connecting you to WASHINGTON STATE UNIVERSITY the STATE the WORLD

features
Grow old with me. The best is yet to be. 22
Can a fifth-century technology aid nuclear waste disposal? 28

upfront
Even though population genetics is a kind of time machine, they like living in the present. 10
Elusive. Evasive. But they can be caught. 11
Making the world a better place—the Iraqi Young Leaders Exchange Program 12
For this researcher, fighting muscle loss is personal. 13
Exercise your information-seeking muscles in our fake news world. 14

COVER: KITES OVER LONG BEACH PENINSULA (PHOTO BROWN W. CANNON III) LEFT: PLUM TREE BLOSSOMING IN WHATCOM COUNTY (PHOTO EDMUND LOWE)
On the horizon  The Jordan Schnitzer Museum of Art/WSU to open

Departments

5  Forged by fire  FIRST WORDS
18  A vocation that stayed on track  SIDELINES
20  Can’t beat ’em  IN SEASON
35  ... Living the fighting spirit  36  62 countries, and on the roll to more 38  ... What a time it was  ALUMNI PROFILES
40  Losing Eden; At Home with Ernie Pyle; Hip Hop Ain’t Dead; Playing While White  NEW MEDIA
44  ... An educator for America’s future  46  WSU Parents Chat Café  CLASS NOTES
50  The perfect gift for every Coug  ALUMNI NEWS
52  Why does hair turn gray?  ASK DR UNIVERSE

Edward R. Murrow-approved.

Ana Cabrera
Anchor, weekend primetime edition,
CNN Newsroom, 2017

Mark Twain Award,
Best Morning Show Broadcast, 2013
Emmy Award,
Best Morning Newscast,
In-the-Field Reporting, 2012

Murrow College of Communication
graduate, 2004

choose.wsu.edu

Read more of Ana Cabrera’s story:
wsu.edu.impact/ana-cabrera

Washington State Magazine
is published quarterly by Washington State University. Editorial office: IT Building 2013, 670 NE Wilson Road, Pullman, Washington 509-335-2388
Mailing address: PO Box 641227, Pullman, WA 99164-1227. Printed in the USA. © 2018 Washington State University Board of Regents. All rights reserved. Views expressed in Washington State Magazine are those of the authors and do not necessarily reflect official policy of Washington State University.

Washington State Magazine is distributed free to alumni, friends, faculty, and staff. Others can subscribe or gift the magazine for $15 yearly (magazine.wsu.edu/subscribe).
Change of address: Biographical and Records Team, PO Box 641927, Pullman, WA 99164-1927; address.updates@wsu.edu; 800-448-2978.

This publication is available online as text-only and in other accessible formats upon request: wsm@wsu.edu; 509-335-2388; 509-335-8734 (fax).

Edward R. Murrow-approved.
Forged by fire. The intricate mastery of Japanese swordmaking relies on a smith’s deep understanding of fire, metal, and techniques to control both. Each unique sword shimmers with thousands of layers from the folding of the metal, a work of art in steel. That steel, though, traditionally comes from an iron-rich sand full of impurities, pounded and blended by the smith. A smith then uses a secret mix of water, clay, ash, and other ingredients over the blade as they once again plunge the sword into fire to create a keen edge. Only when the blade glows a certain color is it quenched in water.

Humans have learned to use fire over the centuries to great effect, not only on our weapons but with our defenses. A 1,500-year-old hillfort in Sweden, for example, has rocks fused together with an ancient glass, now being studied by Washington State University materials scientist John McCloy. As he reverse-engineers the techniques and ingredients, we might even use the glass as a defense in a new battle against the radioactive waste at the Hanford Site.

There are other fires that forge the human spirit. We all face adversity in our lives, and it tempers our spirit and resolve. For Tom Haig ’09 as a young man, it was a bicycling accident that paralyzed his legs. He turned that moment into a chance to advocate for others with disabilities, and even set up a radio station in Nepal.

Leaving home is a traumatic event for many of us, particularly as we get older. Over 60,000 Americans turn 65 every day, and that wave will often look to new kinds of communities as they make the transition to their next phase. Students in WSU’s hospitality program are taking up the call for more managers in senior living communities, and finding rewarding work that assists older people in finding a new home.

Difficulties come in many forms. It may be trouble sleeping, or it could be traipsing through a jungle to track jaguars and ocelots. Sometimes it’s a societal problem, like the scourge of fake news that threatens our democracy. In troubled times like these, we need to hone our critical thinking blades to slice through misinformation, and come out the other side stronger and wiser.
Yacht club

Is there still an active Cougar yacht club? My friends own the Elmore, which was featured in your magazine in the early 2000s. It’s for sale now, in great shape, and still owned by the Cougar fans. It would be a great boost for the yacht club and could possibly keep it in the Cougar family. She’s still painted Coug colors and was built in 1890!

SARAH SELTZER
Seattle

Rocket man

I was in the Signal Corps of the U.S. Army’s satellite tracking station at Ft. Stewart, Georgia, from April 1958–March 1959. I was working telemetry the night Cape Canaveral tried to send a rocket from Earth directly to the full moon above the east coast. The rocket went up 79,000 miles, turned around by gravity, and came back down. Since then all space travel goes up in orbit first and heads out into space. There were three satellites being tracked in spring of 1958, many more to follow. Our job was to watch their orbit path, to not drop down with a bomb attached, or burn up in space. It was an exciting time to be a part of NASA and the beginning of space travel.

RALPH H. QUAAS ’57 HORT.
Everett

Buried treasure

SHANE DUNBAR ’56, a former agriculture and biology teacher from Everett, asked for some background on the illustration in “A mother’s microbial gift,” Winter 2017 issue. Specifically, he was interested in the relationships between the bacterial representations in the intricate editorial artwork by Colin Johnson. I asked our art director if there was, indeed, subtle information the work conveyed:

“Since research of microbes is in its infancy, we simply gave our illustrator the names of the bacterial genera that are some of the ‘important players’ in the story—Streptococcus, Staphylococcus, Pseudomonas, Serratia, and Corynebacteria. Scientists at WSU and elsewhere are busy investigating the complex microbial and host interactions. All canonic that there is still plenty to do and many more exciting discoveries to be made. Therefore, we left the positioning and interplay of the bacteria in the illustration up to the artist. We really only aimed for the illustration to convey the intricacy of the subject matter rather than any specific biological relationships.

“We do many times ‘bury treasure’ in our artwork—sometimes instructional, sometimes just for fun—so Shane was right to ask if there was any present in this particular illustration.”

— J. Paxson, AD

We are always most interested in our reader’s questions and comments that probe deeper into all the stories we tell. Remember to sign up for the monthly Washington State Magazine email newsletter to get previews of stories, videos, and more bonus features: magazine.wsu.edu/email.

— Editor
Clad in unique crimson mirrored glass tiles, the new Jordan Schnitzer Museum of Art/WSU will open April 6, 2018, across from the CUB. The 10,000-square-foot building has six exhibition spaces, which will debut with works by Jim Dine, Marie Watt, and Jeffry Mitchell, along with multimedia presentations. Designed by architect Jim Olson of Olson-Kundig, the new museum offers a beautiful home for the growing permanent collection and space for both traveling and WSU exhibitions.

Photo Robert Hubner

Read more: magazine.wsu.edu/extra/new-art-museum
When Omar Cornejo got his genomic analysis back from 23andMe, he and his wife, fellow population geneticist Joanna Kelley, were both a bit surprised and vindicated. Venezuelan, Cornejo expected to see the alleles of South American, western European, and North African populations. But he was unaware that his family’s deep history also included ancestors from sub-Saharan Africa.

That just goes to show the importance of broadly sampling the genome, says Kelley. “The lesson is that if you just look at the mitochondria, you’d assume this person is from Africa. But if you look at just the Y chromosome, you’d assume that this is a Native American.”

Cornejo and Kelley study the emergence and spread, over space and time, of adaptations and mutations. Among many other things, population geneticists help pinpoint genes involved in disease, opening avenues of investigation that may result in treatments.

Population genetics is also a key part in conservation, as understanding genetic diversity can help ward off extinction. “The idea of supporting each other is really important,” Cornejo says. “It’s not like we’re sacrificing anything for our careers.”

“Definitely don’t feel that way,” Kelley confirms. “This is our life and it’s awesome.”

Kelley laughs, “With this ring I thee wed.” And Omar says, “Shakespeare now?”

Even with two young children and busy research programs, they are sunny and mutually supportive.


At least for a month or two. But as the days rolled by, Kelley says, “I really thought he was interested.”

“I had no idea he was interested! But when she asked, Are you interested, I started looking through a different glass,” he says.

A week after they started dating, Bustamante asked Cornejo to move to Miami to work on a cocoa genome project. “I’m sorry, but I can’t,” he said.

When Cornejo explained why, Bustamante nodded sagely and calmly replied, “Just don’t break my lab.”

Not only did the couple not break Bustamante’s lab, thanks to their research they managed to both score jobs at WSU.

In order to maintain academic independence, they don’t usually collaborate on projects together. But these adjoining labs and offices are home to a gaggle of grad students whom they train together. And there’s certainly plenty to do, as the population geneticists work to uncover the lineage and demographic history of a single organism, from Native Americans, western European, American, to an ecosystem approach to health. “We’re looking at pathogens and the host and asking what is relevant in the interaction between them and how does that interaction develop disease?”

Population genetics is a kind of time machine, as it allows scientists to peer into the distant past to see when, and potentially why or under what conditions, a trait emerged. As important as it is to understand the demographic history of a single organism, microorganisms never work solo. They live in ecosystems called microbiomes.

There are two contexts to health and disease. “Our context created by other bacteria. The other is the human host. We have a lot of variation, different responses to drugs depending on our genetics,” Kelley says.

The couple decided to get married two weeks after Kelley’s interview at WSU. When they told Cornejo’s mother in Caracas, she said, “I am getting on an airplane.”

At San Francisco City Hall, they crammed their three children into a small room, and for a moment, King knew what he wanted to do from far from his hometown of Dickinson, North Dakota. King joined Virginia Tech predator researcher Travis King set up traps last spring to catch jaguars— or whatever other animal came into range of the cameras.

Tesking through one of the largest unexplored rainforests in the world, La Mosquitia in Honduras, Travis King set up traps last spring to catch jaguars—or whatever other animal came into range of the cameras.

Kelley, an environmental science graduate student at Washington State University, was part of a team of researchers conducting the first biological survey of the area known as La Ciudad Blanca or the Lost City of the Monkey God, astounding ruins first identified in 2012.

It was already familiar work for King, who has used remote-sensing camera traps and other methods to identify the behavior and distribution of elusive big cats from Costa Rica, Honduras, and Belize all the way to central Washington.

Although his travels have taken him far from his hometown of Dickinson, North Dakota, King knows what he wanted to do from an early age. As he explored around Theodore Roosevelt National Park, he knew “I knew I had this interest in vertebrate animals, any thing from frogs to cats.”

King sought a university that connected to his interests and WSU fit the bill, where he first helped with cougar and carnivore research in the Selkirk Mountains. His diligence took him to Belize, where King joined Virginia Tech predator researcher Marcella Kelley and set camera traps to look at wild Central American felines—jaguars, pumas, ocelots, margay, and jaguarundis—and their prey. It was quite a training for King. “Those 25 pounds from hiking seven to ten miles every day through some of the toughest jungle I’ve seen,” he says. “But the work I did in Belize really set me up for the world down.”

