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Water is life. But two billion people have no access to clean water, resulting in over 1.5 million child deaths per year.

Researchers at the Paul G. Allen School for Global Animal Health and their African partners work to block the spread of infectious disease and antimicrobial resistance globally.

It’s our mission to improve quality of life for all people.

globalhealth.wsu.edu

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Express yourself: Nature or nurture? It seemed so simple a debate when I was younger and first learning biology. DNA and genes determined some of our traits, and the rest came from family, society, and other external factors.

There was certainly debate about the extent of what we could learn versus what we inherit as hard-coded genetic information. Well, that discussion is a lot more complicated now, as recent empirical research and discoveries show offspring can inherit traits developed by parents’ environment and experiences. Basically, what’s passed on to kids is not just in the genetic code.

One way that happens is through epigenetics, where heritable changes in gene expression occur without changes to the underlying DNA sequence. Washington State University biologist Michael Skinner and his students over the last 15 years pioneered and replicated experiments in this field that showed epigenetic transfers, traits changed by environment that were passed down several generations. Skinner was treated initially as a rogue for the findings, but his research has spurred new understanding of evolution and inheritance, and could lead to effective gene therapies for diseases.

Even when we inherit traits, the environment can sometimes make it hard to express oneself, as Bob Dlugosh ’71 and other gay, lesbian, bisexual, and transgender Cougs will attest. It wasn’t easy to identify as LGBT, even at WSU, but with support these alumni could finally be who they are, and use their voices to build community and resilience.

The voices of Cougs over the years have resonated with people from all over. Edward R. Murrow’s amazing broadcasts from wartime London reached millions. And who can deny that Keith Jackson ’54 expressed the very heart of college football? Jackson, who passed away in January, is remembered by new Murrow College Dean Bruce Pinkleton in this issue. Younger voices, too, can tell us great stories, such as Kara Rowe’s documentary work on women in agriculture.

One thing I’ve discovered over the years is that every member of the Cougar family has a story. Some are sad but must be told, like the untimely death by suicide of WSU student and football player Tyler Hilinski. Stories can help us heal, and hopefully reach out to others facing despair.

Other stories share the spirit of WSU life, whether it’s trout fishing in Idaho rivers or playing piano in Kimbrough. That’s why I’m asking you to express yourself with a 100-word story about your time at Washington State. The contest details are at the back of the magazine, but please note that the top stories will get a cheese-y prize.
His invention saves lives.

Improperly pasteurized milk can carry dangerous diseases. In developing countries, it’s a serious health risk.

Victor Charoonsophonsak ’17 invented a better pasteurization thermometer with a faculty mentor. With fellow WSU students, he created a plan for bringing it to market.

His lifesaving invention is now available in Nigeria—and soon, the rest of the world.

choose.wsu.edu
Jennifer Brown ’99 grew up thinking a team of horses would be required to pull her away from an equine veterinarian career. Although Brown thought she was not that strong in science during high school, her love of training horses and interacting with the animals propelled her to pursue a doctorate of veterinary medicine at WSU.

The heroism displayed during the aftermath of the 9/11 terrorist attacks, however, introduced Brown to a new possibility. “During my residency, 9/11 happened,” Brown says. “That obviously made a big impression on many people and one of the things that impressed me was the work of the search and rescue dogs at the sites. I thought that was something I could get involved in later in my career.”

A few years after Brown had taken a faculty position at Virginia Tech, she joined the Veterinary Medical Assistance Team, right before Hurricane Katrina impacted the Gulf Coast in 2005. “That was my first deployment, and I worked with the search and rescue dogs down there,” Brown says. “When I came back home after being deployed for five weeks for Hurricanes Katrina and Rita, I wanted to learn more about the dogs and how they trained and worked.”

A colleague of Brown’s on the VMAT introduced Brown to one of the local Urban Search and Rescue teams. Observing that training enabled Brown to get more involved with the search and rescue outfit as the team veterinarian who managed their canine care needs. “I said I would never be a dog handler because I just don’t have time for that,” Brown says. “Never say never, because now I have got five Urban Search and Rescue dogs.” Brown got her first search and rescue dog, Phanesse, in 2009. She has FEMA-Certified Live Find dogs and a FEMA-Certified Human Remains Detection dog. Following her relocation to Florida in 2010, Brown transferred to Florida Task Force-2 where she serves...
Bug out!

BY BRIAN CHARLES CLARK

A scrawled note was stuck to the door of the clinic. “All animals left here have died,” it said. “We have buried them for you. I have no way of expressing my grief.” The note was signed by the vet whose clinic was destroyed by Hurricane Katrina. That note is a sad reminder that being prepared for a disaster is key to surviving storms, fires, floods, earthquakes, and whatever else might come crashing down upon us—and our animals.

That’s why Cynthia Faux says, “If I have 15 minutes to evacuate in front of a fast-moving fire, I don’t want to spend 10 of those looking for my pet carriers.” Faux, a clinical assistant professor in Washington State University’s College of Veterinary Medicine, has two cats, a dog, two birds, and a 30-inch-long lungfish. “During fire season, those carriers stay in my living room.”

Faux teaches a two-week-long summer intensive evacuation preparedness course for fourth-year veterinary medicine students. The course immerses students in the intricacies of disaster management, including which local, state, and federal agencies to coordinate with, how to develop plans for moving livestock, and what animal health factors to consider when rendering aid to veterinary clinics in the path of a disaster.

As Faux says, “If your veterinary practice is in the path of a flood or a fire, whether you like it or not, you have to deal with it.” The idea of the course, she adds, “is to prepare veterinarians, whether they’re going to actively participate in disaster management or they just want to know in case it happens to them.”

Emergency managers, as well as psychologists who study crisis communications and management, admit that there’s no way to get 100 percent of people to leave a disaster area. One reason for that is that many people simply refuse to leave without their pets.

And even if some try to leave with their pets, they aren’t always allowed to do so. One case, in particular, helped move American disaster planners to be more inclusive of animals.

In the wake of 2015’s Hurricane Katrina, one of the deadliest hurricanes in U.S. history, a young boy was sheltering at the Superdome. He was to be evacuated to a more permanent facility in Houston. As he was boarding a bus to Texas, his dog was taken out of his arms by a police officer. Distressed, the boy called out to his dog, “Snowball!”, and then crumpled to the ground in despair. Caught in a series of photos, the story went viral—and helped inspire a new law.

More than a year later, in October 2006, Congress passed the PETS Act, which mandates that disaster preparedness plans include provisions for pets. Implementation of the law has been spotty, though, with only 20 states in compliance. Washington state is one of them. Sadly, Snowball and her boy were never reunited.

Still, according to a 2011 ASPCA poll, at least 30 percent of people in the South said they wouldn’t know what to do with their pets if forced to evacuate. Now, though, many disaster management agencies are creating agreements with firegrounds, motels, mass transit carriers, and other businesses to allow animals in emergency situations.

Faux was in Louisiana in the aftermath of Katrina as part of a team of vets who volunteered to help animals in disasters. She was already an experienced disaster-aid vet, having worked in New York after 9/11, where she cared for search and rescue dogs.

Dogs worked in rubble piles with potential for paw-pad injury. Having vets on site meant that if the dogs had problems, they could get help right away. While dogs had very few problems, the site of the Twin Towers collapse was very dirty, so on-site vets washed a lot of eyes and ears, for which handlers were grateful, according to numerous accounts celebrating the canine heroes.

One of Faux’s students, Corrie Hines ’18 DVM, says pet owners need to have a bug-out bag ready to go. Animal owners need to have “vaccination records, food for a week, a can opener, ID tags, water and water bowls, a spare litter box,” and whatever else a pet might need for a week-long evacuation. For horse owners, “own a trailer or have a partner nearby who does. Have friends or...
Virtually yours

How do you walk through a building in Atlanta when you’re in a classroom in Pullman?

If you can’t be there physically, virtual reality can deliver a new level of engagement, whether it’s watching Shaun White’s snowboarder brush inches from your head, or working collaboratively on construction projects with students from Georgia.

Virtual reality is also a rapidly growing business. There were an estimated seven million VR headsets in 2016, which is expected to balloon to 47 million by 2020.

That acceleration has pushed companies like Intel to ramp up their VR offerings, including the 2018 Winter Olympics in PyeongChang, South Korea. The VR technology there was developed by former Washington State University engineering professors Sanjar and Uma Jayaram from 1993 to 2015, funded by federal agencies and companies such as PACCAR and Komatsu. They started their company 3D-4U, which was bought by Intel in 2016, to create fully immersive and interactive experiences.

First used in Martin Stadium for WSU football games, the VR system had a major push during the Olympics. The Vsiland College of Engineering and Architecture hosted a viewing party of the Winter Games where students and faculty could try out VR headsets at WSU Pullman’s Spark, a new digitally-focused classroom building, and experience 360-degree views of snowboarding half-pipe, figure skating, and several other sports. Over in PyeongChang, several former students joined the Jayarams at the Intel project. Barely two years out of school, Blake Rose ‘15 managed the operation. John Harrison ’07 supported coding and graphics activities. Matthew Poppe ’11 handled the design and manufacture of proprietary cameras assisted by Aaron Haseshel ’15, and Oklooom Kim ’07 MS, ’11 PhD created VR Olympic apps for the Omen Gear VR, Google Daydream, and Windows headsets.

The headsets continue to improve, but aren’t at the level of Ready Player One, the dystopian science fiction novel by Ernest Kline that takes place mostly in virtual space. That book was selected as the 2017–18 Common Reading selection read by all freshmen and integrated into coursework and lectures.

Although Ready Player One is set in the future, VR is already used in classrooms. In Anne Anderson’s construction management class, students collaborate on building projects using VR headsets and 3-D software.

Anderson, an assistant professor of construction management and a virtual reality expert, says, “We really feel more team cohesive-ness, as though we are in the space together.”

Not only do they work together, the WSU students join construction management students at Virginia Tech and Georgia Tech for lectures and to “walk” around virtual buildings, such as the historic Rilstone Building in Atlanta, for classes.

