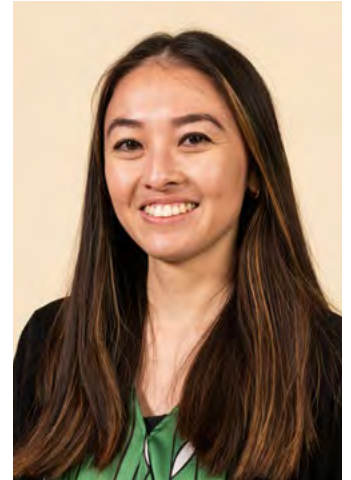


Willamette.

WINTER 2023

THE MAGAZINE OF WILLAMETTE UNIVERSITY

New!



We're all growing older, all the time. How to embrace the journey—and lead a fuller life

**Aging,
Well**

A MOMENT

9:35 p.m.,
August 26,
2022

Here We Begin

New students and alumni from the College of Arts and Sciences and the Pacific Northwest College of Art joined together along the banks of the Mill Stream in Salem for this year's matriculation ceremonies. During the penultimate moment, the passing of the light from alum to student symbolized a welcoming into the Willamette family. Students placed candles in the stream and then set forth on their own journeys, the glow on the water lighting their way.



PHOTOGRAPH COURTESY OF TUFTON BEAMISH

Driven.

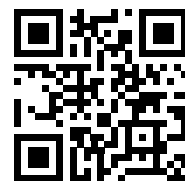
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Willamette students helped spark a huge shift in legal education, one that aims to benefit not only lawyers but anyone who'll ever need one—in other words, you.

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It's dark. It's cold. It's remote. But, oh, the possibilities: they're as big as the ocean itself.

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This short story, by Professor Scott Nadelson, is about a father and daughter who live in a cabin in the Cascade foothills. It's from his novel-in-progress.



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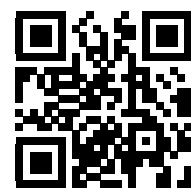
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Just Our Type

in

ANY MAGAZINE, the fonts do a lot of work. Good typefaces have visual appeal and readability. But equally important are the stories they tell. For this redesign, we wanted the fonts to express something about the University's present and future. The serif font you're reading now is Frame Text, inspired by Caslon, a classic text typeface optimized for legibility. The font that's most prominent (including on the cover and at right) is a sans serif called Walsheim. Inspired by the 1930s lettering of Swiss poster designer Otto Baumberger, Walsheim is youthful, bold, modern, and grounded in tradition. Plus, it has swagger. Speaking of swagger, the new cover logo ends in a period. *Willamette.* It's a full sentence, confident and definitive, like the University itself.

CONTRIBUTORS



Celeste Noche
Photographer,
"Treasure Maps," p. 14

Noche is a documentary and editorial photographer based in Portland and San Francisco. She visited a PNCA lab in Portland to photograph a unique project: an effort to create limited-edition prints of maps drawn by the writer Ursula K. Le Guin. "I adore Le Guin," Noche says, "so getting this assignment was really special. It's cool that students get to work on something so rare and unknown from a literary great." Noche describes her photography as being rooted in narrative. She works to explore themes of identity and access across cultures.



Evie Lane
Photographer, "How
to Age Well," p. 26

"I was interested in this assignment because I, like so many, have reservations about getting older," says Lane. For this cover story, about the work of gerontologist Jennifer Sasser

BS'89, Lane held three marathon photo shoots—one in Salem, two in Portland—with Willamette community members who range in age from three to eighty. "It was a joyful experience to meet everyone who stepped in front of my camera," Lane says, "a perfect reminder of how much I love what I do, and how over time I have accumulated the knowledge and talent to execute assignments like this—which is probably my favorite part of getting old."



Chris Ketchum BA'15
Writer, "Imagine the
Future of Work," p. 11

Ketchum's article is for our Idea Lab section. In each issue, this section will explore a big topic from multiple angles. "My favorite part of writing about the future of work and the gig economy was interviewing Willamette faculty and staff I'd only known through others who had taken their classes," says Ketchum. "My interviews with Abigail Susik, Raechelle Mascarenhas, and Mandy Devereux were micro-seminars. It was a homecoming to the formative education I experienced as a Willamette student."

Willamette.