When he returned to WSU, King met Dan Thornton, assistant professor in environmental sciences and head of WSU’s Spatial Ecology and Conservation Lab. Thornton had done jaguar research in Guatemala, so he was a natural mentor for King.

Even so, he asked, “Are you interested?”

That just goes to show the importance of supporting each other. “This is our life and it’s awesome.”

King graduated in 2015 and then started a dual master’s and doctoral program with Thornton. He received a Fulbright Fellowship and other funding for his research, including his master’s research with lynx in Washington. Using 400 camera traps, King, Thornton, and former graduate student Aubir Scully ’16 IVS covered a huge area in mountainous north central Washington. Among other finds, they confirmed the first lynx in the Kettle River Range in 37 years.

King’s interest in Central America drew him back to Honduras, where his doctoral work over several years will look at landscape genetics of jaguars. He says they live in rapidly diminishing mountainous “islands” of forest and there’s a need to understand the genetic connectivity of the big cats.

In addition to camera traps, King developed grab collections kits and recruited local help, from Honduran national park rangers to subsistence farmers and hunters. King will analyze DNA from the faces to identify distinct Ibline groups.

“We don’t have a lot of time to help this jaguar population because it’s really tasty with forest loss,” says King.

“Help students like Travis King compete for national scholarships: www.wsu.edu/support/summerbridge and www.wsu.edu/analystics.”

wildlife photos from the jungles of Central America by Travis King, courtesy Travis King
No barriers to a better world

Eman Ibrahim started volunteering in Iraq’s first cancer support center in the northern Iraqi city of Erbil when she was 18, providing psychological support and reading to patients. It was satisfying work for the energetic young woman, if heart-wrenching at times.

Yet, when the 21-year-old Kurdish medical student from Hawler Medical University became head of the Erbil Hub last year, she wanted to do even more to help—and that meant learning new ideas.

Last July, she got her opportunity with the Iraq Young Leaders Exchange Program.

The highly competitive scholarship program brings 100 Iraqi college students to the United States for 17 days, to foster the next generation of Iraqi leaders through cultural and social exchange.

Washington State University was one of four U.S. universities selected in 2017 to host the program, which is sponsored by the U.S. Embassy in Baghdad and administered by World Learning. The focus at Washington State was public health, and all 25 participants at WSU were medical students. WSU will host another 25 Iraqi students this coming July.

WSU coordinator Cheryl Hansen says the Iraqi students didn’t waste a minute during the packed visit. They saw the global animal health program, veterinary hospital, and equine therapy program, among many other departments, says Hansen, director of partnerships and outreach at WSU International Programs.

As future doctors, the visitors particularly enjoyed WSU Spokane’s health sciences campus, sharing a lunch with faculty physicians and touring the anatomy and nursing simulation labs.

Off campus, the students learned about civic life in Pullman with tours of police and simulation labs. They also had seminars on leadership, civic education, and diversity awareness.

“We were so impressed by the participants, a group of passionate medical students who want to make the world a better place,” says Aisif Chaudhury ‘88 PhD, vice president of International Programs.

One participant, Aisif Darweesh from the western province of Anbar, exemplifies that altruistic nature. Darweesh says his father inspired him to always improve his community, and now he wants to pass that on.

“We need to improve the community through the youth,” says the 25-year-old Darweesh. “I want to encourage them to have the power to do something.”

The Iraqi students didn’t just visit WSU departments and Pullman offices. Each weekend, they lived with local residents. It had a profound effect on both host families and the Iraqis.

“The host families were tired of reading about Iraq in the newspaper and watching on TV, and wanted to talk with Iraqis face to face and find out what was really going on,” says Hansen.

For Ibrahim, the homestay was a high-light. “My family is so protective. I’m the youngest, and they were worried about me,” she says. But Ibrahim soon felt comfortable, particularly after she told her host family about her concerns that people would judge her for wearing the hijab head scarf.

“The mother was so gracious and kind,” says Ibrahim. “The second day she came to me with a scarf and said, ‘Can you teach me how to tie this?’ She said if she sees someone who is hijabi, she’ll wear the scarf.”

Hansen says host families showed the Iraqi students around the region, from visiting the Moscow farmers market to taking a seaplane over Lake Coeur d’Alene.

“This group left an indelible mark on the hearts of Palouse area residents who hosted them in their homes over the two weekends,” says Chaudhury.

They also learned to be part of the Cougar family, says Hansen. “One thing I taught them when we first met was ‘Go Cougs!’ They never let me down, and they said it at the end of almost every session.”

Hansen says she hopes the students will return to Iraq with fond memories and useful knowledge. “They were already leaders before they came, and hopefully they became better leaders here,” she says.

Ibrahim certainly returned to Iraq with some plans. She’s already heading up an expansion of the support center to assist Syrian refugees and orphans in Erbil.

Gaining on muscle loss

Cancer, says Dan Rodgers, is a hellish parade of horribleness.

Cancerous cells multiply aggressively, interfering with the normal function of healthy organs. Tumors secrete hormones and other chemicals that exploit the body’s own defenses to the cancer’s advantage. Your body knows something is wrong, so stress hormones are released in an effort to inhibit growth processes and channel nutrients to the brain.

Deprived of resources, muscles begin to atrophy. Washington State University muscle biologist Rodgers, together with colleagues at the Baker Heart and Diabetes Institute in Australia, investigated treatments for tumor-induced muscle wasting called cancer cachexia.

The research was so promising that Rodgers founded AA Vogen, a company dedicated to bringing the therapy to market.

For Rodgers, it’s personal. “My dad died of pancreatic cancer. He didn’t die from the tumor metastasizing. He died because of extreme muscle loss.”

Cachexia can be fatal but, more often, it reduces a patient’s mobility and quality of life—as does muscle wasting in muscular dystrophy. That’s the condition for which Rodgers and his team worked to find a treatment.

Myostatin, a protein that blocks the growth of muscle and helps optimize muscle mass, normally limits muscle growth, which is metabolically expensive to produce. Their treatment blocks the action of myostatin with a gene called SMAD7. Blocking myostatin in animals can result in double-muscled cattle, like the Belgian Blue.

Myostatin inhibitors have been tested in clinical trials to treat muscular dystrophy and cachexia but they worked outside the cell. “So if you injected one of these inhibitors in the circulation, they’d block myostatin from working on every tissue, not just muscles. They’d also block other hormones that are structurally very similar to myostatin,” Rodgers says.

Administering a myostatin inhibitor outside the cell can result in nasty side effects that weaken blood vessels and cause internal bleeding throughout the respiratory system.

AA Vogen’s solution is to deliver the inhibitory gene directly to muscle cells using an attenuated virus that co-evolved with humans and does not cause disease. “This works via injection but the virus only sticks to cardiac and skeletal muscles,” Rodgers says. “The virus is recognized by a receptor, and the virus—and its therapeutic package of DNA—are engulged by the cell. Once in the cell, the therapeutic package goes into bio-reactor mode.”

In other words, it starts reproducing and doing its therapeutic work.

Rodgers says, “You don’t need to infect 100 percent of the cells in a muscle. If a few cells recover, the whole muscle is going to be better.”

The first goal is to get FDA approval for the targeted gene therapy to treat muscular dystrophy. To that end, late in 2017 AA Vogen received a $2 million infusion to run FDA Phase II toxicity and safety studies that are the prerequisite to human clinical trials.

“Our therapy increases the efficiency of the heart, so we could potentially treat heart failure, as well,” Rodgers says. Which means, he points out, that athletes will want to use it to build up heart muscle. “Gene therapy is on the anti-doping radar.” AA Vogen is also developing an assay to determine if a person has been exposed to the virus that has SMA7D in muscle cells.

Rodgers says he gets dozens of emails a week from people whose family members have muscular dystrophy and who have seen his papers in scientific journals. “I spend several hours a week trying to answer questions,” he says.

His surgery is palpable, not only because he lost his father to a potentially reversible condition but also because of another family member with muscular dystrophy. Flicking a
Truth or consequences

Fake news nearly started a war between Qatar and its neighbors in 2017. In Pakistan, a highly placed official bought into a fake news story warning that Israel was going to take action against its country, too, was a nuclear power. And in Washington, D.C., an armed vigilante burst into a pizzeria and fired three shots, thinking he was bringing down a sex-slave ring.

While news has never been neutral, something has changed. Information has become weaponized. What’s changed, says Washington State University communications professor Doug Hindman, is that the marketplace of ideas has broken down under the pressure of the internet, and its algorithm-driven behemoths, Facebook, Twitter, Google, and other ad-selling social media and search platforms.

The marketplace of ideas, Hindman says, is the place where “truth and falsehood grappled,” with truth usually winning. “That’s why we have the First Amendment. We want all ideas to compete.” Now, though, “we’ve got a marketplace that’s flooded with bad, viral information.”

While far from the only symptom of a politically divided culture, the rise of fake news threatens to deepen the rift and, potentially, pull democracy into the crevasse with it. How we get out is unknown, but a new initiative from WSU offers a ray of hope.

Rebecca Calloway, a doctoral student working with Hindman, spends much of her time researching Facebook. She has some insight into how the social media platform’s algorithmic decision-making process is driving this avalanche of fake news.

“What creators of content want to do is create sharable media,” Calloway explains. When we repost something on Facebook, that “share” is algorithmically weighted more than likes or comments. The reason is simple: When we share, we expand the reach of ads that clutch the post’s coattails.

Shareable, however, does not mean thoughtful. Thought, in fact, is the enemy of the “sharing” economy. What’s sharable is that which appeals to the reptilian brain that knows only emotion.

The primary emotion that can be quickly—and thoughtlessly—shared, Calloway continues, is outrage. “The things I want to share are these things that I have solid ideas about. ‘This person’s rude; can you believe that jerk?’

“This is high emotion, low-information stuff,” Hindman adds.

Calloway nods. “As opposed to some white paper that is breaking down the tax bracket implications for the middle third—something that is really dense and hard for me to create a quickie little post about.”

As criticism of social media algorithms ramps up, Calloway says, “Facebook is just starting to ask, ‘Is this information credible?’ I was teaching a assistant for Doug last semester and in the first week we asked students, ‘Where do you get your news?’” And they told us, Facebook. We said, ‘Well, that’s not a source—what page on Facebook are you going to?’ Well, whatever is in my feed...

Credibility is a hard thing to teach. Maybe people should take a three-day class.”

Calloway suggests. “How would you get information if you weren’t on Facebook? Maybe it’s worth finding out. Exercise that information-seeking muscle!”

It’s not just the marketplace of ideas that has broken down. Hindman says, but our faith in institutions. Trust in university research is deeply divided between conservatives and liberals, as is trust in almost every sort of expertise or shared institution of governance.

Michael Caullfield, director of networked and blended learning at WSU Vancouver, has thought a lot about how to beat back the rise of fake news. He, too, shares Hindman’s concern that we’re plagued by what every authoritarian leader knows. “When people are faced with a flood of misinformation, when they feel that they can’t trust anything, they start to gravitate to what is convenient to believe. And when you remove truth from the equation, all that is left is power,” he says.

“If people feel that there is no way to separate truth from fiction it breeds a sort of cynicism that creates the worst type of government imaginable.”

Instead of cynics, Caullfield is trying to empower students to be “enlightened skeptics.” He calls this approach “the better angels model.” “There’s no denying that ‘there are many parts of us that react in horrible and predictable ways to these clickbait and outrageous stories. But we do have empathy; we do have the ability to step back and look at things in a way that is disconnected from our own interests.”

