and hundreds of readers who marked up their books. And they’re reading and then passing the book on to others.” Hamlin’s pursuits culminated in his own book *Montaigne’s English Journey: Reading the Essays in Shakespeare’s Day*.

Supported by a Guggenheim Fellowship for mid-career scholars who have demonstrated “exceptional capacity for productive scholarship,” Hamlin sought out the surviving copies of the first century of Florio’s translation at more than 100 different libraries in France, England, Scotland, and North America. Florio’s first edition of Montaigne’s *Essais* was published in 1603 by the same printer that issued Shakespeare’s First Folio some years later. There are 110 of these known to exist. Two more editions were printed in 1613 and 1632. Of the 353 known copies in the world, Hamlin saw 263 of them. “Overall I found more than 7,000 annotations,” he says.

One heavily marked copy had three different writers commenting on the same passage. “And there are about 20 copies in the world that have annotations on every page,” says Hamlin. Most of the time, it’s impossible to tell who the readers were. But Hamlin has managed to identify about 50, a fair number of them women. “People were interested in Montaigne’s thoughts about education,” he says. They also focused on sexuality, medicine, religious belief, freedom of thought, and the constraints of custom.

“Montaigne is the most interesting of all French writers, I think,” says Hamlin. “He may not have the same status of Shakespeare, but I find him amazingly forward-thinking for his time.” In his essay “Of Cruelty,” for example,



Engraving of John Florio by William Hole, 1611.

Montaigne reproaches a European culture where brutality was commonplace, censoring hunting and mistreatment of animals. “You don’t find many people from the sixteenth century making that argument,” says Hamlin.

Hamlin’s own project took eight years, during which he endured “long, long, long, long days,” waking up in cities like London and rushing to early morning trains that took him to distant places like Leeds, Liverpool, and Newcastle. Then he would spend the day with a particular book, sometimes skipping meals to capture more time, and head back to his residence around midnight.

“I went to London 11 times, Paris three times, Boston and New York two times each, and spent many days in California,” he says. One of his best days was in a library at Lyme Park in Cheshire, a private estate managed by the National Trust in England. Spending the November day in the home’s wood-paneled library, Hamlin had access to just one electrical outlet, only a few hours with the book, and about 900 pictures of marginalia

to shoot. “There was no time to read,” he says. “I was frantically taking pictures.”

Just as the day was starting to darken, he sought out the caretakers and asked them why the house seemed so familiar. It turned out to be the setting for Pemberley, Mr. Darcy’s estate in the BBC version of *Pride and Prejudice*. The caretakers were amused to find that rare visitor more interested in an old book than in the celebrity of the great house. “Since it was November, no one was visiting,” says Hamlin. “They gave me the keys so I could go out and walk on the grounds while it was still light.”

Although many of the books he sought were in accessible libraries, some were in private collections, and Hamlin took pains to see them,



Will Hamlin. Photo Nella Letizia

asking librarians and intermediaries to contact the owners and request access.

Three copies now reside in WSU’s archives, including one Hamlin bought in Canada. The notes in that one came from an older secretary hand that Hamlin believes dates to around 1610. The handwriting on one page took him 10 days to decipher, he says. The notes alluded to Genesis and original sin and offered a vehement rebuttal of the argument Montaigne was making in the text. “From what I can tell, it was a theologian.”

By undertaking his detailed case study of early seventeenth century English readership, Hamlin explores how readers first encountered this unknown text, through their notes engaged in animated dialogue with the author, and established a foundation for Montaigne’s later reputation in England. “This is a book that was widely and enthusiastically read,” says Hamlin. And that early reception established patterns of focus and interpretation that shaped the later appropriation of the work by major writers.

Consider the dragon

by *Larry Clark '94* :: With his fierce gaze and swift, powerful muscles, Chinese American martial artist and actor Bruce Lee inspired John Wong and a generation of Chinese people in the early 1970s. Lee embodied a new and potent physicality as an Asian man on film, one who would transcend traditional kung fu forms, influence fitness, and stand toe-to-toe against stereotypes.

“He had a quality that people admired and almost worshiped,” says Wong, associate professor in the Washington State University College of Education and sports historian. “Even people who were born after Lee died see his influence as a pioneer.”

In a recent article for *Sports History Review*, Wong and Robert Rinehart from New Zealand’s University of Waikato analyze Lee’s influence on martial arts as well as the effect of his physical prowess and pride in his body on a sense of national identity in China at a crucial point in modern history.

Wong also felt personally connected to Lee and his movies. Wong spent his early childhood in Hong Kong before moving to Canada in 1973, the year of Lee’s sudden death at 32 from a brain edema. Wong attended British grammar school in Hong Kong, and like many other Chinese kids, he says, “I was a product of the time. I grew up in a Chinese family, but with a dose of British and American culture. Lee was able to bridge the divide.”

Born in California and raised in Hong Kong, Lee moved back to the United States as a teenager, living in Seattle for several years. While there, he attended college, taught martial arts, and met and married his wife Linda Emery. He also started blending his traditional training in kung fu with his own philosophy and belief in fitness and nutrition to form what he would eventually call Jeet Kune Do. After the Lees moved to California, where Lee continued teaching, he was spotted at a martial arts exhibition and offered a television role.

Lee only made five films as an adult, along with several television roles, including the short-lived series *The Green Hornet*, but his body of work raised an awareness and appreciation of martial arts and kung fu in particular throughout the west. Lee’s Cantonese-language movies were familiar to Westerners in their plots, similar to Clint Eastwood’s spaghetti westerns and other tales of underdogs fighting back.

“In Lee’s time, never mind martial arts, in sports generally, workouts were not the norm. If you had talent, you could just do it on the field or on the ice. In that sense, he was a pioneer of physical fitness,” says Wong. “His training incorporated in the ’60s what is now called kinesiology, which is the study of bodies in motion. Lee supposedly had one of the largest libraries on training and how your body works.” Wong says that after he presented a paper about Bruce Lee at a sport history conference, a couple of weightlifters told him Lee had revolutionized their sport as well. At 5’6” and around 135 lbs.,

:: continued page 16

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Salmon

:: by Eric Sorensen ::

Back in 1991, the Snake River sockeye was the first of nearly two dozen salmon populations listed as threatened or endangered. To fishermen, scientists, and wildlife managers it seemed that salmon might soon vanish from the waters and traditions of the Pacific Northwest.

Today, many runs are coming back, while more vibrant populations in the Pacific Northwest and Alaska have continued bringing a steady stream of salmon to our plates through the summer, into the fall, and thanks to flash freezing, the winter. Salmon remain a major part of the region's culture and cuisine, as five Washington State University faculty and alumni can attest in these interviews edited for length and clarity.

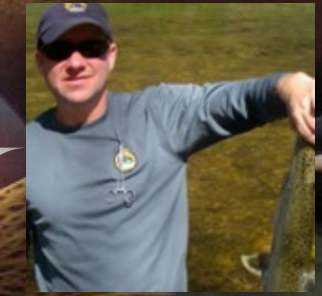
Doug Thomas '87, president and CEO, Bellingham Cold Storage:

In 2010, we had a sockeye fishery out of the Fraser River around the corner from us and it was the second-highest sockeye fishery catch since 1913. That was big. This year they're predicting an even larger amount. We've been doing a better job as a society of taking care of our rivers and streams and creeks and storm water. And we've been doing a better job of fisheries management. That's why we've seen the health of the fishery come back, because we've been more responsible with the resource. » The fresh season is an exciting time around here. We're working 24/7 and it's literally all hands on deck. I've been in the industry most of my life and I just love being down here at 2 o'clock in the morning with boats coming in across the bay and everybody's working. Sometimes people will work for six or eight weeks at a time without a day off but it's exciting times. I'm an operations kind of guy at heart so I like getting out there, jumping on a forklift and helping out sometimes just to be in the mix. » If you come in the middle of August and you come down in an afternoon or evening when all the boats are coming in, it's a really neat experience to watch all the action going on. There will be days where there's a million pounds of product presented to us at the dock. We've got to take care of that product and then the next day, another million pounds.



Bill Young, '97 PhD, project leader, Nez Perce Tribe Department of Fisheries Resources Management:

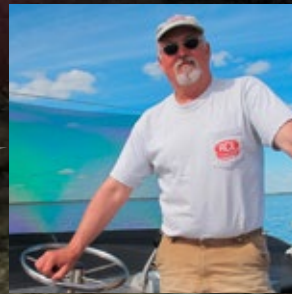
One of my main duties is to go out and survey salmon spawning areas. I'm amazed that these fish swim so far. They start out as these little tiny juveniles that we collect as part of our monitoring. They're 3 or 4 inches long. They go out and disappear into the stream and when they come back they're 10, up to 20 pounds. Big. They swim hundreds of miles. Some of our sites are 6,000, 7,000 feet in elevation, these little streams where there's not enough water to cover their backs. » The males do a lot of displaying early in the season and they'll swim around and try to look as big as they can. They stick their dorsal fin up and display to each other, and the water is so shallow they look like sharks. » In '95, there were actually less than 1,000 wild salmon that came over Lower Granite Dam for the entire Snake River. That's when I think everybody thought they were probably not going to make it. But things turned around. The ocean turned around. I think the hydro system is better at getting fish through now. And this year they're predicting 40,000. Things are getting better but we still have a long way to go.



Jeff Vervoort, commercial fisherman, professor, WSU School of the Environment:

Each summer I go up to Bristol Bay, Alaska, and work my fishing boat. What I like about it is that in my normal university job I'm thinking about countless different things at once—different projects, different collaborators, university stuff. It's just a never-ending list of things to do. When you're up on the boat, there's one thing that you're focused on and that is catching fish. And I'm by nature a very competitive person. It's not because I want to make more money. I just want to catch more fish than anyone else, especially my friends and the people that I fish with. That is just how fishermen think. I've actually been pretty successful with fishing, which is a source of pride for me because I'm just an isotope geochemist competing against full-time commercial fishermen.

» Ideally you get in a place where there aren't other boats and you lay your net out and it just explodes with fish. There's a long cork line and you look down and you see fish hitting all the way down the net. It's a total adrenaline rush. If you can stay on the fish, that's what's really cool. You can fill the boat that way. That's a good day. Our boat doesn't really comfortably hold more than 18,000 pounds under the hatch covers. After that, they're on the deck.



Jon Matthews, '95 MBA, CFO, Columbia River Inter-Tribal Fish Commission; member, Nez Perce Tribe:

The commission coordinates management policy and provides fisheries technical services for the Yakama, Warm Springs, Umatilla, and Nez Perce tribes. » When the tribes are working with the feds and the state and dealing with the spring fishery, the first allocation of any kind for the tribes is to ensure that fish are available for ceremonial purposes, most notably the longhouses, because the longhouses celebrate the return of the fish each year in the springtime. The commission has a meeting off-site maybe two, three times a year and the Washut ceremony is a way for the tribe to welcome the four tribes from my organization on to their reservation and provide an opportunity to share a meal with them. It's part of the culture. It's pretty fulfilling to hear the drums and the singing. Closing your eyes, it puts you into a different realm and you can just recognize, going back in history, how important those ceremonies are to the tribes. It's something that really fills you spiritually and makes you recognize that these words and these songs that are telling stories are going way back and they're there for a reason. It's a way to honor the fish that are returning, that are giving you life, and they're giving up their life to give you life.



Barbara Rasco, professor, interim director, WSU and University of Idaho School of Food Science:

Most people in the United States overcook fish. Then it will tend to get hard, particularly fried fish. It will tend to get woody and powdery, depending on the species. It's not tasty anymore and the texture isn't good. When we cook fish, for any cooking method, we try for 10 minutes for each inch of thickness. Then a typical test is to stick a fork or a filet knife in between the fibers—myofibrils is what they're called. Open them up as soon as they can flake and it looks like the tissue has become opaque. Then the fish is done. » Fresh fish is not necessarily better. I would much rather have salmon that was frozen on board and handled properly than something that was sitting on ice, maybe out in the sun and then showing up in the store five or six days old. Frozen at sea is probably the best product you can get. » I tend to put just a little garlic and pepper on the salmon and then I'll grill it. I have a grill that has some smoked chips so I can actually smoke it as well. It's not good in my opinion to put salt or lemon on it until you're actually ready to serve it. The surface will look nicer if you don't put salt on at first. » If I have a choice, I'm going to pick steelhead or sockeye. Those are my two favorites. I just like the flavor of steelhead and sockeye, and sockeye is always the nicest red color. All the Pacific salmon are nice. Even the lowly pink and chum salmon are great in certain preparations, particularly smoked, and pink is a great fried product for fish and chips, things like that.



Coho salmon return to spawn in Clark Creek near Marblemount, Skagit County. Photo Jessica Newley

» panoramas

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Lee epitomized a body type that was primarily muscle in a smaller frame.

Lee's innovative, high-speed fighting technique also shook the martial arts world. Not only did he break a taboo against teaching foreigners kung fu, Lee emphasized fighting effectively over form, as typically practiced. "For Lee, it's not enough to just practice the form. He was bucking hundreds, thousands of years of tradition. He thought these forms were just fluff," says Wong. "He would argue that if you go in a street fight, these forms aren't going to help you at all."

Even though he was a successful martial arts teacher, Lee was called to Hollywood. "The film as a medium played nicely into his entrepreneurial spirit of spreading his art to a much wider audience," says Wong. When Lee couldn't find the roles he desired in American film or television, he moved to Hong Kong. There his films struck a sympathetic chord with audiences. The movies showed Lee defeating enemies of Hong Kong Chinese: exploitative Chinese bosses, Japanese invaders, and Westerners. The films rocketed Lee to stardom at a critical time in the thawing of relations between China and the West.

Wong says Lee's films were part of the cultural exchange, with China reentering international sports competitions and the post-Cultural Revolution "ping-pong diplomacy" of

the early 1970s. At that time, Lee offered a very physical embodiment of Chinese strength and national pride, but with a Western connection.

This was especially true of Lee's third film, *Way of the Dragon*, says Wong. It was the only complete movie that Lee directed, starred in, and in which he choreographed the fight scenes. The movie features Lee visiting Rome and fighting the Mafia, and offered a dose of humor where Lee made fun of his own heritage to show how Chinese people needed to adapt.

Even though social change is often unbearably slow, says Wong, Lee's films serve as a powerful cultural instrument. After seeing the movies, people might find their preconceptions challenged and come away with a different view of what Chinese people are like. For Asians, he says, Lee offers an example of adapting beyond tradition, patterns, and expectations.

One example of this subtle adaptation, says Wong, is Lee's switch in fighting technique in *Way of the Dragon*. "When he started fighting Chuck Norris in the Colosseum, he was using traditional fighting techniques, stance, and routines. And he got struck. You saw after he got struck a couple of times, he started dancing—more like Muhammad Ali," says Wong. "He changed and in the end he beat Norris."

Watch clips of Bruce Lee's movies at wsm.wsu.edu/extra/Bruce-Lee.



Bruce Lee fights Chuck Norris in the 1972 film *Way of the Dragon*. Movie frame courtesy Bryanston Pictures

A matter of taste

by Nicholas Deshais :: The human tongue is a pink, undulating, fleshy affair covered in thousands of papillae—all the better for sensory perception. If the tongue weren't so ordinary, it would be strange to think of such an appendage taking up most of the room in your closed mouth, allowing you to discriminate the foul from the toothsome.



Above: Carolyn Ross at a sensory perception lab testing booth. Photo Robert Hubner. Opposite: The electronic tongue at work. Frame from video by Matt Haugen

But there it is.

And here I am in Room 150 of the Food Science and Human Nutrition Building on the Pullman campus, one of eight panelists who will smell and drink wine after wine after wine over the course of two weeks. Kenny McMahon, a doctoral student, is our overseer, handing us these wines, but he can't tell us what we're tasting or why—this is science, after all.

My tongue gets a workout with each new glass, but it's nothing compared to the marathon tasting the electronic tongue does in the lab next door.

The e-tongue looks like a sophisticated little cyborg squid dipping its tentacles in shot glasses of wine. A machine of metal, glass, and plastic, it moves, whirrs, and communicates with a computer. To the point, it's a multisensory array coated in specific membranes that interact with ions in solution. Unlike me and my easily-fatigued gustatory organ, the e-tongue can taste and characterize 60 different wines in a little more than two hours.



The \$90,000 tongue has been busy since Carolyn Ross, food scientist and head of the Sensory Evaluation Unit, purchased it two years ago. The hallway passing by the sensory labs and leading to Ross' office is overflowing with poster abstracts based on work done with the e-tongue.

"Prior to this we had the capability to look for volatile compounds which contribute to flavors. Those are things like strawberry, vanilla, and oaky," Ross says, her slight Canadian lilt exposing her provenance. "But we didn't have any one instrument testing analytically for taste: sweet, sour, salty, bitter, umami."

These are things we can all sense with our own perfectly functioning tongues. But the e-tongue can distinguish flavor on a molecular level. "The human tongue doesn't look at little things absolutely individually. We take everything together," Ross says. We sense taste, flavor, aroma, and mouthfeel all at once, and we have trouble teasing these sensations apart. "That's what the e-tongue does," says Ross.

Back in the sensory lab, my fallible tongue and nose are struggling with each wine. This day, in the second week of tasting as we're preparing to sniff and gargle red varietals, we're trying out "control" scents, attempting to agree on how to rank the plastic and the burnt rubber components, just two of ten parameters we'll smell and taste for. McMahon tells us he used fewer burnt rubber bands for this control scent compared to the last, but left them soaking for longer, which may account for the change in intensity. For such a sophisticated libation, it's an unsavory task. I groan a little inside with each sulfuric whiff.

The e-tongue has no capacity for groaning. That's the point, says Charles Diako, a doctoral

student who was trained by Alpha MOS, the e-tongue's France-based manufacturer.

"We have some form of subjectivity in the human sensory evaluation," Diako says. "The way you taste wine today depends on your mood. If you are very angry today, maybe the wine doesn't taste as sweet to you. Maybe. Tomorrow if it's snowy and you don't want to come here but you do, the wine is bitter. It's subjectivity in human evaluations. Bring in the electronic tongue, and it gives you the absolute values. The whole thing is to bring objectivity into sensory science."

And it does. The human tongue can tell when a wine is sweet. The e-tongue will tell *how much* sweetness a wine contains.

Ross, on the other hand, is careful to point out that the e-tongue will never replace

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a trained panel of expert tasters. But trained tasters are rare.

"The trained panels need a lot of training before you can consider them reliable instruments," Ross says, emphasizing *a lot*. "At least a hundred hours of training. That's not to say that 12 hours isn't sufficient to reduce the variability and have people agree on certain attributes. That's always the trick of the training, getting people to agree on what an attribute is and its perceived intensity."

Under McMahon's watch, we are given a scale from one to 15 for ten attributes, and we all have to agree on them, just as Ross was saying. We smell for reduced and oxidized characteristics. We seek out vegetal, floral, and overall fruit. We dig for musty and earthy. We sip it like soup and aerate it. How sweet and sour and bitter is it? What about the mouthfeel? Does it burn? Is it astringent? Is it thirst quenching? A strange question to ask about a wine you're spitting into a red plastic cup at 10 a.m., but we do our best to find common ground.