The projects aren’t just in Georgia. Strap on a headset, and you can look inside the walls of WSU Pullman’s Ehsan S. Floyd Cultural Center and see how the beams create the unique “rolling” roof. It’s certainly more than a game. As Anderson says, industry is already using this technology, which helps graduating students.

Hines and her fellow students worked with the disaster management team in Chelan County, in north central Washington. Women are in a home to a large number of horse lovers and their animals, so having a way of moving large animals to safety is important to Stan Smoke, Chelan County’s emergency management specialist.

A former fire chief, Smoke says having defendable space around your home, barn, or stable is an important part of a preparedness plan. Sandy Duffy, Smoke’s counterpart in Grant County, where Faux and her students have also worked, concurs.

“Everybody cramming into a school parking lot, looking for their children—that’s probably not the best way to go about trying to find a child.”

Duffy says that whether its large animals or small children, knowing the plan is critical to a safe evacuation.

* "Virtually yours" is a column by Lesley Anderson. The views expressed are those of the author and not necessarily those of WSU or the College of Engineering.

By Rebecca Phillips

Smoke covering the entire state of Washington on September 5, 2017. Courtesy: Detail of the online AIRPACT-5 Dynamic Map which forecasts air quality in the Pacific Northwest. Images courtesy NASA and WSU Laboratory for Atmospheric Research

In the hazy days of summer

It’s no secret that wildfires are on the rise throughout the western United States. Come summer, the plumes of gray-brown smoke seem to arrive weeks earlier and often linger well into fall. The smoke irritates sinuses, clings to clothes, and despite your efforts, seeps into homes and cars like an ever-present smoldering campfire.

On those hazy-filled days, people often wonder, “Is it safe for the kids to play outside? To hold a neighborhood BBQ? What about those with asthma or other respiratory problems?”

Engineers at the Washington State University Laboratory for Atmospheric Research (LAR) are helping provide answers through a powerful computer modeling system called AIRPACT, which predicts daily air pollution levels for the Pacific Northwest, including wildfire smoke.

In response to growing public health concerns, the AIRPACT team recently expanded their wildfire smoke forecasting capabilities and is also developing early warning alerts for those with respiratory health issues.

It’s a welcome move after last summer, when the Spokane Clean Air Agency recorded the region’s worst air quality since monitoring began 20 years ago. For several days in September, much of Eastern Washington was blanketed with thick mud-yellow smoke that sent air quality readings into the very unhealthy zone—and people scrambling for N95 masks.

Though the severity of wildfire seasons varies, scientists say the number of smoky days has been trending upward for the last decade and is expected to continue. The reasons are complex, but it’s generally agreed that average temperatures are rising and staying warmer longer due to climate change. The result is often more rain than snow during winter, which spurs spring vegetation growth and allows insect pests to survive. The combination of drought, dry fuel, and pests can turn what should be a normal fire year into something extreme.

The looming question, for many people, is how to adapt their daily lives to endure weeks or months of smoky air pollution while minimizing adverse health effects.

By Larry Clark

network of people in nearly every county who will let you leave their animals with them. “Have a plan,” Hines insists. A veteran wildlife rehabilitator who has cleared birds after oil spills, Hines adds, “Know that something bad can happen, so be prepared. Just opening your pasture gates and hoping your horses are going to be OK? That’s not a plan. They can get hurt. They can hurt others.”

Knowing where your local fairground is might just save your animal’s life, especially in the Pacific Northwest where fire is a major concern.
Joseph Vaughan, research associate professor in civil and environmental engineering, says smoke forecasts are posted on the AIRPACT website by 7 a.m. each day and can help with decision-making and day-planning. The system models several components of wildfire smoke, with a focus on particulate matter that is 2.5 microns or less in diameter, called PM2.5. In comparison, the average hair is 10 microns wide.

These tiny smoke particles stay suspend ed in the air and are small enough to get deep into the lungs where they cause irritation and inflammation, says Vaughan. According to the Environmental Protection Agency, particle pollution is carcinogenic and linked to serious health problems including respiratory disease, asthma attacks, cardiopulmonary disease, heart attacks, strokes, and early death.

PM2.5 is one of six pollutants reflected in the EPA’s Air Quality Index, or AQI, and regulated by the Clean Air Act. The AQI, available to the public on AirNow.gov, shows current air pollution levels using colors and a scale running from 0 to 500. Good air qual ity, for example, is shown in green and runs between 0 to 50. Yellow is moderate at 51 to 100, orange is unhealthy for sensitive groups at 101 to 150, red is unhealthy for everyone between 151 to 200, people is very unhealthy for everyone at 201 to 300, and maroon is haz ardous at 301 to 500.

In Spokane last September, the AQI for PM2.5 reached 256—people level and the highest ever recorded.

Vaughan says AQI is based on weather monitoring and forecasts while AIRPACT uses a computer model that brings in meteorology and emissions data to simulate air pollution conditions as they evolve over time. The AIRPACT team wants to use the model to provide practical information for widespread public use.

To that end, Vaughan and his colleagues recently teamed up with the Washington State Department of Ecology and Washington State Department of Health to create a program called CENSE—or Cardio Pulmonary Estimation System.

Using AIRPACT forecasting, CENSE will alert individuals when air quality is predicted to deteriorate and could trigger specific health emergencies. Plans are in the works for a website, subscriber function, and smartphone app.

CENSE calculates values that relate the average 24-hour PM2.5 level to incidence of human health conditions such as asthma and chronic obstructive pulmonary disease (COPD). For example, Vaughan says there is a specific value for asthma patients under age five, another for the general population, and one for those over age 65.

“Our subscriber function will text, call, or email you with the day’s warnings for the conditions you’ve signed up for,” he says. “If you have a child with asthma, you might want an alert whenever there’s a 20 percent increase in the risk of an event. Or a 50 percent increase for a parent with COPD.”

CENSE ties in nicely with the work of WSU civil and environmental engineering professor and LAR member Von Walden, who leads air quality research for the Urbanova project in Spokane’s U-District. Urbanova is a consortium of businesses and innova tors who are using smart city technologies to improve services and infrastructure in Spokane.

“The smart city idea is using state-of-the-art sensors in intelligent ways to improve health and well-being of citizens,” says Walden.

Last year, he and his colleagues mounted air quality sensors on three streetlamps as part of the Avista smart streetlight project.

“This spring, we installed six more sen sors—this time on rooftops in the U-District,” Walden says. “We also put in a very sophis ticated suite of air quality instruments as a reference site at WSU Spokane.”

Their plan is to monitor air quality at the street and neighborhood level with an emphasis on winter air stagnation and wildfire smoke. “If you gear up for what could be another smoky fire season, Walden says they hope to collect data that will benefit the general public.”

“Smoke can have serious health effects, so we’re making measurements to better understand the exposure of Spokane’s citizens,” he says. “By providing people with more information during smoke events, we hope that they will be able to make better decisions regarding their personal health.”

Smoke truly gets under the skin of wine grapes.

As microscopic particles and liquid droplets ozone and eddy through the vineyard, grapes are coated with toxic chemicals. Worse, smoke from forest and range fires management and planning while AIRPACT forecasting, CENSE will alert individuals when air quality is predicted to deteriorate and could trigger specific health emergencies. Plans are in the works for a website, subscriber function, and smartphone app.

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Physics at the bat

TODAY’S BASEBALL GAME, brought to you by Physics Unlimited, is a blockbuster contest between the famous Mathematical Physicists and Washington State University’s own Oblique Collisions.

As the Oblique Collisions take the field, Ernest Rutherford, the renowned English physicist, is first up for the Mathematical Physicists. Better known outside physics circles for his cricketing skills, Rutherford is quite the hitter, though usually of particles much smaller than baseballs.

Indeed, in describing the collision of an alpha particle—better known as the nucleus of a helium atom, two protons and two massive neutrons—with a gold atom, Rutherford had this to say: “It was as if you fired a 12” [artillery] shell at a piece of tissue paper and it came back to hit you.”

Swing and a miss! Strike one against the discoverer of some of the basic properties of particle physics.

Jeffrey Kensrud, manager of the WSU Sports Science Lab in Pullman, is on the mound winding up another pitch. Crouched behind home plate—and sporting safety gear of course—a lab coat, Smith, director of the lab.

Kensrud fires, and it’s another 88 MPH fastball, hitting the center of the plate, and oh my! We’re seeing a spin rate of 3,500 RPM as the Oblique Collision outfielders drop back, back... home run! No wonder Rutherford was called a force of nature!

Isaac Newton is next up, adjusting his powdered wig, and taking a few practice swings. The all-star mathematician, not known for his baseball skills, is in fact a master of the game.

Later, in a post-game interview, Smith and Kensrud talk about their evening. “It’s not that we played poorly,” says Smith.

“Rather, these guys are the masters of scatter experiments,” I mean, Rutherford laurelled that move in the early twentieth century. We used the same principles in our efforts to understand what happens to a baseball when but with a bat—as we recently wrote in a paper on the subject, ‘some of the same principles that apply to subatomic collisions also apply to collision of all mass microscopic objects.”

Kensrud nods, and adds, “And Sir Isaac developed the math that tells us how fast a hit object goes, based on the coefficient of restitution. Simply divide the velocity after collision by the velocity before collision.”

“That sounds simple,” says the interviewer. “So, all the energy of the swinging baseball is converted into ball velocity?”

“No,” explains Kensrud. “The ball is slightly deformed, absorbing some of that energy, while some of the rest is lost to friction of bat against ball.”

“But what you really want,” interjects Smith, “is to minimize the loss of kinetic energy and to maximize the post-impact spin by maximizing both the normal and tangential coefficients of restitution.”

There is joy in Mudville at this insight.

FINAL SCORE: Mathematical Physicists, 3, Oblique Collisions, 0, but the Collisions score many bonus points for their high-speed photography of bat-whacked spinning balls.