Caullfield and his colleagues in other universities are also empowering students by having them write web content. They avoid hot-button issues in favor of less emotional ones—but that still give students a chance to exercise their information-seeking muscles.

“You can sit around all day and complain about the junk on the web,” Caullfield says, “but we have a civic responsibility to, so to speak, green the information commons. Students researched and, with expert mentors, peer reviewed pieces on niche topics, such as “are bald men sexist?” and “does music increase IQ?”

The results have been gratifying. Several student-produced pieces have shored their way to the first page of Google results.

“If you can imagine this spreading to many institutions, you’re no longer talking about impacting the search results of questions like ‘are bald men sexist?’” says Caullfield. “You’re talking about higher education reclaiming its place of impacting the information environment.”

How to become information literate? It takes four moves and a habit...

Caullfield’s approach to information literacy is simple. He argues that we should teach students to be fact checkers instead of historians. Irrelevant, readers spend a great deal of time reading closely, analyzing syntax and word choice for tone. Fact checking, though, is quick, involving only “four moves and a habit.” Caullfield says. A recent Stanford University study supports the idea that a fact-checking strategy is superior to close reading.

Look for previous work. When fact-checking a particular claim, the quickest, simplest thing to do is to see if someone has already done the work for you. Has the claim already been fact-checked? Check Snopes, Wikipedia, or another reputable site.

Go upstream to the source. Almost all web content is repeated from another site. Find the original and evaluate it.

Read laterally. Don’t dig deep into a single site, read across many sites to see what others have to say about the source you’re reading.

Circle back if you get lost, hit a roadblock, or otherwise start chasing your tail, stop and start over.

And the habit? If you feel strong emotion when you read a social media post, stop. As WSU graduate student and Facebook researcher Rebecca Callove says, current creators are trying to appeal to our baser emotions, so if that’s what you’re feeling, don’t give them the win.

BY BRIAN CHARLES CLARK

online sites that check the veracity of claims: magazine.wsu.edu/center/fact-checkers
What dreams may come

If Shakespeare lived today, the playwright would surely be prescribed a sleep study. For centuries, sleep has been the subject of much academic and artistic investigation, providing a wealth of insights into human behavior and biology. In a recent project, Karatsoreos found that repeated sleep disruption might accelerate aging—an idea hard to dispute when you trudge to the bathroom and look in the mirror after a rough night tossing and turning.

Oh, sleep that knits up the raveled sleeve of care... writes Shakespeare in Henry IV, Part 2. While Shakespeare’s restless, seventeenth-century nights were lit with a single amber flame, today’s insomniaors are usually staring at bright blue LED screens in a world increasingly devoid of darkness.

The light/dark cycle and how does that exactly why we do it— it’s clear that 7-9 hours of serene slumber can set the stage for a healthy and productive life, the kind that dreams are made on.

While Shakespeare’s restless, seventeenth-century nights were lit with a single amber flame, today’s insomniaors are usually staring at bright blue LED screens in a world increasingly devoid of darkness.

From streetlights to nightlights, light pollution is taking a toll on peaceful slumber in modern societies all over the world, says Ilia Karatsoreos, associate professor in the Department of Integrative Physiology and Neuroscience at Washington State University.

Karatsoreos studies the circadian timing system—a network of internal clocks that keep our physiology running smoothly throughout the 24-hour light/dark cycle. The system is governed by a light-sensitive master clock located in the suprachiasmatic nucleus (SCN) in the hypothalamus. This tiny timekeeper receives input through the eyes which is relayed to various brain centers and peripheral clocks in the heart, lungs, liver, and other organs. Together, they control everything from hormone levels and metabolism to body temperature and sleep.

We have special cells in the retina that are very sensitive to blue-rich light, which is essentially a signal for dawn and time to wake up,” says Karatsoreos. Unlike the rods and cones that provide vision, these photoreceptors regulate the sleep cycle through a direct line to the SCN.

Light also travels indirectly to the pineal gland which secretes the sleep-promoting hormone melatonin. As light diminishes and becomes more yellow late in the day, melatonin levels rise to prepare us for bed. That release can be delayed, however, by even brief exposure to artificial light.

While Shakespeare’s nights consisted of first and second sleeps separated by peaceful moonlight “watches,” Karatsoreos says using blue light-emitting e-readers or cellphones in the wee hours sends a jarring wake-up signal that can disrupt sleep patterns for the rest of the night.

As a member of the Sleep and Performance Research Center at WSU Spokane, Karatsoreos is investigating how that disruption impacts our physical and mental health. He explores questions like: “What happens to the liver if you change the light/dark cycle and how does that affect metabolism?”

To find out, he studies mice who live in a shortened 20-hour day. Through EEG readings, Karatsoreos discovered that although they sleep the same amount of time as control mice, the quality of their sleep is poor.

“Their sleep, slow wave sleep was reduced, which we think is the most restorative stage of sleep,” he says. “It was also more fragmented—and they sleep in shorter bouts than normal.”

In a recent project, Karatsoreos found that mice with disrupted sleep cycles also gained weight despite eating the same amount of food. Additionally, they showed impaired cognitive flexibility and problems with working memory. The mice had trouble changing tactics, for example, or remembering short-term information—similar to memorizing a phone number long enough to make the call.

His research even suggests that repeated sleep disruption might accelerate aging—an idea hard to dispute when you trudge to the bathroom and look in the mirror after a rough night tossing and turning.

The biological clock those organisms have and the brain-based clock that humans have are not necessarily in sync. You notice this when you travel to another time zone. The first trouble people get when they travel to another time zone, other than being sleepy, is that they get GI upset.”

Just as our biological clock is governed by certain genes—with syllable names like clock, time, and per (for “period”)—so too bacteria and other microorganisms have homologous genes. But instead of being light-triggered, the microbial clock is not proven. But there is strong evidence that out-of-sync microbial clocks are giving us fits.

Do microbes dream of circadian sleep?

Anticipation is sweet. In anticipation of the blooming light, plants unfurl their leaves. For many marine creatures, rising to the sea surface as the moon rises is the anticipatory signal that food is available. In our gut, too, microbes anticipate dinner time because microorganisms have internal clocks that sound the dinner bell.

“Mice and flies have these same problems,” he says. “The symbiotic relationship between our microbiomes and ourselves is everywhere but it is particularly strong in the GI system. So just because you travel to another time zone doesn’t mean that the microbiome get the message. So now their clocks and their activities, the proteins that they produce, are out of sync with you.”

Just as our biological clock is governed by certain genes—with syllable names like clock, time, and per (for “period”)—so too bacteria and other microorganisms have homologous genes. But instead of being light-triggered, as is the clock in the suprachiasmatic nucleus of the mammalian brain, microbial communities are triggered by the availability of nutrients in the gastrointestinal tract.

Van Dongen cautions that attributing the negative effects of travel to the microbial clock is not proven. But there is strong evidence that out-of-sync clocks are giving us fits.

“Shift workers,” Van Dongen says, “consistently complain of their GI systems getting out of whack.”

In one longitudinal study of nearly 75,000 nurses, those who worked night shifts on a rotating basis were 11 percent more likely to die early compared to those who never worked the night shift. While disruption of the sleep cycle typically takes the blame, another study with mice that were artificially jetlagged confirmed the disruption to their microbiomes. In a followup with humans, researchers confirmed that, indeed, the composition of the gut biome changed after a time zone-jumping trip. Immediately after the trip, the subjects had a higher proportion of Firmicutes, a group of bacteria that, in overabundance, is linked to obesity.

Again, Van Dongen cautions that “we don’t know this as a fact. It’s just an emerging idea.”

In anticipation of the blooming light, plants unfurl their leaves. For many marine creatures, rising to the sea surface as the moon rises is the anticipatory signal that food is available. In our gut, too, microbes anticipate dinner time because microorganisms have internal clocks that sound the dinner bell.

“Mice and flies have these same problems,” he says. “The symbiotic relationship between our microbiomes and ourselves is everywhere but it is particularly strong in the GI system. So just because you travel to another time zone doesn’t mean that the microbiome get the message. So now their clocks and their activities, the proteins that they produce, are out of sync with you.”

Just as our biological clock is governed by certain genes—with syllable names like clock, time, and per (for “period”)—so too bacteria and other microorganisms have homologous genes. But instead of being light-triggered, as is the clock in the suprachiasmatic nucleus of the mammalian brain, microbial communities are triggered by the availability of nutrients in the gastrointestinal tract.

Van Dongen cautions that attributing the negative effects of travel to the microbial clock is not proven. But there is strong evidence that out-of-sync clocks are giving us fits.

“Shift workers,” Van Dongen says, “consistently complain of their GI systems getting out of whack.”

In one longitudinal study of nearly 75,000 nurses, those who worked night shifts on a rotating basis were 11 percent more likely to die early compared to those who never worked the night shift. While disruption of the sleep cycle typically takes the blame, another study with mice that were artificially jetlagged confirmed the disruption to their microbiomes. In a followup with humans, researchers confirmed that, indeed, the composition of the gut biome changed after a time zone-jumping trip. Immediately after the trip, the subjects had a higher proportion of Firmicutes, a group of bacteria that, in overabundance, is linked to obesity.

Again, Van Dongen cautions that “we don’t know this as a fact. It’s just an emerging idea.”

Running up the competition

BY LARRY CLARK

IF YOU WANT THE FACTS
about track and field records, ask a statistics junkie like E. Garry Hill '69. But he might throw you with another fact, this one culled from long experience as editor of Track & Field News, announcer at the Olympics and World championships, and expert on the sport: Track and field as a spectator sport is struggling mightily.

Rows and rows of empty seats faced runners and fielders competing at the Los Angeles Olympics. And where can you watch big track events on TV? Hill calls it like it is, and he's seen a lot since he competed for Washington State University in the 1960s.

"It's unfortunately gone from being a major sport when I was in college, to a mid-major sport when I started with the magazine, to now being pretty much a niche entity," he says in his gravelly tone.

Hill points out that lack of presentation, inability to keep up with the marketing of professional team sports like football and basketball, other leaders driving interest in track and field. He does have a few ideas to reform the sport, which, as a good editor, he's not afraid to share. Hill has already seen how the sport can thrill watchers and create fans, like when two runners to beat Steve Prefontaine at the Olympics. And where can you watch big track and field records, ask a statistics junkie like Hill. "I spent all my time reading old issues of Track & Field News, compiling lists, and making predictions," he says.

He remembers Missouri as a hotbed of trackback in the changing culture: no sideburns or long hair, and no women in the stands during practice. At 11 times he was pretty crusty, but he was as honest and open as the day is long. "I just had a down-home, easy, couldn't-help-but-love-the-guy persona."

He also earned his two Gray W letters alongside a host of other legends like runny genius Garry Lindgren '70. Lindgren beat seasoned Soviet runners on national television in 1964 before going to WSU, then set many NCAA records and was one of two runners to beat Steve Prefontaine at the collegiate level.

"They fell into the mileage Lindgren put in. People now tend to not believe it. But I saw you could go over to Bolleher morning, noon, or night and he'd be either leaving on a run or coming back from one," says Hill.

At the end of his WSU days, Hill saw a well-meaning ad for a statistician in one of his favorite magazines, Track & Field News. "This was heaven to me," he says. "They couldn't have invented a better job."