Still, with every sip I can't help but feel I'm competing with the e-tongue, that my flawed human tongue will never win against the machine next door. Diako doesn't discount this thought.

"If we have objective measurements of what we are looking at, then this can be disseminated into industry, into the farmers and grape growers so they can tailor their activities to what they want to optimize," he says. "That way we can also give authentic information. I'm not saying the sensory human isn't authentic, but..." He laughs without finishing his thought.

The scoop on Ferdinand's murals

by Bailey Badger '14 :: Visible clouds of breath hang about as we all look upon what remains of the original murals of the Ferdinand's ice cream shop once located in the now deserted Troy Hall.

The first home of the dairy department, Troy is in the middle of campus and in poor condition. Roped off for safety, this 1920s brick structure has been on the University's capital planning list for renovation for a few years now. It is currently in the design stage of what is expected to be a \$40 million renovation so that it can be a suitable home for environmental sciences and chemistry.

As rotting bits of ceiling hang above us and more pieces are scattered on the floor, our



The first Ferdinand's Ice Cream Shoppe in Troy Hall with its original murals featuring images from the popular children's book *The Story of Ferdinand*. Courtesy WSU Creamery

small group has a rare opportunity to explore the empty halls and rooms. Some of the project's planners and designers and I start our tour in the first-floor room where Ferdinand's opened in the 1940s, and where a few rare glimpses of the first Ferdinand murals can be found.

We can see disoriented patches of images straight from the children's book illustrations of *The Story of Ferdinand*.

Simply painted in brown and white, an image of a baby bull named Ferdinand and a bit of text on a teal blue background peeks out from one wall. Several emails, phone calls, and a look into the University's archives suggest that in 1951-1952 physical plant painter Steve Allured crafted the murals after the name Ferdinand's was given to the shop.

Three of the four walls were once covered with the murals, but then they were all but erased thanks to a remodel of Troy Hall during 1970-1973. According to Marc Bates, who managed the creamery from 1974 to 2000, "parts of that remodel caused new pipes and conduits to be routed through the ceiling area of Ferdinand's, causing damage to the original mural."

To mask the damages, a false ceiling was built, which then covered more of the murals. Rich Brim '77 took photographs of what remained the original murals before they were nearly covered over with further improvements. Those images were the inspiration for yet another painter to transfer the story onto the pieces of five large panels of plywood.

Putting the paintings on panels made it easier to clean and manage the walls in the small shop in Troy. They served their purpose into the early 1990s. But when Ferdinand's moved from Troy Hall to the Food Quality Building in May of 1992, there was no room for them. Instead, an even smaller, newer version of the Ferdinand story was put up.

And the striking plywood paintings were stashed away. But not forever.

In 2000, the current manager of the creamery found the panels in the basement of the Food Quality Building. "I thought it would be a real waste for people not to see them," says Russ Salvadalena. "Then three of four years ago as I was walking past the Food Science office I noticed these big empty spaces on the walls. So I talked to the School of Food Science and asked them if we could put the panels up there."

It took a few years and some convincing, but the panels were eventually taken from storage for cleaning and restoration and placed back into public view. Though the painter of the second set of murals is still a mystery, Bates believes that the artists' name might be on the back of one of the panels that now dominate the walls of the main stairwell in the west part of the Food Science building.

Now, when people stop by Ferdinand's to sample the creamery's newest flavors of ice cream, they can also slip around the corner and into the main hall of Food Science building for a taste of the past.

100 years of the Bookie

by Larry Clark '94 :: For a hundred years the Washington State University student-owned bookstore, affectionately known as "the Bookie," has served as a social hub, a source of funds for the student body, and, of course, the place to get textbooks and supplies.

Since it opened in 1914, the Bookie has had several homes and sold thousands of books, baseball caps, fancy fountain pens, and frozen treats. But many former students remember best those iconic Bookie bags, the Cougar gear, and the coffee. Even though the bookstore doesn't hand them out any longer, many also remember those crisp Bookie bucks that filled their wallets at the end of each semester when they sold back their books.

In April 1914, the Associated Students at the college voted to invest \$2,000 in a co-op bookstore on campus which would sell books, supplies, and, as an *Evergreen* ad from that year noted, "hot chocolate, milk shakes, ice cream, soft drinks, and sandwiches." The Students' Book Corporation (SBC) became an instant hit for students who saved 10 percent on all student supplies.

The original Bookie operated in a small wood-frame building on the present site of Wilmer Hall until 1923, when a new brick building was constructed next to the music conservatory and financed by the Associated Students for nearly \$30,000. A larger two-level red brick bookstore was erected in the same location in 1954. The Bookie remained there until 2008, when it moved into its present location in the remodeled Compton Union Building. Now there are also branch Bookies at WSU Tri-Cities, Spokane, and Vancouver.

The old Bookie's coffee shop, with its soda fountain and high-backed booths, attracted droves of students seeking coffee or Cokes and company. It was a de facto student union before an official one, the CUB, was built after World War II. A 1936 *Evergreen* story reported the shop sold 600 cups of coffee on an average day.

The original store sold pennants and other spirit gear, just as the current Bookie sells Cougar clothes and paraphernalia. The Bookie also continues its tradition as a coffee and meeting place, only now with a Starbucks inside the bookstore.

Around a table there, Leslie Martin, Bookie manager and an employee for 17 years, reflects with SBC board chair and doctoral student Richie Liu and undergraduate director Lindsay Elhart on what the Bookie means for WSU's students.

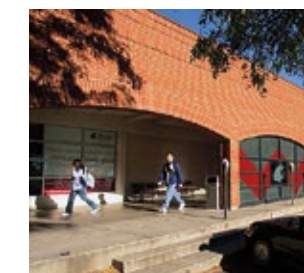
"With e-books and online stores, the role of the college bookstore changes all the time," says Martin. But the Bookie has always been focused on saving the students money by finding the lowest priced textbooks, and now offers a textbook rental service, she says. Students also still realize a 10 percent discount on all textbooks. Even though bookseller Barnes & Noble, Inc., now manages the store, it has always been owned by students.

The Bookie returns a 10 percent dividend to the student body, says Elhart, a senior in finance. Last year, the SBC gave \$85,000 to the Associated Students of WSU, which used the money to install traffic crosswalk lights along Stadium Way.

In honor of a hundred years of service, the student-run SBC board presented a \$100,000 dividend to the WSU student body this year. And in April, the Bookie staff handed out free ice cream and retro baseball shirts bearing the old Washington State College logo. There's reason to celebrate, says Liu. It's all with the purpose of reminding the campus that students own the bookstore and reap its benefits. <<



View photos from 100 years of the Bookie at wsm.wsu.edu/gallery.



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Summer Spikes



Above: A team on the court and in the camps, this summer WSU's student athletes will coach the next generation of college players. **Opposite:** WSU volleyball coach Jen Stinson Greeny '99 gives Cougar volleyball campers a few pointers. Photos courtesy WSU Athletics

by Hannelore Sudermann :: The Washington State University volleyball offices just off Bohler Gym are a lively place, even on an off-season Tuesday in mid-winter. The far office is buzzing with the voices of coaches planning the afternoon practice, the phone rings and rings again, and an athlete studying on a couch greets another sweeping through between classes and the weight room.

The team's last public game was in November, but recruitment is in full swing, there is some light training, and coaches and staff are planning for a series of summer camps for nearly 300 grade school, middle school, and high school girls. Several other WSU sports programs, including tennis, football, and track and field, offer summer camps, drawing thousands of kids to Pullman for a chance to play in the Division I venues like Martin Stadium and Mooberry Track. But Coach Jen Stinson Greeny '99 and her staff have a particularly deep connection: They were all WSU volleyball campers themselves. Greeny first experienced the camp as a high schooler wanting to build her volleyball skills for her Davenport High team. "Basketball was my sport," says Greeny. It had

to be. Her dad was the coach. "But the camp was my first real introduction to Pac-10 college volleyball."

Stephanie Logan, a 6'2" right-side hitter for the Cougs, got her first taste of volleyball at WSU as a "little spiker," an elementary school student who learns the ABC's of the sport directly from the athletes. She watched the players deftly jump and sail across the court. "They were the coolest people in the whole world," she says. "I idolized them so much."

At 14 she got to play in a tournament in Bohler Gym. "I thought that was the coolest thing in the whole world," she says. "I never realized I would be back here as a Cougar." She cemented her love of volleyball, though, through the summer camps. "For the younger kids it's about making it fun," says Logan, who now coaches at the camps. Games and encouragement ease the girls into learning the rules. "It's fun to watch them start to get it," she says. For the older girls already hooked on the sport, it's about honing their skills. "It's even more fun to watch as things start to click with them," she says. "The ones who were here last year remember what we taught them and are so excited to show how they've improved."

WSU hosts three major volleyball camps in June and July. The first brings in girls from first to sixth grade and introduces them to the basics of volleyball before starting them in team play. "If it's their first time ever, they look at us and they're like—we have no idea what you're talking about," says Katie Hinrichs, director of operations for the volleyball program as well as camp coordinator and former camper. "The student athletes break it down for them. It's really fun to watch, and really good for the student athletes as well."

The second camp is an overnight experience for middle and high school students. They live in the dorms, eat at the cafeterias, and over three days have 27 hours of instruction in morning, afternoon, and evening sessions. They also attend "chalk talks" where the coaches explain the recruiting process and offer some basic ideas about nutrition, strength, and conditioning. They may not all be destined for Pac-12 play, but there are schools for everyone, says Hinrichs. "We tell them out to reach out to different schools."

The camps focus on basic ideas of hydration and a healthy lifestyle, including getting plenty of fruits, vegetables, and protein, says Hinrichs. "We touch on sleep, too. We let them know that it's a huge indicator of how you're going to perform, not the next day, but the day after." The campers are also taught drills they can do "in their garage, in the park, or with a friend" to prepare themselves for their school tryouts.

The summer camps culminate with a final camp for team training and tournaments. Players from specific high schools come together to work on not only their individual abilities to spike, set, block, tip, dig, and serve, but to build their teamwork. Nearly 200 students from Pullman, Moscow, Montana, and the west side of Washington pour into Pullman for the team sessions. "It's to gain experience before the start of their high school season," says Hinrichs. "We give them tools they can take home and use as high school athletes."

For Greeny, the excitement of being a high schooler around the college players was unbeatable. "It was just such a fun experience to watch them demonstrate the skills and have them coach us," she says. That first year, she landed on the top team, coached by assistant coach Mashallah Farokhmanesh. He urged her to consider pursuing volleyball in college and even talked with her dad about it. "That was my first time imagining that volleyball would even be an option," says Greeny. She was highly recruited in both volleyball and basketball. "But I had played basketball a really long time and volleyball was sort of new to me. It was an exciting sport and I enjoyed the coaches," she says. So her first college decision was volleyball, and her second was to come play it at WSU. "I got four years with the volleyball team," she says. Then, smiling slyly, she says, "I worked in a little basketball, too."

Once in college, her camp days were far from over. Coach Cindy Fredrick worked her players into the summer camps, pushing them to figure out how to teach the sport to others. "It was my first experience coaching," says Greeny. "I liked it." So much so that it became a career.

Now as head coach of the WSU volleyball program, Greeny not only leads and oversees the camps, she uses them to prepare her own players. "We want our student athletes to be role models in the community," she says. "We love when our players are coaching because they have to look at the game from a different point of view." They mature as players, and they become more aware of the world outside themselves, she says.

She also gets to coach the coaches, who come along with the teams. "It gives them a great time to pick our brains," says Greeny. "They come in saying they think they could be better, but they don't know how."

Finally, the high school campers can get a taste of both life on a college campus and life as a student athlete and Greeny and her coaches get to work first-hand with students they may eventually be recruiting. A few campers come back year after year, and eventually graduate into a place on a college team. "Even though most of them will not be college athletes, we want to offer them an advantage," says Greeny. "We want to remind them that they can always be learning something." <<



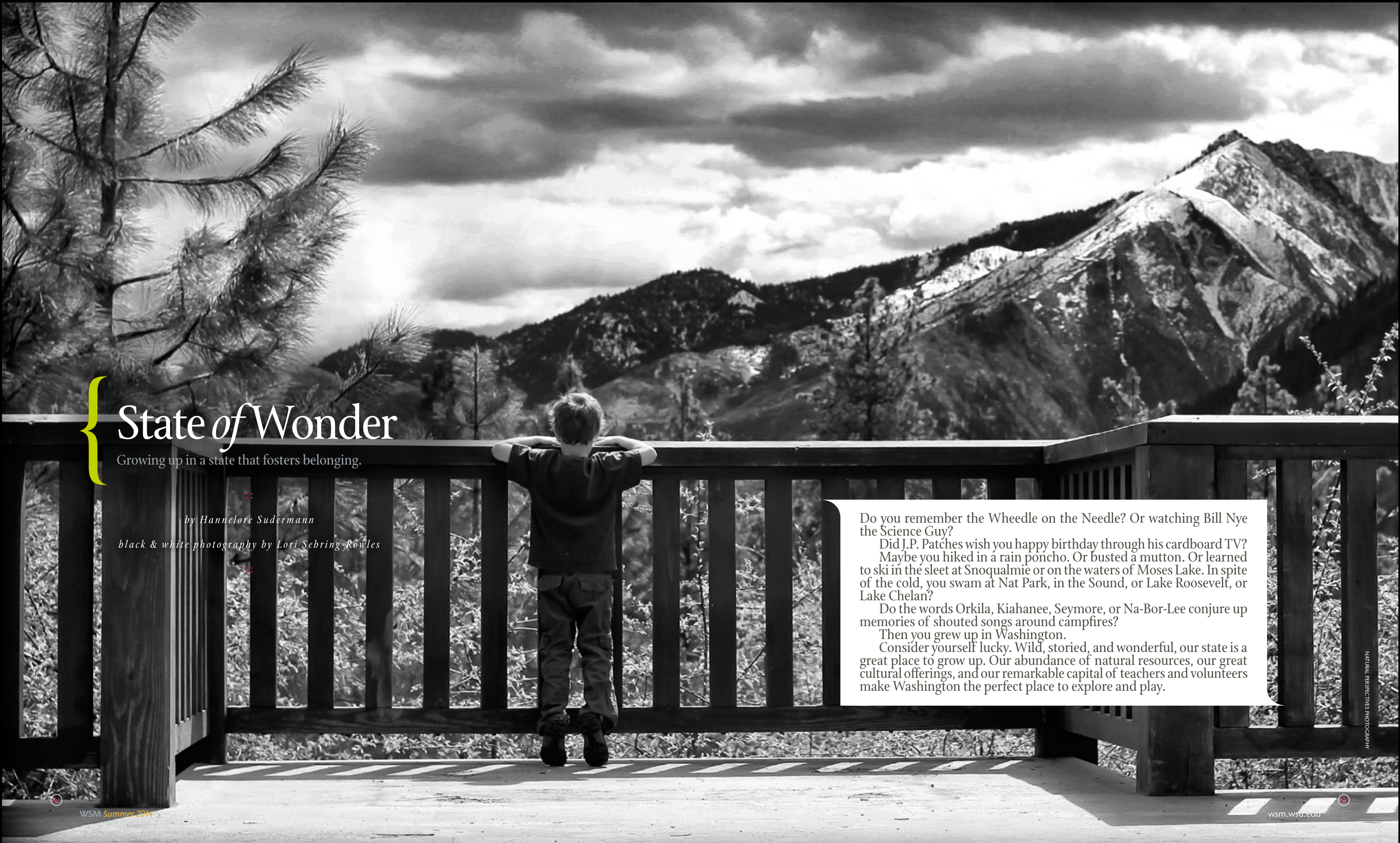


A MILKYWAY PANORAMA NEAR WATERVILLE—PHOTO JOSH TARR

WSM Summer 2014

Our State of Wonder





State of Wonder

Growing up in a state that fosters belonging.

by Hannelore Sudermann

black & white photography by Lori Sebring-Rowles

Do you remember the Wheedle on the Needle? Or watching Bill Nye the Science Guy?
Did J.P. Patches wish you happy birthday through his cardboard TV? Maybe you hiked in a rain poncho. Or busted a mutton. Or learned to ski in the sleet at Snoqualmie or on the waters of Moses Lake. In spite of the cold, you swam at Nat Park, in the Sound, or Lake Roosevelt, or Lake Chelan?
Do the words Orkila, Kiahanee, Seymore, or Na-Bor-Lee conjure up memories of shouted songs around campfires?
Then you grew up in Washington.
Consider yourself lucky. Wild, storied, and wonderful, our state is a great place to grow up. Our abundance of natural resources, our great cultural offerings, and our remarkable capital of teachers and volunteers make Washington the perfect place to explore and play.

NATURAL PERSPECTIVES PHOTOGRAPHY



PLACES TO PLAY

Alex is the second to arrive at the Child Development Program classroom on the Pullman campus. The five-year-old doffs his coat, washes his hands, and beelines to the building blocks.

"I'm going to build an airport. Will you help me?" he asks WSU student Erin Flanagan. She sits on the floor with him and as they line up the blocks, she adds to the game with questions like "How long will the runway be?" and "What will land here?"

Meanwhile, three-year-old Sam, the first arrival, is up to his elbows in a sand table that has been seeded with little plastic dinosaurs. Clementine soon strides through in pink boots, her ponytail swinging as she hunts down a book on shapes. Three other children have moved into a play area beneath a "Doctor's Office" sign and put stethoscopes around their necks to examine WSU student Ashana Hitchens.

"This is free choice time," explains Adair Lawrence, director of the center. "The children are making choices about what to explore and play."

Using the fundamentals of child development as defined by Jean Piaget, Maria Montessori, John Dewey, and Lev Vygotsky, the student teachers are exploring their charges' social interactions. They're watching the three- to five-year-olds self-direct their learning and discovery. And, most importantly, they're helping them play.

"At this age," says Lawrence as Clementine zooms by again, "it's all play."

Play is vital to the developmental process, says Brenda Boyd, associate professor of human development who oversees the student teachers at WSU's 70-year-old teaching classroom. "It's really the quintessential venue." The child could be building and guarding a fort in the woods, acting the superhero and chasing villains across the playground, or galloping a herd of horses through a park. "All these activities help you develop your social and emotional aspects," she says. "And cognitive—you're out there thinking creatively."



BRENDA BOYD PHOTO: ROBERT HUBNER

Play starts with the infant and toddler's early explorations, evolves into pretending, and then becomes games with rules in middle childhood. Children today, particularly in certain environments and certain neighborhoods, may not have the time or ability to play freely, says Boyd. Joining teams or having structured play dates doesn't fill the bill, either. They need time outside.

"I like to believe life in the Palouse is great for kids," says Boyd, reflecting on where her own children liked to play. "Here they have the chance to be outside on their own and do what they do."

The WSU child development program is a window into what has become a statewide governmental emphasis on early childhood, that time from infancy until school.

"Our state recognizes that early childhood is a critical period in terms of brain development and it cannot later be replicated," says Jane Lanigan, an associate professor at WSU Vancouver. Besides needing good health care and optimal nutrition, children at this stage need a variety of learning experiences and physical activity.