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Betting your digital dollar

Vast, haze-filled casino floors where rows of flashing colors light up expressionless faces endlessly feeding coins into a machine. Men sporting Hawaiian shirts rake piles of plastic chips across green felt tablecloths, all seeking the hedonistic rush of hitting a jackpot seemingly just out of reach.

This is gambling as many of us know it. However, the combination of luck, wagering, and a chance at a payday is far from a modern concept. As far back as the Paleolithic era, humans wagered on the roll of crude dice made from knuckle bones. Nonetheless, the staples of contemporary gambling—slot machines, card games, craps tables—may be considered primitive technology soon, says Kahil Philander, an assistant professor of hospitality business management at Washington State University Esport with expertise in the economic impacts and public policy of gambling.

The challenge is to alter the landscape. “It’s not that we played poorly,” says Smith.

“Rather, these guys are the masters of scatter experiments,” I mean, Rutherford laurelled that move in the early twentieth century. We used the same principles in our efforts to understand what happens to a baseball when but with a bat—as we recently wrote in a paper on the subject, ‘some of the same principles that apply to subatomic collisions also apply to collision of all mass microscopic objects.”

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There is joy in Mudville at this insight.

FINAL SCORE: Mathematical Physicists, 3, Oblique Collisions, 0, but the Collisions score many bonus points for their high-speed photography of bat-whacked spinning balls. *

The advent of the internet is altering the gaming landscape. Traditional forms, such as scratch-off lottery tickets, are slowly being phased out in favor of more interactive, skill-based games. The internet is becoming more accessible on phones, computers, tablets. As the digital realm grows a flurry of new avenues for gamblers, lawmakers grapple with the challenges posed by emerging technology and an evolving scientific understanding of gambling addiction.

Gambling in Washington state is governed by laws largely created in the early 1970s. While older than most, Washington’s regulatory framework is not much different from other states, which do not take into consideration the rise of new digital forms of gambling.

The unique challenges posed by online and digital gambling have left policymakers scrambling to update antiquated laws created in an era when the internet was an unknown concept. Complicating the equation further, the ambiguity of betting’s newest forms has given way to debate about whether these activities even constitute gambling in the first place, says Washington State Gambling Commission Director David Trujillo.

“I’m paying real-world money to open up ‘footboss’ for a chance at obtaining rewards within a video game considered gambling?” What about earning virtual points on an online poker site? We spend a lot of time answering questions about ‘is this gambling or is this not?’ And we get these scenarios all the time because they’re always slightly different,” Trujillo says.

In the meantime, lawmakers across the country are arguing the potential for a dramatic rerew of the policies surrounding one of the newest forms of gambling: sports betting. The U.S. Supreme Court is considering the case of NCAA v. Christie, which seeks to overturn the law that effectively outlaws sports wagering in 46 states. The case is gaining momentum as the NBA recently called upon U.S. policymakers to create laws that provide a basis for betting on its games, in spite of efforts by the American Gaming Association to block such regulations on the basis of unconstitutionality. State governments—including Washington—announced closely following NCAA v. Christie, as a reversal of the sports betting ban would be felt across the country.

“Everybody is kind of in wait-and-see mode,” says Trujillo. While many unanswered questions remain about legalized sports wagering, lawmakers are tantalized by the prospect of massive gains in tax revenue it could bring to their home states—no matter the mention of it it provides to consumers. “But what you really want,” interjects Smith, “is to minimize the loss of kinetic energy and to maximize the post-impact spin by maximizing both the normal and tangential coefficients of restitution.”

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I will do my part to make sure we compete and act with integrity and class.

BY LARRY CLARK

As a Kid growing up near Cleveland, sports and devoted fans surround Patrick Chun. He became one himself, rooting for the Cavaliers, Indians, and Browns, even when they weren’t winning. Chun’s passion led him to Ohio State University and eventually to leadership in their athletic department.

But as much as he loves sports, Chun gives credit to his parents for instilling a devotion to education and a powerful work ethic. It all came together as he took on the mantle of athletic director, first at Florida Atlantic University and now at Washington State.

Chun’s parents came to Ohio from South Korea in 1969 in pursuit of the American dream, says Chun, and “like a lot of immigrants, their dreams manifested themselves in their children.” They settled first in Youngstown, where his father was a taekwondo instructor at the downtown YMCA and his mother worked at a grocery store. They moved to a suburb of Cleveland when the steel industry in Youngstown declined.

They pushed Chun to work hard as well. “My first job was being a paperboy, and Cleveland winters are character builders,” he says with a grin.

He also grew up playing baseball, basketball, and football, but didn’t play at the college level as he headed to Ohio State. “Like a lot kids here in Washington, I wanted to go to the land-grant institution in my own state,” in Columbus, says Chun. “I wasn’t good enough to play sports there, so I graduated with a degree in journalism and wanted to be the next great sportswriter.” Chun learned that sportswriting would need to see how good he can be.”

Starting in 2012, Chun’s tenure at FAU led to success across academics, athletics, student-athlete development, and fundraising. Chun’s belief in education was manifested in FAU’s athletes’ academic growth: Entering the 2017–18 academic year, they posted a combined GPA above 3.0 for each of the past four semesters, a first in school history. The school’s athletic program won a national award for best practices in their programming for student-athletes, including a comprehensive life skills program for the football team that featured career services and a concerted effort to provide community service to the South Florida area.

Chun also oversaw significant fundraising and athletic achievements at FAU. The institution received its largest single gift, signed several partnership agreements worth millions, and built and started a number of facilities. The FAU Owls over the last few years posted impressive seasons in football, women’s volleyball, women’s soccer, beach volleyball, men’s and women’s tennis, baseball, and softball, among others.

After previous Athletic Director Bill Moos ’73 took the same position at the University of Nebraska last fall, Chun was named by WSU after a national search. In January, he became the first Asian-American athletic director at a Power 5 college. The people who come out of this community, an important point as he brings the country that have this kind of a model and mirror that.”

Chun wonders, “What can we do, as an athletic department, to help them achieve their humanly possible, just start talking about their achievements. As the students talk about why they’re here, this kind of attitude is manifested in FAU’s students.”

Second, WSU and the Cougar family are well-known and respected for their devotion. “I believe there are less than half a dozen schools in the country that have this kind of a mission, this kind of love and loyalty for their institution,” says Chun.

He also knew Pullman was a welcoming community, an important point as he brings his family to the town with wife Natalie; daughters, Vanna, Kennedy, and Greta; and their dog Little Brother.

The Cougar family also convinces Chun that the greatest days of WSU athletics lie ahead.

“You can change the world from WSU. It transcends athletics; just look at engineering, farming, business, the wine industry, the Murrow College. The people who come out of this place, they change history,” he says. “We have a responsibility in the athletic department to model and mirror that.”

Chun sees WSU’s competitiveness in sports tied to its educational mission. “Couggs want to win, and Cougs want to win at the highest level. We all want to win championships, and to develop young people who will get degrees and go on to do great things.”

Hearkening back to his own upbringing and the values of hard work and education, Chun makes sure to point out what’s most important to him, and what he hopes all Cougs will help achieve: impact on students.

Even in the short time he’s been here so far, Chun has made it a point to meet and listen to members of the tennis, basketball, golf, and football teams.

“Get the joy of going to the Cougar Athletic Training table with student athletes,” he says with a smile. “This is to be called a 30-20-year-olds and make it as awkward as humanly possible, just start talking about their life. It’s the best part of the job.”

As the students talk about why they’re here, this kind of attitude is manifested in WSU’s students.”

PHOTO ROBERT HUBNER

ATHLETIC DIRECTOR PATRICK CHUN

SIDELINES
One day in a drift boat along Henry's Fork

in eastern Idaho, Kyle Smith '07 felt the lure of the trout, fly fishing for a signature fish of the West.

The Henry's Fork is just about as legendary as it gets among trout fishermen," says Smith. “I remember casting Renegades, my favorite dry fly for trout, and catching five or six rainbows in a row.

Smith's trip cemented itself in his memory and led him to a career in trout conservation with Trout Unlimited. It’s his unique experience, but it matches the stories of many anglers, stories of steelhead and brook trout, cutthroat and browns, cutthroat and rainbows, even grizzly bears and trout fishermen, stories of all kinds. The Jessie's Fork—named after a Charles Dickens character and a hat—is not really a trout, but it looks like one. Predominant among all trout in the region is the rainbow.

Rainbow trout, a versatile and hardy fish, are often raised in hatcheries and found in lakes, rivers, and streams just about everywhere. Millions of rainbow trout are released into Washington lakes each spring, and hundreds of thousands of people head out to catch them. Raising rainbow trout is a $2 billion global industry with sales in the United States alone exceeding $100 million.

Maintaining a healthy population of rainbows is crucial. Tissue samples are sent to WSU’s Washington Animal Disease Diagnostic Laboratory to screen for viruses, bacteria, and parasites that might affect the large number of trout.

One such malady is coldwater disease, which has a probiotic treatment thanks to researchers Kenneth Cain ’97 PhD of the University of Idaho and Douglas Call ’87, ’97 PhD of WSU’s Paul G. Allen School for Global Animal Health.

On a fundamental level, WSU biologist Gary Thorgaard played a key part in the management of rainbow trout when he identified their sex chromosomes. He found a sterile rainbow trout with three sets of chromosomes, so it can be released without affecting native fish.

Conservation of trout, especially steelhead, also motivates Kyle Smith. After graduating, he volunteered in western Oregon with Trout Unlimited, a freshwater conservation organization, which led to a job. It’s tough and satisfying work.

“We’re getting our waders wet and our hands dirty doing stream work, working with farmers and irrigators on habitat restoration,” says Smith. As he speaks, Smith fishes on the North Santiam River in the Willamette Valley on a chilly spring day, a dedicated angler searching for steelhead.

Writer and fly fisherman Steve Raymond summed up that dedication in his book The Year of the Trout: “What magic quality does the trout possess that compels millions to search for it in such dark and desperate weather? What virtue does it offer to command such unwavering devotion? I can answer only for myself: I love trout because they are among the most beautiful and grateful of all creatures and because they dwell in some of the most beautiful and graceful of all places.”