Despite his degree in public health and bacteriology, Hill applied "much to the chagrin of my advisor, who I gather had me writing a thesis on the relationship of cancer and cigarettes," he says.

Soon after he took the magazine job, the owners asked Hill to start writing. He moved up to managing editor and then editorial duties.

"I suddenly avoided taking a class that required writing a term paper, which for someone who ended up in a journalism career was a pretty backwards way to go around it," he says. Hill and the business manager bought the magazine in 1965. Unfortunately, Hill had met Bob Steiner, sports information director at Cal-Berkeley and renowned track and field announcer. The idea intrigued Hill.

"I started mimicking Bob in my head. It's great to have someone explain everything that was going on and not only calling the races, but also throwing in historical data and national relevance for what the marks meant on that day," he says.

Steiner gave him an announcement gig in 1977 for a big meet at the Cow Palace, and Hill started announcing throughout California. A decade later, he started announcing at international meets, leading to the 1996 Atlanta Olympics. That was the first of five Olympics for him as an announcer; along with about 10 World Championships in 20 countries, filled with many memorable events that he also cataloged in Track & Field News.

"A favorite Olympic moment for Hill was in 2004, when a few days prior to the Athens Games they staged the shot put competitions in the ancient stadium in Olympia a couple of hundred miles away. "The sun came up through the open field as we were sitting on an open platform on the hillside overlooking the open field where they were throwing. A German spectator came over during a break in the action and told me how much he appreciated my work, saying, 'I can understand you better in English than I can understand the announcer in German back home.'"

"Or perhaps because of, or his many experiences with the sport, Hill has witnessed a slowdown in interest for track and field. "When first moved to northern California, there were major meets galore," he says. "I'll go to a major track meet every weekend."

But since the 1960s, track and field just hasn't kept up with team sports with a professional marketing effort. Media, too, have moved away from covering track and field.

"The people who want to save the sport are not realistic. They don't recognize track's place in the hierarchy of the sports world. They keep trying to make it into something it isn't," he says.

To fix it, Hill suggests streamlining track meets by reducing the number of disciplines, which likely means field events, and the amount of down time. "Waiting for them to measure a discus which likely means field events, and the amount of down time. "Waiting for them to measure a discus which likely means field events, and the amount of down time. "Waiting for them to measure a discus which likely means field events, and the amount of down time. "Waiting for them to measure a discus which likely means field events, and the amount of down time. "Waiting for them to measure a discus which likely means field events, and the amount of down time. "Waiting for them to measure a discus which likely means field events, and the amount of down time.

"The people who want to save the sport are not realistic. They don't recognize track's place in the hierarchy of the sports world. They keep trying to make it into something it isn't," he says.

To fix it, Hill suggests streamlining track meets by reducing the number of disciplines, which likely means field events, and the amount of down time. "Waiting for them to measure a discus which likely means field events, and the amount of down time. "Waiting for them to measure a discus which likely means field events, and the amount of down time. "Waiting for them to measure a discus which likely means field events, and the amount of down time. "Waiting for them to measure a discus which likely means field events, and the amount of down time. "Waiting for them to measure a discus which likely means field events, and the amount of down time."

"I make the flat-out prediction that he's going to be the first big American track and field name on Twitter, which likely means field events, and the amount of down time. "Waiting for them to measure a discus which likely means field events, and the amount of down time. "Waiting for them to measure a discus which likely means field events, and the amount of down time. "Waiting for them to measure a discus which likely means field events, and the amount of down time. "Waiting for them to measure a discus which likely means field events, and the amount of down time. "Waiting for them to measure a discus which likely means field events, and the amount of down time.

"I cry after a race for the first time."

"To do that, Hill says it might be best to bring in people who don't know the sport, but with a keen eye for analyzing what works and what doesn't."

"All is not lost. Even casual fans of track and field have more access to events and competitions through social media. "If you want to follow any big American track and field news on Twitter, they're there," says Hill. He also notes that most collegiate events can be seen on streaming video for free, which could drive up the fan base.

But Hill stresses the importance of being a fan. So as you'll see, his list is very much front-loaded.

"I didn't realize until I compiled this favorite moment list just how much the dictum of "you don't need to understand the press box" has come to dominate how I watch/cover my sport. Unfortunately, I've done a good job—too good, in fact—of learning how to be dispassionate. It makes me a better journalist and broadcaster, but it saps some of the vitality out of being a fan. So as you'll see, my list is very much front-loaded."

"Chock-full of self-centered moments sits with me (noting that I've restricted individuals to a single appearance ape, or it would run the risk of being all Garry Lindgren and Henry Rono)."

"MAY 1963 — Don Bonetti '63, who ran for the same track club back home as I did, wins the Penn-Arms Games 800 gold medal.

"MARCH 1965 — Bob Yard '66, who went to his high school, wins the pole vault at the first-ever NCAA Indoor Championships.

"APRIL 1965 — The first-ever Mooberry Relays, named after longtime Coug coach Jack Mooberry, are held at Rogers High in Spokane. I won the long jump with a mark I never approached.

"JUNE 1968 — The Cougских bench the form chart and finish second at the NCAA Championships. I wasn't good enough to go to the Nationals, but that was the year I lettered.

"NOVEMBER 1969 — Garry Lindgren and Oregon legend Steve Prefontaine clash at Stanford's golf course in the greatest cross country race ever seen. Garry narrowly wins the Pac-8 title. Added bonus: I'm there to see it, as I'm in town for my foot-and-field team from Pullman.

"MAY 1970 — The setting is UCLA's Drake Stadium for the Pac-8. Twenty-six-year-old Rick '71, my best buddy in Pullman, wins the mile with the first sub-4:00 in school history and I cry after a race for the first time.

"MAY 1973 — In 5.5 sec & 10.8 sec, LA's historic Carl Lewis and Craig John Dalenere '74 turn the long jump world upside down, literally, by unveiling some somersault style.

"JUNE 1974 — 6 sec cross country time at Stanford again and I get to see Henry Rono win the first time. I make the flak-out prediction that he's going to be a world record setter. I conveniently ignore how many times I've said something similar and been dead wrong and never fail to bring up my prescience when he goes on his two years later.

"MAY 1984 — I get the honor of announcing the Pac-10 Championships in Pullman.

"JUNE 1988 — I get the honor of announcing the Pac-10 Championships in Pullman.

"MAY 1998 — I'm standing a dozen rows from the track in the middle of the homestretch in Athens as Bernard Lagat '101 and world record holder Hicham El Guerrouj 'EGR' stage the greatest 1500 race ever seen in an Olympic 1500. Bernard loses narrowly, but it's another tear-inducing moment.

"SEPTEMBER 2017 — Our '18 team is inducted into the WSU Athletics Hall of Fame.

Any favorite track and field events of your own? Send them to us at wsm@wsu.edu
Beets

BY LARRY CLARK

Not everyone will love a beet, but it has long been a vegetable of love. The deep red of a beet and its earthy sweetness speaks to some people, who adore the vegetable in all kinds of dishes. Beets have a lot of healthy qualities, too, and even potential chemical uses in solar panels. That’s not to say beets don’t have detractors. That same earthiness, produced by the substance geosmin, puts off some palates. The beet—Beta vulgaris, also known as garden beet, blood turnip, beetroot, or red beet—was cultivated in ancient Greece and Rome, but there are stories of beets in the Hanging Gardens of Babylon as well. It’s related to Swiss chard and, in fact, people mostly ate the leaves and stalks of beets at first, with the thin bulb used for herbal medicine. It wasn’t until the 1600s that varieties with a thicker bulb entered the diet of most Europeans. As a good winter vegetable, the beet became a staple through eastern Europe.

We now connect the blood-red color with beets, but that shade was selectively bred into the vegetable in the eighteenth century. We don’t often see white beets at the store or farmers market, but they are the most common variety grown for sugar production. Today 20 to 30 percent of the world’s sugar comes from sugar beets, including some commercial growers in Washington. Almost half of the sugar consumed in the United States comes from sugar beets. The ancient Greeks and Romans prized beets for their supposed aphrodisiac qualities. Long associated with lust and love, beets appear on frescoes in houses of prostitution in Pompeii and Rome. Even in Greek mythology, Aphrodite ate beets to increase her appeal.

While claims of amorous abilities are questionable, there’s no doubt that beets carry plenty of health benefits. For example, betalains, the antioxidant-laced pigments that give beets their redness, are being studied as a way to fight cancer. A number of studies support the use of beet juice to lower high blood pressure, due to its high nitrate content. Nitrate gets transformed by an enzyme to nitric oxide, which relaxes blood vessels. Beet juice can lead to drops in both systolic and diastolic pressure at rates higher than some medications. Beets could help improve brain and liver functions. They’re an excellent source of fiber, vitamin C, magnesium, folate, potassium, and manganese.

The betalains could provide more than just a health benefit for us; they might improve our solar electrical panels. Jeanne McFarl, a Washington State University chemistry professor, and her team of students study how betain, a betalain dye called beetroot red, can react to photons in solar panels. Betain as an additive could make dye-sensitized solar cells potentially more economical and environmentally friendly alternatives to silicon-based solar photovoltaics. The strong betalain red coloring in most beets is also used as a dye in foods and other substances. In the nineteenth century, women used that juice as a cheek and lip stain.

Beets grow well almost anywhere in the state, but they grow best in cool conditions and bright sun, according to WSU Extension. Make successive plantings every three to four weeks from spring to midsummer, and then in the fall about 10 weeks before heavy frost, if you plan for winter storage.

They’re biennial and normally grow an enlarged root in the first season. Some recommended varieties for western Washington are Red Ace, Early Wonder Tall Top, Detroit Dark Red, Lutz Greenleaf, Winterkeeper, Cylinda, Golden, and the mellower Chioggia. Beets, like many root vegetables, transform subtly when roasted. The natural sweet flavor emerges and it becomes a little less earthy, which can please palates that don’t want that strong loaminess. If you boil them, leave them for five inches of stem on the beets so you don’t have the red color “leaking.” In soups or stews, beets have long played a leading role. It’s said there are as many types of beet soup as there are villages. Beets pair nicely with sour cream or strong cheese in soups and other dishes. Another way to appreciate the hardy flavor is a beet salad, combined with pungent greens, nuts, mustard, vinegar, and cheese.

And don’t forget the beet tops; they’re an excellent source of vitamin A and can be cooked or used fresh as greens. Beets preserve well through pickling. Pickled beets are a Midwestern classic, but they can also be made with cinnamon and sugar to give them an intense flavor. Just be sure to follow WSU Extension recommendations for pickling to avoid contamination—unpeeled vegetables to start, the right amount of vinegar, and proper preparation—and you can enjoy the red root all year.

Lentils with Roasted Beets and Carrots

Ingredients

- 2 1/2 cups French lentils (also called Puy lentils)
- About 1 dozen (1 large bunch) medium-small carrots, with their tops on
- About 1 dozen (2 large bunches) medium-small beets
- 2 tbsp. olive oil
- 1/2 cup chopped fresh herbs (whatever you have on hand: basil, chives, or parsley)
- 2 cups French lentils (also called Puy lentils)
- 1/2 cup chopped carrot tops
- 1/2 cup feta cheese
- 1/2 tsp. salt
- 1/4 cup fresh lemon juice
- 2 tbsp. olive oil
- 1/2 tsp. salt
- 1/2 tsp black pepper
- 1/4 tsp. cayenne

Directions

1. Preheat the oven to 375°F. Place the vegetables in oil.
2. In a medium saucepan, cover them with water and bring to a boil.
3. Meanwhile, rinse the lentils and check them for small pebbles, then place them in a large saucepan. Cover them with water and bring to a boil.
4. In a medium bowl, combine the beets and carrots with the lentils and toss them together. Season with a bit of salt and pepper if you wish. You can remove the skins from the beets by gently rubbing them off with your fingers.
5. Place the roasted carrots and beets on top, then crumble the feta all around. Serve warm or cool.