"Washington even has its own Department of Early Learning," she says. The state agency looks to prepare parents and child care providers as those first teachers. The director serves on the governor's executive cabinet.

What's more, Washington was one of the first states to win a federal Race to the Top Early Learning Challenge grant, \$60 million over four years from the U.S. Department of Education and Health and Human Services to improve early learning settings. The practices of interactive play and the efforts to develop the mind and motor skills that take place in the classroom in Pullman are being used throughout the state in child care and Head Start through a program called Early Achievers.

Using the federal grant, Washington is taking its research-based program for rating and improving early learning settings statewide. "It's a big deal that we got that money," says Boyd, explaining that it will go far in improving the quality of life for our youngest citizens.

A big component of the program is ensuring that the children have plenty of free play and time outdoors. That does several things for children, says Lanigan. "It gives a connection to nature, it allows them to develop their gross motor skills ... and the physical activity allows them to explore what their bodies are capable of."

Recently, Lanigan's research on healthy activity and eating in child care settings was used in expanding First Lady Michelle Obama's Let's



NATURAL PERSPECTIVES PHOTOGRAPHY

Move campaign beyond its initial focus of school-aged children to include preschoolers and younger. We're only now recognizing that "habits are formed in early childhood around being active or being sedentary," says Lanigan. "And eating tends to carry through until middle childhood." The challenge is that the age group, which isn't yet in school, is much more difficult to reach, she says. That is why efforts like our state's early learning emphasis are so important.

NATURE IS THE BEST TEACHER

Beyond offering our youngest citizens a good start, Washington is striving to cover the full span of childhood. Scott VanderWey, WSU's director of Adventure Education for 4-H oversees programs to get grade school- to high school-aged Washingtonians outside.

Washington has three national parks and 117 state parks. People here grow up riding bicycles, climbing trees and mountains, canoeing, rafting, skiing, swimming, and sailing. Recognizing this, cities and counties throughout the state have, through their parks, programming, and funding, made great efforts to get Washington's children outside to explore, says VanderWey.

In 19 of the state's 39 counties the 4-H programs include ropes courses in city parks, sailing in the San Juans, back country hiking in the North Cascades, and snowshoeing in Ferry County.

At Camp Long, a 68-acre Seattle park with forests and cabins, kids can not only get into the woods, but up in the trees. Comprised of high platforms and nests of ropes, the camp's high and low ropes courses were built by WSU Extension, King County, and the Seattle Department of Neighborhoods. Last year, the courses served 2,500 children ages nine to 19. This year, it hopes to bring in 4,000.

Down in Skamania County, a 4-H Forest Youth Success program brings teens into the forests to teach them the fundamentals of forest ecology, give them work experience, and have them build trails, tend the forest, and release turtles and trout.



COURTESY SEATTLE.GOV

Camp Long - Seattle



JANE LANIGAN PHOTO: LAURA EMANICHCHISUV



PHOTO BILL WAGNER

Esther Short Park – Vancouver

The WSU Adventure Education program is more than 30 years old and it is still looking for new ways to use Washington's natural resources to serve kids. "Washington State University is the only land grant university with this depth and breadth of adventure education programs," says VanderWey. "That may be in part because Washington just lends itself to it. For example, we have every outdoor activity you can imagine within two hours of the city of Seattle."

Richard Louv's book *Last Child in the Woods* discusses how contemporary American culture does not foster children being outdoors. The book points out that the decreased time outside coincides with health issues for children as well as a rise in depression. "Studies prove it out," says VanderWey. "It's pretty clear that spending time in nature decompresses children." It also develops life skills, can make students more ready to learn, and lends itself to natural resource education, he says.

That childhood exposure to nature carries through to adulthood, affecting adult attitudes toward supporting and protecting the resources around them, says Virginia Lohr, a professor of horticulture. A few years ago, she explored this in a survey of 2,000 adults living in cities across the United States. "People appear to understand the diverse benefits that trees provide," she found. "Childhood participation in active and passive outdoor activities, including tree plantings and being raised near trees, appears to influence adult attitudes positively."

She found that people with strong childhood experiences with nature were more sensitive to having nature around them as adults.

WITH KIDS IN MIND

Washington's communities are filled with museums, science outposts, festivals, zoos, and theater programs, all created with kids in mind. Seattle's scrappy city-and volunteer-supported, child-focused Poncho Theater of the 1970s and 80s has evolved into a stunning Seattle's Children's Theater, one of the

top five children's theaters in the country. It's just next door to the Pacific Science Center which for the past half-century has lured thousands each month to its wide array of hands-on science exhibits.

Tacoma's Point Defiance Zoo and Aquarium has spent 100 years at its current location and draws 700,000 visitors per year. And Vancouver's five-acre Esther Short Park, the oldest public square in the Northwest, is packed most summer weekends for outdoor concerts, a farmers market, and the picturesque wading fountain. Last year the American Planning Association named it one of the nation's 10 great public spaces.

Across the state, Spokane has the 100-acre Riverfront Park, its own children's theater, and the Mobius hands-on science museum. "But we are nothing if we are not a city of events," says Anne Windishar Walter '87, a counselor at Franklin Elementary and trustee of the city's library board. These events draw visitors from around the region, fill the streets of downtown, and are all about being healthy and being outdoors.

Bloomsday, the world-famous spring-time running race through the city, has a "Marmot March" fun run for second graders and younger, and recently introduced a one-mile junior version of the race for third and fourth graders. There's also an annual Fit for Bloomsday program where 6,000 area elementary students can, with the help of their coaches, teachers, and parents, train to walk or run in the race.

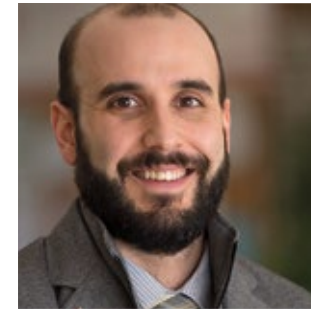
Spokane's Lilac Festival, not unlike Seattle's Seafair and Pierce County's Daffodil Festival, highlights both the community and the natural resources and, again, draws thousands of people into the city. Seven years ago, the city added bicycle-focused Spokefest, a family bicycling festival featuring rides from nine to 47 miles, with a much smaller one- to two-mile loop for the youngest bikers. During each of these events, Spokane surrenders its streets to the families who come to participate, says Walter.

But what may be most impressive is what has become the world's largest three-on-three basketball tournament. "Hoopfest is amazing just for the breadth of people that it brings out," says Walter. Now in its 25th



PHOTO GARY PETERSON

Spokane Hoopfest



JOHN LUPINACCI PHOTO ROBERT HUNNER

year, the annual three-on-three tournament at the end of June draws over 7,000 teams of all ages and a quarter of a million people to the streets of downtown Spokane.

Terry Kelly '81 first heard the idea for Hoopfest over lunch with the event's founder Rick Betts one afternoon. "He had run into a three-on-three tournament somewhere else and said we could do it in Spokane, only bigger and better." Kelly, a former Cougar basketball player, wasn't so sure. "I said I didn't know if Spokane was that into basketball. And it would have to be very big to be successful." Nonetheless, he was willing to help. A tax attorney, he helped draw up the nonprofit event's articles of incorporation and later trained volunteers to officiate the games. More than 2,000 players on 512 teams came that first year. "It was a madhouse," says Kelly. "I remember thinking, this is wild. We shut down downtown."

But what better city than Spokane for such an event? "It's the geography of the place and the mindset of the people," says Kelly. "We felt a lot of love coming from the smaller communities. And here in town we had so many willing volunteers."

Spokane is a good mix of neighborhood and city with just enough cultural and natural resources to provide children with a rich experience, says Walter. She and her husband, writer Jess Walter, grew up in Spokane. "We have chosen to stay where we are and raise our kids because of the quality of life," she says. "I wanted my kids to be able to play outside, to experience a community in a town where they can live and contribute. But it's large enough that they do experience the world here, too."



COURTESY SCOTT VANDENBERG



NATURAL PERSPECTIVES PHOTOGRAPHY



NATURAL PERSPECTIVES PHOTOGRAPHY

A STATE THAT FOSTERS BELONGING

Whether it's in the woods, on the beach, or in the middle of downtown, place can play such an important role in development, says John Lupinacci, an assistant professor in the College of Education who researches place-based education. Time outdoors helps children become more attuned to the ecology around them and ultimately can help them care more for their environment. And by exploring their cities, museums, and cultural events, children are deepening their ties to the places around them, he says.

As we visit in his Pullman office, Lupinacci mulls how Washington might be different from other states and then lights up. "I know a great example," he says. "Washington has so many farmers markets. These are great places for children for a multitude of reasons."

"There is an intergenerational connection, and they take place around food, around farming, and around place," he says. Even in the heart of the city, at a farmers market you are connected with the countryside. "Things are shifting here," he says. "People in Washington are finding ways to address food and ecology issues locally. And there's a tremendous source of optimism here."


"We always have that openness and willingness to be responsive to the ecological parts of our communities," he says. But sometimes

"that comes in conflict to the narrative of what it means to be successful." Right now in Washington, instead of pushing for commercial development, communities are pushing for more school and community gardens, open air markets, and healthy outdoor experiences, he says. "We're now focusing on place in a deeper way than just sort of an environmental education. I think the unique geographic landscape contributes to that."

Even in Washington's most urban areas, you can still see rivers, lakes, mountains, and trees. "That has to have some effect," he says.

Lupinacci works with students training to be teachers. He also focusses on reforming education to make it situational, local, and in support of living systems. He's finding that the two parts of his work are overlapping in interesting ways. "It used to be that you grew up, you went to school, and then you moved away to find success," he says. But now many of his students are intent on not just staying in Washington, but on returning to and serving the communities where they grew up.

"There's a strong connection, not just to our nature, but to our cityscapes and beyond," he says. "That relationship of belonging sort of claims you." ☒

 WSU students are writing, designing, and illustrating their own children's books. Read more about the Inga Kromann Book Award at wsm.wsu.edu/extra/KromannAward.



STAFF ILLUSTRATION

Machine *in the* Classroom

New tech tools engage young scientists

by Larry Clark '94

In a familiar classroom scene, lab partners take turns squinting into a microscope. They spy a wriggling paramecium, if the organism doesn't swim away from the field of view. These days they also peer into an iPad to watch videos and access digital textbooks. Engineer and entrepreneur Jeff Stewart sees a happy marriage between these old and new technologies in science classrooms.

Stewart and his colleagues at Exo Labs have enhanced that connection with an accessory that connects any microscope to an iPad, where students and teachers can take pictures and videos, measure objects, and quickly share observations. The device could help teachers expand students' ability to interact with the microscopic realm.

"We wanted the iPad to be a center for creating content, not just consuming it," says Stewart '01. "Our simple idea is to go into places that have microscopes and iPads. We're the glue that brings them together."

While Stewart and others create technology for science classrooms, an old debate emerges for teachers, school administrators, and education experts. Once again—as with film, television, radio, and computers in their times—the educators ask, "Will this new technology hinder or help teach students? Is the expense and the learning curve worth it?"

Ambivalence toward iPads in schools around the country, now at five million iPads and counting, exemplifies the debate toward technology in the classroom. Last year the Los Angeles Unified School District announced plans to give iPads to all its students, invoking skepticism from experts. "Using an iPad just to say you're using an iPad won't help students," Sherri Hope Culver, director of the Center for Media and Information Literacy at Temple University, told *The Christian Science Monitor* last August. "Technology in the classroom should always be in the service of learning."

IN THE SEATTLE WATERFRONT OFFICE OF EXO LABS,

Stewart demonstrates how the Focus Microscope Camera in conjunction with the iPad could improve science teaching. He walks across the refurbished wooden floors, past wire racks stacked with circuit boards, microscopes, and electronic parts, to a table with the device. It's about the size of a deck of cards with an adjustable protuberance that attaches to a microscope. A cable connects to an iPad that shows and captures what's happening beyond the eye's reach.

From the iPad, he projects a fly wing onto the wall, then a fly leg, a spider, and then a nematode. Stewart says nematodes are especially popular in science classes. The magnified wormy, squiggling creatures definitely have a creepy-crawly feel, which just grabs attention.

Using the app connected to the camera, Stewart measures the length of the nematode, then takes a picture, which he shares via email, all in the space of a couple of minutes.

The office has the feel of a tech startup. Engineers and computer programmers work closely at desks and tables in the light of large windows at the end of the room. While other users might find the tool useful, Stewart insists the focus is on classrooms.

"This makes the experience in the classroom relevant and not so different from what's in students' pockets," says Stewart. "Otherwise students say, 'OK, I put away 2014 and go back to 1950 to draw this thing out, taking turns at the microscope.'"

A tall man with glasses and close-cropped hair, Stewart smiles as he explains that science teachers—and students—have really taken to the microscope camera.

"One teacher asked us if we had replaced all the students in his class," he says. "They were excited, pulling out slide after slide. Everyone's pointing and looking. That teacher was reminded that these kids were curious. Our camera is just a different way in."

Stewart didn't start his career working with educational technology. After completing his computer engineering degree at Washington State, he went into medical devices and worked on a tool to predict epileptic seizures. But the difficulties of getting medical inventions into the market disillusioned him.

"I knew some people who had worked in medical startups for 20 or 30 years and never had actually shipped a product," he says. "It was time to move on, and a startup felt like the next venture I wanted to try."



Opposite: The Focus Microscope tool connects any microscope to an iPad. *Courtesy Exo Labs.* **Above, left to right:** The Focus tool appeared in Apple's thirtieth anniversary commercial. *Courtesy Apple Inc.* Michael Baum and Jeff Stewart. *Courtesy Exo Labs*

Starting out in Stewart's basement in 2011, he and colleague Michael Baum pooled their energy and leapt into the startup world. Both had recently started families and wanted to connect their work to education. After thinking about where they might apply their creativity and skills, they recalled their love of science as kids and the wonder of microscopes.

"We were sitting in a coffee shop in Fremont thinking of ideas. We realized with the proliferation of iPads in schools and the confluence of STEM education, we could connect with these assets schools already had: microscopes."

The microscope, a staple of science classroom technology for centuries, seemed a natural fit. Its application for engaging and enlightening students was recognized early on. An 1882 guide to selecting a microscope noted, "As a means of imparting instruction to the young, the microscope has now become indispensable." An 1806 work affirms that "it opens to the young and curious an inexhaustible source of information and pleasure." Anton van Leeuwenhoek's tool still draws students to scientific exploration by revealing the unseen.

Moving from the concept of connecting the microscope and iPad to the design of the actual hardware and its associated app, the engineers began collaborating with science teachers, field-testing in classrooms to make a device that fit with actual lessons.

Their interaction with teachers also led to the development of a magnifier stand for observations of larger objects, and an adapter for telescopes.

Working at a startup can have its perks. The flexibility and nimble response to teachers and clients keeps Stewart interested. But founding a new company is not for the faint of heart.

"It's not an environment for everybody. There's a tremendous amount of uncertainty and you feel like you're constantly running in the fog," says Stewart. "It's exhilarating and terrifying at the same time."

Like sailing around the world. Stewart and two friends, fellow engineers Matt Smith '00 and Casey McNeese '02, decided to circumnavigate Earth in 2005. They took sailing lessons, bought a boat, and left their jobs.

"The hardest moment of the trip was casting off," says Stewart. "Just committing to that one moment we had been talking about for years."

That two-year trip prepared Stewart for his startup and, as he says, for the adventure of having a family. He and his wife Christina Hulet have a son, Trevor, who is almost three.

THE STARTUP MENTALITY IS NOT NEW TO STEWART.

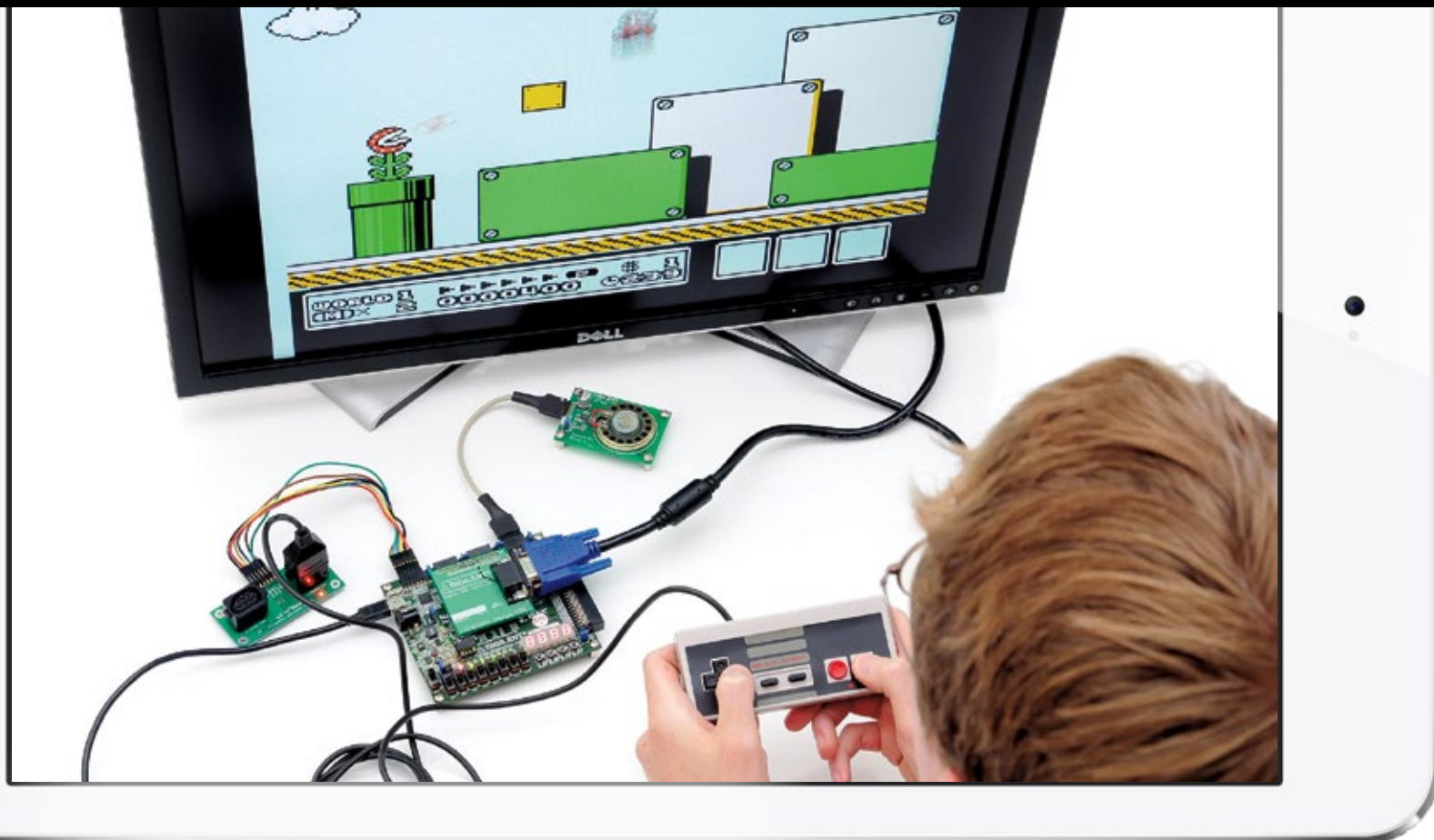
At Washington State, he learned from his mentor and professor Clint Cole '87, '99 MS about developing educational technology. Stewart says Cole brought relevant, practical industry experience to the electrical engineering labs and classes.