While fishing for trout is often catch and release in rivers, they can provide a delicious meal. They’re usually sustainable, too, getting a “best choice” rating on Seafood Watch.

Smith’s favorite preparation is smoked trout. “I have a cheap smoker and some alder chips—a couple of hours doing something else around the house while the fish smokes is my favorite way to cook trout and steelhead,” he says. He likes to make pasta with a smoked trout alfredo, a recipe he got from working at Pete’s Bar and Grill in Pullman.

A smoked trout chowder can also rival clam or smoked salmon chowders.

Poston loves pan fried trout for breakfast, a favorite from his grandpa Carey, made with Johnny’s spice mix, egg, and panko breading.

Trout can be nuanced and light, and thus goes well with olive oil and lemon. Treat it simply, perhaps with thyme and dill, and trout can satisfy any fish connoisseur.
In a word, Michael Skinner is tenacious. Growing up on a ranch outside Pendleton, the former Eagle Scout and college wrestler learned early on that you don’t back down from a little head-buttting or controversy. It’s all just part of the game.

The trait has served Skinner well over the years and enabled him to persevere through the fallout of a chance discovery in his reproductive biology lab in the 1990s. The unexpected findings threw 200 years of scientific ideology into question and initiated a paradigm shift in the understanding of inheritance and evolution. They also sparked a wave of outrage and debate that continues today.

The Washington State University Eastlick distinguished professor and founding director of the Center for Reproductive Biology was the first to clearly document a nongenetic form of inheritance that works through epigenetics. The epigenome—which means “on genetics”—is a suite of chemical molecules that attach to DNA and regulate gene function like tiny on-and-off switches.

Skinner showed that certain agricultural and manufacturing chemicals can alter the epigenome in pregnant rats and those alterations subsequently passed down for four generations without changes to the underlying DNA. These epigenetic changes were also linked to a disturbing increase in disease in the rat’s grandchildren and great-grandchildren.

In effect, “environmental contaminants dramatically change gene expression in the offspring without causing mutations in the DNA,” says Skinner. “These are things that don’t fit the traditional genetic paradigm.”

The implications are huge. “What your great-grandmother was exposed to in her environment might actually influence what disease you’re going to get and might also pass onto your grandchildren,” he says.

Since the 1940s, it’s been generally accepted that the DNA sequence controls transfer of biological information from one generation to the next. To suggest that environment alone could change heritable traits upended models stretching back to the battle between Darwin and Lamarck in the 1850s.

Skinner is well aware. “We’re challenging the chief paradigm in biology—genetic determinism—which suggests that your DNA sequence determines your destiny. I believe genetics is only a small piece of a much bigger story. Environmental epigenetics is probably equally important in regards to inheritance, disease etiology, or evolution.”

The idea of nongenetic inheritance had been bandied about by academics in the past but Skinner’s breakthrough provided the first plausible mechanism by which it could occur.

His inaugural publication on the topic in 2005 ignited a scientific firestorm that thrust him into the spotlight as a leader in the new field of transgenerational epigenetics—the study of inherited changes that can’t be explained by traditional genetics.

Along with it came the dawning realization that supposedly harmless chemicals, stress, or nutritional deficits could in fact impart health problems to later generations. The bad news was somewhat tempered by a silver lining—the discovery also gave medical researchers new opportunities to improve personalized medicine and the diagnosis and treatment of disease.

In 2013, Skinner was honored with a Smithsonian American Ingenuity Award, given annually to people having a revolutionary effect on their fields.

Though some still doubt his findings and even regard him as a heretic, Skinner says hundreds of similar papers involving epigenetics in plant and animal species are being published each year.

“These paradigm shifts in science always take at least a generation to occur,” says Skinner. “It takes a new generation of scientists with no vested interests to get involved and carry it forward.”

A NUMBER OF THESE YOUNG SCIENTISTS cut their teeth on microscopes and dissecting trays in the classrooms of historic Abelson Hall on the WSU Pullman campus.

Up five flights of stairs in the stalwart building, you’ll find the Skinner Laboratory, a quiet work space filled with hundreds of bottles arranged neatly on clean shelves, the tile floors surprisingly waxed and shiny.

In the back, the professor welcomes visitors into his office where an enormous northern pike appears to leap from the wall to greet
them. The avid outdoorsman is casual in jeans and a gray wool shirt. His Stetson fedora rests in its spot on the bookshelf. “The story began in the late 1990s,” Skinner says as he reaches for a Starbucks coffee cup and leans back in his chair. “I was studying the effects of two widely-used farming chemicals on pregnant rats—the pesticide methoxychlor and a fungicide called vinclozolin,” he says. “Like many agricultural chemicals, the two are known to be endocrine disruptors that can interfere with normal development and function of the reproduction system.”

In this experiment, one of Skinner’s postdoctoral fellows, Andrea Cupp, exposed the rats to methoxychlor during the time the fetal tissues were developing into ovaries and testes. They wanted to see “So, a month later she came back and reported the exact same changes on the sperm,” says Skinner. “More than 90 percent of the males had very high levels of sperm cell death even though their parents were just tiny fetuses when their grandmothers were briefly exposed.”

Skinner and Cupp dutifully recorded the results and moved on to tissues were developing into ovaries and testes. They wanted to see

“Put it out there was a big deal. It advances our understanding that we’re not just inheriting our DNA sequence, we are inheriting our epigenetics. And since the environment can dramatically alter epigenetics, suddenly the environmental impact on inheritance is important. Before, it wasn’t.”

The controversy softened a bit after Skinner published a half dozen new papers further confirming that epigenetic changes can persist for several generations. Eventually, some of his opponents investigated for themselves and published their own findings. “The universe comes in waves,” Skinner says. “Industry, academics, government agencies, and conservation groups—they ebb and flow as...
Darwin was absolutely correct that natural selection is one major driver for the process of evolution,” Skinner says. “But there is more to the story.” He refers to a lesser-known naturalist named Jean-Baptiste Lamarck who, in 1802, speculated that environment could directly alter physical traits and those acquired traits then passed on to children and grand-

**Environment does have the ability to increase variation in your traits through epigenetics,” he says.**

Moreover, our studies show that epigenetic changes can increase susceptibility for all types of genetic mutations. So, genetic variation comes from environmental epigenetics.”

Skinner pauses for a moment. “I want to be very clear here,” he begins. “I’m not saying anything against genetics. Genetics is absolutely essential. But there will never be a genetic-only process and there will never be an epigenetic-only process. These two things are integrated and cannot be separated.”

He first took this “unified theory of evolution” public at the University of Wisconsin-Madison, an institution known for its scholarly evolution department. Skinner says he was curious as to how they would receive him.

It didn’t take long to find out. Three times during the presentation, seasoned faculty members stood up and loudly interrupted him.

“It’s extremely well established that genetics is the primary molecular mechanism for evolution and is supported by studies for decades, so why suggest anything else?” one shouted.

Reflecting back, Skinner says, “It was somewhat expected as scientists who spend 30-40 years studying a specific paradigm. Then some guy comes along and says it’s not that this is wrong, but we need to add other parts. So, for some well-established scientists, there’s a knee-jerk reaction against that kind of thing. It’s just human nature.”

“Today I could go in there with no problems; this was their first time hearing about it and it shocked them,” he says. “But then they sit back and think about it. They look in the literature and realize that many people are starting to investigate this area. So, it’s slowly changing.”

He gives a little laugh. “I didn’t know it, but this also happened to be Darwin’s Week at the university. So, I said as I went, ‘I had one of the best naturalists who was absolutely correct in this aspect of his hypothesis.”

In his own study, he notes that fourth-generation offspring are prone to weight gain and anxiety; grandchildren of vinclozolin-treated rats have consistently altered in development, aging, and even cancer,” Skinner writes in *Inheritance outside the genes.*

**Since that day, Skinner and other scientists have observed transgenerational inheritance of acquired characteristics in a wide range of species, including plants, flies, worms, fish, birds, rodents, and pigs.**

And with that comes disease susceptibility that individuals might not otherwise have.

“Today, no one doubts that epigenetic effects play a crucial role in development, aging, and even cancer,” Skinner writes in *Scientific American.*

“Follow-up studies at my lab have shown that the great-grandchildren of vinclozolin-treated rats have consistently altered patterns of methylation in their sperm, testes, and ovaries, as well as abnormal gene activity in their primordial germ cells. We also found that fourth-generation offspring are prone to weight gain and anxiety; they even select mates differently.”

Skinner says almost anything in the environment can cause these epigenetic changes, beginning with the food we eat each day.

“There are thousands of compounds in plants that we’ve adjusted to confer certain traits on our body. Some, for example, say that decreases the risk of prostate disease and is known to be modulated by epigenetics. Starch and high-fat diets also alter the epigenome.”

**Stress at critical points in development can likewise trigger changes as can hundreds of chemicals we are exposed to every day in our industrial society. A number of these compounds have been investigated in Skinner’s lab where the workload relies heavily on the talents of postdoctoral fellows and select undergraduates whom he recruits as freshmen.”**

One of those freshmen students was Margaux McBirney ’17 who was recently listed as first author on a PLOS One publication showing that atrazine, an herbicide commonly used on soy and corn, causes epigenetic effects. Though it had no direct effects on exposed rats or their pups, she helped demonstrate that 80-90 percent of the grand-grand and great-grandpups suffered from more than one disease, including the inability to store fat.

“It’s amazing that Dr. Skinner gives opportunities with these kinds of responsibilities to undergraduates,” says McBirney, who is now a research technician at the Fred Hutchinson Cancer Research Center in Seattle.

Over the years, Skinner’s team has also confirmed epigenetic health risks from Bisphenol A and phthalates in plastics, jet fuel, dioxin, permethrin, mercury, and DEET, as well as DDT and methoxychlor, both of which are responsible.

He says body tissues are most susceptible to environmental insults during times of rapid growth and development. Some organs like the mammary gland, prostate, testis, ovary, kidney, adipose tissue, and brain are sensitive to small epigenetic shifts while muscle, liver, and bone can withstand larger shifts with fewer problems.