THE MAGAZINE OF
WILLAMETTE UNIVERSITY

WINTER 2023
VOLUME 1, ISSUE 1

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Send address and name corrections to alumni@willamette.edu.
Send comments and letters to the editor to magazine@willamette.edu.

WELCOME BACK

This is not your typical alumni magazine.

When we decided to pause this publication for a redesign, our goal was to dispense with the usual fare and return to your mailboxes with something entirely different: a print periodical as original, modern, and surprising as the University itself. We set out to tell stories about the big issues that matter most to all of us today, with Willamette people as the main characters. You hold in your hands the result of that effort. Inside, you'll find an interview with one of the most important politicians of our time. You'll find stories that explore siblinghood, aging, and the deepest ocean through new lenses. You'll also find diversions both literary (short fiction) and witty (a crossword). We made this magazine—and a companion website, which has class notes and additional stories—for you. Please tell us what you think.



TYLER L. REICH BA'06
Executive Director,
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What is the most important book ever written?

The Ishango Bone

At the risk of adopting an overly abstract definition of a book and deviating from my narrow realm of expertise, I contend that the most important book is a bone—namely, the Ishango bone. Roughly 20,000 years ago, in what is now the Democratic Republic of the Congo, someone scratched small line segments onto the sides of a mammalian bone, topped the bone with a piece of rock, and (upon the bone's unearthing in the mid-twentieth century) unknowingly sparked a debate about whether patterns in the bone's etchings constituted an astronomical calendar, a numeric system cognizant of prime numbers, or a straightforward tally of some long-forgotten events. Whatever its original purpose, the Ishango bone symbolizes humanity's penchant to systematize knowledge, and the debate surrounding it epitomizes our perpetual reflection on humanity's capacity to understand. It shows that all people, across time and regions, are unified by a shared heritage of learning. It's an important book, which just happens to be written on bone.

—Tim Johnson, *Grace and Elmer Goudy Professor of Public Management and Policy Analysis; Director, Center for Governance and Public Policy Research*

Origins of Totalitarianism

What counts as “most important” is relative—a matter of historical context, timing, and the way ideas ripple and resonate over time. Copernicus's *De revolutionibus orbium coelestium*, for instance, was arguably the most important book published in 1543, as it replaced an Earth-centered cosmos with a sun-centered solar system, thus suggesting a radically new place for humans in the universe. But the idea had been around for a long time (textually, as early as the fourth century BCE), and it didn't fully convince many people until Galileo's telescope (1610) and Newton's law of gravity (1687) provided additional proof. Hannah Arendt's *The Origins of Totalitarianism* (1951) may not be the most important book ever, but it is (unfortunately) proving enduringly relevant, and it is one of the more compelling books now for its systemic analysis of how societies provide the breeding ground for not just Nazism and Stalinism, but also autocratic political ideologies. If Copernicus's map was revolutionary in removing humans from the center of the universe, Arendt's book is prescient in mapping how modern liberal societies create the conditions of “radical and desperate” loneliness and unbelonging, which, she argues, fuel surges in the kinds of tribalism, militarism, and misinformation we see flourishing at home and abroad today.

—Wendy Petersen-Boring BA'89, *Associate Professor of History*

Isaac Newton's *Philosophiae Naturalis Principia Mathematica* (published in 1687, with revised editions in 1713 and 1726) lays the foundation of what we now call classical mechanics, allowing us to calculate planetary orbits, compare them to observations, and make predictions, which is a fundamental part of science. Even more so, Newton showed that the laws of physics that are valid on Earth are also valid in outer space, which is not necessarily obvious (but is a very fundamental idea that allows us to understand the universe).

—Michaela Kleinert, *Professor of Physics*

A Digital Library

The Library of Congress is now essentially one very large book that can be searched cover to cover. Since its database comprises the most comprehensive collection of books in history, you could make the case for its being not only the most important book ever written but the most important book that ever *will* be written; it will grow and include all, like a giant amoeba engulfing every text and narrative it encounters. The only thing that could stop it is some apocalyptic narrative (and there are many, of course) in which all the lights of humanity go out. Even then, surely someone near the end will plug a thumb drive into the USB port, download everything and pack it in lead for the future to discover.