Cole's own move into educational technology innovation also came by way of medical devices. Even before studying computer science and electrical engineering at WSU, he worked as a paramedic for a number of years. Then, as a student, he decided to turn his engineering savvy toward medicine.

After working for Hewlett-Packard and a medical device company, Cole and his team started a new company and built the Heartstream compact defibrillator, which reduced the size of the emergency machine by a factor of five. They sold the technology, and Cole returned to WSU where he taught electrical engineering classes.

It was in those classes that Cole realized that his students were missing the hands-on training they needed to advance in their careers. The circuit boards students needed to learn the basics of electrical engineering were overpriced, says Cole. He knew the components alone did not justify the expense of \$400 to \$1,000.





Above: A video game and controller designed with Digilent boards. *Courtesy Dan Strother. Left:* Clint Cole with some of Digilent's circuit boards. *Courtesy Digilent Inc.*

So Cole and former student and Microsoft engineer Gene Apperson started Digilent Inc. to build their own circuit boards and sell them for \$49 to \$99, bringing them into the range of not only college students and universities, but also hobbyists and high schoolers.

"We started about 14 years ago, and within about four or five years we became the nation's leading supplier of digital design kits," says Cole. "We now have a broad range of kits that appeal to students who want to learn electronic or computer engineering."

One window of Cole's office in Digilent looks out to the Palouse hills on the edge of Pullman. Another faces the headquarters of Schweitzer Engineering Laboratories (another successful 1982 startup by a WSU alum). Picking up their first commercial circuit board, the engineer demonstrates how it helps educate young engineers. The primary feature is a chip that does nothing until a user programs it to be a computer, a light switch, an MP3 player, or anything an engineer wants.

"These circuit boards with modern chips on them expose those technologies to students," says Cole. "After supplying WSU and the University of Idaho, we started getting requests from other universities and colleges."

Cole pulls another device from the shelf. It's a digital oscilloscope and logic analyzer, a combination of two basic measurement tools for electrical engineers. Like Stewart's combination of iPad and microscope, the new device builds on old technology and makes the measurements accessible by using a computer as the interface.

An oscilloscope displays electrical signals over time. The earliest ones were built in the 1870s. A logic analyzer does similar work with signals from digital circuits, registering multiple signals simultaneously. Both tools enable engineers to determine if circuits and electrical devices are working correctly.

"Together on a bench, this would replace a huge stack of devices that cost a couple of thousand dollars used on eBay or up to \$20,000 new," says Cole. "It takes thousands of dollars of equipment to see if this 30-cent circuit works."

Smaller than a DVD case, the new analyzer sells for \$99. It connects directly to a computer, where an engineer or student can see the measurements.

Using this "analog discovery" tool with a training circuit board, engineering students can learn the basics of the field. They can also expand the capabilities of the circuit boards with GPS, WiFi, and other plug-in modules for their projects.

Cole enjoys the enthusiasm and understanding from students who learn engineering this way. Digilent has sponsored design contests

using the company's products. Students around the world built devices from very meager resources, such as a robot built from scratch.

Digilent was acquired last year by National Instruments, a large Texas-based test equipment company, continuing the focus on developing affordable equipment to train engineers.

TECHNOLOGY IN THE CLASSROOM ISN'T A GUARANTEE OF GREATER ACADEMIC SUCCESS, BUT IT CAN HELP.

Rich Lamb, an assistant professor in the WSU College of Education, focuses on the applications of new technology in science classrooms and their effectiveness. He measures the impact of the technology in student achievement and engagement.

"Technology is the mode to teach science to me," says Lamb. "I'm interested in how the application of technology can impact students' learning and how a teacher can be more effective with technology."

Lamb, who taught high school science for eight years, believes that technology, if applied correctly, can improve the science literacy of students. He describes how his own chemistry class took advantage of computer-based experiments.

Lamb's class would try physical experiments, but if they failed to get the right chemical reaction, they would have depleted their supplies and had no way to try again. If they performed computer simulations of the experiments first, then they had greater success with their physical experiments. The computer simulation could also zoom to the atomic level and show the up-close reaction.

However, ambivalence toward technology has polarized opinions on the roles of new devices and technical tools in classrooms with limited instructional time, says Lamb.

It's an oft-repeated pattern of technological adoption in pedagogical practice. When films were introduced to classrooms in the 1920s, enthusiasts claimed it would elevate the efficiency of teaching students and free up time for teachers. Thomas Edison wrote in 1922 that "the motion picture is destined to revolutionize our educational system and that in a few years it will supplant largely, if not entirely, the use of textbooks."

After several decades of use, however, the reality was that teachers' use of film filled only a fraction of the instructional day. Film entered the teacher toolbox, but only as a limited supplement due to the cost of equipment, lack of material, or real demonstration of any improvement in learning.

Radio in classrooms also had its boosters starting in the 1930s, who said broadcasts "will be as common in the classroom as is the blackboard." Instructional television shows on a set schedule, and later personal computers, were also touted as panacea for overburdened teachers. Science fiction stories and some education experts in the 1980s claimed computers would supplant teachers, revolutionizing the way students are taught. Others claimed computers would cause students to slip in their academic abilities and lose critical problem-solving skills. Similar criticisms were made about film.

Such fantasies, says Lamb, create a difficult dilemma for teachers and administrators who make technology choices. "The assumption is that students will do wrong with technology," he says, like playing video games. "Some will, but it makes a cultural barrier to using technology in the classroom."

To bring a more objective view to the debate, Lamb's research examines specific improvements in student learning through technology, particularly in science classes. Specifically, Lamb explores the cognition of students engaged with technology.

"Cognition is the underlying genetics of learning. The outward expression of learning is how well you understand the content, how well you understand chemistry or biology," says Lamb.

He uses video games to gather information on how students think about the material. He looks at critical reasoning, problem-solving, and communication, and how they change during the video game. As he says, technology is excellent at gathering data and allowing analysis of student interaction with material.

Lamb and other researchers have found that technology consistently improves student achievement, but the mechanisms are up for debate. Lamb contends that student engagement with the technology increases test scores and comprehension. And he has biometrics to show it.

Using eye tracking, heart rate sensors, and other physical measurements, Lamb can observe how students interact with technology, such as the serious science video games he studies.

The key, says Lamb, is students learning and directly applying knowledge. Reflecting on the iPad and microscope connection, he says, "As a science teacher I can see giving students an unknown specimen they can examine together, and collaborate in their material. Children are natural scientists, because it's about understanding the world."

Technology provides the opportunity for "soft failure," says Lamb. Consequences for missteps in scientific exploration are not dire, but rather they work as educational opportunities.

Even if using a technology, whether it is film or the iPad microscope camera, can assist students, teachers must decide on how the technology fits with their lessons. Computers, for example, are clearly a crucial part of education. The question for teachers is when and where they make sense for lessons, says Susie Skavdahl, an educational technology instructor in the WSU College of Education.

Skavdahl, along with education professor Joy Egbert and others, teaches aspiring teachers how to analyze technology and choose how to apply it in their teaching.

"We don't want our teachers using technology as a crutch, going into the classroom and relying on the technology to teach for them," says Skavdahl. Instead teachers can enhance their instruction with the machines.

Some teachers may hesitate to use a "smart board," a giant touch screen whiteboard, she says. But it could show a math problem or a science demonstration video and allow students and teacher to interact without interfering with the lesson.

Skavdahl worked as a special education teacher. From personal experience and talking with current teachers, she says students, whether they are advanced or have learning disabilities, can gain a lot from technologies.

"The pitfalls are students being distracted by technology," says Skavdahl. "Fear can also impede teachers, like fear of breaking an iPad. We show how to use them like a tool, and give them a bag of ideas that they can use in their classes."

WELL AWARE of the need to keep teachers involved with the technology, Stewart and his colleagues created an online community of science teachers to share experiments, ideas, and applications of the iPad microscope camera and accessories. The videos and discussion can help instructors better use the device, and share their successes and struggles.

Even at the beginning, says Stewart, “local teachers from Mercer Island were instrumental in helping us understand the needs of teachers. We engineers tend to apply how we want it to work. The teachers helped us understand what a good day as a teacher looks like and how to engage students.”

Teachers are even part of the development process for new devices through a Kickstarter crowdfunding campaign that grants devices to schools that might not be able to afford them. The teachers test the new equipment and give feedback. One successful project was time-lapse photography for the microscope camera. Stewart and Exo Labs are also working with WSU Spokane and their K-12 outreach program to get the cameras into classrooms.

Although Cole and Diligent’s products are often used in college classrooms to train engineers, having both students and their instructors find new ways to use the engineering education devices is crucial.

Down the hall from Cole’s office, a large space houses cubicles and offices where WSU undergraduates, graduate students, and visiting professors design and build projects using the circuit boards, modules, and other tools. On top of a cubicle rests a large spider-like robot. A few feet from there, a student checks the signals from his circuits with the oscilloscope/logic analyzer device.

“These projects will take you from your first touch exposure to electronics. This series of projects that you can complete on your kitchen table can guide you to acquire the skills you need if you want to be an engineer,” says Cole.

In a room downstairs, next to the warehouse, Cole shows the studio for filming instructional videos for teachers and other users. The company gives those videos, along with textbooks and experiments, to consumers for free.

“We have a liberal license for this material to let the educators of the world know it’s out there. They can copy it and use it any way they want,” says Cole. “We don’t put it out there for a cash flow but to build awareness and excitement.”

FOR TEACHERS AND EDUCATION EXPERTS, the peril and promise of technology and machines in the classroom present a familiar problem. Instructional time is limited, the pressure of tests weighs on students and teachers, lack of infrastructure and support might hinder use, and the difficulty in learning a new technology can intimidate or delay instructors. No matter what the research, says Lamb, “Teachers ask how can this make teaching easier than what I do already. That’s the litmus test for technology.” ☒

Watch examples of student-produced videos with the Focus Microscope and iPad at wsm.wsu.edu/extra/microscope-ipad.

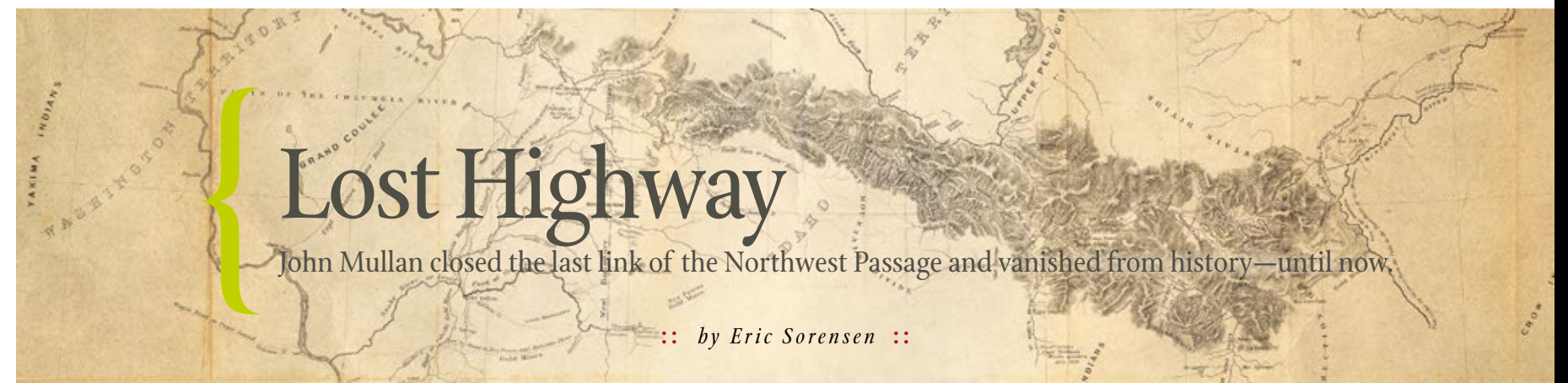
Know someone who might want to enter the 2014 Diligent international student hardware design competition? Visit diligentdesigncontest.com.



Susie Skavdahl and Rich Lamb from the WSU College of Education teach and investigate how technology is applied in classrooms. Photos Robert Hubner



ON A MAY MORNING IN 1858, along a small creek on the northern edge of the Palouse, hundreds of warriors from several Inland Northwest Indian tribes closed in on 160 Army soldiers led by Col. Edward Steptoe. An Army retreat turned into a 10-hour running battle. Two company commanders were mortally wounded, panicking the men. At last, the troops took up defensive positions on a hillside in what is today Rosalia. As night fell, they were surrounded, outgunned, and down to two rounds of ammunition apiece.



1863 FORT WALLA WALLA TO FORT BENTON MILITARY MAP DETAIL/WSU LIBRARIES DIGITAL COLLECTIONS

More than a century and a half later, Keith Petersen '73 is standing on the hillside, looking at a memorial to the battle. Frosted grass crunches under his feet. A set of displays illustrates Steptoe’s advance and retreat.

“This,” says Petersen, whose grizzled beard could put him in the nineteenth century as easily as the twenty-first, “came real close to being Custer before Custer.”

As it happened, Steptoe’s men muffled their horse’s hooves, buried their howitzers, abandoned their pack animals, and stole away under cover of darkness. Without a doubt, says Petersen, the Indians let them escape.

But as the spring of 1858 gave way to summer, a fundamental tension lingered like gun smoke in the morning air. The Indians did not want the U.S. government to build a road across their land. They had grudgingly agreed to the road in the 1855 Walla Walla Treaty negotiated by Isaac Stevens, Washington Territory’s first governor and supervisor of its Indian Affairs. But the treaty had yet to be ratified by Congress, making any road a trespass. Father Joseph Joset, a Jesuit missionary who had tried and failed to head Steptoe off from his ill-fated battle, later speculated

that, had a road-building party been traveling across the Palouse instead of troops, it “would have been sacrificed.”

The road would come to play a pivotal role in the development of the Northwest, let alone the young nation’s aspirations. It would run from Walla Walla to Montana’s Fort Benton, an obscure-sounding route today, but the last link of the transcontinental Northwest Passage President Thomas Jefferson envisioned when he sent Meriwether Lewis and William Clark out west more than 50 years earlier. Stevens himself hoped it would be the route of a transcontinental railroad, positioning Puget Sound as the nation’s gateway to Asia.

“It’s always this drive of connecting, connecting the East and the West,” says Petersen. “That explains so much of nineteenth century American history, that connectivity between the East and the West. Well, you can say it still describes us.”

Leading the road’s construction was John Mullan, a brash, aspiring, indefatigable 27-year-old lieutenant. The son of an army sergeant who worked at the Naval Academy in Annapolis, Mullan was educated at West

Point, less a military school at the time than a first-rate engineering college and precursor to the land grant college. Here graduates were outfitted with “science for exploring the hidden treasures of our mountains and ameliorating the agriculture of our valleys.”

Steptoe’s Disaster, as it came to be called in some circles, was a linchpin in the development of Mullan’s road. Within months, the Army was back with a vengeance, clearing the way for Mullan to finish his road in a massive feat of frontier logistics, leadership, brute effort, bureaucratic wrangling, and frostbite. At which point he all but vanishes from the pages of history.

“It’s hard to pick up a book about Northwest history that deals with the nineteenth century and not find something in the index about John Mullan and the Mullan Road,” says Petersen, “but it just ends. He just totally disappears from sight.”

Petersen first heard of Mullan as an undergraduate history major advised by David Stratton, now an emeritus professor after a 51-year

“This was kind of cool,” recalls Petersen. “You could talk about Indians and the Sand Creek Massacre or whatever but all of a sudden you say, ‘the Army and the Indians got together out here where our high school is and almost had a fight.’ That’s pretty exciting stuff. It gives a whole new picture to things.”

It was a departure from traditionally dry, detached history. Along with stories from his long-lived grandfather, it showed Petersen that history could take many forms. Still, it would be a while before he would even realize that he might become some sort of historian.

When he arrived at WSU in 1969, advisors were assigned alphabetically. He drew Stratton, a western-raised and educated scholar who specialized in the American West and Pacific Northwest. Petersen had no particular major in mind, figuring he would take what he felt like and go from there. Come his junior year, when it was time to declare a major, Stratton looked at his courses and said, “I think you should declare it in history because that’s what you’re taking.”

by William J. McConnell, an Idaho governor in the late 1800s. He spent most of the 1990s as an acquisitions editor for the WSU Press. With fellow Stratton student Glen Lindeman (’69 BA Political Science and History, ’73 MA History), they put out a dozen or so titles a year.

Starting in 1999, as the Lewis and Clark Bicentennial approached, Petersen acted as Idaho’s bicentennial coordinator, which segued into his current job, associate director and state historian for the Idaho State Historical Society.

And every now and then, John Mullan would drift across his consciousness. With the rise of the Internet in the late ’90s, he would occasionally search for information about him, taking advantage of the web’s broadening reach into the world’s archival corners. Then, poking around the web in 2007 or 2008, he saw that Georgetown University had recently catalogued 13 boxes of Mullan papers stretching 8 linear feet. It was a eureka moment. He and Reed, his de facto research and editorial assistant, became the first people to go file by file through the archive, he says, “and that’s what made the biography possible.”

calls, “some of the most significant explorations ever undertaken in the West.” He scouted several routes to the Bitterroot Valley from the east, including the rugged, snow-driven stretch of Lolo Pass that nearly doomed Lewis and Clark.

When Wright set out to avenge Steptoe, Mullan had yet to see what would become of his road’s western section. So he signed on as the topographical engineer, or “topo.” This was no behind-the-lines clerk typist job. He was put in charge of 30 Nez Perce warriors. They wore Army-issue blue uniforms; Mullan, a model student at West Point but a free spirit in the field, wore buckskins.

The full force—600 soldiers, 100 packers and herders, and 1,600 animals—were lured into battle by a confederation of Inland tribes outside modern-day Spokane. This time the Army had long-range rifles, killing 17 to 20 Indians and taking no casualties over four hours. Wright singled Mullan out in his official report, saying he “moved gallantly.” For his part, Mullan barely notes the battle.



Opposite: Capt. Mullan nearly drowned in the Hellgate River (now Clark Fork) as depicted in this illustration by Gustav Sohon, 1854. Courtesy WSU Manuscripts, Archives, and Special Collections.
Right: One of the few photographs of John Mullan. Courtesy Georgetown University Library and WSU Press.

career at Washington State University. In 1986, he jotted his first notes on Mullan, “thinking someone else would surely write a book about this guy.”

But that someone turned out to be him. This May, WSU Press publishes *John Mullan: The Tumultuous Life of a Road Builder*. It’s the result of some five years of writing and research, including coast-to-coast travels and visits to more than two dozen libraries and archives.

“I literally had dreams about John Mullan,” Petersen says.

Along the way, he discovered a hard-edged embodiment of nineteenth century hubris and grit, a quintessentially Western tale of frontier aspiration, courage, checkered dealings, and bad luck.