“It turns out, you’re not really too much we can do about it, so this is pretty doom and gloom,” Skinner says. “Once methyl tags are formed, we can’t remove them.”

**Yet, by simply knowing this phenomenon exists, it will allow us in the future to both prevent and treat diseases.”**

Methyl tags do not always lead to disease, however. Skinner says your environment likely determines whether a susceptibility will go on to manifest as illness. The first line of defense is to adopt a healthy lifestyle and diet. Avoiding chemicals, maximizing exercise, and eating nutritious food could help deter or postpone disease onset.

“We used to think you were programmed to get a disease if you had a certain gene mutation, and no matter what you did, you’d get it. But that’s clearly not the case,” he says. “Genome-wide association studies show that generally less than one percent of any disease has an associated genetic mutation. This suggests that the majority of diseases are not related to genetic mutations.”

“Our study, 95 percent of animals with a disease have epigenetic shifts. So, clearly things like the environment have been overlooked as potential causes of disease.”

Looking toward the future, Skinner says he’ll continue to uncover the precise mechanics of the transgenerational epigenetic process. He and his team are also breaking ground in the discovery of new diagnostic tests for the medical field.

“Theoretically, we should be able to do an epigenome analysis in our early twenties and determine if we have a susceptibility to various diseases,” Skinner says. “If 50 percent of animals with a disease have epigenetic shifts, then we’ll potentially be able to treat it.”

Epigenetics 101

**While the DNA in chromosomes (left) carries primary genetic information, it is modified by a second layer of molecules called epigenetic “marks.” These marks are usually methyl, acetyl, or other chemicals which act like switches to control gene expression. Epigenetic marks also control how tightly DNA wraps around histone heads. The tighter the wrapping, the fewer genes available for activation.**

**Epigenetic traits can persist for generations**

Skinner’s research shows that exposure to pollutants or stressors (right) can add abnormal epigenetic marks to DNA and these marks can then survive two distinct waves of post-conception reprogramming—a process meant to prevent such persistence. A number of robust studies suggest the epigenetic marks can be passed down for at least five generations along with associated health risks.

finding identity and expression at WSU

BY BRIAN CHARLES CLARK

Bob Dlugosh says that he and his roommate, Al, “were always chewing around Pullman together.” Best friends, Bob figured Al for straight, but he liked the guy so much he didn’t let it bother him. Bob did wonder if Al knew he was gay. In 1968, “gay” felt like a brand new word. So it probably wasn’t the one used on the sign Al and Bob found tacked to their Stephenson Hall door: “Bob and Al are gay.”

But that’s what Robert Dlugosh ’71 recalls decades later. The noun was probably something from the much cruder vernacular of the day. They were being called faggots, queers, fairies. Al brushed it off. Dlugosh says, and the friends roomed together until graduation. In recalling the sign of aggression, Dlugosh, too, brushes it off. Others had it much worse than him. He has “warm and fuzzy feelings” for the University. Dlugosh, an activist-through-education and Seattle architect, and his husband, Don McKee, now endow a scholarship for LGBTQ — lesbian, gay, bisexual, transgender, and queer—students at Washington State University.

For Prudence Miles ’77, beingouted wasn’t a homophobic attack, but an act of defiance. Although open about her orientation, she only shared that with a small group of other gay and lesbian students, staff, and faculty. But one day the editors of WSU’s student newspaper, The Evergreen, published a letter by one of that small group. Prudence’s name was on the list of signatories.

“There was little me,” she recalls, “voting breakfast at the Regent’s Hall dining room, suddenly seeing this letter with my name attached to it. Probably 79 percent of the women in the room didn’t care; she didn’t know who I was—but it was a public outing that I attached to it. Probably 99 percent of the women in the room didn’t let it bother them. Bob did wonder if Al knew he was gay. In 1968, “gay” felt like a brand new word. So it probably wasn’t the one used on the sign Al and Bob found tacked to their Stephenson Hall door: “Bob and Al are gay.”

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“Having that conversation at the Center made me more confident in having that conversation with my family,” she says, just before her child.

Harvey Milk, the San Francisco city supervisor and first openly gay elected official in California, urged his “brothers and sisters” to come out “for your sake,” and for the sake of friends, family, and coworkers. “I know that it is hard and will hurt them,” he said in a 1978 speech. “Come out [and] once and for all, break down the myths. Destroy the lies and distortions.” Milk urged people to come out at least to those they know well, because coming out is a tonic for homophobia.

Coming out is how community is created among a very diverse group of sexual minorities. But it is no guarantee; it can be, as Milk acknowledged that day, dangerous. Later in 1978, Harvey Milk and Mayor George Moscone were gunned down in San Francisco City Hall, murdered by Dan White.
FINDING IDENTITY AND EXPRESSION

and Seattle. He hesitates, then says, “How do I put this? I knew some other gay people—I mean, they seemed gay to me but we never talked about it. It was very frustrating for all of us students.” Dlugosh’s recollection is that there was no gay liberation movement, as it was only beginning to be called, during his years in Pullman. Alumni mentioned in various Evergreen articles, and especially in the student newspaper’s letters section, are difficult to find. Dlugosh says that when he tried to kickstart an LGBT alumni group, “we found [many alumni] had a bad taste in their mouth for WSU not being very progressive back in those days. They did not have warm and fuzzy feelings.” It’s not surprising, the virulent homophobia in some of the letters the Evergreen published from the early 1970s until as recently as the late 1990s is sometimes horrifying. To the paper’s credit, the editors were mostly in favor of giving gay people that right to live—a “right” as ominous as it sounds—and have at least some civil rights (if not all the rights, such as to not be fired from a job for one’s sexual identity). Dlugosh graduated in 1971. By the time Prudence Miles got to Pullman in 1977, things were peaking up. She says she must have seen a poster for Gay Awareness and started going to meetings. Then, as now, what to call an alliance as diverse as a group of sexual minorities was always a struggle, so in the Evergreen, this group, or perhaps another, also went by Gay Alliance or Gay People’s Alliance, with the name gradually becoming more inclusive over the years as it became more inclusive of identities.

In any case, Miles was soon part of what was then a community transitioning from “protective invisibility” to out, proud, and loud. She misses the diversity of what was then a sort of secretive social club. Secretive for self-defense, but it was nevertheless a group of people who spent their time rapping about awareness, rights, and the simple observation that coming out to people changed minds and softened hard hearts. That’s why, she says, “there were a group of us who were willing to go out and talk when asked.” The Gay Alliance’s speakers bureau would do interviews on the campus radio station, or give talks and answer questions at residence halls and sorority and fraternity houses. “Human sexuality classes always wanted gay people to come and talk,” Miles recalls. “You try to talk to people: it’s not scary and it’s not going to change who you are if somebody you know is gay. You’re the same, they’re the same. It just... they’re in love with somebody different.”

Miles spoke up because of the toxic effect of coming out. Even more important, she says, “You never know if some other in that room is scared and questioning. They need to hear it’s OK.”

COMMUNITY AS RESILIENCE

The letter to the Evergreen where Miles’s name was signed really sticks out as a sign of just how bad things were for LGBT people in the 1970s. Published on December 4, 1973—while Miles was still in her first semester of college—the letter refers to an AWSWSU survey asking if gay people should have “the equal rights supposedly guaranteed to all human beings.” A majority of respondents said no, gay people should not have basic human rights. But, the letter writers say, here’s “a good word for the AWSWSU Assembly” for arguing otherwise and counting LGBT people among the human.

For his part, Dlugosh says he worked at passing straight: the best defense against homophobia was camouflage. For many people, it still is; Becca Prescott is quite candid about that. But that approach to life results in an internal self conflict that degrades mental and emotional health.

An anonymous interview in a video produced in 1977 by KUID called “From Sweet Land of Liberty: Moscow/Pullman Gay Community” captures this double consciousness perfectly. The interview subject is in shadow. The on-camera reporter, a faculty member, likely from the University of Idaho. “You have to establish a dual personality,” the man in the shadows says. “You have to have a straight face that you put on ‘so you can go out and cope and function with straight people. And then, somewhere between your house and the office, you become somebody else, the person who no longer plays games with himself.”

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“What if you were discovered?” the interviewer asks. “I’d be fired immediately. Shock and appall by my colleagues. My students would freak out. My parents don’t know, and it would be really difficult to tell them. My father would disown me. I’d like to stop being a dual personality... It’s a lonely life.”

Lonely, and not at all healthy. Minority stress is the fracture line between a stigmatized minority and the dominant culture. It drives its victims to despair and suicide at a much higher rate than the straight, white population.

Kwon enumerates the factors that define the chronic wear and tear caused by minority stress and that help create resilience. The most important, he says, is having a social support network, being connected to a positive community. Having hope and optimism about the future, where oppressors have a change of heart, and being emotionally aware are the other two major contributors to resilience and mental health.

Emotional self-awareness is a critical counterintuitive, Kwon says. “If someone is targeted with an insult, the intuitive thing might be to immediately push your emotions aside, to try to not feel bad about what just happened. But what we know in psychology is that kind of emotional suppression is more damaging than accepting that there are going to be some uncomfortable emotions, and that we need to process and spend time and deal with these emotions wisely.” And, he says, “rates of mental health disorders are about twice in LGB folks—I suspect it would be even higher in trans folks—compared to non-LGBT individuals.

“Some sources of minority stress can be very blatan,” Kwon continues. “like having laws that are discriminatory. But it’s also more subtle, just feeling that you can’t be your-
Violent crimes against sexual minorities are on the rise, according to studies by the Southern Poverty Law Center. T

WASHINGTON STATE MAGAZINE SUMMER 2018 3333

FINDING AND

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differences and the bus stop. Quarters of seven, it’s dark. This ran-
dom man walked up to me, looked at me, and said, ‘Your

girlfriend’s cheating on you.’ I had headphones on, and was really making those efforts just exhausted.” Kwon, who offers counseling services one day a week in Lewiston, Idaho, admits to sometimes feeling “paralyzed by what is going on nationally or even statewide.” So he focuses on those where he can see shifts in the way people go thinking that is what results in prejudice by psychologist Gordon Allport, backlash is due to-attain prizes, awarded to

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minors are a potential source of support, people who suffer from prejudice, writes Thomas Hiepiou in a 2014 Psychology Today article that expands on Allport’s analysis, “prejudice treat people as categories rather than as individuals. Because someone is black, female, homosexual, and so forth, the prejudiced person needs no further information on which to base his evaluations and behaviors.... A summarizing, administrative spirit prevails.”