Yield: 6-8 servings

Recipe courtesy of Kitchen Vignettes/PBS
It’s never easy to find a new home. Just ask Barbara Nelson, a former account manager from Seattle. When her husband passed away, she moved from the century-old house where they had lived for 48 years. She has piercing eyes and a strong voice, but it trembles slightly as she explains: “It was so traumatic. After the estate sale, I took five things out of that house and walked away. I felt like I lost my neighborhood.”

Barbara made the decision, consulting with her family, to move to a senior living community. She visited a number of locations in the Seattle area and two and half years ago decided on Mountlake Terrace Plaza.

On a quiet street in the suburb north of Seattle, across from a lush park and library, the building could pass for any upscale complex. It’s become a new home, with benefits, for Barbara, her friends Mary and Pam, and about 75 other seniors. The three women are joined by Rosita Sandell ’11, the community’s executive director, after some tasty jelly-filled German doughnuts made from scratch in the building’s kitchen.

Big band jazz plays from the speakers as the group describes the busy life at Mountlake Terrace Plaza: art classes, volunteering, yoga, Wii bowling, music, movies, barbecues, trips to Leavenworth for Oktoberfest, river rafting, and eagle watching, coordinated by their energetic activities director.

For Barbara, the active life and the friendly reception drew her into the community—oh and, she adds with smile, that she doesn’t have to cook and do dishes.

Welcome to the rapidly evolving future of senior life, a blend of skilled nursing, technology, architecture, and business management all wrapped together with resort-style hospitality.

Sandell, who has been with the MBK Senior Living property for a couple of years, says the community, like a growing number of senior living facilities, provides a lot of what the residents need in a home, while allowing them independence. “You can’t always tell someone who’s 91 years old and made all their own decisions that this is the way it’s going to be.” Dressed in a red blazer with black slacks and shirt, Sandell, a graduate of Washington State University’s hospitality management program with a gracious demeanor, could be a top restaurant or hotel manager. She in fact has that background, helping start up concessions and catering at the launch of both Safeco Field and Seahawks stadium exhibition center, then later working at the Washington State Convention Center. Sandell grew tired of training her own managers, so she decided to get further education, first at Highline Community College and then WSU.

She was on track to go into the hotel industry, but a particular class her last year opened her eyes to senior living. “The ‘a ha’ moment came when we visited residents and staff at a Seattle facility, and I saw the untapped potential.”

That place and others are a far cry from the past drab image of a “nursing home” with listless seniors just sitting around. The Mountlake Terrace community and thousands more across the state and country help seniors create new homes and enjoy their golden years. But the communities are swelling with the tide of Baby Boomers entering their active later years, and the need is dire for people like Sandell.

THE SILVER WAVE
With around 60,000 people a day in the United States turning 65, and senior living communities filling up and popping up all over, the industry is starting to feel the crunch. An estimated 90 million seniors will live in the country by 2050, and while some will continue living in their homes and “age in place,” many more will seek out apartment-style facilities or more residential active adult communities.

It was the pressing need that brought senior living executive Jerry Meyer to WSU and to Nancy Swanger, director of the School of Hospitality Management in the Carson College of Business, with a request in 2010. Meyer was then president of Áegis Living, a rapidly-expanding senior living company based in Redmond.

“When I first met with Jerry Meyer, he said to me, ‘We want people with a hospitality background and not just a skilled nursing background,’” says Swanger.

At first she was a skeptic. “My 88-year-old parents still live in their own home. In my mind all I could think about was nursing homes. What was the connection to hospitality?” she says.

Meyer explained that similar skills are needed when operating senior living communities as running hotels and resorts. Since over a million more managers will be needed in the senior living industry in the next decade, he thought WSU was in a prime position to train them.
A veteran executive with extensive experience in the senior living industry, Eckstein didn’t start in the field. He began in real estate in his native New York City. When the market turned sour in the late 1980s, his research showed growth potential in building for an aging population. The company he worked for was急of the prospect, since they didn’t have expertise with senior properties. But Eckstein’s professional insight in 1991 had an unexpected personal connection as well.

Eckstein joined WSU in March 2016, taking over for Merrill Gardens statewide. It’s led by Scott Eckstein, clinical assistant professor of and classroom training on finances, marketing, and other aspects of their own companies.”

Those leaders helped develop curriculum, found speakers, flew them over the mountains on their own dime. The very second class multiple times, and you would think it was Thanksgiving dinner. It wasn’t about being competitive. And they weren’t there to market them over their own diners. The very second class started a one-

The class size has now grown to 45 students across WSU campuses.

Swanger, who’s also associate dean at the Carson College and the W. Terry Umbreit distinguished professor in the 85-year-old hospital-ity program, agreed after visiting a Seattle Áegis Living facility. “I was blown away. It was like walking into the lobby of a really nice hotel.”

Although she recognized that many of the operations—food and beverage, concierge, housekeeping, recreation—were similar to hotels and resorts, her own restaurant background wasn’t sufficient to develop a senior living-specific class. So Meyer helped create the course for fall 2011, joined by presidents and executives from other Seattle-area senior living companies. Bill Pettit from Merrill Gardens, Granger Cobb from Emeritus, and Jason Childers from Leisure Care.

“Those leaders helped develop curriculum, found speakers, flew them over the mountains on their own dime. The very second class started a one- a-kind program, with field trips to Puyallup Sound senior facilities and classroom training on finances, marketing, and other aspects of assisted living, independent living, and memory care.

It’s not that we’re the only people doing something in this area, however, says Pettit. “Part of it is taking the paras and programs we’ve been doing and putting them into good senior living programs, and real estate,” says Swanger. “In a hospitality school in a college of business, we’re definitely it.”

The class size has grown to 45 students across WSU campuses statewide. It’s led by Scott Eckstein, clinical assistant professor of hospitality and senior living executive-in-residence at WSU Everett. Eckstein joined WSU in March 2016, taking over for Merrill Gardens president Bill Pettit.

At that time, my paternal grandfather was in a nursing home and my grandmother lived alone in her Bronx apartment. She would visit him seven days a week, nine to ten hours a day, and that was her life,” he says.

Eckstein’s voice lowers. “She ended up having an aortic aneurism, alone on her kitchen floor where she laid for nine hours. I was very close to my grandma and that had a major impact on me. I thought if she was around people, somebody would have said, ‘Why isn’t Mary at breakfast?’ It is very possible she could have survived.”

He decided to take a new career path, and began working in senior living development and then senior living operations. His work expanded in the United States, as well as Spain, Mexico, and Asia. He has worked for AVE (now Atria), Sunfine, and Aegis Living, followed by a stint with Emeritus (now Brookdale).

Now, as he teaches the ins and outs of this hybrid business of hospitality, healthcare, real estate, and finance, Eckstein shows students that modern senior living is not what they expect.

“Senior living is not seen as sexy,” he says, “A lot of the students want to go into hotel business. They want to run the Hilton in Yakima.”

When they visit some senior living communities, though, it opens their eyes to the resort-like atmosphere of many of them.

Eckstein notes that many millennial students don’t want just a job, either. They want to make a social impact while making a good living.

“Imagine making a difference in the lives of grandparents and grandmas and their families. We talk about doing well by doing good,” he says.

THE OLD AND NEW COMMUNITIES

The idea of “retiring,” especially to warmer climes, certainly isn’t a novel idea. Thomas Edison had one of his houses in New Jersey dismantled in the 1800s and moved to Jacksonville, Florida, where he would winter and finally live permanently. He was soon joined by Henry Ford and his wife, and other wealthy families.

Eventually middle class seniors in the 1920s started heading south with their “tin Lizzies” pulling mobile homes to Florida for the winter. Hotels in Sarasota, St. Petersburg, Miami, and other cities also began catering to aging semi-permanent clients, the “Snowbirds.”

The grand social experiment in age-restricted communities really took off around 1960 with Del Webb’s Sun City in Arizona. The entrepreneur founded a large community featuring mostly smaller homes, which then expanded to similar communities in Florida and homes were also more geared toward assisting seniors’ changing health needs, such as bars by the tubs in bathrooms.

Fifty years later, many senior living communities look quite abit different. Down I-405 from Mountlake Terrace, just blocks from downtown shops, Áegis Living Bellevue also sits on a peaceful street across from a verdant park. Past the flowers and manicured landscaping, the busy lobby hosts an exercise class. A baby grand piano awaits a player under tall ceilings with chandeliers. It has the feel of a fine hotel, and one can see why WSU students like Sandell were impressed when they visited.

The manager, Patrick Mazzuca, greets residents by name as he leads a tour of the building, accompanied by his two vibracious goldendoodle dogs. Beyond a range of amenities, from a movie theater to gyms, beauty salon, a library, and more, Mazzuca says the most important thing is residents’ happiness as they move in.

“Nobody says, ‘I can’t wait to move into senior living.’ It’s our job as staff to be compassionate and understanding, and to also help the families, who may feel some guilt,” he says.

One common feature with many senior living communities, like Áegis Living, is the continuum of care. The residents are able to move from independent apartments to assisted living, memory care if they develop Alzheimer’s or other forms of dementia, or other higher care needs.

In the memory care area, residents plant yellow flowers on a rolling cart. They’re surrounded by nostalgic reminders: an above vintage Coca-Cola signs, a back garden with a 50s-era car and a Sinclair gas pump, photos of their families. Mazzuca says it’s all designed to ease residents, and help them feel safe.

Across the state, a similar experience awaits over 350 seniors at the Touchmark on Spokane’s South Hill. Ken Alexander ’94 manages the skilled nursing and assisted living area there, using his 14 years of industry experience. Beginning at an expansive lobby, he leads the way past apartments and through the dining area to recreation and art rooms. Large boards show the numerous daily activities. Nursing and memory care are in separate wings.

“We do a lot of transitions. As people age in place in the independent cottages and then might need extra help, they can move to nursing or memory care,” says Alexander.

Apartament facilities like Touchmark and Áegis Living aren’t the only model. Panorama, a 140-acre community in Lacey with 850 residences, comes from the same pedigree as Sun City. It was built 54 years ago as a “retirement” community, with 11 neighborhoods
that hold single-family homes, duplexes, and apartments. It also has an assisted living and care facility on the premises.

Howard Burton, Panorama’s director of marketing, drives slowly through the winding streets, past the new pollinator garden (installed with help from WSU Extension), and to a recreation complex tucked amid the homes.

“It’s changed. It has become more about lifestyle enrichment,” says Burton, who’s worked at Panorama for 24 years. He walks past exercise rooms and a swimming pool. “We have 108 hobby and interest groups, including a writer’s group that’s been around for 27 years.”

At Panorama’s 200-seat theater, where residents perform plays and hold film festivals, Burton introduces Katherine Billings, the effusive arts director. “We have an intelligent, engaged group that writes, directs, and acts in plays,” she says.