—Michael Strelow, *Professor Emeritus of English*

The Laches

This is a loaded question, no doubt, so I will choose the book that is most important for *me*, because it fundamentally changed the way I think about how I live and how I work and what (if anything) I can know. For me, for the purposes here, I nominate *The Laches* (380 BCE), by Plato. A rather short Socratic dialogue, actually, a mere twenty-three folio pages, and a mostly overlooked work.

—Joe Bowersox, *Professor and Dempsey Endowed Chair in Environmental Policy and Politics*

Read more answers at
willamette.edu/magazine



Invisible Man

Invisible Man (1952), by Ralph Ellison. It is often cited as the greatest American novel, in large part because it plays upon the sensibility of that other great American novel, *Huckleberry Finn*. Still, *Invisible Man* is a classic in its own right as our unnamed narrator moves from the South to the North in the early decades of the twentieth century, trying to suppress his Southern upbringing and values in order to be an “important” Northern social and community activist. His failure presages a point Ellison would make in subsequent essays and speeches, that Black American culture is American culture and that one day there would be no apparent difference between the two. The rise and triumph of Black music—from jazz and early rhythm and blues to dance music and hip hop culture—as an international phenomenon confirms that Ellison was only partially right: Black music is synonymous today with world music.

—Tyronne Williams, PNCA Creative Writing Faculty

Two Lost Texts

The book I consider most important is not an existing tome, but rather one that is missing. If the whole is the sum of its parts, we can agree Euripides’ 415 BCE *The Trojan Women* is a masterful and timely antiwar play which feels complete in its dramatic structure. What is missing, though, are the two other plays in the trilogy, *Alexandros* and *Palamedes*. The story is incomplete without the other two works, because those works provide context and shifting perspectives with which we can view the stories of Hecuba, Priam, Paris, Helen, the Greeks, the Trojans, and ultimately ourselves in relation to war, war crimes, and the conflicts between the state and the individual. I yearn for these missing texts because I wonder if they can provide a glimmer of hope or a flash of understanding that might help us navigate this dangerous and fragmented moment in our own history.

—Andrea Stolzowicz, Playwright and Senior Lecturer in English

Our Bodies, Ourselves

Our Bodies, Ourselves was a paradigm-shifting health manual created by feminist activists in 1969. It began as a mimeographed, stapled pamphlet passed between readers at a time when accurate information about women’s bodies was scarce or withheld. Since then, OBOS has been revised nine times in the United States, with more than thirty translations and global adaptations, and a brand new edition for transgender communities. Intended to empower readers with practical information and advice on communicating with doctors, the book radicalized the “self-help” genre with an emphasis on collective knowledge-building. Its first-person accounts and revisions based on readers’ input anticipated the internet as a site of crowd-sourced and evidence-based health information and advocacy. It opens a window onto fifty years of feminism and contested ideas about bodies, difference, experience, and authority.

—Leslie Dunlap, *Continuing Professor of History*

Keynes’ Theory

The General Theory of Employment, Interest, and Money, by John Maynard Keynes, revolutionized economic thinking. In 1936, this book unveiled the nature of capitalism as a monetary production system; exposed three fundamental flaws of capitalism—unemployment, instability, and arbitrary distribution; and proposed measures to salvage but nonetheless transform capitalism. Its ideas provided the intellectual foundation for FDR’s New Deal and for many other modern capitalist institutions. Today, *The General Theory* continues to exert tremendous influence. As Keynes famously writes, “The ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood. Indeed, the world is ruled by little else. Practical men, who believe themselves to be quite exempt from any intellectual influences, are usually the slaves of some defunct economist.” What book is more important than the one that emancipates us from “defunct” economists? —Yan Liang, Peter C. and Bonnie S. Kremer Endowed Chair of Economics



NEXT QUESTION:

Which twentieth century invention has been the most consequential?

Send your response to magazine@willamette.edu.

Driven.