Back in the late ’60s, Keith Petersen lived in Battle Ground, a town named for a battle that brewed but never quite boiled over. His high school history teacher, Bill Hill, in effect threw out the history textbooks, choosing instead to use local history to teach larger lessons.

So he did, and on graduation found employment working in a Vancouver sawmill. He spoke with Stratton about graduate schools, and on a visit to the University of Wisconsin, dropped in at the state’s historical society to ask about work.

“Can you start next week?” he was asked.

He worked there through graduate school and, along the way, realized two things: He liked public history, essentially the practice of history outside the classroom, and he didn’t need to get a doctorate to do it. Soon after he graduated with a master’s in history, Stratton told him about a job at the historical society in Latah County, Idaho, launching a peripatetic, 36-year career of researching and describing history in different ways.

As an independent consultant in the 1980s, Petersen did contract work for state and federal agencies, helping with interpretations, exhibits, and written materials. He wrote a history of the University of Idaho and the book *Company Town: Potlatch, Idaho, and the Potlatch Lumber Company*. He married Mary Reed, a fellow public historian he met at a mint julep social at McConnell Mansion, the Victorian home built in Moscow, Idaho,

Not three months after Steptoe’s humiliation, the U.S. Army sought revenge. Gen. Newman Clarke, commander of the Pacific Department, brought in troops from most every post west of the Mississippi River. Putting Col. George Wright in charge, he said, “You will attack all the hostile Indians you may meet, with vigor. Make their punishment severe.”

Mullan could have waited things out in Walla Walla but, true to form, he smelled an opportunity. As a kid in Annapolis, the oldest of 11 children, he rounded up recommendations to West Point from political connections of his father, who served briefly as a city alderman. He then took the letters to President James Polk—the White House was a remarkably accessible place in 1848—and personally secured one of the president’s ten at-large academy appointments.

After West Point, he was assigned to a Pacific Railroad Survey led by Stevens and so impressed him that he was put in charge of what Petersen

“He was right in the middle of it,” says Petersen. “He was leading the Nez Perce, the first people to engage with the enemy. This is exciting stuff. He comes back and writes his field reports that day and says, ‘Well, I think I found a wonderful place to put my road.’ He doesn’t say anything about the battle. It’s amazing. This guy was just monomaniacal about his road.”

Wright soon made that possible. A week after their first battle, the Nez Perce and cavalry soldiers captured a herd of 800 Indian horses. Over the next two days, Wright’s men slaughtered 700 of them. They also took to burning storehouses and caches and killing cattle in a path of destruction that anticipated Gen. William Tecumseh Sherman’s March to the Sea in the Civil War.

Coeur d’Alene and Spokane tribal members agreed to terms of peace. This included letting soldiers and settlers travel through the country unmolested. Other tribes were subdued by sheer intimidation. Over the course of the campaign, Wright hanged 16 Indians, including Qualchan, the son of Yakama Chief Owhi, who some say rode into Wright’s camp under a flag of truce.

“That immense tract of splendid country over which we marched is now opened to the white man,” wrote Lt. Lawrence Kip afterwards, “and the time is not far distant when settlers will begin to occupy it.”

Mullan immediately set about making his road happen. Taking an unauthorized leave, he traveled back to Washington, D.C., and with the help of Stevens, then a territorial delegate to the U.S. House of Representatives, got an additional \$100,000 appropriation from Congress. The following spring, he was back in the West, assembling a crew of 80 men and 180 oxen with a 140-man military escort.

An exultant *Oregon Union* predicted the road, “will open up a direct communication between the valley of the Mississippi and Oregon.”

The word “communication” is not accidental. Before the transcontinental telegraph and railroad, let alone the telephone and airmail, roads were central to communications. While Mullan was working on his road, a letter sent from Washington, D.C., in September did not reach him until January. To be marooned in Walla Walla, thousands

Coeur d’Alene’s southern shore and encountered swamps, hills, boulders, tangled underbrush, and towering trees four and five feet thick. Mullan noted that the work, done with shovels, picks, saws, and black powder, was “more severe than I had any idea of.”

The crew made ferry boats of whipsawed lumber to cross the St. Joe River. They laid logs side by side for so-called “corduroy” roads across bogs. The Coeur d’Alene River required nearly 100 crossings and scores of bridges averaging 50 feet each. It rained all of October. November brought more than a foot of snow and sub-zero temperatures. Hundreds of the crew’s cattle, horses, and mules perished.

In December, as the temperature hit 40 below, the men built a garrison of log cabins and earthworks. They were 267 miles into their 624-mile effort and over budget. The Topographical Bureau wrote Mullan to say his expedition was disbanded.

But before he got the letter, Mullan sent Walter Johnson, a 23-year-old engineer, to Washington, D.C., by way of snowshoe,

Returning east, Mullan married the well-educated, socially positioned Rebecca Williamson in 1863. The longest lived of their five children was Mary Rebecca, or May, who married well and gave generously to D.C. institutions, including Georgetown University. While her father had personally visited James Polk, the eleventh president, to get a recommendation to West Point, May’s yard looked into the garden of John F. Kennedy, the thirty-fifth president.

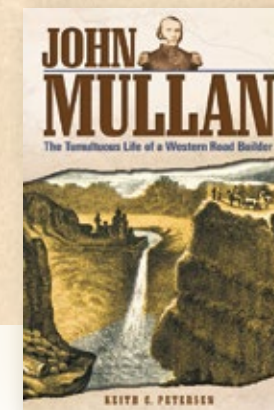
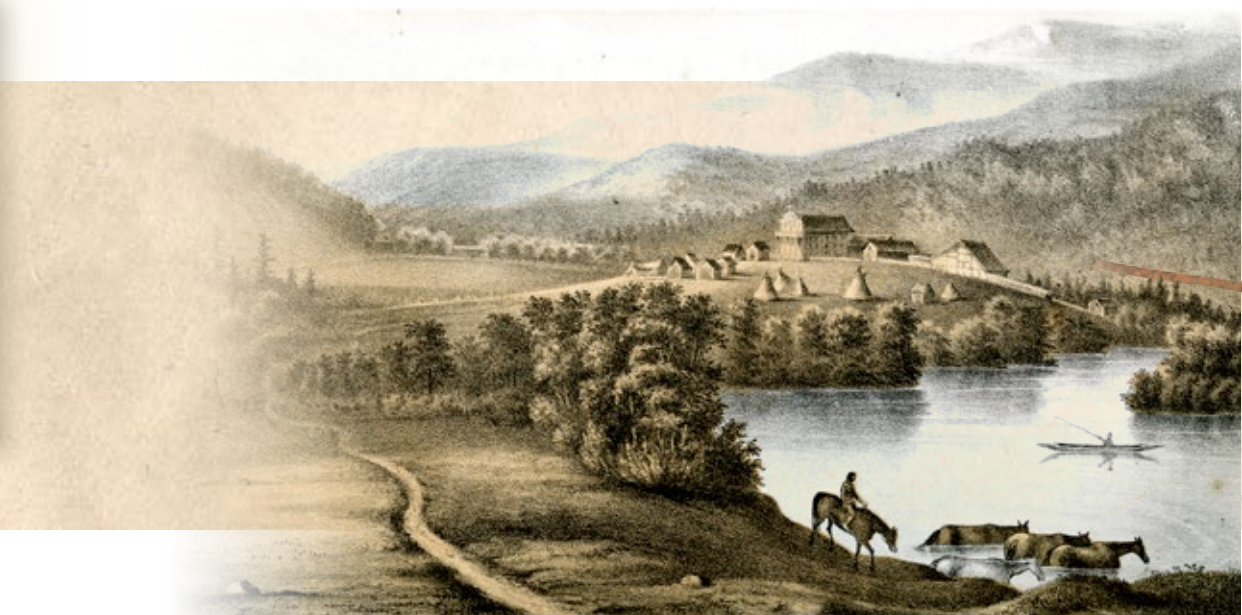
When May died in 1962, her father’s personal and legal papers were donated to Georgetown. Forty years passed before they were processed and made available to researchers like Petersen.

The files were short on materials like letters from Mullan to his parents or wife, but they were loaded with materials from Mullan’s life after the road. With this as a solid core of information, Petersen and Reed scoured for historical tidbits across the country, visiting the

The result is a portrait of a deeply complicated, fascinating individual. Mullan was intensely loyal to his family, but willing to run roughshod over most anyone else. He was racist, but with flashes of respect for figures like Owhi, “a noble and generous Indian” he met in 1854. He was a remarkable leader, keeping his men moving and working and even cheerful in the most brutal conditions. He was bright but no genius, a “monster for work,” facing conflicts with a chief tactic of outworking his opponents. He was hugely egotistical, and, Petersen suspects, “pretty obnoxious.”

“The hard part for me on this one,” Petersen says with a chuckle, “and I don’t want to say this in the wrong way, is I wish I could have liked the guy a little better.”

His road work done, Mullan lived to be 79 before dying, broke, paralyzed, and bed-ridden, in 1909. He had spent some three decades struggling to capitalize on the West’s economic promise, repeatedly coming up short.



Opposite, left to right: Keith Petersen ‘73 is Idaho State Historian and associate director of the Idaho State Historical Society. Courtesy Keith Petersen. Idaho’s oldest building, the Coeur d’Alene Mission, proved a welcome respite for Mullan’s road building crew. Illustration by Gustav Sohon—courtesy WSU Manuscripts, Archives, and Special Collections. **Right:** Cover of Petersen’s new book on Capt. John Mullan published by WSU Press.

of miles from the news of the East, was an antiquated, months-long version of life without WiFi.

What actually constituted a road was open to interpretation. The standard for Mullan was that it be 25 feet wide and capable of supporting a wagon.

“Those are the instructions that are given to Mullan,” says Petersen, “and it’s sort of like, ‘You know what to do.’”

From Walla Walla and up through the Palouse, the road was little more than the team’s tracks. The crew made the region’s earliest elevation measurements and compiled the first observations of longitude made above the continent’s 42nd parallel. A wagon-rigged odometer carefully logged the miles from Walla Walla, which were branded into posts along the road along with the initials “M.R.”

“Technically, the initials stood for ‘Military Road,’” Petersen writes, “but for most people the shorthand became ‘Mullan Road.’”

A private drowned crossing the Snake River—the only fatality of the project—but the men were tested in other ways as they skirted Lake

steamer, and Panama crossing to appeal for more funding. Working with Stevens, he secured a second appropriation of \$100,000. It helped that Mullan nonchalantly reported that some of his crew found gold, otherwise keeping the discovery secret for fear the entire crew would bolt.

Work resumed in the spring, and on July 18, Mullan reached Mullan Pass, a summit he scouted six years earlier and the end of his slog through the Rockies. He arrived in Fort Benton on August 1.

In 1861, he set out on the road again, revising the early part of the route to go through today’s Spokane and north of Lake Coeur d’Alene. He repaired washed-out bridges, fell behind schedule, and endured yet another brutal winter. He finished in early June, but backtracking to Walla Walla, he was discouraged to see so much work undone by fallen trees and spring torrents. Still, historian William Turrentine Jackson wrote almost a century later, the Mullan Road amounted to “the federal government’s greatest contribution to transportation development in the Pacific Northwest.”

Bancroft Library at University of California-Berkeley, the National Archives, the Maryland State Archives, Yale University’s Beinecke Library, West Point, and Chico State University. Archives in Idaho and Washington had information on people Mullan worked with or met while building the road.

“All of them have fragments of this story,” Petersen says.

In the Museum of North Idaho, Petersen saw the road’s most enduring blaze, from a white pine marked at Fourth of July Pass, so named for a celebration the road crew held on July 4, 1861. It marked the trail until 1988, when the tree was cut down. At the Northwest Museum of Arts and Culture in Spokane, he found a pistol donated by Peter Mullan, a Coeur d’Alene tribal member who claimed John Mullan was his father by way of a liaison with Rose Laurant, a Flathead woman Mullan could have met while scouting the Bitterroot Valley in 1854.

Idaho state historian by day, Petersen worked on weekends, evenings, and mornings on Mullan’s story. He wrote from 5 to 6 a.m., producing about a page a day for more than a year.

He had helped reconfigure Washington’s territorial boundaries, hoping to become a territorial governor, and was outmaneuvered by William Wallace, who became the first governor of Idaho. A last-minute appeal to President Abraham Lincoln was fruitless.

Resigning from the Army, he returned to Walla Walla, then the largest city in Washington, and was hired to build a short line railroad from the Columbia River. The scheme, writes Petersen, “quickly fizzled.”

He joined his brothers Louis and Charles on his Walla Walla farm and was soon squabbling with them over who owned what. His brothers Ferdinand and James joined in. Louis sued John and Charles. John sued James and Louis. The operation went broke and John went back east to Rebecca’s Baltimore home.

He won a mail contract for a stagecoach line between Chico, California, and mines in the Boise basin, but failed to raise enough capital to make the line work. The effort sputtered and died in less than two years, bankrupting Mullan a second time.

Lost Highway

The Mullans moved to San Francisco and John, having spent some five years reading the law, passed the California bar exam.

Writes Petersen: "He would spend the next decade negotiating land deals that skirted both ethical and legal boundaries—a practice that brought him the prosperity he had long cherished, but at the cost of his carefully honed reputation."

He and his partner Frederick A. Hyde mastered the state's byzantine and largely unregulated land transfer system. They hired surrogates to buy public land that they then sold at considerably higher prices. As a Democratic Party activist, he fought Chinese suffrage, claiming America's laws were to be administered "by white men, for the benefit of white men."

In 1878, California Governor William Irwin appointed Mullan to collect money the federal government owed the state for federal land transfers. Mullan was to get a commission of 20

percent. He returned to Washington, D.C. Hyde expanded his land dealings to Oregon and Washington, where he was later convicted of fraud.

Mullan outfitted a Connecticut Avenue home with European furnishings and servants. He was rich but overextended. Soon states started to renege on promises of payment. With hundreds of thousands of dollars at stake, Republican opponents and the press piled on Mullan as a money grubber; California's Republican Governor Robert Waterman dismissed him. Mullan wrote a 580-page book to make his case and started legal proceedings that went to the state Supreme Court, which ruled against him.

Oregon and Nevada also withheld payments. With Mullan's health in decline, his daughter Emma campaigned for payment, securing a fraction of what he was owed.

By 1905, Emma and May, young society women and, as one newspaper put it, "belles of many dances given in the most elegant ballrooms in the city," had to open a laundry to make ends meet. When he died on December 28, 1909, John Mullan was broke.

The newspapers of the day barely noted his passing. His road, meanwhile, saw solid use on various parts, particularly by miners and their suppliers. It helped Walla Walla dominate Pacific Northwest trade. Still, writes Petersen, it "proved a bust as an east-west, cross-mountain wagon highway."

Infantrymen improved the road in 1879, leading to a spurt of use. But travelers were soon using the Northern Pacific Railroad, which went north of Lake Pend Oreille, a route Mullan preferred in retrospect.

Then, two years after Mullan's death, the first automobile crossed Fourth of July Pass. The Yellowstone Trail Association, working to build a 3,700-mile route from Plymouth Rock to Puget Sound, put Mullan's road on its route. This became U.S. Route 10, one of the nation's original long-haul highways. It went on to become Interstate 90.

"You can bet those engineers were out there trying to figure out where's the best way through the mountains," says Petersen. "It was Mullan's route."

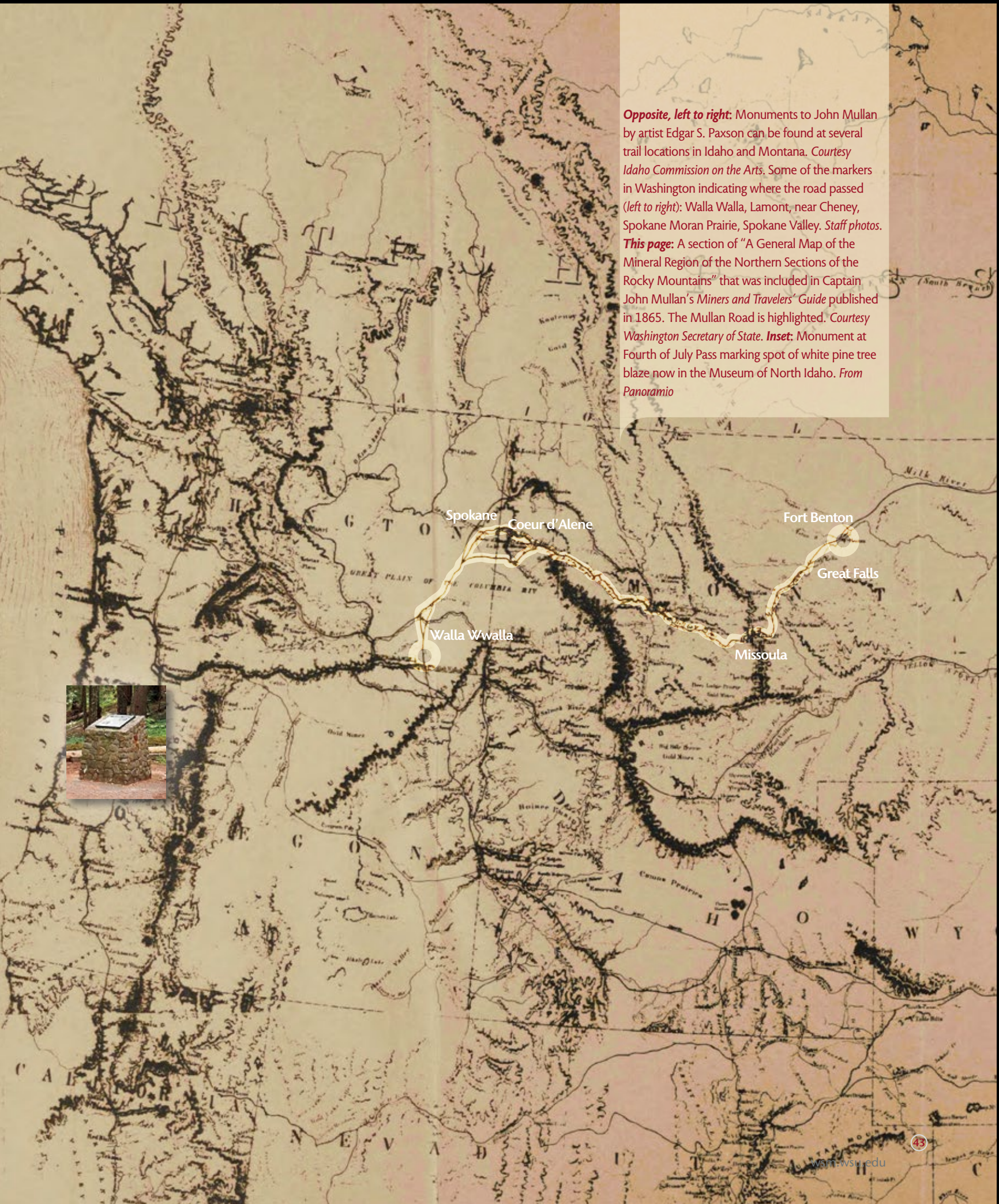
While many people wrote the route off as a failure, says Petersen, "he was ahead of his time. The technology to keep a route through those mountains clear wasn't available to people in the 1860s. Otherwise it would have been a success then."