“Some people may have felt invisible as they grew older,” she continues. “No longer. They move to a community like this and they discover how many communities like Áegis Living, Touchmark, and Panorama in Lacey.

The theater at Panorama hosts plays, radio shows, and other performances by senior residents in the community. Courtesy Panorama

Another problem is financing. People are living longer, and tens of millions of seniors, though, have already made new communities, such as ones for Chinese language speakers, religious affiliation, military veterans, and lesbian and gay seniors.

Doing well while doing good

As the tens of thousands of senior communities expand and adapt, WSU’s program also continues to grow. A new interdisciplinary senior living degree is in the works, with not only hospitality business operations, but also nursing, technology, and psychology, to reflect how many communities like Aegis Living, Touchmark, and Panorama serve a broad range of seniors’ needs.

After starting the business class, Swanger began conversations with other faculty around WSU who had interest in the field of aging and senior living. Maureen Schmitts-Edgecombe in psychology, Laura Hill and Cory Balkan in human development, Diane Cook in electrical engineering, and Catherine Van Son and Shelly Fritz at WSU Vancouver’s nursing department, to name a few. Swanger invited them over for lunch and the conversation led to the idea of a holistic degree and a research institute.

The Granger Cobb Institute for Senior Living will focus on three dimensions: workforce development, collaborative management and sponsored research, and undergraduate education. It would be named for one of the founding fathers of the WSU senior living program and a pioneer of the industry who died of cancer in 2005 at age 55. Some of that research includes smart home technology, like that being tested by Fritz at Touchmark in Spokane.

WSU has also started a noncredit online certificate program that will allow people to train in senior living management over the course of a year. “The industry doesn’t have the supply of people to even meet the demand they have currently to run their communities,” says Swanger, and this certificate can help get people up to speed.

That means not just training, but generating interest. “We need to let students know this is a career opportunity. It’s a lot like a hotel, except the people check in and stay longer, and they might be, on average, older,” says Swanger. “If you want to be the manager of a hotel property, it can take 15 years or more to work into that position. Resita was running her own building in a year.”

The program still brings in industry insiders for classes, such as Patrick Dooley, chief operating officer of Vancouver-based Milestone Retirement Communities, the eighth largest privately managed assisted living company in the United States.

Through classroom and online learning, and experiential field trips, the school continues to show students that senior housing is not what it used to be. As one example, for their final project, Eckstein asked hospitality students to create a group research paper discussing what future products and terminology Baby Boomers envision will be part of the senior living environment.

Even that lexicon is changing.

“In all likelihood, we won’t be using the term ‘senior’ as an industry,” Eckstein says. “Boomers do not like the terms ‘senior,’ ‘senior housing,’ or even ‘senior care.’ We are alerting students early on to this upcoming change in the conversation to help them develop a different mindset toward ‘retirement’ communities, though even the term ‘retirement’ will also be changing as we move forward. The definition of retirement is to cease to work, withdraw, or stop. That is not how the Baby Boomers will be doing it!”

A PLACE TO CALL HOME

Whether it’s called “retirement” or “active adult,” back at Mountlake Terrace Plaza, Barbara, Mary, and Pat appreciate their life. They don’t like the term “nursing home” or even assisted living, but they do like the camaraderie.

That still doesn’t make it easy to call it home.

“At times, I feel I could have stayed at my house. Then I take a deep breath and say, ‘No, I couldn’t.’ It was a very old house and needed a lot of attention. It was not a place to live alone,” says Barbara.

The family environment, say the three residents, is what makes it a true community.

“Everyone watches out for each other,” agrees Sandell, and that makes it feel safer and more comforting.

Sandell greets other residents with a smile and a friendly word as she navigates the remodeling work in the building. She turns pensive as she thinks about how she has been treated, as well.

“Personally it’s even helped me with my grandparents,” she says. “It’s also helped me rethink how I talk to people. How do I want to be treated when I get older? Do I want to be taken seriously, or will I just be looked at as a person with gray hair who nobody listens to?”

Sandell says the emotional rewards certainly add satisfaction to the work. “There’s a lot of empathy involved. People bring their heart to it.”

Residents polish a classic car in the garden of Angels of Bellevue. Courtesy Angels Living

more on senior living research and education at WSU;
business.wsu.edu/departments/hospitality/senior-living-management

WASHINGTON STATE MAGAZINE SPRING 2018

27
In the embers of an ancient winter day, a Swedish scout scrambles up the hill of snow-covered boulders, hurrying over the slippery ground between them along a narrow path. His panting breath trails after him until he stumbles through the castle gate gasping, “Vandals on the riverbank! Bandits to the east!”

As the sun rises in 2018, that Iron Age hillfort is still standing. The Broborg (pronounced Brew-boy) castle, built around 450 C.E., remains surprisingly intact, one of the best preserved of the thousand or so defensive forts scattered throughout Europe. Located north of present-day Stockholm, Broborg provided protection as well as a means for collecting toll along what was once a major waterway. It was not always appreciated.

The heavy palisade slams shut behind him as men rush to position along a glinting rock wall. From 150 feet above the valley floor, they watch as silhouettes begin scaling the boulders below. With a signal, arrows and stones rain upon them, yet the marauders advance, dragging their weapons or clenching them in their teeth. One brawny group attacks the wall with a battering ram but the rampart holds firm. In the end, wounded and spent, the intruders slink back, covered boulders, hurrying over the slippery ground between them along a narrow path.

The ancient glass project, as it’s informally known, is composed of an international team of scientists from universities, national laboratories, the U.S. Department of Energy (DOE), the Smithsonian Institution, and more. Leading the effort to reverse engineer the exact methods and ingredients used to make Broborg glass is John McCloy, associate professor of mechanical and materials engineering at Washington State University. He also founded the WSU vitrification research program in 2013 and has a joint appointment with the Pacific Northwest National Laboratory (PNNL) in Richland.

McCloy is not your typical engineer, however. He also holds a master’s degree in cultural anthropology and professes a life-long love of ancient technologies. As he talks about the unique adventure of studying Broborg, you can see a hint of the gold prospector’s twinkle in his eyes.

At the molecular level, glass evokes a certain sense of alchemy. The translucent material is neither completely solid nor liquid but something in between. And, despite the way it sparkles in the light, glass is not composed of crystals but is instead an amorphous substance that can interact with a wide variety of atoms.

That flexibility allows scientists like McCloy to dabble with the ingredients when making glass. They can adjust the recipe to produce a glass specifically designed to trap nuclear waste particles. It’s good news for Hanford, where the waste storage tanks bubble with a thick yellow-brown sludge containing a witch’s broom of radionuclides such as uranium, plutonium, cesium, and technetium.

The muck is also packed with leftover production chemicals and corrosion products including aluminum, zinc, lead, and copper. Though isotopes like cobalt-60 have short half-lives and decay quickly, others, like plutonium-239, remain hot for ages.

The idea of using vitrification to contain this waste first arose during the 1950s with the advent of environmentalism and growing concern over the dangers of radiation. Scientists agreed the toxic materials should be stored in an impervious, solid form that would remain stable for thousands of years while the radioactivity safely dissipated.

The task of choosing that form fell to a U.S. scientific committee which evaluated a vast array of materials as possible candidates. According to their reports, the overwhelming choice was borosilicate glass—a substance that is sturdy, stable, and easy to produce.

Since then, glass has been successfully used for vitrification in the United Kingdom, Germany, France, Korea, India, China, Russia, Japan, and Switzerland. It is also in use at the West Valley Nuclear Facility in New York and the Savannah River Site in South Carolina.

But Hanford presents the biggest challenge yet. Projected to cover 65 acres, Bechtel National, Inc., under contract with the DOE, is designing and constructing the world’s largest radioactive waste into glass logs that would last for centuries using a replica of the rugged Broborg glass.

It has spent billions of dollars mopping up residual radioactive and chemical wastes, 56 million gallons of which remain stored in rusty tanks. The task of choosing that form fell to a U.S. scientific committee which evaluated a vast array of materials as possible candidates, including a witch’s broom of radionuclides such as uranium, plutonium, cesium, and technetium.
very much in our society that lasts anymore. We don’t have that mindset."

Albert Kruger, chief glass scientist for the DOE at Hanford, joined McCloy on the expedition and agrees, “Never underestimate the intelligence of the ancients. The things these people figured out without modern analytical chemistry equipment were incredible.” It was Kruger who came up with the idea to study vitrified hillfort glass in 2013 while chatting with Swedish waste disposal researcher Rolf Sjöblom during an environment seminar in France. Kruger, engaging and heartfelt in his round glasses and flowered bowtie, leans across a table at PNLL explaining how the chance meeting further led to an introduction with Swedish geologist Peter Krösten. For 30 years, Krösten had collected samples from vitrified forts scattered across Europe and he kindly agreed to share a few from his personal museum.

The artifacts are now under the expert care of Carolyn Pearce who has been sitting quietly next to Kruger. Originally from England, Pearce is now a staff scientist in the geosciences group at PNLL and fellow member of the Broborg expedition. She gives a brief project overview and then escorts us to their laboratory where we don protective glasses.

With gloved hands, Pearce unlocks a small metal cabinet and draws out a box. “We store the artifacts in museum-grade specimen boxes with special paper,” she says. Carefully unwrapping a large, brick-like chunk of rock that appears to be glazed with white icing, Pearce explains that two kinds of glass formed at Broborg—clear and dark.

The clear glass, with its high sodium content, is very similar to that used to vitrify low activity nuclear waste or LAW. The dark glass is high in iron and analogous to material used for treating high level waste or HLW.

McCloy and Pearce analyze both types of glass to determine how it degrades through processes like weathering, corrosion, and the microbial action of amoeba, bacteria, and fungi. Their primary focus, however, is on the clear glass.

“By adopting highly abrasive tests, we can show that glass is a very durable material,” says Kruger. Typically, we grind glass into fine powders and put it through 200 degrees Celsius steam, or cut it into wafers and submerge them in water.

“By taking samples and running them through this rig, we can test their durability,” says Pearce. “The big advantage of this is that we can tease out the specific elements and processes needed to concoct a replica of the hardy Broborg glass. One autumn afternoon, he introduces a few of them as they work on various projects.

Kneeling beside a small, boxy furnace, doctoral candidate José Marcial is patiently melting a bit of ordinary glass. Dressed in blue coveralls, heavy red gloves, and a welding helmet, Marcial periodically peers into the furnace’s tiny window. When the temperature reaches 860 degrees Celsius, he opens the door and removes a crucible full of molten glass with a long pair of silver tongs.

Gently, he pours the liquid glass onto a metal plate to cool. McCloy says a similar process is used to melt amphiiboite, the glue that fused the granite Broborg fortresses together.

“The Swedes had to get to 1,200 degrees Celsius to melt amphibolite,” he says. “It was right at the edge of their iron-making technology. They would have needed bellows or drafting in furnaces to reach that temperature.”

In the lab, McCloy tries to replicate their actions by heating the amphibolite to different temperatures. At 750 degrees Celsius, for example, it develops a copperish sheen. By 1,000 degrees Celsius, the rock begins to transform and by 1,200 degrees Celsius, he says it appears glassy.

As the texture changes, so too, does the rock’s mineral composition. They track this metamorphism by identifying the mineral content of each sample at different stages of melting—noting crystals of quartz, feldspar, mica, olivine, and others. This is followed with a series of high-end tests that zero in on the sample’s chemical structure and physical properties.