Peo-ple in power feel they are losing that kind of privilege, and they retaliate by reinforcing that privilege. I think we know prejudice rises when there is more competition over scarce resources.”

Matthew Jeffries concurs that education is important. One of the goals of the Center’s work is to offer workshops and trainings that educate faculty, student affairs, and students about the realities of being a minority. “We are here to create cognitive dissonance in students, so that the next time they think before speaking: ‘Oh, maybe I shouldn’t say ‘That’s so gay’.” We can’t unbear crimes against sexual minorities are on the rise, according to studies by the Southern Poverty Law Center.

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Time for a pop quiz. Name at least one famous female farmer. If you’re coming up dry, you’re not alone—but Kara Rowe ’00 wants to change that. An executive producer at Emmy-award winning North by Northwest in Spokane, Rowe is a champion of all things agricultural—especially women farmers.

Rowe, together with NxNW partner Dave Tanner, and Audra Mulkern, a photographer, foodie, and founder of the Female Farmer Project, are raising funds for a documentary called Women’s Work: The Untold Story of America’s Female Farmers. The producers hope to correct a longstanding problem with the history of ag in America by telling the story of the women who work so hard to grow food for their families and the world.

“We’ve met so many wonderful women who are keeping our farms going,” Rowe says. “There are women who are physically on the farm, getting their hands dirty, driving the tractors, planting the crops, herding the cows. But there is also a huge army of women working behind the scenes, in marketing, policy making, science, running ag businesses, and every other aspect of the agricultural enterprise. Rowe is no stranger to ag. She was born and raised on a wheat and cattle farm in Wilbur, on the big bend of the Columbia River west of Spokane. She came to Washington State University to study broadcasting on, as she says, “the Glenn Johnson track” in hopes of being “the next Lesley Stahl.”

Straight out of college, she took a job as a TV reporter for KPAX in Kalispell, Montana. There, she was a one-woman band as on-air reporter, camera person, and story editor. But she quickly expanded her horizons, starting a commercial production company with Ryan Rowe, her new husband.

“We did everything from local commercials to informational videos,” Rowe says. “Then we got approached by a local family with ties to the Outdoor Channel.” The Rowes shot a hunting and fishing show for a couple seasons.
Of soil and stage

BY WILL DEMARCO

Born into a family of orchardists in Wenatchee, the “Apple Capital of the World,” Paul Atwood’s future in agriculture was practically a given from birth. As a high school senior with every intention to continue down the fruit-lined career path of his parents, Paul’s first audition for a musical was the result of a classmate’s playful dare. Despite no prior performing experience, Paul ’91 not only made the cast of the high school’s big autumn production, he landed the lead role.

With one foot planted on soil and another on stage, Paul ultimately made the switch to a performing arts degree after taking a handful of agriculture classes as a WSU freshman. Unbeknownst to him, these seemingly opposite paths would converge to form the deep connections of Paul and his future wife Kelly to north central Washington.

Another WSU student unsure about the future, Kelly Ginger ’91, also decided to study performing arts midway through freshman year after some convincing from a vocal teacher. Recalling fondly her high school theater days in Hillsboro, Oregon, Kelly was sold. “I just wanted to get involved because I know that with theater, there’s always a home for you,” she says. As luck would have it, Paul and Kelly’s courses collided when they co-directed Godspell in their senior year. Less than 12 months later, the two were graduated, married, and living in Wenatchee—working both on the stage and in the orchard.

“Women’s West is a look back at the history of women in agriculture,” Rowe says. The story of American ag has only been “half-told,” she writes on the project’s website, with women almost never mentioned. “Native women led their communities as farmers and true homemakers,” Rowe writes, while “female settlers kept the farm fields productive and planted throughout decades of crisis and two world wars.”

The film will be a welcome revision of the history of American ag. In addition to the documentary features, “We’re also working on a history of Washington agriculture project with Historylink.org and the Washington State Historical Society. That includes essays, a curriculum, as well as short video vignettes that teachers can use.”

Rowe says she’s blessed to be working as a TV and film producer who gets to harness her passions to tell the stories of the people she so deeply cares about.
that was my first acquaintance with Kelly.” What transpired marked a fork in the road not only for Schreck and the Atwoods, but for performing arts throughout Central Washington.

Beginning as an East Wenatchee high school drama and debate teacher for 15 years, Schreck laid the foundation for performing arts in the area. Perhaps most notably was her brainchild, Short Shakespeareans, which featured Schreck's own adaptations of Shakespeare works as told by thespians ages 4 to 15. After writing and directing the local favorite for more than 30 years, however, Schreck sought to retire. Paul and Kelly, who have performed, directed, and produced in excess of 70 local productions like \textit{Guys and Dolls} and \textit{Spamalot}, were natural fits to carry on Schreck's legacy. "They are the all-around theater people," Schreck says. "They're dynamos."

With the dynamic directing-producing-choreographing-set-and-costume-designing duo now at the helm, the Atwoods have carried the Short Shakespeareans banner for nearly five years. Kelly's extensive background in vocals and design provides a fresh perspective on Schreck's original winning formula. "She has a little bit of a different slant. The interjection of music, the glorious costuming, all of it," Schreck says. "I think it's very rare that a director does the costuming, too, but she's an expert at that, so it makes for a very spectacle-like production."

By the same token, Paul's exuberant style brings a witty humor to the table, affording Short Shakes a style uniquely, recognizably, their own. The two have adopted the mantra of a WSU mentor they shared with Schreck, Paul Wadleigh, who continuously urged: "Louder! Faster! Funnier!" The attitude is evident in Paul and Kelly's lively shows, which are punctuated by a vibrant humor and good-natured sarcasm. "Usually we gravitate toward the musical comedies," Paul explains, including modern favorites like \textit{The Wedding Singer} and \textit{Hairspray}. "Because sometimes I think you get your point across even more when people laugh at the situation."

Paul and Kelly share a deep appreciation for the transformative power of theater and a profound respect for the legacy one person can leave, which has committed them to continuing the work of predecessors like Sherry Schreck. Her endless affinity for theater has provided Wenatcheeites decades of entertainment rivalling that of larger cities. What's more, it provided a basis for the Atwoods to impress their signature style on the next generation. "Not only are you helping nurture students' love of the arts, but it's an impact on the community as well," Kelly says. "A community that supports their arts thrives. It definitely thrives."
**NEW media**

**Captain Cook’s Final Voyage: The True Story from the Journals of James Burney and Henry Roberts**

**EDITED BY JAMES K. BARNETT**

**WSU PRESS 2017**

The British Navy was outfitting ships for war against the upstart American colonies when Captain James Cook sailed from Plymouth Harbor in July 1776 for his third and final voyage. The mariner sought the elusive Northwest Passage via the west coast of North America, but the ensuing three-and-a-half year expedition didn’t turn out as planned.

Much has been written about Cook, particularly his earlier voyages to the Pacific, Indian Ocean to Tasmania and New Zealand. Lower ranking officers on the Resolution also kept notes on their voyage. Barnett’s discovery of the journals, along with his commentary, make this book essential reading for anyone interested in that era of discovery.

—Larry Clark

**Bound**

**JAMES MCKEAN 68, 74**

**TRUMAN STATE UNIVERSITY PRESS: 2017**

Bound presents a lyrical memoir about growing up in the Pacific Northwest and the women whose feminine fortitude contributed to the author’s life.

Taking readers into the kitchens and parlors of mid-twentieth-century America, McKean lovingly unpacks the attic trunks, sharing the exploits of his wife, mother, grand-mother, and great-grand-mother in-law Rachael Cartwright Lee, among others.

At a time when ladies were expected to stay home and not make a scene, one woman swam for the Washington Athletic Club in Seattle and won a bronze medal in the 1936 Olympics. Another divorced an abusive husband and became a farmer. Others carried derringers, smoked cigarettes, rode horses, bound books, and through it all, held families together.

As a boy, McKean says he took these family members for granted. In Bound, he rededicates himself by recapturing their individual beauty and dignity.

A glimpse of his grandmother:

Fifty-five years later, I remember my grandmother as a slight woman stopped at a willow, descend ing into my parents’ kitchen from her room above the garage, a single bed made, a bedside table where she kept a two-dollar bill, its corner torn off so the bill would have extra room, and three silver dollars, each minted in 1922, three years after the death of her second son (the 1918 influenza pandemic.)

Beside her prayer book, a box of Kleenex that smelled like lilacs. Just now, over the fence, a neighbor having not pruned them in the twenty six years we have lived here, I don’t mind. My grandmother blooms each spring and fills the yard with her silent air, her faded prayers, newer dews pushed up, her shores dished with出汗 and Saran wrapped for the psoriasis, her white hair permed and combed and held by a clip.

—Rebecca Phillips

**The Book of Caterpillars**

**EDITED BY DAVID G. JAMES**

**THE UNIVERSITY OF CHICAGO PRESS: 2017**

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—Rebecca Phillips

—Rachel Webber

**Fly on the Wall: The Seattle 7 Conspiracy**

**KIT BAKKE**

**WSU PRESS: 2018**

It’s December 1970, and surprise witness Horace “Red” Parker is suborning his way through the testimony. The prosecutor has to keep telling the self-made activist infiltrator to speak up. The defense attorney keeps objecting to Parker’s constant inferrals of what the defendants must have been thinking as they organized the anti-Vietnam War protest they’re on trial for. Which, as Kit Bakke points out, is ironic because “that’s what defines the crime of conspiracy—people assuming they know what other people are thinking.”