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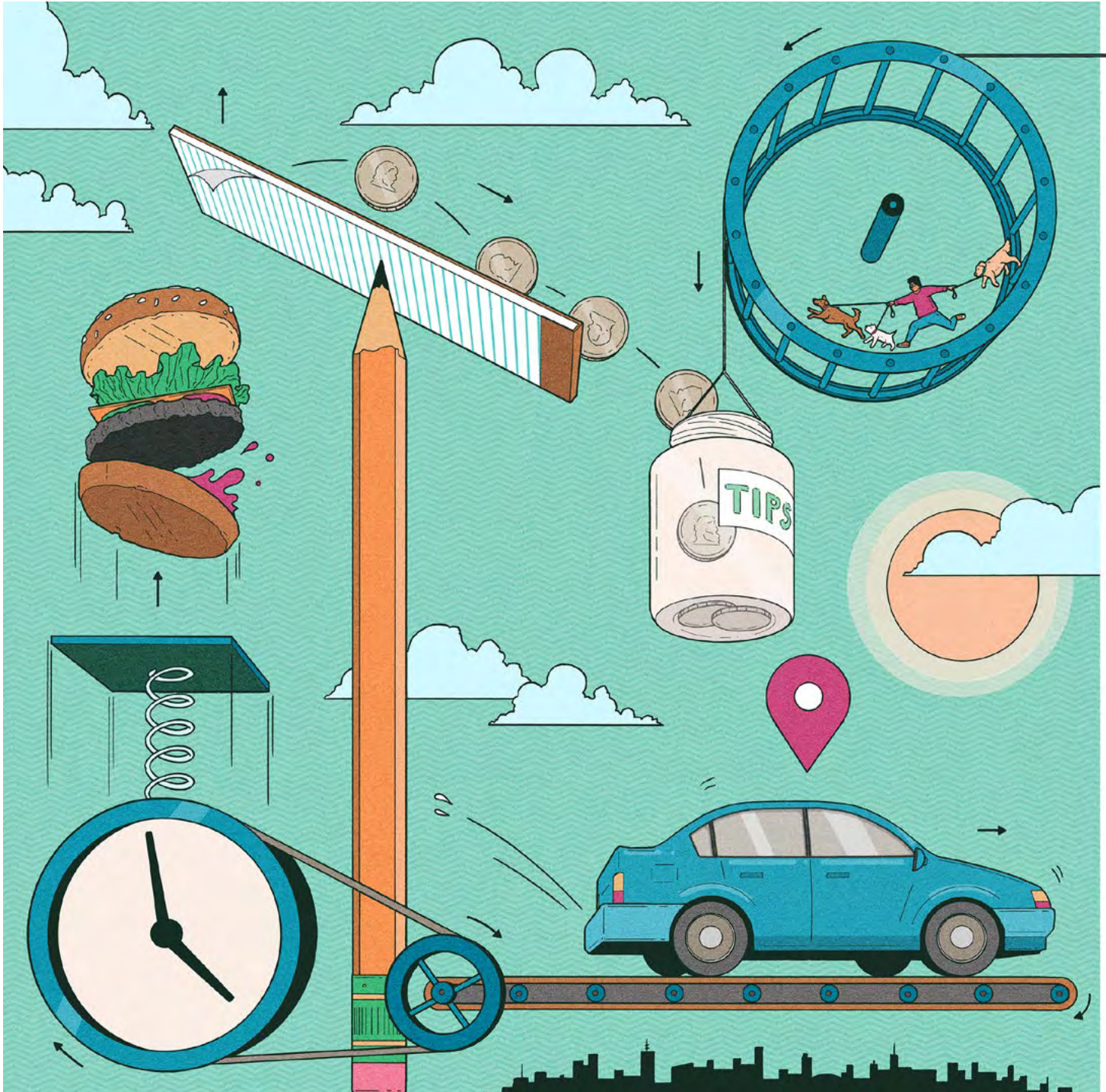
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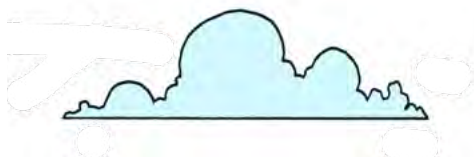
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Imagine the Future of Work

The economies of France in 1919 and the U.S. in 2022 are quite different from each other. But the path to better working conditions may be the same.





in

AUGUST 2021, I began working for an education tech company that provides prospective college students with editorial feedback on their college admissions essays. I had recently finished a master of fine arts in poetry and was seeking the kind of work I'd imagined was most suitable for a practicing artist—flexible, remote, seasonal. Hired as a part-time employee, I was assigned four hours and seven minutes of work per day that October, the equivalent of five to six reviews. On the surface, this workload appeared manageable; I could write in the morning, review essays in the afternoon, and still make it to my evening job. But I quickly realized the difference between this kind of commission-based gig work and hourly-wage labor: if I wasn't typing, I wasn't getting paid. Take a drink? The clock stops. Restroom break? The clock stops. Blink? Even by November, it took an average of six hours per day to complete my assigned work. I felt like an Industrial-era factory worker: if I paused to dab sweat from my forehead, a contraption on the assembly line would jam, snag, snarl.