Today, the highway's 75-mile stretch across Idaho, which Petersen calls "the most scenic and the most difficult passage," bears the name "Captain John Mullan Highway." ☒

View more illustrations by Gustav Sohon that chronicle the Mullan Road and depict other scenes of the era at wsm.wsu.edu/gallery.

Check out Keith Petersen's new book *John Mullan: The Tumultuous Life of a Road Builder* at wsupress.wsu.edu/new-titles.html.

Opposite, left to right: Monuments to John Mullan by artist Edgar S. Paxson can be found at several trail locations in Idaho and Montana. Courtesy Idaho Commission on the Arts. Some of the markers in Washington indicating where the road passed (left to right): Walla Walla, Lamont, near Cheney, Spokane Moran Prairie, Spokane Valley. Staff photos. This page: A section of "A General Map of the Mineral Region of the Northern Sections of the Rocky Mountains" that was included in Captain John Mullan's *Miners and Travelers' Guide* published in 1865. The Mullan Road is highlighted. Courtesy Washington Secretary of State. Inset: Monument at Fourth of July Pass marking spot of white pine tree blaze now in the Museum of North Idaho. From Panoramio





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» CLASS NOTES

1950s

Paul R. Sellin ('52 History) has learned that Yankee Book Peddler, United Kingdom, has selected his revisionist study *Treasure, Treason, and the Tower: El Dorado and the Murder of Sir Walter Raleigh* (Farham, Surrey: Ashgate Publishing) as a UK Core Title for 2011.

Milton K. Leonard, P.E. ('54 Mech. Eng.) was recently honored by the American Society of Mechanical Engineers (ASME) with his elevation to the ASME grade of Life Fellow. Leonard is an active member of the Oregon chapter of ASME and a licensed professional mechanical engineer in the Portland, Oregon, area for more than 50 years.

Ellen Franzen Dissanayake ('57 B.A. Hum.) was honored with an Honorary Doctor of Art in Baltimore in May 2013. Ellen received the J. Horace Nunemaker award at the end of her junior year (spring 1956) at WSU, honoring a student "with the promise of making a contribution to the humanities."

1970s

Jim ('72 Forest Mgt.) and **Jane Thornes** were named on March 25, 2013, Idaho "Outstanding Tree Farmers of the Year" for their management practices in Moscow, Idaho.

Bob Walter ('72 Forest Mgt.) has been elected to the Eatonville town council. For the past 11 years, he and his wife, Dixie, have published a local news website called Eatonvillene.wsu.edu as a community service.

1980s

Doug Burnett ('81 HMB) was appointed as a representative of Idaho's Travel Council. Since 1995, Doug has worked for Hagadone Hospitality and is currently the Coeur d'Alene Resort's resident manager.

Sheryl Hagen-Zakarison ('83 Agronomy, '91 Acc.) has been appointed to the Farm Service Agency State Committee. She has also been active with several agricultural organizations such as Tiltch and the Wheat Growers. She and her husband Eric have a small farm north of Pullman.

Eric Jerde ('84 MS, Geol.) has been elected vice president of the Kentucky Academy of Sciences.

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Tom Norwalk '75 is president and CEO of Visit Seattle.
Courtesy Puget Sound Business Journal

Tom Norwalk '75 Visit Seattle

by Hannelore Sudermann :: Tom Norwalk's office sits high above the Washington Convention Center and looks directly across the street to the guest rooms of the Seattle Sheraton. From another angle, Norwalk can see the two round towers of the Westin and the classic red brick Roosevelt then, just a bit to the left, the Hyatt. For the president and CEO of the city's private nonprofit visitor marketing association, seeing those rooms in use every day is a good reminder of his job. Visit Seattle, supported by the convention center, hotel room surcharges, the mayor's office of Arts and Cultural Affairs, and a number of other sources, draws new visitors to the region and enhances the experiences of those already planning to come.

Norwalk '75 grew up in Seattle, attended Roosevelt High School, and chose WSU because

of his interest in communications. After graduation, he went to work for the Washington Plaza Hotel, which soon became Westin Hotels. He moved over to the Four Seasons in 1981 when the luxury hotel company took over the Olympic Hotel. As a regional director of marketing for Four Seasons, he moved around the west for nearly two decades. He became general manager at the Newcastle Golf Club and then president and managing director of Seattle Hospitality Group.

In 2005 he moved to the Seattle Convention and Visitor's Bureau as vice president for sales and marketing. He later became president and last year led the bureau in rebranding itself as Visit Seattle. And what a year it was. Seattle saw a 79.6 percent hotel occupancy rate, a remarkable feat considering the growth of hotel rooms in the area and the seasonality of the region, notes Norwalk. "Last year was a record year for the city."

Give us a picture of tourism in Washington.

In Seattle and King County, it's about a \$6 billion industry with well over 10 million overnight visitors. Statewide, tourism is a \$16.4 billion industry. That's amazing since Washington has never ever been a big spender in terms of tourism promotion. Of the 50 states, we were always in the 40s in terms of what we spent. There's the feeling in Olympia and somewhat in Seattle that people will come because of the natural beauty. And that is enough of a driver.

British Columbia spends about \$60 million a year on marketing to visitors and California spends about \$55 million a year. Oregon, Idaho, and Montana spend between \$9 million and \$15 million a year each.

When our state closed its tourism office in 2011, the industry immediately created the Washington Tourism Alliance to find and create

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a long-term funding model to support tourism in Washington state. And it has been a painful and slow process to get where we are. Right now, Washington's office has an annual budget of \$500,000, and that's just to keep the Washington Tourism Alliance going.

In downtown Seattle we see Montana billboards. They're a great lure. It is exactly what we should be doing in key markets to support our state. If we're not competing for that business, we will eventually lose our market share.

What does that mean for Visit Seattle?

We've taken on a role to support all of the state. We have six market reps around the world and spend \$2.5 million a year just on marketing and sales promotion in places like China, Japan, and Europe. We realize Seattle is the gateway. While our job is to promote the city and King County, we always include the San Juans or the Peninsula or wine country. From an international and overseas perspective, we are definitely selling Seattle and the state of Washington.

Where are our visitors coming from?

Our number one overseas market at this point is Japan. Our number two, and growing at an enormous rate, is China. Then, I would say, is the United Kingdom. We're tracking now by credit card data from Visa. In 2012, for example, visitors from China spent \$35 million in Seattle. We also know that 65 percent of that was on retail. Another 14 percent was for lodging, and 4 percent was for a cruise. Australians, on the other hand, spent 73 percent of their money on cruises.

Who else?

I said overseas before because our biggest visitor group, by far, is Canada. Canadians spent \$151.8 million here last year. And then there are the Californians, one of the biggest markets for our city.

So what are our biggest draws?

Universally, without a doubt, the magic of the Pacific Northwest. The natural beauty and the proximity of the natural resources. For a lot of our Asian visitors, particularly the Chinese, it's the air quality, the cleanliness and the freshness. At the same time, Seattle's a real city. It's eclectic, it's still gritty. We have a working waterfront. And it's so walkable.

Food?


Absolutely. Just look at the number of James Beard award winners, the success of our startups, and the health of the industry here. People come here to eat. And we're just getting started. I think you're going to see more and more that one of our strongest selling points is really our food and wine. But we can't overlook the arts. Seattle has more performing arts per capita than most cities in the United States. Look at the 5th Avenue Theatre. It's an incubator for Broadway-bound musicals. It's really a unique claim to fame.

With the Seahawks winning the Super Bowl and Macklemore winning a Grammy, Seattle seems to have grabbed some of the national spotlight this year.

Yes. It's a dream come true to have a highly valued and cherished national champion football team that really delivered on that promise. For us to go back to New York and to have Seattle on the news there every day and to be on every sports report, it has done an enormous amount for us. And for Macklemore to hit that rise at the same time is just incredible. He is an ambassador for Seattle.

Do you run across Cougs in the tourism and travel business?

Absolutely. I'm so thankful there is a core group, many of them Cougar alums, who are helping chart the course for Seattle's future. (The Visit Seattle Board includes Steve Vissotzky '79, General Manager of Seattle's Hyatt Hotels; Craig Schafer '76, who owns Hotel Andra; and Darrell Bryan '71, who owns Clipper Navigation.) There's also Howard S. Wright III '76, owner of Seattle Hospitality Group; Paul Ishii '81, the general manager of the Mayflower Park Hotel; Joe Fugere '84, owner of Tutta Bella; Brian McGinnis '77 of the Alderbrook Resort; and Troy Longwith '90, general manager of the Heathman Hotel in Kirkland. It's so interesting when you look at key people in very influential roles in tourism, travel, and hospitality. Many of them end up being Cougar alumni.

 Find out about a few favorite Seattle sites you may not have visited yet: wsm.wsu.edu/extra/Seattle-secret-places.

1990s

Jackie Peer ('96 Elect. Eng.) was honored by the Manufacturing Institute with a 2014 Women in Manufacturing STEP Award. Jackie works for Schweitzer Engineering Laboratories Inc.

2000s

Jessica Pack ('05 Ed.) became one of five California teachers of the year. She is on her second year piloting the Student BYOD (Bring Your Own Device) Program. She has piloted several other technology-based programs for the Palm Springs Unified School District. She is the president of the Cahuilla chapter of Computer Using Educators and has written and published an e-book on student film production called *Digital Storytelling: Connecting Standards to Movie-Making*.

Jacob Spangler ('05 Biochem., Gene. & Cell Bio.) completed his doctorate in genetics at Clemson University.

Dr. Casey S. Gamache ('07 Med. Sci.) has opened Gamache Orthodontics in Yakima. He attended the University of Washington Dental School and completed his orthodontics residency at University of Texas, Dental Branch in Houston.

Isaac Powell ('07 MFA) featured a collection of paintings at the Clyde H. Wells Fine Arts Center at Tarleton State University until March 17. His exhibit "Paintings" showcases organic imagery and the structure of the picture plan. In 2011 the Armory Show, held in New York City, included Powell's work.

Elise Jackson ('09 Mktg., Business) and **Megan Hughes** ('04 Comm.) have both joined their parents in the family wine business at Barnard Griffin Winery in Richland.

2010s

Marisa Sandoval ('10 DTC, English) and **Matt Lamb** ('10 Biochem.) married on December 28, 2013, in New Mexico.

Dirk Rogstad ('11 Civil Eng.) has been hired as a design engineer by CG Engineering in Edmonds.

Scott Button ('13 MS Eng. Mgmt.) was honored with Boeing's annual Special Invention Award.

James Ellis ('13 Civil Eng.) has been hired as a civil engineer-in-training by CG Engineering in Edmonds.

Jennifer Leach ('13 Business) has been appointed special projects and events manager at the Olympia Lacey Tumwater Visitor & Convention Bureau.

IN MEMORIAM

1930s

Opal Irene (Jenkin) Hill ('33 Home Ec., Alpha Omicron Pi), 102, December 11, 2013, Mercer Island.

Martha M. Winiecki ('33 Speech, Phi Kappa Phi), 102, February 11, 2014, Vancouver.

Jeanne K. Pearson ('35 Socio.), 99, November 28, 2013, Tacoma.

Anna Louise (Proff) Boersma ('37 Home Econ.), 100, September 25, 2013, Wenatchee.

Robert F. Goldsworthy ('39 Speech & Hearing Sci.), 96, January 25, 2014, Spokane.

1940s

Donald A. Barton (x'41 Eng.), 92, December 6, 2013, Spokane.

Charles R. Cameron ('41 Chem.), 95, February 10, 2014, Concord, California.

Leona M. (Brown) Runyan ('41 Home Ec.), 93, November 6, 2013, Sunnyside.

Jack W. Tippett ('41 Ani. Sci.), 84, December 5, 2013, Clarkston.

Clara Marion Williams ('41 Phys. Ed.), 93, November 29, 2013, Anacortes.

Roderick G. MacKintosh ('42 Vet. Med, '43 DVM), 93, August 17, 2013, Yakima.

Charles N. Williams ('42 Phys. Ed., '46 BED Ed.), June 25, 2013.

Phyllis I. Carlson ('43 Home Ec. Dietetics, Alpha Delta Pi), 92, November 30, 2013, Prosser.

Willard Wes McCabe ('43 Econ.), 92, December 7, 2013, Spokane.

Louis Case Perkins ('43 Liberal Arts), 93, February 2, 2014, Portland, Oregon.

Mildred Louise Call ('45 Psych.), 90, December 23, 2013, Huntington Beach, California.

Robert Clovis Goulding ('45 DVM), 91, January 2014, Auburn.

Leslie Mackoff (x'46), 88, January 24, 2014, Seattle.

Jean Baptiste Sarchet ('46 Comm.), 93, November 23, 2013, Spokane.

Sidney R. Buckley ('47 Pol. Sci.), 92, November 12, 2013, Kettle Falls.

Barbara Tippett Fredrick ('47 Speech, Chi Omega), 89, February 6, 2014, Punaluu, Hawaii.

Victor R. Hyslop ('47 Mech. Eng.), 93, November 23, 2013, Kirkland.

Clair Auld Schwartz ('47 Speech Comm.), 87, November 22, 2013, Portland, Oregon.

Robert J. Tardiff ('47 Ed.), 92, September 20, 2013, Crookston, Minnesota.

Douglas Volosing ('47 Chem., Zoo.), 89, January 7, 2014, Spokane.

Patricia R. McFaul ('48 Speech & Hearing Sci.), 87, December 13, 2013, Spokane.

Barbara Ann Norton ('48 Socio.), 87, January 29, 2014, Everett.

Margaret W. Ransom ('48 MA Liberal Arts), 90, February 9, 2014, Portland, Oregon.

William Darwin Sage ('48 Bus. Admin.), 91, January 12, 2014, Shoreline.

Lorena Frances Shinn ('48 Bus. Admin.), 93, January 13, 2014, Lewiston, Idaho.

William G. Brammer ('49 PhD Physics), 88, November 25, 2013, Los Angeles, California.

Tim Hills '93

Hotels and history

by *Nicholas Deshais* :: The bodyguards standing sentry outside James Brown's dressing room were as tall as the ceiling—an impossible 20 feet or so, remembers Tim Hills '93 MA. But maybe it was his nerves.

After a long wait, the door opened and the historian was granted entry. Reclining on a sofa in Portland's Crystal Ballroom, decked out in a blue leather suit, surrounded by his large entourage, the Godfather of Soul was prepared to entertain Hills' questions for the next hour.

How did an unassuming public historian who once worked for the Congressional Information Service before earning a graduate degree in history from WSU end up interviewing one of the most celebrated singers of the twentieth century?

Years later, while lunching in the ground floor restaurant of the Crystal, his beard long

The Crystal, as Hills calls it, was his first project with McMenamins. It resulted in a book *The Many Lives of the Crystal Ballroom* and set the template for a career helping the company "keep the past in the present." The storied venue, built in 1914, had hosted jazzers, cotillions, R&B artists, soul singers, and rockers in its long history before falling out of public use for almost 30 years. In 1995 the downtown ballroom faced demolition. But McMenamins bought it, refurbished it, and tasked Hills with telling its story.

He collected handbills and posters, and dug around for primary documents like letters and newspaper articles. He interviewed person after person.

"You talk to someone and they say you need to talk to this person," Hills says. "You talk to six different people and, especially from the '60s era, there would be six different versions of the same night."

Teasing the real from the unreal was the fun of it, Hills says. One rumor he heard detailed a Led Zeppelin show at the Crystal. Not true. Another dealt with a live recording of the Grateful Dead



Historian Tim Hills '93 in Portland's Crystal Ballroom. Photo Bill Wagner

and working its way toward majority gray, Hills offers his answer. He simply wrote a letter to the owners of McMenamins, his favorite local chain of pubs, entertainment venues, and hotels, and suggested they hire him. Next year he'll celebrate his twentieth year as staff historian for the hospitality and entertainment company that has rescued and revived many old and historical structures throughout Oregon and Washington.

that ended up on their second album, *Anthem of the Sun*. True. Glenn Miller played here. So did Ike and Tina Turner, and Marvin Gaye.

Most of the history you can see for yourself if you visit the downtown ballroom. Posters of past shows and murals cover the walls offering windows into the Crystal's past. (The company recently celebrated the ballroom's centennial with 100 straight nights of entertainment.) With

such a singular history, the feeling is undoubtedly unique. But if you've ever been inside a McMenamins establishment, you'll recognize the strange mix of history, site individuality, and quirky company branding that gives each of the company's 65 properties that special something.

The company's sprawling Edgefield resort, the former Multnomah County Poor Farm, has it with its hotel, restaurant, music venue, golf course, and movie theater—not to mention its rumors of hauntings from former patients. The Kennedy School, an old Renaissance revival-style Portland elementary school once slated for demolition, has it, too. As does the 1927 Bagdad Theater on Hawthorne, where *One Flew Over the Cuckoo's Nest* debuted.

While its selling points include charming rooms named for colorful locals and filled with vintage furniture, the century-old Olympic Club in Centralia doesn't shy away from its role in the Centralia Massacre of 1919, when members of the American Legion had a deadly encounter with "Wobblies," the Industrial Workers of the World. Six men died, more were wounded, and the Olympic Club, where the Wobblies often gathered, sat at the epicenter.

"The owners of the Oly Club, their lifeblood was the workers," Hills says. "Those were their customers. But at the same time, they had made enough money. They were part of the elite. So they were aware of both plans, both sides."

The massacre continued to divide the town even as Hills researched the club for McMenamins in the late 1990s. "People still talked in hushed tones about it. Their parents or grandparents were really prominent on one side or the other," he says. Local librarians told him that for years they weren't allowed to carry any material about the massacre. When a mural commemorating the Wobblies was painted on another building in 1996, some people were outraged. "It caused so much commotion. Eighty years later," he says.

Hills first learned about the massacre during his studies in Pullman. He and his wife Andrea Hills '93 MA had relocated from the East Coast and enrolled in graduate school.

A highlight of his time in Pullman was the instruction of Orlan Svingen, who still teaches public history. "He was a great teacher," Hills says. "Initially, it was rather disconcerting because my papers would have red all over them. At first it was just so intimidating and frustrating, but I learned an incredible amount from his comments. Just to be a better editor and writer of my own stuff."

In Svingen's class, he learned the national historic registry process. He visited Albion and

documented the history of a particular house from the time it was built. And he and several other students helped Svingen on a centennial history of the Northwest Mining Association.

All of it, Hills says, now helps him in his career with McMenamins, which he still refers to as a "dream job."

"We try to connect the history to the property and to the community it's in," he says. "That's what I really admire about McMenamins. Instead of turning their back on all this history and characters and events that have happened around these places over the years, like most people would do, they celebrate and commemorate those connections."

Read an excerpt of Hills' book *The Many Lives of the Crystal Ballroom* at wsm.wsu.edu.

Cori Dantini '93

Art and whimsy

by Marcia Hill Gossard '99, '04 :: Boxes filled with vintage paper, new paper, old books, fabrics, and other precious odds and ends neatly fill Cori Dantini's home art studio. Over the years she has collected thousands of items, knowing someday they would come in handy. "If you don't have it, you can't use it," she says with a smile.