But the trial of the Seattle 7 never really was about conspiracy. As defendant Chip Marshall said, “The judicial system has to be aware that justice and obedience are not the same thing.” And what the group of activists had done was essentially civil disobedience, protesting an increasingly unpopular war. Seattle in 1970 did not welcome disobedience.

Bakke’s recounting of the trial of the Seattle 7 is fascinating and evenly read able, and thoroughly fills a gap in the history of anti-war activism. Bakke does a fine job of sketching characters and the milieu of anti-war activism in the late 60’s and early 70’s, on the battle lines.

The Seattle 7 were ultimately acquitted of conspiracy (though they were thrown in jail for a few months for contempt of court for their theatrical courtroom antics) and several of the defendants continued to be social activists. A surprise cultural bonus is Bakke’s detailed description of the model for The Dude, the main character in the Coen brothers’ film The Big Lebowski.

—Brian Charles Clark

**A Day in the Life of a Country Vet**

**BRIEFLY NOTED**

**FRED NEWSCHWANDER**

**THE UNIVERSITY OF CHICAG0 PRESS: 2018**

Mostly true stories, anecdotes, and illustrations about the animals and people from the life and career of a retired mixed animal veterinarian.
NEW media

Notes in the Category of C. Reflections on Laboratory Animal Care and Use

STEVEN NIEMI ‘82 DVMD

ACADEMIC PRESS: 2017

Niemi’s professional analysis and expertise inform ways to improve laboratory animal care and use. His book characterizes the current state of the industry and speculates on its long-term future. Niemi, director of the Office of Animal Resources at Harvard University, has spent a lot of time in the trenches and highlights new approaches to further advance the field in animal use.

Das Fischer

BERN HENDEN ‘08 COMM.

2017

Hendin’s first short film is a new-minute comedy about a young German man, Otto Rubschlager, and his journey to Idaho to learn the art of fly fishing and uncover the mysteries of the elusive, legendary cutthroat, Hidabonich Rainbows. Shot in southwestern Washington, northeastern Oregon, and northern Idaho, it won “Best Angler Film” at the FilmNationVilla Mountain and Adventure Film Festival last spring and is touring internationally. It can be viewed on Vimeo and Amazon Prime.

Listening to Silence

PHILIP MARX ‘77 FOREST & RANGE MGMT.

COVENANT BOOKS: 2017

In Marx’s novel of love and anger, Grady Simmons, a forbid face, becomes a friend when the man she loves marries another woman. The story leads to forgiveness and understanding for the characters, as they struggle through illness and loss.

Black Swan Ghosts

SIMON HIN ’92 PHD SOCIO.

MOUNT BALSAM PRESS: 2017

A sociologist encounters witnesses to unexplained phenomena, including the mysteries of the elusive, legendary cutthroat, Hidabonich Rainbows. Shot in southwestern Washington, northeastern Oregon, and northern Idaho, it won “Best Angler Film” at the FilmNationVilla Mountain and Adventure Film Festival last spring and is touring internationally. It can be viewed on Vimeo and Amazon Prime.

Forged: Made Strong in Weakness

SEAN NEAL ’12 BUS.

CHRISTIAN FAITH PUBLISHING: 2018

WSU staff member and alumnus Neal presents the story of a boy diagnosed with Spinal Muscular Atrophy, a genetic disease that attacks nerve cells in the spinal cord. Through unshakable faith, he forges a successful, inspirational life.

CLASSnotes

The Central Washington Sports Hall of Fame will induct its inaugural class in June, which includes PETE RASDAMCHICH (’74, 77 MS, Ed.). Rasdachich was a Gold Gloves champion who won the gold medal in heavyweight boxing at the 1986 Olympics. The class also includes two WSU alumni who have passed away: GENE CONLEY (’50) and CHUCK “BOBO” BRAYTON (’50, ’59 MS, PhD, Ed.). Conley was only person to have won both a NFL World Series and NBA championship. Brayton was a Hall of Fame baseball coach who coached 33 years at WSU.

RONALD F. MARSHALL (’71 Phil.) delivered the endowed Walton Lecture last November at Saint Olaf College in Northfield, Minnesota, on “The Confused Nature of the Century: Luther’s Thought as the Matrix for Kierkegaard’s Writings.” Marshall has been pastor at First Lutheran Church of West Seattle since 1979 and has published two books on Kierkegaard with another forthcoming.

PATRICIA KASPER (’73, ’78 MS Bacteria) was selected to lead the Northern California chapter of the Association of Clinical Research Professionals as the organization’s new president. Kasper mentors a consulting firm and recently published a book, Six Strategies to be a More Effective and Efficient Mentor.

The Mason County Public Utility District No. 1 in Hoodport awarded retired commissioner KARL DENISON (’74 Forest and Range Mgmt.) with a lifetime achievement award for his commitment to public utilities and exceptional leadership spanning over three decades. Before his commissioner career, Denison served with the U.S. Forest Service and other government agencies to address environmental issues around the state.

The University of California, Riverside announced GERRY BOMOTTI (’75 MA Math.) as its new chief financial officer and vice chancellor for planning and budget. Bomotti has spent more than three decades in senior executive positions in public universities across the country, including his most recent role as senior vice president for finance and business at the University of Nevada, Las Vegas.

ENRIQUE CERNA (’75 Comm.) recently retired as senior correspondent for Seattle’s public television station, KCTS, after 23 years with the organization. Throughout his career in media, Cerna brought attention to social justice issues such as race, immigration, and public safety.

The Mark Morris Athletic Hall of Fame recently inducted JOCELYN SCHAUER (’78 Ed. and CAROL SMITH RUIZ (’85 MS Civ. Eng.) into the Longview high school’s newest class. Schauer, a teacher at Curtis High School in Tacoma, also stays active within her local church and all Mark Morris sports. Ruiz, a retired sport athlete at Mark Morris, went on to play on the Pac-12 Academic Team and field team three times while at WSU.

Former WSU football player LEIF ERICKSON (’85) was recently inducted into Lynden High School’s Athletic Hall of Fame. After claiming the state championship in both football and basketball as a senior at Lynden, Erickson helped the Cougs reach their first bowl game in 10 seasons as a tight end.

Vincent Advisor of Botball welcomed MAUREEN JONES (’81 Finance) as the conference’s newest financial advisor. With more than 30 years of industry experience, Jones will help create financial plans and provide investment portfolio guidance to clients in her new role at the firm.

Centralia College Foundation announced ROBERT DOWLING (’44 MA Econ., ’45) as its 2016 Distinguished Alumus. Dowling has an extensive history in intelligence and security work with the U.S. government, and has helped create services used by law enforcement agencies to share information and monitor threats.

DWYANE LALOR (’90 MS, Ed.) received the Lifetime Achievement Award from the city of Red Deer, Alberta. He played baseball there, at WSU, and on the Canadian National Team. Lalor taught and coached nearly every sport at Lindsay Thurber Comprehensive High School in Red Deer. Seattle-based Tablau Software has selected GERI MARTIN-FICKLING (85 Comp. Sci.) to join its board of directors. Currently serving as chief technology officer and executive vice president at Starbucks, Martin-Fickling has also held chief information officer positions at a number of companies, including Adobe and McAfee, Inc.

BamBamChip, the largest regional business advisory firm based in New England, has announced the election of a new partner, JAMES J. KROUSE (’86 Acc.). Krouse is a partner in BamBamChip’s tax department in Shelton, Connecticut. He has 25 years of experience as a tax advisor.

DANIEL S. GLOVER (’84 Const. Mgmt., ’90 Bus.) was recently appointed to the Goodwill Board of Directors for the Olympics and Kansas regions. As chief technology officer and executive vice president for finance and business at the company, Glover has also held chief information officer and chief technology officer and executive vice president roles at the company.

Stephanie named TROY LONSWORTH (’90 Hotel and Rest. Admin.) as the Bellevue firm’s new regional director of operations. Lonsworth will help lead a brand of hotels located in Chicago, San Diego, San Francisco, Portland, and Seattle for the company.

LOREN CARLSON (’94 Pol. Sci.) was named the western region general manager of sales for online heavy equipment auction company Bidadoo.

In his new role, Carlson will develop business strategies and work to improve the customer experience for the online industrial equipment auction service.

Perfect for Graduation, a Special Occasion, or Tuesday

How often can you give a gift that puts a smile on your recipient’s face and supports your alma mater at the same time? You can do just that when you purchase a gift membership in the WSU Alumni Association.

Recently, we heard from an alumna whose father bought her a WSU Alumni Association membership as a graduation gift… in 1947. She told us she has treasured the gift and her father’s thoughtfulness throughout the 70 years since. How many gifts can do that?

With a WSUAA membership, your Coug can stay connected with WSU and fellow alumni, get awesome discounts and services, and show their Cougar Pride. You can purchase the online information and upgrade your membership level simply by visiting 1800-ALUM WSU or online at alumni.wsu.edu/gift. We’ll send the membership packet to you or directly to your Coug. Please call us for details.

Give the gift they’ll remember. Give the gift of membership in the WSU Alumni Association.

Membership is open to all Cougs, including alumni, former students, spouses, friends, faculty, and staff.

Give the Gift of Membership.

ALUMNI ASSOCIATION

Members Make the Difference.

W A S H I N G T O N S T A T E M A G A Z I N E S U M M E R 2 0 1 8

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Knutzen Engineering announced the hiring of ERIC ANDERSON (’96 Civ. Eng.), who has more than 20 years of industry experience. Anderson will provide structural engineering and project management expertise to the Kennewick-based organization in his new position.

After 26 years as a collegiate throws coach, PAUL BARRETT (’96 Sport Mgmt.) was named Marshall University track and field assistant coach for throwing events. A three-time All-American at Spokane Falls Community College, Barrett went on to compete in the discus and javelin throws for WSU and was a Pac-12 finalist in the hammer throw.

JENNIFER PRIOR (’97 Real Estate, Const. Mgmt.) recently launched her company, PRE Consulting in Phoenix, Arizona. Prior brings more than 20 years of industry experience to the startup, which provides commercial real estate firms with project management services and financial solutions.