Four and a half million people left their jobs in November 2021, according to the *Washington Post*—more resignations in a single month than the U.S. had ever recorded. This period of frictional unemployment has been variously termed The Big Quit, The Great Reshuffle, and The Great Resignation, denoting the current, historic period in which the U.S. Bureau of Labor Statistics reports 11.4 million job openings and six million people unemployed—nearly two jobs for every unemployed individual. Amid rising inflation rates, nationwide calls for a \$15 minimum wage, and Andrew Yang's 2020 presidential campaign on a platform of universal basic income, the existing labor shortage has led journalists, economists, and academics to speculate about workers' leverage in the labor market.

Abigail Susik, associate professor of art history at Willamette and author of *Surrealist Sabotage and the War on Work* (Manchester University Press, 2021), draws



a parallel between today's labor shortage and France's labor deficits of the interwar period. In a recent *New York Times* op-ed she asks: "Could the Great Resignation Help Workers? Take a Look at History." In response to widespread deaths from World War I, the influenza pandemic of 1918–19, and a low birthrate that diminished France's workforce, she explains, Prime Minister Georges Clemenceau attempted to ameliorate the labor shortage by calling on women, youth, and immigrants to join the workforce. "This influx of workers allowed many employers to keep wages low despite the overall shortfall," Susik writes, "which in turn stoked worker resentment, leading to a period of wildcat and general strikes throughout France between 1917 and the immediate post-pandemic period." These protests culminated in legislation that established France's forty-hour workweek in 1919, long preceding the U.S.'s Fair Labor Standards Act of 1940, which offered similar protections.

Over the summer I asked Susik to tell me more. In our conversation, she described how French Surrealists of the 1920s extended their protest against industrialization by refusing full-time work, resorting to part-time and project-based labor to make ends meet. Instead of working at a Parisian textile factory, Surrealists took just enough "precarious work" to scrape by. But Susik sees few similarities between today's app-based gigs and part-time work in the 1920s: "Surrealists were not paying into a big company. They would get their cash and leave. The level of technological orchestration of gig labor today makes it so that you're just a tiny cog in a massive system."

a DECEMBER 2021 POLL by the Pew Research Center found that 16 percent of American adults had earned money from an online gig platform like Uber, Instacart, or Amazon Flex, and 9 percent were currently earning income via gig work. This reflects market value growth in the global gig economy from \$142 billion in 2018 to an estimated \$311.6 billion by 2023, as reported by the Tony Blair Institute. But who benefits from an expansion of the gig economy?

Raechelle Mascarenhas, associate professor of economics at Willamette, summarized a conversation with

16%

of American adults have earned money from an online gig platform like Uber, Instacart, or Amazon Flex.

Could today's
workers prefigure—
or demand—a model
of gig labor that
serves their interests
by offering fair pay,
reasonable work
hours, and options
for benefits?



students in her class “The Gig Economy and the Future of Work.” Gig work, she told me, “is presented as an alternative to traditional work. But I want students to understand that the standard employment relationship has come about from many years of workers bargaining for better conditions, asking for benefits, and getting things like health insurance in the U.S. tied to your employment. If you’re doing gig jobs, there might be more control over your schedule, but it comes at a cost. Gig employers don’t provide those kinds of benefits.” Gig workers have learned to expect little more than an hourly wage in return for unpredictable labor that often comes with hidden costs, such as wear on a personal vehicle.