The process is complicated by the fact that the rock’s mineral content also varies depending on where it was located at the Broborg site. Another wild card in determining how water played a role in the melting process.

Though it’s still too early for conclusions, McCloy says he’s starting to get a handle on the sequence of changes that occur as the minerals undergo extreme heating.

“We’re studying samples from five different sites and trying to find the boundaries—or edges—of what is normal,” he says.

McCloy has no shortage of helping hands—his students are keen to learn, grind, and test the samples in order to extract their secrets. They especially enjoy the “alchemy” of pouring glass. “They get to take part in what feels like a mystical experience—to see that phase transformation,” he says. “I can only imagine these people making hillforts must’ve had a similar experience. One moment, a rock is solid and the next, it’s liquid. It must’ve been incredible.”

McClory's chemical synthesis lab dominates most of third floor Dana Hall in the Voinol College of Engineering and Architecture. The old 1930s lab, with its low ceilings and traditional fixtures, is just one of the five laboratories he oversees throughout campus.

Here, with state-of-the-art equipment, McCloy’s graduate students tease out the specific elements and processes needed to concoct a replica of the hardy Broborg glass. One autumn afternoon, he introduces a few of them as they work on various projects.
“It felt like the site is still alive with memories,” he recalls. “Some days were cold and rainy, and it would've been hard to carry boulders. Other days were sunny and nice. ‘There’s so much life on the hill—you can almost see them digging the rocks and building the hillfort.’”

While McCloy was busy sifting through prehistoric rubble with Kruger and Pearce, Hanford installed two new mothers in the Vit Plant’s Low Activity Waste Facility, where giant machines will eventually convert nuclear waste into 4-by-8-foot glass logs.

According to DOE, the facility will begin treatments as soon as 2022, and is scheduled to be fully operational for both LAW and HLW by 2036. The bulk of Hanford’s radioactive waste is LAW and HLW by 2036. The bulk of Hanford’s radioactive waste is LAW and is slated for burial onsite. The HLW will eventually be shipped to the national nuclear waste repository.

Meanwhile, work will continue on the ancient glass project. Kruger says that within five years, they should have enough data to “support the use of the accelerated aging test with a high degree of confidence.”

The reverse engineering project is likewise moving toward completion. The beauty of all this effort is that reconstructed Broborg glass can almost see them lugging the rocks and building the hillfort.”

McCloy’s work with ancient glass is but one example of the robust and rapidly-growing partnership between WSU and PNNL. Other faculty members have joint appointments focused on bioenergy, protecting the power grid, and nuclear research, such as the acclaimed nuclear chemistry program led by Regent Distinguished Professor of Chemistry Sean Clark and chemistry professor Aurora Clark. The WSU-PNNL collaboration benefits students, faculty, federal scientists, and ultimately, Washington state citizens and economy. —Editor
Six years before Hudson was born, construction of the Garrison Dam submerged 550,000 acres of Hidatsa, Mandan, and Arikara (the Three Affiliated Tribes) land, resulting in Lake Sakakawea and forcing hundreds of families to flee, including Hudson’s. The tragedy only inspired his parents to triumph over it.

He carried the Hidatsa values of community, charity, education, and the environment with him to WSU. In its Native group, Ku-Au-Mah (“cougar” in Nez Perce), “I immediately found a supportive network of Native people from all over the Columbia Plateau,” says Hudson, who first double-majoried in forestry and environmental science. He was headed toward a professional path many of his relatives had taken, in Indian law, education, health, and the environment.

A talk by visiting Makah filmmaker and poet Sandra Sunrising Osawa “opened my eyes to the passion for the salmon issue in the Northwest,” he says. “The best way I saw to make change was through journalism and filmmaking.”

With his bachelor’s degree in communication, Hudson worked at Seattle’s now-defunct Alpha Cine Labs on post-production for everything from experimental films to Hollywood blockbusters. Fifteen years in, married and raising three sons, he was working on Kevin Costner’s The Postman when he “became disillusioned with Hollywood’s self-indulgence and excess,” he says. “To make real change, I knew I needed to make a major course correction in my life.”

A good start was the University of Washington’s yearlong certificate program in philanthropy, delivering him to the culture...
null
What a time it was

BY REBECCA PHILLIPS

One by one, they share memories of curfews, 42-cent dinner dates at the CUB, the JFK assassination, and the birth of women’s lib. A few regale listeners with the infamous tale of the 1964 “Pot Push,” which had nothing to do with cannabis.

These are just a sample of the treats recorded at the recent Diamond and Golden Grads digital storytelling workshops, led by Washington State University English instructor and former assistant director of the Digital Technology and Culture program Rebecca Goodrich.

The workshops, held at the Lewis Alumni Center during the Diamond and Golden reunions, are available to visiting 50- and 60-year graduates who would like to contribute oral histories of their time at WSU. The stories will eventually be archived by Manuscripts, Archives, and Special Collections in the Terrell Library.

Goodrich matches alumni with students who conduct the interviews. She says the project is a win-win-win.

“The grads really enjoyed it and some brought newspaper clippings to share with the students. The old yearbooks were out and it was a great social event. “It was wonderful for the students too,” she says. “They were so interested in what the alumni were telling them. They asked great questions and later I heard them telling each other about the stories they heard. It was the perfect activity to get generations talking.”

Jonathan Wallis, a senior in neuroscience, took part in last April’s workshop and says he would gladly do it again.

“I heard stories I wouldn’t have known about, like the football stadium bleachers being burned down by an arsonist.”

Wallis says it also made him appreciate the aspect of time and how the alumni had contributed to society in many important ways, which all began at WSU.

“there was a civil engineer who worked many years in the field and had fond memories of a particular professor,” he says. Fifty years later, “he was still grateful to that professor—it was eye opening.”

ALUMNI profiles

Listen to the stories of these Cougs and others: magazine.wsu.edu/audio

Give the Gift of Membership.

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 WSUAA Life 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 over the phone at 1-800-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.

Members Make the Difference.
Losing Eden: An Environmental History of the American West

SARA DANT '91 MA, '00 PHD
WILEY 2017

The 1803 World’s Columbian Exposition welcomed millions of people to Chicago to celebrate the rise of industrial America, the 400th anniversary of Columbus’ arrival on the continent, and the romanticization of the “frontier” West. Historian Frederick Jackson Turner presented his thesis that the western advance into a wild and savage frontier defined the American spirit, and the idea took hold in the national imagination.

Historian Sara Dant pulls the curtain away from the lauded tales of the conquering American West in this book about the interaction between people and nature over time. Her goal is to establish “the ‘inner city’ that is a source of social problems” and how the “ghetto’s” continues to be viewed as the Achilles heel in American society, the repository of bad values and economic failure” as well as “the source of a vibrant culture of resistance.”

At home with Ernie Pyle

A glimpse into the life and times of American journalist and Indiana favorite son Ernie Pyle, as seen through an extensive collection of Pyle’s folky newspaper columns stretching from his student days in 1921 until his death by sniper fire during the Battle of Okinawa in 1945.

The homespun Hoosier, as Pyle was known, grew up in small-town Dana, Indiana, where his local high school as a place for his syndicated column that eventually ran in more than 300 weekly newspapers.

Pyle seemed to attract Hoosiers everywhere he traveled and delighted in telling their stories. As a war correspondent in World War II, he provided welcome updates for the families of military members.

“Readers treated his column like loved ones letters from overseas, telling what it was like to be in the war,” writes Johnson, who also wrote the book’s introduction.

Pyle’s simple yet poignant accounts of those “dogface” soldiers earned him the Pulitzer Prize in 1944. A sample of his humor and humanity:

January 25, 1944

IN I’LL SCI (by wireless)—The several Air Force operations officer of his squadron.

For Dant, it’s about the ability to achieve sustainability by creating environmental stability and ecological health within the framework of economic development. But that has to be achieved on a clear-eyed look at the real history of a region that’s been shaped and adapted over thousands of years.

Losing Eden isn’t about loss of paradise. It’s about losing theadel of an Edenic West.

—Larry Clark

Hip Hop Ain’t Dead: It’s Livin’ in the White House

SANDFORD RICHMOND ’11 PHD
MILL CITY PRESS 2016

Playing White: Privilege and Power Off and On the Field

DAVID J. LEONARD
UNIVERSITY OF WASHINGTON PRESS 2017

During his undergraduate years at the University of Southern California, writes Sanford Richmond in Hip Hop Ain’t Dead, “I began to realize that the world I had experienced as a child was not merely a sequence of unfortunate coincidences, but a systematic exclusion of an entire population.”

Richmond’s experiences include the murder of a Black junior high school classmate, Latahia Harlin, by a Korean grocer, and the city-burning riots in the wake of the Rodney King verdict. The Harlins murder led to one of Richmond’s favorite songs, Ice Cube’s documentary-like “Death Certificate.”

Hip hop’s ability to kick against the traces that bind Black American culture to what Washington State University professor David Leonard calls, in Playing While White, describes “the construction of blackness as criminal.”

“The politics,” Leonard writes, “surrounding blackness, its scaring, and the efforts to source problems to the black community not only replicate longstanding cultural projects that locate broader social and cultural problems through black bodies in general, and hip-hop specifically, but also exonerate whiteness and America as a whole.”

Leonard cites historian Robin D.G. Kelley, who writes about the perception that it is the “inner city” that is a source of “social problems” and how the “ghetto’s” continues to be viewed as the Achilles heel in American society, the repository of bad values and economic failure” as well as “the source of a vibrant culture of resistance.”

Instead of acknowledging the ingrained racism of American society, then, pundits of all colors prefer to locate the problems in the black family, the places black people live and grow up, or the way they play music and sports.

Black celebrities and critics excoriated hip-hop as a source of negative influence on black culture, even as more stereotypically white music got a pass. Bill Cosby, Stanley Consh, Don Imus, Geraldine Alessi all publicly asserted that hip-hop was part of the problem, thus scapegoating the music in the face of overwhelming evidence to the contrary. Perhaps the most virulent form of racism is a systemic issue rather than one of self-representation.

Like brown-skinned Muslims women who wear burkas or men who wear khullafas, turbans, or beards, are considered suspect, hip-hop culture made the hoodie notorious. As Richmond writes, when black congressmen Bobby Rush gave a speech decrying racial profiling on the floor of the House, he was forcibly removed. Why? “He was wearing a hoodie. Rush survived that altercation, unlike Trayvon Martin, who was murdered because he was a black man wearing a hoodie.

But emerging fashions often come with changes in fashion. The adoption of beads and paisley prints came along with the Grateful Dead and Jefferson Airplane. The dawning of sports jerseys and hoodies corresponds precisely with the rise in popularity of the NFL, the NBA, and hip hop culture.

Musicologically and historically, hip-hop is a new folk music, born of African blues and black American jazz. Hip hop builds on jazz in part of the white European idea of originality and structure. The European classical tradition praises what has never been heard before, whereas jazz, as Leonard points out, favors a perspicacious consideration that adds a unique voice to an ongoing project of collaboration.

This new folk music is a living poetry that documents the plight of groups of people oppressed by a racist majority culture, written in music documents—and also protests loudly. As one critic put it in a review of N.W.A.’s Straight Outta Compton, “evertumed transcultural machine like a police car.”

As we speak a doctrine of equality, our language betrays us. Reading I lost my, you think it was the sportswriters, not the football and soccer players, who had the conclusive brain injuries.