That "use it" moment came in 2008. Over a long weekend with her husband Liam and son Henry away and an art show on the horizon,



Cori Dantini in her studio. Photo Zach Mazur

Dantini began to layer vintage papers and words. She sketched a pencil drawing over the paper and added ink and color. A month later, her first named character, Miss Lucy, came to life. In the ensuing weeks more than 20 paper ladies

Russell Wendell Fulgham ('49 Socio., Alpha Kappa Lambda), 90, December 17, 2013, Renton.

Dale Clifford Gough ('49 Bus. Admin.), 91, February 23, 2014, Spokane.

Earl Wesley Murbach ('49 MS, '52 PhD Chem. Eng.), 90, May 21, 2013, Tucson, Arizona.

Catherine Mae Otis ('49 Home Econ.), 86, December 18, 2013, Puyallup.

Howard B. Pilcher ('49 Hum., Theta Chi), 88, December 16, 2013, Spokane.

Barbara Marie Stave ('49 English, Kappa Kappa Gamma), 85, December 11, 2013, Stanwood.

Carolyn Joan Wilson ('49 History), 86, January 30, 2014, Delta, British Columbia.

1950s

Millard Frazier Ball ('50 Bus. Admin.), November 13, 2013.

Felix M. Entenmann ('50 Ag., '51 MS Ag.), 91, January 28, 2014, Kirkland.

Herbert Carter Johnston ('50 Forestry), 89, December 11, 2013, Renton.

John Edwin Klapp ('50 Arch. Eng., Tau Kappa Epsilon), 86, February 6, 2014, Spokane.

Phyllis May LaRue (x'50, Kappa Kappa Gamma), 87, January 31, 2014, Spokane.

Donald Neil Noteboom ('50 Ani. Sci.), 84, January 12, 2014, Lynden.

Russell O. Ohlson ('50 Elec. Eng.), 85, November 20, 2013, Franklin, Tennessee.

Margaret J. Sorensen ('50 Pol. Sci.), 85, February 10, 2014, Spokane.

Floyd A. Triplett ('50 Pharm.), 89, November 21, 2013, Milton-Freewater, Oregon.

Reynold Goedde ('51 Psych.), 87, April 23, 2013, Pullman.

Clarence E. "Clem" Powell ('51 Econ.), 84, November 22, 2013, Sammamish.

William H. Wheeler ('51 Hort.), 88, December 10, 2013, Salem, Oregon.

Wayne Calhoun ('52 Fine Arts), 83, August 27, 2012, Malden.

John Ernest Dayharsh ('52 Geo., History, Geol.), 88, November 15, 2013, Spokane.

Rita Mariann McCoy (x'52, Alpha Delta Pi), 83, December 3, 2013, Bellevue.

Harriet Jean McGrew ('52 Home Ec.), 83, January 5, 2014, El Mirage, Arizona.

Lynn Alden Pearson ('52 Pharm.), 84, January 21, 2014, Meridian, Idaho.

John Hugh Schmidt ('52 DVM), 87, February 6, 2014, Klamath Falls, Oregon.

Leonard Ervin Vann ('52 Industrial Tech.), 85, January 25, 2014, Seattle.

Gary L. Burns ('53 Speech Comm., Phi Delta Theta), 83, February 1, 2014, Longview.

Florence May DeFeyer ('53 Home Ec.), 84, January 8, 2014, Tacoma.

Robert McKnight ('53 DVM), 84, December 24, 2013, Florence, Oregon.

Damon Boyce Smith ('53 Ag. Econ.), 86, February 6, 2013, Yakima.

James D. Stephens ('53 Geo.), 82, December 27, 2013, Blackfoot, Idaho.

Jack L. Albright ('54 MS, '58 PhD Ani. Sci.), 83, February 26, 2014, Carmel, Indiana.

Evelyn Holm Ericksen ('54 Nursing), 91, January 15, 2014, Coeur d'Alene, Idaho.

Fred S. Evertsbusch ('54 Pharm.), 94, November 29, 2013, Spokane.

William R. Gilbaugh ('54 Geo.), 93, December 26, 2013, Wenatchee.

Lulu May Smith ('54 Fine Arts), 81, August 11, 2013, Yakima.

Janice (Moss, McKee) Barach ('55 Liberal Arts), 79, November 15, 2013, University Place.

Howard Finch ('55 Ag.), 81, February 7, 2014, Pullman.

Mary Bira (Otness) Chandler ('56 Ed., Alpha Delta Pi), 79, November 29, 2013, Spokane.

Morris M. Jessup ('56 Liberal Arts), 81, January 1, 2014, Yuma, Arizona.

James George (Ret) Fuller ('57 BS Civil Eng.), 84, December 31, 2013, Spokane.

Judith Louise Grady ('57 Liberal Arts), 77, August 20, 2013, Whitefish, Montana.

Willis C. Norwood ('58 Bus. Admin.), 84, January 4, 2014, Issaquah.

Maryanne Blair ('59 Liberal Arts), 85, December 21, 2013, Chambersburg, Pennsylvania.

Simon J. Martinez ('59 Ani. Sci.), 62, March 20, 1999, Moxee.

Patrick Reed O'Shaughnessy ('59 Bus. Admin.), 78, November 29, 2013, Pomeroy.

Wesley Duane Schierman ('59 Psych., Alpha Tau Omega), 78, January 4, 2014, Everett.

Catherine Diener Simpson ('59 Ed.), 101, January 25, 2014, Priest Lake, Idaho.

1960s

Robert Francis Downs ('60 Elec. Eng.), April 24, 2013, Santa Ana, California.

C. Conrad Elnes ('60 Music, '66 MAT Music), 77, May 12, 2013, Scottsdale, Arizona.

Obe M. Healea Jr. ('60 Geo.), 78, September 25, 2013, North Bend.

Gerald Dan Holt ('60 Geo.), 83, January 2014, Fairfield.

Virgil J. Olson ('60 PhD Socio.), 85, December 18, 2013, Seattle.

Catherine D. Simpson ('60, '62 MA Ed.), 101, January 25, 2014, Spokane.

Douglas Arnold Smith ('60 Chem. Eng.), 76, January 26, 2014, Baton Rouge, Louisiana.

Larry Michael Young ('60 Bus. Admin., Beta Theta Pi), 76, January 18, 2014, Camarillo, California.

Emory H. Bull ('61 DVM), 83, January 4, 2014, Broomfield, Colorado.

followed. Whimsical and folk-art, Dantini's characters wear boots with skirts and their hair in buns. Often pensive, the words above their heads say things like "goodness exists," and "bring your listening heart."

"My people have always been very serious, reflective, and thoughtful," says Dantini. "I would make these paintings and I would write these

"I always drew...when you needed something painted on the window or a sign, I was always the kid that did it," says Dantini. "It was the only thing I ever really cared about."

Dantini's high school art teacher Jon Aesoph ('80 MFA) recognized her talent and encouraged her to pursue art as a career. "I just loved her because she would go out on a limb even at her



Cori Dantini's whimsical drawings have gained an international following. Courtesy Cori Dantini

stories all over them. Each thing that would trouble me I would throw it into one painting. It gave it a lot of focus."

The summer of 2010 had Dantini, one of four people selected in the emerging artist category at the Cherry Creek Arts Festival in Denver, preparing for her first big show. "I really started painting like mad because I knew I could only show originals," she says. "I made hundreds of paintings, and that's how those ladies came about in the way that they are."

Today, with more than 500 original paper ladies and a menagerie of birds, bunnies, bugs, and foxes, Dantini has sold thousands of original art pieces. Thanks to a growing number of loyal fans, her designs have gone exponentially further in the forms of duvets, mirrors, shower curtains, greeting cards, and calendars.

While her commercial success seems the result of a well-orchestrated plan, her story is really one of hard work and opportunities. "I just went through the open door, whatever door that was at the time, and it led me here," she says.

Growing up in Pullman, Dantini knew from an early age that she wanted to be an artist.

age," says Aesoph, who is now semi-retired and living in western Washington. "She was ahead of the curve."

"He was the one who made me feel I could go do it," says Dantini, who felt emboldened to pursue an art degree in college. At WSU, Dantini majored in painting and minored in print making. She won a small but rarely-given painting scholarship. "It felt like another brick in my backpack," says Dantini. "It was a big responsibility." But it also meant someone saw her potential.

After graduation, she moved to Seattle, worked in a bar near Capitol Hill, and painted in her free time. She ran into Liam Breeze, a fellow Pullman High graduate, at a punk rock concert.

"I had had a crush on him since the fifth grade," Dantini says. It turns out, the interest was mutual. This August they will have been married 16 years.

In the mid-1990s, they moved to Denver. While Breeze attended graduate school, Dantini found work as a clip art designer. At first she drew 10 images a week. That quickly grew to 40. "By the end of the second year I was doing 200

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images every week," says Dantini. "My drawing skills got quite good."

When that work started drying up, Dantini freelanced as an illustrator with a Denver-based advertising agency and then moved to freelance work with Starbucks and Dole. She also animated television commercials for the Tulsa Health Department on subjects like immunization and mosquito control.

With a solid portfolio and busy freelance career, Dantini and her family moved back to Pullman in 2007. But then the economy crashed and she lost most of her clients. That same year she met a woman who had a shop on Etsy, an e-commerce website for vintage and handmade things. Intrigued, Dantini opened her own Etsy shop and offered some of her modern-style acrylic paintings. But they weren't getting much interest. Then she saw an Esty page with dictionary text behind a drawing.

"The page came up and a light bulb went on," she says. She started drawing over printed paper, then adding color. "I wasn't just making a watercolor anymore," she says. "All of a sudden I was building a narrative under the drawing."

In 2008 she showed her new pieces at a gallery in Palouse. "I hung up probably 20 and when I went out a couple of days later, three-quarters of them had sold," says Dantini. "I thought, this is what I should be putting on Etsy. I did and then everything started taking off."

Dantini began taking her work to art shows and chanced upon an agent. "My very worst show I ever had to this day was probably my very best show, all because Sheila showed up," she says. In May 2010, Sheila Meehan took Dantini's artwork to a surface and textile show where licensing companies shop for artwork. Dantini's commercial success took off.

Her artwork reflects her daily life. And that is part of their appeal. Her pieces often speak to the harder parts of being alive, she says. It was during a darker period when she was the most prolific. The paper ladies came out of pressure to work in a stalled economy.

Dantini's artwork is now on a broad and growing array of household items including serving trays, fabric, paper lanterns, magnet boards, clocks, mobiles, ornaments, and even Kleenex boxes. A couple fans have even tattooed her artwork on their bodies.

Her work can be found locally at Neill's Flowers and as far away as Great Britain, Scandinavia, Israel, and Australia. It has also been featured in *Better Homes and Gardens*. In

a recent issue of *Spirituality and Health* her bird drawings are paired with an interview with writer Anne Lamott.

"I never know what is happening next," Dantini says with a laugh. "I just show up and see what happens."

Allison Helfen '89

A crush on local wine

by *Hannelore Sudermann* :: While sweet Riesling and Merlot were once the foundation of Washington's wine, you can tell, just by cruising the wood racks of The Wine Alley shop in Renton, that this is a whole new scene.

Our state's offerings were already intriguing when Allison Helfen '89 and her husband Scott started the shop nine years ago. "When we first



Allison Helfen '89. Photo Matt Hagen

opened, the hot thing was viognier. And Syrahs were everywhere," says Allison Helfen. Today the shelves are even more diverse. "They have to be. People get bored," she says. That's why her stock has shifted to include inky Malbecs, sprightly Sangioveses, and rich Barberas.

The Helfens' shop carries more than 900 wines. They offer a good representation of the West Coast, a selection of internationals, "but we are primarily Washington," says Helfen. "And we do our best to not carry anything you're going to find at a grocery store or big box store." Their edge comes, in part, because those smaller wineries, the ones that don't produce on a level to be of interest to a big distributor, are working with new grape varieties and playing with new

Charles David (Dave) Burgess ('61 Ag. Econ., Lambda Chi Alpha), 74, November 7, 2013, Walla Walla.

Brian F. Finnigan ('61, '68 MS Hort.), 74, December 29, 2013, Idaho Falls, Idaho.

Howard E. Howell ('61 Ag.), 81, February 1, 2014, Mount Vernon.

Edward Owen Kearley ('61 DVM), 84, January 25, 2014, Ceres, California.

Thomas T. Migaki ('61 DVM), 88, January 3, 2014, Indianapolis, Indiana.

Leland Ross Miller ('61 DVM), 82, December 12, 2012, Corvallis, Oregon.

Clarence Robert Munk ('61 Forest and Range Mgmt.), December 3, 2013.

Donald G. Owens ('61 Acc.), 76, January 13, 2014, Seattle.

Louise Anne Goyette ('62 Ed.), 73, January 8, 2014, Elliot City, Maryland.

Edith E. Hempel ('62 MS Bio. Sci.), 83, December 6, 2013, St. Petersburg, Florida.

William H. Kensel ('62 PhD History), 85, January 16, 2014, Edmonds.

Myron Allan Kistler ('62 Sciences), 75, January 14, 2014, Camarillo, California.

Jill Griesse ('63 Econ.), 74, February 3, 2014, Granville, Ohio.

Anne Louise Post ('63 Elementary Ed.), July 26, 2013.

Edith Ann Woll ('63 French Foreign Lang. and Lit.), 83, December 19, 2013, Skagit Valley.

Robert E. Potts Sr. ('64 Elec. Eng., Phi Gamma Delta), 74, December 21, 2013, Spokane.

Gary Lloyd Schmid ('64 Vet. Med., '66 DVM), 71, February 22, 2014, Seattle.

Sue Carol (Holderness) Buettner ('65 Educ., Delta Delta Delta), 71, March 2, 2014, Oro Valley, Arizona.

Shirley Mae Ramsey ('65 Home Ec., '66 Ed.), 69, July 30, 2013, Olympia.

Daniel J. Yturraspe ('65 DVM), 75, December 29, 2013, San Francisco, California.

Tom Chambers ('66 Poli. Sci.), 70, December 11, 2013, Lake Sammamish.

Ron D. Hill ('66 Socio., Acacia), 70, February 26, 2014, Athens, Georgia.

John Gustave Klundt ('66 Police Sci.), 72, December 28, 2013, Deer Park.

Richard I. MacLean ('66 Speech Comm.), December 22, 2013.

Linda Lee Roberts ('66 English), 70, November 23, 2013, Bellevue.

Donald Stephen Senn ('66 Civil Eng.), 70, May 24, 2013, Wenatchee.

William Allen Strait ('66 Psych.), 68, March 7, 2013, Moscow, Idaho.

Robert William Morris ('67 Math), 84, January 6, 2013, Portland, Oregon.

Gordon Andrew Pearson ('67 Bus. Admin.), 69, October 18, 2013, Langley, British Columbia.

John Alan Ross ('67 MA Anth.), October 15, 2013.

Thomas E. Samuels ('67 MS Psych., '69 PhD Clinical Psych.), October 2013, San Mateo, California.

Michael Edward Schu ('67 Arch. Eng.), 70, December 20, 2013, Spokane.

Frederick H.C. Schultz ('67 PhD Physics), 92, February 7, 2014, Kennewick.

Sharon Eileen Anaya ('68 Sciences), 67, November 17, 2013, Santa Fe, New Mexico.

Janet Leigh Braden ('68 Ed.), 68, August 22, 2013, McMinnville, Oregon.

Robert A. (Rob) Coppock ('68 Sciences), 68, February 14, 2014, Arlington, Virginia.

Robert Paul Leffler ('68 Bus. Admin.), 68, October 29, 2013, Des Moines.

Frederick Schultz ('68 PhD Physics), 92, February 7, 2014, Kennewick.

Richard Allen Hill ('69 DVM), 79, March 22, 2013, Ashland, Oregon.

Dolores Anne Salesky ('69 Acc.), 66, October 28, 2013, Garfield.

1970s

Raymond Joseph Haeg ('70 MA Ed.), 79, November 29, 2013, Worley, Idaho.

Victor W. Moore ('70 MFA Fine Arts), 87, November 14, 2013, Rancho Mirage, California.

Mark D. Dickinson ('71 MS Elec. Eng.), 66, September 21, 2013, Albuquerque, New Mexico.

Robert Ferdinand Lapen ('71 PhD Vet. Sci.), 77, November 29, 2013, Seattle.

Anita Babayan ('72 Ed.), 67, August 29, 2013, Puyallup.

Beverly B. McConnell ('72 MA Home Econ., '80 PhD Ed.), 84, January 1, 2014, Pullman.

Janice Rosa McFadden ('72 Cloth. and Textiles, Alpha Omicron Pi), 63, December 30, 2013, Issaquah.

Richard David Anda ('73 Acc.), 62, February 17, 2014, Spokane.

Lynne Katyryniuk Sanders ('73 English), 62, February 6, 2014, Spokane.

Danny Shaffer ('73 Speech and Hearing Sci.), 63, October 17, 2013, Los Angeles, California.

Larry James Walker ('73 Hotel and Restaurant Admin.), 65, January 24, 2014, Vancouver.

Leslie E. Wildesen ('73 PhD Anth.), 69, January 23, 2014, Portland, Oregon.

Daniel Leonard Noss ('74 Bus. Admin.), 61, November 28, 2013, Kennewick.

Bruce Jay Beyerl ('76 Forest and Range Mgmt.), 62, January 24, 2014, Wenatchee.

James M. Ribble ('76 PhD, Speech Comm.), 83, October 2013, Spokane.

Dennis Lee Wilcox ('76 Vet. Sci., '78 DVM), 68, October 17, 2013, Port Angeles.



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blends. They need shops like The Wine Alley to sell their wines outside of their winery.

"There are not a lot of any of those grapes out there," says Helfen. "They could make just 40 cases, maybe, of one in a year. And they come to us to help sell them."

Right now, Helfen herself is into whites. But those too are changing. With sweet Riesling holding court for so long, dry and off-dry Rieslings have moved onto the Northwest palate. "They're such great wines," she says. "They pair so well with food." And, as we tour her little shop with its apricot-colored walls and small tasting space at the back, she has to mention the current rise of the dry rosés. "They're so good. People used to look for them in the summer, but now you can find them year-round."

Helfen, a hospitality alum with a background in hotels, had dreamt for years about a neighborhood wine shop somewhere around Seattle. But it wasn't until 2004 on a trip to Italy that Allison and Scott sampled the local *enoteche* and found the impetus to open a local wine store at home. "Every neighborhood had one," she says. "Why shouldn't ours?"

It wasn't a decision made lightly. "Many wine shops have opened and closed since we've been in business," says Helfen. "Most of them were created as a hobby or a passion." But The Wine Alley started with a clear business plan that the Helfens meticulously researched and vetted. After scouting several locations, they chose the Cascade-Fairwood neighborhood of

Renton, where they already had their home. All that planning was done while they researched their product. "We knew we liked wine, but we didn't know a lot about wine," says Helfen. Online classes and books helped them understand the finer points. And they tasted and tasted. "In the end it's simply grape juice," says Helfen. "What people enjoy is what people enjoy. You've got to know your customer."