Perhaps it’s because of the instability of gig work, and the unpredictability of its future, that Mascarenhas says her students don’t view gigs as offering a sustainable employment model. “I asked students, ‘How many of you would want to do gig work?’ Many said, ‘For the summer I would, but I wouldn’t want this to be my career path.’ There’s really no upward mobility.”

to GET A SENSE of how Willamette students are responding to shifts in the labor market, I spoke to Mandy Devereux, executive director of career initiatives at Willamette. Many students, she says, express interest in career fields that address social justice, climate change, community advocacy, and policy reform. Devereux says students “have a lot of healthy boundary-setting around work and want to mitigate getting involved in situations that led to The Great Resignation.” In the Pacific Northwest, growing opportunities in fields like education and public health have coincided with the development of a new public health major at Willamette, started just before the pandemic.



While students are attracted to the flexibility afforded by remote work, most of the undergraduates Devereux counsels are primarily purpose-driven, searching for careers that align with their personal values.

In our conversation about the Surrealists’ refusal of full-time work, Susik referred to the idea of prefigurative politics. The term describes practices that respond to the material realities of an expected or idealized future—for example, an individual who eschews fossil fuels in anticipation of a petroleum-free society. How, then, could today’s workers prefigure—or demand—a model of gig labor that serves their interests by offering fair pay, reasonable work hours, and options for benefits?

Susik lists a few conditions she imagines for a healthier economy, including regulations to reduce the cost of housing and to cap the workweek at forty hours while providing a livable wage. Mascarenhas suggests a model for portable benefits in part-time labor, in which separate employers contribute a fractional sum into a worker’s account to pay for health insurance, time off, and parental leave. While the economic environments of France in 1919 and the U.S. in 2022 differ vastly, the path to improved working conditions hasn’t changed: Gig workers have an opportunity to develop a collective vision of fair labor standards and, like the French Surrealists and Industrial Era workforce, establish a future for the app-based economy in which flexible work is a viable, humane alternative to full-time employment. ●

Chris Ketchum BA’15 is a poet and writer from Moscow, Idaho. He received an MFA from Vanderbilt University and is a current PhD candidate in creative writing at Georgia State University in Atlanta.

Treasure Maps

Author Ursula K. Le Guin drew striking visuals of her fictional worlds. A PNCA lab is making limited-edition prints of these rare, beloved works.

FIVE YEARS AFTER her death, Ursula K. Le Guin remains one of the most acclaimed writers of science fiction and fantasy, with a tally of twenty-three novels, numerous other works, and many prizes, including a 1973 National Book Award. She also drew maps of her fictional worlds. Willamette's Pacific Northwest College of Art, through its Watershed Center

for Fine Arts Publishing and Research, is collaborating with Le Guin's son and literary executor, Theo Downes-Le Guin, to create limited-edition lithographs of her maps of Earthsea, which is one of those worlds. "My mother always looked to her own community first when considering collaborations," says Downes-Le Guin. He envisioned this printing project as a way to offer alternatives to images sold online without permission. "More importantly," says Downes-Le Guin, "maps are very present in my mother's work. All of her writing starts with and is situated in specific, if imaginary, places. All her best-known books start with a map."

By EMILY GOLD BOUTILIER / Photographs by CELESTE NOCHE



1. “It’s a water-versus-oil interaction,” says Professor Matthew Letzelter, Watershed’s director, of the process he’s demonstrating here. “The water rejects the ink on the plate and the image rejects the water, which allows the ink to settle on the image area. Much like earlier stone lithography, photo plates allow us to print layers,” with each holding one color.

2. Watershed is the research and education arm of the PNCA print-making lab, staffed by students in the MFA in print media program, which Letzelter directs. Clients come from the Portland arts community, of which Downes-Le Guin is a champion.

3. This is a Mailander offset proofing press. “It allows us to drop layers of ink on a sheet of paper and control registration down to the slimmest of margins,” Letzelter says. It dates to the middle of the twentieth century.

4. The goal is to make prints that look as close to the original as possible. “We are digitally separating out each color in the drawing from a high-resolution image,” Letzelter says. “We are trying to avoid the usual CMYK process that leaves distinct color dots in lines that you would see in most commercial printed matter.”

5. Color-matching is one of many skills that “cannot be taught through a textbook or lectures. It’s an atelier experience,” Letzelter says. In the print lab, students also learn to think on their feet. Ink reacts differently each day, for example, depending on factors such as temperature and humidity.

6. A color image of Earthsea in the lab. “To have Theo come in and talk about his experience and how he saw these drawings done when he was a child was amazing,” Letzelter says. “It’s a connection to history.”