It’s the banality of racism that is so appalling and frustrating to Leonard. Systemic racism is taken for granted, underexamined, and explained away. Sportscasters and sportswriters, no matter the color of their skin, consistently criticize black players for exactly the same behavior as their white colleagues, who get a pass. In example after example, Leonard examines the language of sports, especially when it comes to wrestling. Whether a wrestler is white or black, telling is his consideration of the reception of Johnny “Footbaho” Manziel, “the once famed college football player turned mediocre NFL star . . . who always had like to talk trash.”

Even as sportswriters damned black players for talking trash, Manziel was praised as a smart leader and a cunning competitor. As Leonard points out, trash talking in competitive situations is nothing new, so why are blacks and whites judged differently? “Just shut up and play,” the critics say to “Richard Sherman, LeBron James, Neymar da Silva, Yasiel Puig, Serena Williams and even [Muhammad] Ali,” while players like “Johnny Talbert and Mark Aguirre” get away with it. “PlayWhileWhite.” When Rob Gronkowski or Tom Brady “dance, taunt opponents, and talk trash” they aren’t showing “disrespect” but rather displaying their “passion.”
of the old Pullman Building Supply. Skilparp, a technical academy offering the most in-demand skills training to underrepresented populations in the high-tech sector, added ERICA PRICE ('99 MBA) as its business development manager. She spent over a decade working in product and program management for Microsoft, Symantec, and Intel. Erica recently completed Reboot Seattle, the career accelerator focused on women returning from a career break. JEFF SNELL ('99 MEO, '12 EDJD) regularly runs marathons to raise money for various charities with his son, Nash. Jeff started Mica’s Miles in 2012, an organization that raises money to support children with cerebral palsy. He’s currently superintendent of the Cams Community School District.

The Vidette newspaper of Montesano, Washington, recently welcomed TODD BENNINGTON ('01 Wspm, '10 English) as its newest reporter. In addition to four years of journalism experience, Todd served four years in the U.S. Army as a paratrooper and intelligence analyst. Tamarack’s BLM Architects named JONAH JENSEN ('09 Arch) its new associate principal. He has served as a designer, architect, and project manager since beginning at the firm in 2006. During this time, Jonah has worked on a number of K-12 school projects, including the expansion and modernization of Seattle’s historic Loyd Heights Elementary, as well as the rehabilitation and expansion of Washington Elementary in Tacoma. ITS Logistics announced JIM DINGMAN ('03 MBA) as the firm’s new president of fleet operations. A veteran of the trucking and distribution field, Jim has acquired over 25 years of management and sales experience with a range of companies and served in the U.S. Marine Corps for six years as a diesel mechanic. Mercer Wine Estates of Prosser recently chose JEREMY SANTO ('09 Biz) to take over as its head winemaker. He boasts years of industry experience, creating award-winning wines for Washington estates such as Chateau Ste. Michelle and Wahluke Vineyard Company.

In his senior year of high school in Seattle, Siyam says he’s calmed and understood why he “went through a pretty traumatic experience where my friend shot this dude. I witnessed the whole thing. It was a significant emotional event in my life. It precipitated a lot of important questioning of my own direction.” Suddenly, he says, he needed to go to college, he needed to be an entrepreneur, he needed to make a difference in communities where safety is at a premium and need is rampant.

Siyam says that Multicultural Student Services was critical in recruiting him and facilitating his transfer from Seattle Central Community College to Pullman and Washington State University. At WSU, the Filipino American was an activist and mentor for other underrepresented minorities. He misses the Palouse but he might soon have reason to visit. “My stepson Derek is applying to universities,” he says. “I’m hoping he chooses WSU.”

BY BRIAN CHARLES CLARK
What is the definition of the Coug family? We have fun too. Many parents meet for care packages with volunteers all over the world that are willing to help our Cougs. If you are stranded, broke down, or in accidents, we created a list of 200-plus things delivered to your Coug, chances are there is another member who isn’t a Cougar what it’s like. There’s something that happens at Washington State; you quietly and subtly become infected so that we can get to know each other and care more about each other.

We have also cried or grieved together when one of our Cougs has been hurt or killed. We send cards to families dealing with loss, and started a drive for a memorial bench with paving stones to honor additional fallen Cougs.

WSU is truly an amazing community. We have fun too. Many parents meet for care packages and many others. I tell new members, those questions that wake them in the middle of the night? We have also had them and we have answers. There really isn’t any question you can come up with, that we can’t answer.

We tell stories of our Cougs and many others. I tell new members, those questions that wake us in the middle of the night? We have also had them and we have answers. There really isn’t any question you can come up with, that we can’t answer.

Check us out: facebook.com/groups/351823357670043.

There are special people in our lives who never leave us, even after they are gone. A celebration of life to honor Professor Emeritus Keith Campbell will take place in April 2018 in Spokane, Wash. For details, please visit the RememberingKeithFacebookPage at bit.ly/rememberingKeith or call the College of Pharmacy at 509-368-6675.


PEARSON IN memoriam

You can also post full obituaries and remembrances on the online class notes: please visit www.wsu.edu/WSUAA.

You will also find a link in the member newsletter to place visit magazine.wsu.edu/contact. You can also post full obituaries and remembrances on the online class notes: magazine.wsu.edu/MyStory.


The perfect gift for every Coug

When you choose a gift for a special person in your life, you want to pick just the right one. A gift that will delight when it’s opened and make an impact for years to come.

Recently, we received a postcard from a 1947 graduate whose father gave her a WSU Alumni Association Life Membership for graduation over 70 years ago. She told us that she thinks of her dad every time she receives something from the WSUAA. There aren’t many gifts that can prompt that kind of gratitude nearly three-quarters of a century later.

Many of our members choose this gift for the Coug (or Cougs) in their lives. Mike Polites ’79, a Platinum Life Member and devoted Coug, wanted to provide a meaningful graduation gift to his oldest son, Spencer ’10. Mike recalls, “When we presented him with his Life Membership in the Alumni Association, he was ecstatic. Spence loved it.”

Steve Huhta ’73 saw a similar opportunity when trying to pick the perfect birthday present for his son, Karl ’09. Because Karl’s birthday falls during the holiday season, the gift needed to stand out. In addition, since Karl works for WSU Athletics, Steve wanted the gift to radiate Cougar Spirit. As a Platinum Life Member himself, Steve decided to give his son his own Platinum Life Membership. Now their names are both engraved on the Platinum Life Member Wall of Honor in the Lewis Alumni Centre in Pullman.

Whether it’s a graduation, birthday, or holiday gift, we hear so many stories of how much the gift of membership means to Cougs. Kristin Vog ’89 received annual gift memberships from her father, Wally, for years. “When I graduated, I told him I wanted to stay connected to WSU.” Kristin said her dad saw a WSUAA ad in Washington State Magazine (true story) and decided membership would be a great way to help his daughter stay in touch with the University. “That year, and every year after, my annual membership card showed up in the mail. It was just something he did for me. The year, I decided to become a Life Member, but I’m so thankful for my father’s gift of helping me stay close to my alma mater.”

If you would like to give the gift of membership for any occasion, please let us know. We will be glad to help you make someone’s day, year, or life. Call us at 1-800-ALUM-WSU or purchase online at alumni.wsu.edu/gift.

March 28, 2018

On Washington State University’s 128th birthday, the Cougar family will come together again to show what makes WSU special. Join us in building a strong future for the next generation of Cougs.

On March 28, 2018, help us show how #CougGive.
Dear Darae,

Hair comes in lots of different colors. There’s black, medium brown, auburn, light brown, strawberry blonde, and copper, to name just a few. But in the end, almost everyone will have hair that’s gray or white.

Ever since you were born, different cells have been working on your hair. Each hair sprouts from a follicle, a sort of little hair-making factory under your skin. Here, some of your cells are making your hair and others are coloring it.

The cells that color your hair are called melanocytes. They produce a pigment, or natural coloring matter, called melanin. This is the same pigment that gives your eyes and skin their color, too.

I decided to visit my friend Cynthia Cooper, a biologist and researcher at Washington State University, for help answering your question.

Cooper and the other scientists in her WSU Vancouver lab are really curious about cells. They are investigating questions about how some cells end up becoming the kind that produce skin pigment.

As people get older, she said, the pigment-producing cells in their hair follicles gradually die. They can no longer make enough pigment to keep coloring their hair.

If we took out all the pigment from your hair, it would be totally white. So when melanocytes stop producing melanin altogether, your hair turns white.

“Why hair follicle melanocytes die over time, and are not replaced, we don’t entirely know,” Cooper says. “Our skin doesn’t turn gray, so the biology is quite different.”

While Cooper works on pigment in skin, she says some scientists are also working on the pigment in hair. These scientists are especially curious about the inner workings of the cells and how gray hair is part of people’s DNA.

Perhaps, you’ve heard someone say their kids are giving them gray hair. But scientifically, if anyone is giving someone gray hair, it’s likely their own parents. Those that come before us pass down their hair color to us through our genes. It’s the same with graying hair.

Scientists have even pinpointed specific genes and parts of cells that are involved in growing gray hair. The new knowledge is helping us put together a better picture of how pigment works. Still, there’s a lot more to discover.

Maybe as you get older and find that first gray hair, you’ll remember some of the science that’s at the root of it all. If you have a cat or dog, maybe you’ll notice that they’ll go gray around their muzzles, too.

I’ve actually had gray and white hair ever since I was a kitten. I think it’s pretty great. Our pigment, or lack of it, help make us all unique.

Sincerely,

DR. UNIVERSE

“I have not failed. I’ve just found 10,000 ways that won’t work.”

–Thomas Edison

Are you 70½? A gift to the Washington State University Foundation directly from your IRA is a tax-smart way to support your favorite WSU program and is excludable from your gross income (a TAX-FREE gift!).

Of course, everyone is unique. We are happy to chat about any additional tax benefits or criteria that might apply to your situation.

Call the WSU Foundation Gift Planning Office at 800-448-2978 or visit foundation.wsu.edu/giftplanning to create your legacy today.

WASHINGTON STATE MAGAZINE SPRING 2018
WHAT'S ONLINE  ❯ SPRING 2018

magazine.wsu.edu

WEB EXTRAS
Smart tech in senior living communities, fake news fact-checking, new WSU art museum, Coug oral histories

VIDEOS
Ancient Scandinavian warriors in glass forts

PHOTO GALLERIES
Big cats and other wildlife in Central American rain forests

PINTEREST
Gift guides for Cougs, art, and WSU-themed pins on our WSM boards

INSTAGRAM
Photographs from WSU campuses and around the state

Facebook
Like the WSM page on Facebook for extra content

Twitter
Follow us on Twitter for frequent updates

eLetter
Subscribe to WSM's monthly email newsletter

eMAG VERSIONS
Read the magazine as you like it, on your tablet, phone, computer, or e-reader

myStory
Post your class note and browse news from fellow Cougs

VIDEOS
Ancient Scandinavian warriors in glass forts

PHOTO GALLERIES
Big cats and other wildlife in Central American rain forests

PINTEREST
Gift guides for Cougs, art, and WSU-themed pins on our WSM boards

INSTAGRAM
Photographs from WSU campuses and around the state

Facebook
Like the WSM page on Facebook for extra content

Twitter
Follow us on Twitter for frequent updates

eLetter
Subscribe to WSM's monthly email newsletter

eMAG VERSIONS
Read the magazine as you like it, on your tablet, phone, computer, or e-reader

myStory
Post your class note and browse news from fellow Cougs