Helfen susses out her customer's preferences at her weekly wine tastings. Even if people don't sample at her shop, she urges them to seek out local tasting events. "You don't have to spend any money," she says. "I pour 10 different wines every week. It can really expand your palate."

Her own expanded palate has led her of late into blends, which she likes for their complexity and harmony. "I prefer blends in general. With whites you can get bright and fruity and then blend in a little chardonnay to add a bit more body." She points out a popular red blend called Powers Spectrum, which has five different grape varieties. "It's amazing. You really can notice all the flavors," she says.

The Helfens' efforts are appreciated by their loyal customers—many of whom continue to nominate and vote for Wine Alley as the "Best Wine Shop" in *Evening Magazine's* "Best of Western Washington" contest for six out of the last seven years.

"We are fortunate because we are a neighborhood store," says Helfen. "We support our neighborhood and our neighborhood supports us." <<



Stephen Leslie Riese ('77 Forest and Range Mgmt.), 60, November 10, 2013, Portland, Oregon.

Leslie Gail Chapman-Rose ('77 Foreign Lang. and Lit.), 58, January 11, 2014, Sherman Oaks, California.

Patricia A. Smith-Pierce ('77 PhD Speech Comm.), 74, February 9, 2014, Schaumburg, Illinois.

Liselotte M. Dumin ('79 Fine Arts), 87, November 27, 2013, Pullman.

Alan J. Hyde ('79 Veterinary Science, '80 DVM), 59, January 24, 2014, Emmett, Idaho.

1980s

Stuart John Bonney ('81 Arch.), 57, January 7, 2014, Port Angeles.

Tom G. Denison ('81 PhD Ed.), 61, June 25, 2009, Florida.

Jeffery Lynn Olsen ('81 Hort.), 62, January 31, 2014, Oregon.

Michale J. Hatley ('83 Const. Mgmt.), 69, December 25, 2013, Lewiston, Idaho.

Holger Joseph Jensen ('83 Civil Eng.), 62, December 25, 2013, Boise, Idaho.

Lisa Marie Pielstick ('84 Elementary Ed.), 51, January 20, 2014, Vacaville, California.

Jim V. Hogg ('86, Ag.), 56, April 22, 2012, Chihuahua, Mexico.

Molly M. Griffith ('87 Acc.), 48, June 29, 2013, Maple Valley.

Michelle Malarz-Tripp ('87 Hotel and Restaurant Admin.), 61, October 2, 2013, Seattle.

Scott D. Stratton ('87, '92 MA History), 51, February 18, 2014, Pullman.

1990s

Lawrence Mark Salinger ('92 PhD Socio.), 55, November 23, 2013, Jonesboro, Arkansas.

Kevin Padgett ('93 Bus. Admin.), 47, December 14, 2013, Long Beach, California.

Arthur Maxwell Taylor Jr., ('93 Foreign Lang. and Lit.), 48, November 28, 2013, Lewiston, Idaho.

Broderick Gant ('96 MS Ani. Sci.), 45, February 20, 2014, Kennewick.

Ioan Sadoveanu ('97 MS Math.), 56, June 23, 2007, Birmingham, Michigan.

2000s

Hunter S. Vissotzky ('04 Fine Arts), 32, March 1, 2012, Spokane.

2010s

Arthur Rimisho Sawe ('11 Pol. Sci.), 24, January 1, 2014, Seattle.

Brett Lee Thompson ('11 History), 24, January 29, 2014, Everett.

Faculty and Staff

Donald L. Aasen, 71, WSU County Extension 2006-2009, February 21, 2014, Long Beach.

Charlotta J. Blood, 83, Housing 1977-1993, January 10, 2014, Moscow, Idaho.

Jane Ann Clanton, 73, College of Sciences 1974-1996, February 22, 2014, Pullman.

Frances E. Cole, 84, Psychology, 1968-1980, February 2, 2014, Pullman.

Rinehart Dahmen, 91, Creamery/Food Science 1956-1982, November 23, 2013, Pullman.

Richard Daugherty, 91, Archaeology 1950-1983, February 22, 2013, Pullman.

James C. Engibous, 90, Agronomy and Soil 1955-1988, January 16, 2014, Frisco, Texas.

Mavis Kay (Gorman) Fertakis, 81, Dean of Student Affairs Office 1965-1987, November 16, 2013, Spokane.

Lawrence Flood, 85, College of Engineering 1968-1986, February 7, 2014, Spokane.

G. Richard "Dick" Fowles, 85, Physics 1966-1995, November 30, 2013, Mount Vernon.

Elizabeth F. Frykman, 94, Student Book Corporation 1966-1982, January 7, 2014, Pullman.

Carl J. Goebel, 84, Department of Nat. Res. Sciences 1967-1993, November 20, 2013, Woodburn, Oregon.

William P. "Bill" Jacobs, 85, Small Business Development Center 1979-1990, February 2, 2014, Eagle, Idaho.

Lorraine Marie James, 80, Financial Aid 1964-1994, January 2014, Corvallis, Oregon.

Trudy K. Kenny, 69, CAHNRS Business and Finance office 1981-2014, January 8, 2014, Pullman.

Linda Kittell, 61, English 1984-2013, January 29, 2014, Troy, Idaho.

Brett E. Line, 48, Dining Services 2002-2014, January 5, 2014, Albion.

Frank A. Loewus, 94, Institute of Biochemistry 1975-1990, January 21, 2014, Pullman.

Susie A. Mallavia, 82, Microbiology 1972-1998, February 10, 2014, Page, Arizona.

Richard W. Mathews, 88, Cooperative Extension 1965-1990, November 30, 2013, Stanwood.

Edwin Joseph McWilliams, 94, Board of Regents 1978-1990, January 11, 2014, Seattle.

Jean M. Rounds, 77, Dining Services 1980-2003, February 12, 2014, Potlatch, Idaho.

Harold Charles "Hal" Sorensen, 78, Civil and Env. Eng. 1987-2003, December 16, 2013, Pullman.

Lois L. Stratton, 73, Small Business Development Center, 1986-2006, February 12, 2014, San Angelo, Texas.

Scott D. Stratton, 51, History, 2009-2014, February 18, 2014, Pullman.

Sietse J. Willekes, 84, University Publications, 1956-1986, February 9, 2014, Clarkston.

Homer R. Wolfe, 97, Tree Fruit Research Center 1947-1957, November 26, 2013, Wenatchee.

WSU Alumni Association News



Lewis Alumni Centre "re-barn"

TWENTY FIVE YEARS AGO the WSU "farm barn" with its cattle stalls and hayloft was converted into a welcome landing for visiting alumni and their families and friends. The ground-floor livestock area was transformed with a visitors' desk, an open lounge with distinct seating areas, a small library, and several charming meeting rooms. The second level under the gambrel roof became a bright, open space perfect for parties, reunions, and game day gatherings.

The farm barn had been a landmark on the east side of campus since the 1920s when it was built to serve the agriculture school. Over the years, offices, laboratories, and classroom buildings sprouted out of the surrounding farmland and by the 1980s, the animals had been moved away from the central campus. The barn was deemed obsolete and scheduled to be demolished. But the Washington State University Alumni Association stepped forward with an offer to convert the landmark into a home for the organization.

A groundswell of support and donations from alumni and friends got the project started. Donors Jack and Ann Lewis gave \$1 million and their name to the project. Architects Steve McNutt '71 and Robert Grossman '59 took on the challenge of remaking the building.

After traveling to other campuses seeking ideas for the renovation, the architects returned to Pullman to create not only a home for the alumni association, but a flexible space for campus gatherings, retirement parties, and starting this summer, wedding receptions. The building hosts 300-400 events a year.

Now, after 25 years, the structure is undergoing another overhaul, albeit on a much smaller scale. New furnishings, paint, lighting, and a variety of upgrades will bring the building up to date.

"For years the Alumni Centre has served as the University's living room. We want to keep it fresh, contemporary, and useful to campus," says Mark Wilcomb '85, director of finance and operations with WSUAA. Part of that is building in more technology, offering wireless access for individual visitors as well as facilities for technology-based interactive meetings for groups. The association is revisiting the original ideas of architects McNutt and Grossman. By drawing ideas from the original plans "we're hoping to offer even more of a Cougar feel than there is right now," says Wilcomb.

Though the renovation will be underway throughout the summer, the center is welcoming visitors and commemorating the anniversary with displays of memorabilia and gifts from alumni. "We have the green freshman beanie, we get huge laughs with that," says Wilcomb. Other items include a 1912 cadet's uniform and a medal of honor donated by James Fleming '66, an Air Force colonel honored for his life-saving actions piloting a helicopter rescue in South Vietnam.

The displays and a series of events celebrating the center's anniversary will take place throughout the summer, culminating in the fall during Homecoming and the golden and diamond graduates' reunions.

"We want to be an exciting and inviting twenty-first-century facility," says Wilcomb. "But we'll never forget our roots."

For more information about WSUAA and alumni chapters go to alumni.wsu.edu or call 1-800-258-6978. Visit wsm.wsu.edu/extra/re-barn for a gallery of images.



The Aesthetics of Strangeness: Eccentricity and Madness in Early Modern Japan by *W. Puck Brecher* UNIVERSITY OF HAWAII PRESS, 2013 :: Review by *Larry Clark '94* :: Eccentricity and odd artistic behavior in the Edo period of Japan (1600–1868) proliferated as an aesthetic subculture that both resisted the rigidity of the Tokugawa realm and served as a source of moral and cultural values.

This study by Brecher, an assistant professor of Japanese language at Washington State University, delves into the complex role of oddballs and eccentrics as sources of artistic innovation and eventually as an influence on Japanese society.

Consider the story of Striped Kanjuro. A “harmless oddball” immortalized in the annals of strangeness from the Edo period, his home was painted entirely in stripes, he only wore striped clothing, and he even cut his food into stripes. But rather than being just a deviant, Brecher points out that Kanjuro’s idiosyncrasies fit with important writers and artists of the

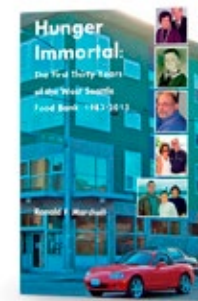
time as they became part of the mental landscape of Japanese society.

For example, the poet Basho’s penchant for wandering the land, embrace of eccentricity, and his manipulation of poetic forms altered the course of Japanese poetry. Basho and others also aligned themselves with an older Chinese and Daoist tradition of artistic madness, which often held that eccentrics were virtuous moral paragons.

However, Basho, saké-fuelled artist Beisanjin, print artist Hokusai, and other eccentrics of the period stood counter to the orthodoxy that the ruling Tokugawa shogunate wished to impose on all aspects of society, including the arts. That conflict offers a chance to explore early modern Japan’s culture through those artists and writers.

“Viewing the Edo period through the lens of strangeness ... highlights tensions between artistic correctness and strangeness, as well as the intellectual discourse surrounding those tensions,” writes Brecher. Late Tokugawa society realized, “the full aesthetic potentials of eccentric art as well as its transformative contributions to mainstream Japanese culture.”

Although this book discusses eccentric artists in a particular Japanese historical and cultural context, Brecher’s exploration offers some fascinating insight into art and strange artists for readers beyond specialists in Japanese studies. ☒



Hunger Immortal: The First Thirty Years of the West Seattle Food Bank, 1983–2013 by *Ronald F. Marshall '71* 2013 :: Review by *Hannelore Sudermann* :: What is today the West Seattle Food Bank started as a shoestring operation in an abandoned public school building. A pair of retired grocers from South Dakota had taken on responsibility for distributing government commodities like cheese and peanut butter to needy community members.

Thirty years later, the food bank owns its own building, serves an average of 750 families a week, and distributes food, baby supplies, and other items to a diverse community. The bank also delivers bags of food to the homes of the elderly.

Ronald F. Marshall, a pastor who has served on the food bank’s advisory board for nearly two decades, provides the story of the bank from its scrappy beginnings and through its efforts to meet the needs of a changing, growing community. He blends the chronological

story of the bank with small profiles and stories of board members, volunteers, donors, and property owners who made personal sacrifices to provide the bank with a location. “Hunger in our community is far worse than most of us who live here imagine,” he writes, explaining why he undertakes this unusual history filled with intrigue, sadness, corruption, sacrifice, and lucky breaks.

Within a few years of its opening, the food bank’s offerings grew to include food from local donors and groceries. All the while it had to move, and move, and move again, struggling to find a location that it could afford and where the neighbors wouldn’t complain about noise and traffic.

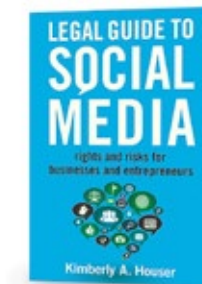
In 1988 the organization became a registered nonprofit. The 1990s brought stability and more community support. Eventually the bank had the resources to provide clothes and books for the clients’ children and to enhance its fundraising. Then, in 1997, a gift came out of the blue. A former longshoreman and

building janitor who owned his home and had some savings left \$335,000 to the organization. The bequest was a mystery to the board, since the man, a recluse, was neither a significant donor nor a volunteer.

The board decided to use the sum to create a permanent site for the bank. That finally happened, after a number of other donations, in 2007 when the bank opened the doors to its new \$3 million home on 35th Ave. SW and Morgan Street.

Marshall cites many reasons for writing this book, including his own curiosity to know more of the story of the bank and the community around it, and his desire to show that “great things come from small beginnings.” ☒

Legal Guide to Social Media: Rights and Risks for Businesses and Entrepreneurs by *Kimberly A. Houser* ALLWORTH PRESS, 2013 :: Review by *Larry Clark '94* :: Millions of photos, links, and comments are posted to social media sites like Facebook and Twitter every



day, yet the legal briar patch of copyright, privacy, defamation, and more can snag both personal and business users. Houser, an attorney and clinical professor in Washington State University’s College of Business, wrote this book as a guide to some common legal risks of social media.

With the rise of social media marketing, the number of implications for the law has grown tremendously. Social media also spans so many legal jurisdictions that a small businessperson or entrepreneur must navigate some serious complications. Can you post about a product or person? What are the issues around licensing? How do terms of use and privacy policies on a website apply to you?

Many of her clients now ask about making sure their websites are “legal” as much as they ask about forming a corporation, writes Houser. She produced this book as a plain English explanation of laws affecting social media

because of that demand. She uses a question and answer format to explain many of the legal complexities of employment law, copyright infringement, right to publicity, and other concepts for the layperson.

Her book comes at a crucial time and fulfils a definite need for any business engaged with social media—and that means virtually everyone. If you’ve wondered how to respond to a takedown request from Pinterest, what you can write on an online forum, or who really owns your work Twitter handle, this book can provide some advice and direction. ☒

new & noteworthy

Kierkegaard for the Church: Essays and Sermons by *Ronald F. Marshall '71* WIPF AND STOCK PUBLISHERS, 2013 :: Soren Kierkegaard’s philosophy and writings on Christianity have been a staple of classrooms and academics for many years, but have not necessarily

been applied to the practice and teaching of Christian faith. Marshall, pastor at First Lutheran Church in West Seattle since 1979, takes Kierkegaard’s criticisms of the Danish church and emphasis on individual engagement with the religion into pragmatic sermons and essays on the philosopher’s role in churches today. Marshall has authored more than 50 articles on religion, specializing in the works of Martin Luther and Kierkegaard. ☒

The Whiskey Creek Water Company by *Jan Walker '60* PULCATA PRESS, 2014 :: In a small Puget Sound community in 1932, a mysterious stranger, his wife, and small child disrupt the local populace. Whiskey Creek on Burke Bay becomes the setting for romance, bootlegging, and Great Depression era drama in this fourth novel by Jan Walker. ☒

Into the Storm: Journeys with Alzheimer’s edited by *Collin Tong* BOOK PUBLISHERS NETWORK, 2014 :: In this series of 23 personal stories, caregivers of sufferers of Alzheimer’s

disease reveal their fears and challenges in dealing with this debilitating disease. Tong, a retired WSU staff member who edited the volume, faced many of the same issues when his late wife Linda was stricken with early onset of the disease. ☒

Teeing Up for Success *Cheri Brennan '72*, contributor EXECUTIVE WOMEN’S GOLF ASSOCIATION FOUNDATION, 2014 :: In her contribution to a collection of more than 30 essays on how golf helped businesswomen, Bellevue-based marketing and public relations consultant Brennan tells how working for a golf company revived her interest in the game. She had learned golf in a WSU physical education course, and renewing her skills enabled her to specialize in promoting the golf industry. ☒

So This Is Christmas by *Jim Devitt '86* 2013 :: The Anderson family’s recent move causes nine-year-old Tony’s bad attitude to ruin the holidays, until Christmas magic comes to life in Devitt’s second novel. ☒

ILLUSTRATION: DAVID HUYCK

Ask Dr. Universe

Ever wondered how to build a suit to guard against lightning strikes? Or have you been curious about what you'd see if a black hole appeared between the Earth and moon?

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I am a Cougar pharmacist



When Shon Volk first contacted the student services director at the College of Pharmacy at Washington State University his anxiety about getting into pharmacy school immediately disappeared. He had many more interactions with that person on his path to being accepted into pharmacy school and each time it was the same feeling that he was in good hands. After Shon was accepted and began classes he met other faculty and staff who also guided him and made him feel that they really cared about him.

"No matter how difficult things became with a heavy workload, I always had somebody there to motivate me and keep pushing me forward," Shon remembers. "They were there for ME!"

Shon graduated in 2007 and today he is manager of an Albertsons pharmacy in Spokane. He has stayed involved in the college by giving a few lectures every year and precepting student pharmacists at his pharmacy. But he went even further recently when he teamed up with two professors and started a pilot project in Albertsons stores in Spokane to allow customers who think they may have strep throat to be tested by a pharmacist. Shon took the project through the proper corporate channels to get it approved and found a physician willing to sign off on the project, which means participating Albertsons pharmacists may prescribe antibiotics to customers who test positive. Shon was one of 20 Albertsons pharmacists who were trained by a WSU pharmacy professor to give the strep test. Shon is excited to be making such a contribution to the advancement of pharmacy.

"Pharmacists are now referred to as health care providers, which is huge for our profession," Shon said. "I believe we will continue to find ways to implement accessible health care. As a retail pharmacist, I am the first stop and the last stop in the health care process. Most patients will come to me first to inquire about an illness or condition, and armed with my recommendation they will self treat or go on to their doctor."

Many pharmacists do continue to dispense medications but it is no longer their primary role, Shon said.

"We are educators," Shon said. "We have a very specialized skill set and we are the most accessible health care provider. Whether it's a question about Tylenol dosing for an infant or a skin condition for an adult, we have the answer or we can lead the public in the right direction for treatment."

Shon discovered at an early age he had an aptitude for science and an interest in physical health, but he didn't know how to combine those into a career until he had a discussion with a family friend who had just graduated from the WSU College of Pharmacy. It was a great experience and the right choice, and now he hopes to stay involved with other future pharmacists.

"It is WSU College of Pharmacy faculty and staff that separates them from the rest," Shon says. "I have a family at WSU that I can always count on."



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