California State University, Chico recently named MILTON LANG (’99 MA Elem. Ed., ’08 EDD Higher Ed. Admin.) as vice president of Student Affairs. Lang, who has served in a variety of capacities at University of California, Davis since 2013, vowed to support student development in his new role by addressing issues such as affordability and mental health.

After five years at the company, Sinclair Broadcast Group, Inc. promoted ROBERT TRUANAN (’98 Comm.) to general manager of their KATU (ABC) and KUNP (Univision) stations in Portland. He has spent nearly 20 years in the business, holding sales roles at television stations in Seattle, Boise, and Salt Lake City.

GARY HILL JR. (’00 Comm.) moved into a permanent role on the Seattle Mariners broadcast team after seven years in a part-time position. He takes over for now-retired Kevin Cremin as executive producer/engineer for the radio crew. Hill has hosted Mariners pregame and postgame shows since 2010 and occasionally had play-by-play duties. Hill hosts a Mariners podcast and is a regular contributor to the Mariners Magazine.

WHITNEY HIEHON (’02 Arch.) joined the planning department of the Vancouver Public School District as capital projects lead. She was also recently appointed to the City of Camas’s Design Review Committee.

BRANDY KERK (’05 Bus.) recently joined Portland-based Zekos as the cannabis processing equipment company’s director of marketing. Kerk has held positions ranging from account management in advertising to marketing manager during her 12-year career. BrightSide Animal Center selected ERICA PSALTIS (’05 Soc. Sci.) as its new coordinator of volunteers and events. She joins the Redmond, Oregon, shelter after serving as Mt. Bachelor Memory Care’s director for four years.

The Bedwell Inn of Bend, Oregon, appointed JENN BARCUS (’06 Fin.) to the organization’s board of directors. In her new role, Barcus will draw upon years of financial experience and nonprofit work to help provide shelter to the situationally homeless.

CHAUNCEY DRINON (’06, ’07 MAR Arch.) and CHAD LAWRENCE (’14 Civ. Eng.) were recently recognized as associates at Mackenzie in Vancouver. Lawrence joined the firm as an intern in the organization’s civil engineering department, while Drinon joined as an architectural designer. Throughout their respective careers, the two have aided Mackenzie in an array of civil design projects and community involvement programs across the state.

SkyCiv Financial announced that JAN BACHTEL (’07 Bus.) is joining the organization’s Woodford, Oregon, office. As a veteran financial advisor, Bachtel is also a member of the Rogue Community College Budget Advisory Committee and serves on the Jacksonville Chamber of Commerce.

ESTHER HYUN (’10 Bus.) was recently named an associate at Bellingham law firm Camacho Clark, PS. As a part of the company, Hyun will represent clients in cases dealing with creditor debtor law, business, and real estate.

RITA M. KEPNER (’12 PhD Comm.) was recognized in Almanac Who’s Who for more than 45 years of involvement with organizations like the Department of Homeland Security and FEMA. An educator, artist, and author, Rita has also co-written a book and exhibited her art in galleries across the world.

Freibut & Ho Architects hired CHLIEA MIRKEL (15, 17 MAR Arch.) as an architectural designer, where she will undertake a variety of commercial and tenant improvement projects.

MATT GRINNELL (’16 Bus.) also joined the Kirkland commercial architecture and interior design firm recently as a permit and entitlement coordinator. Peoples Bank announced JENNIFER EVANS-THOMPSON (’16 Bus.) as senior vice president and director of mortgage lending in Bellingham. Evans-Thompson, who has been with Peoples Bank since 2015, will help manage the company’s mortgage production and operations in her new senior management role.

KAILA LAFFERTY (’16 Comm.) recently joined KATV-TV (ABC) of Little Rock, Arkansas, as the station’s newest morning reporter. Throughout her journalism career, Lafferty has produced a regional Emmy-awarded newscast while at WSU and served as a news anchor and multimedia journalist for ALSC Architects in Spokane.

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When I finally met Keith Jackson ’54 last summer, I felt like I was meeting a friend. He didn’t own me, but we shared a tremendous amount of common interests. While he was calling the biggest games in college football, I was, alas, enjoying not just the games, but the spectacle and excitement that Keith communicated skillfully to audiences.

Listening to Keith call a game, it was easy to get lost in the excitement of the event. He was a nearly flawless professional—this was obvious to even a casual fan. What set Keith apart from any other broadcaster is that he respected the games and their players enough to let events happen without forcing himself into their moment. He was, like all broadcasters in that he let events happen without forcing himself into their moment, and his stories gave him an unceasing national experience.

Keith was a leader. Perhaps his experience serving in the Marines strengthened his confidence and resolve. I realized later that even as a college student Keith was honing those abilities. He was freshman class president, editor in a fraternity, and played significant roles in student organizations. Clearly, his time at WSU allowed Keith to sharpen his leadership skills.

Keith understood what it meant to be a Cougar. He and Turi Ann gave generously to the College of Communication and to WSU institutions. We have a building, a newsroom, graduate fellowships, an excellence scholarship and a studentship that bear the Jackson name. Over the years, a select group of Murrow College broadcasting students have received the Keith Jackson Sports Award.

Keith wrote personal letters to them, encouraging the students in their professional endeavors and offering to mentor them. These were personal, meaningful, and encouraging letters the recipients put away for safekeeping.

Ultimately, Keith had pride in his work without being a prouder person. If any of us have a reason for pride in the quality of our work, Keith had reason. Even now as I listen to him call a game, I’m impressed by its quality. It’s almost as if I’ve forgotten how good a sportscaster can be and, when I hear Keith again, I’m reminded of his tremendous work that was a particular part of my life for so many years.

Bruce Pinkleton is dean of the Edward R. Murrow College of Communication.
A little help from a friend

When you hear about the WSU Alumni Association, you might think of fun events and crowds of spirited Cougs. For students and recent grads, the WSUAA can also be a source of help in making the transition from college into the “real world.”

By taking advantage of their membership in the WSUAA, students and new grads can participate in networking events with successful alumni, seek career opportunities (after all, Cougs love to hire fellow Cougs), and connect with Associate chapters around the country as they plan their next steps. We find the stories of some of our recent graduates inspiring. We hope you do, too. For Lisa Yeadon ’13, “the WSUAA provided me with lifelong friends and a network.” As a student, she knew she wanted to move to New York City to pursue her dreams. “During my senior year, I attended a WSUAA barbecue and was introduced to the WSUAA New York City Chapter president. I had no friends or family in New York and this first connection was one of the best things that could’ve happened to me. A few months later, I went to NYC, and the Big Apple Cougars were there to welcome me. They set up a happy hour for me to meet other WSU alumni in the city. The people I met at that happy hour were my first and now closest friends in New York.”

Other recently graduated members of the WSUAA have had similar experiences. Preston Smith ’12 says he uses his membership for fun, discounts, and networking. He said “Many of the friendships I made after I graduated were fellow Cougs I met during WSUAA football viewing parties.” Balba Murray ’12 also capitalized on networking and career opportunities. “As a student, the WSUAA gave me resources to feel connected after I left campus, like how to find my local chapter, and how to stay involved with WSU.”

Ashley Vu ’14 has the unique perspective of being both an alumna and student. A WSUAA Leadership Scholarship recipient and two-time Student-Alumni Ambassador president during her undergraduate years, she is currently working on her doctoral degree in mechanical engineering under Coug extraordinary Suanna Bose, no less) and later plans to apply to the WSU College of Medicine. It’s safe to say that Ashley is the definition of a Cougar over-achiever. So what does the Alumni Association mean to her? “The WSUAA helps students to learn how to network and build their career with alumni, propelling them for life post-graduation. I feel like the WSUAA is working to assist the broadest cross-section of Cougs—students, alumni, and even future Cougs! That means a lot to me.”

In Lisa’s words, “I am proud to be a Coug and grateful for the help I have received from other alumni.” To learn more about a WSUAA chapter near you and the membership programs offered by the WSUAA, go to alumni.wsu.edu.

Fieldwork, Faculties, and Staff

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WSU in 100 words

A mini-essay contest: Every Coug has a story. That’s what we’ve discovered over the years—from memorable football games to wedding engagements to midnight donut runs, WSU alumni have got some great memories. Now we’d like to hear your Washington State story in 100 words or less.

Pick your favorite memory and send it to us. The top essays will receive a can of legendary Cougar Gold cheese or a WSU hat.

Here’s an example:

On a cold October night, the four of us stroll through campus and find the door to Kimbrough unlocked. We walk the hallway and come across a dimly lit room. It’s practically empty except for a grand piano sitting in the far corner. We go inside and a friend plays a few notes before breaking into Chopin’s “Raindrop.” It’s a surprise to us all. The rest of us twirl around and plié like ballerinas. My grandpa had told me that the pianos on campus are kept well-tuned. He was right. The song ends and we head back into the night.

—Rachel Webber ’13

Send us your 100-word WSU memory by June 1, 2018, through the magazine’s website at magazine.wsu.edu/contact, email wsm@wsu.edu, or a letter.

We’ll print our favorites in the August issue and post others at the magazine’s website: magazine.wsu.edu.

Dr. Universe’s contemplations on children’s science questions can still be found at: askdruniverse.wsu.edu

GO COUGS!

As we celebrate the achievements of WSU graduates statewide and beyond, we also thank the tens of thousands of alumni and friends whose generous gifts throughout the year help to make the WSU experience rich and rewarding for all students every day.

Open doors for future Cougs with a gift to WSU today.

foundation.wsu.edu/give
WEB EXTRAS
Coug legend Keith Jackson; a former fighter pilot finds her identity; tips to cope with wildfire smoke

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Like the WSM page on Facebook for extra content

TWITTER
Follow us on Twitter for frequent updates

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Subscribe to WSM’s monthly email newsletter

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PHOTO GALLERIES
Places called Trout

PINTEREST
Art exhibitions, historical displays, and WSU-themed pins on our WSM boards

INSTAGRAM
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PHOTO GALLERIES
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