“Maps are very present in my mother’s work,” says Theo Downes-Le Guin. “All of her writing starts with and is situated in specific, if imaginary, places.”



isa

Page 16.

THE INTERVIEW

“You’ve got to be willing to stand in the middle,” says one of the most important leaders of our era, “at a time when you’re being dragged off to the extremes.”

By ERIKA BOLSTAD

murk owski



PHOTOGRAPH COURTESY OF LISA MURKOWSKI

For U.S. Sen. Lisa Murkowski JD'85 (R-Alaska), Willamette is a family affair: her mother, Nancy, was in the class of 1954, and son Nicolas Martell graduated in 2019 with a JD and an MBA. She has a brother and two sisters who are alumni, and her uncle was in the class of 1950. Murkowski was appointed to the Senate by her father, who resigned the seat to become governor of Alaska. She was elected to a full term in 2004, and then, after losing a Republican primary in 2010, held onto the seat with a hard-fought and rare write-in campaign. She was one of seven GOP senators in 2021 to vote to impeach then-President Donald Trump—and the only one who faced re-election in 2022. She won that race with 53.7 percent of the vote, following the state's ranked-choice tabulation. Murkowski spoke to the magazine on June 17 at Portland's Heathman Hotel.

You're a centrist in a party that has seen what were once fringe ideas become mainstream. How do you articulate your vision of the Republican Party right now, in this time of extreme polarization?

I think that both parties right now are struggling with the pull from the extremes. The Republican Party right now is trying to define who they are. I think it is very dangerous for any party to be defined as the party of an individual, and for us as Republicans right now to be the party of Trump is very limiting and I think will in the long term do great damage to our party. We're a party that has good, solid fundamentals. Whether you call yourself a Ronald Reagan Republican or choose not to align yourself with any individual, think about the things that defined us: Less government is better, financial responsibility, lower taxes, personal freedoms, a strong military. The fundamentals are still good and sound, but I think we're struggling right now as a party. And so where I fit in as a centrist is as one who hasn't strayed from those principles that I think once clearly defined the Republican Party. I think people have chosen to look beyond the principles, to align themselves with an individual. And I think that can have a dangerous outcome for the health of the party going forward.

What alarms you about what you saw in person on January 6, 2021, and what kind of threat do you see to democracy?

What alarms me is that some of us who were there, who saw it all, seem like they're shoving that shared reality of

what we went through into the recesses of their minds, to either forget about it or to create perhaps a different view and a different vision. It is what it is. It was an attack on our democracy. It was an effort by a president to hold on to power even after he had lost. And one of the things that was made clear through the hearings is that he knew he lost, and those around him knew he lost. And he still continued to push that myth, to push that lie. We have to be clear-eyed about our facts, even if we do not like them, even if it shines a really troubling light on a person. Just because you like somebody's policies does not mean that you can condone an effort to overturn an election and to overthrow a democratic process.

What can you do to coax people back to what you called a Ronald Reagan Republicanism, a Lisa Murkowski form of the party?

What you can do is not give up. And believe me, I've had so many people say, "Why are you still a Republican?" It's because I am one who believes that government is not the answer to all of our problems, that empowering individuals is where we need to be. I'm not leaving the party; I believe in the fundamental core of the party. But I also believe that the way to get back to these principles is to stay true to those principles. You've got to be willing to stand in the middle at a time when you're being dragged off to the extremes. And it's hard when you are standing alone in the middle, when you are targeted by people within your own party who say you are not a true enough Republican.

Earlier this year you talked on the Senate floor about your support for the filibuster. You said, “This is supposed to be hard.”

The Senate by its design is supposed to get us to consensus. Whether it is election reform, whether it’s abortion, whether it’s guns, whether it’s immigration, if we try to muscle through on a strict party-line basis, it’s not enduring. If we’re going to do something serious on climate, for example, the worst thing we could do is force it on a party-line basis, because then you’re not going to have the level of investment that you need from the private sector to move forward with the initiatives. They’ll be waiting to see: Is the presidency going to change? Are we going to have a change in policy? Is the House or Senate going to flip? That’s why the infrastructure bill is so significant for this country. It was a bipartisan effort, and it enjoyed the support of almost seventy members of the Senate. It then became political in the House. Why? Because you had a former president who was not successful in moving it. I think it was a situation of sour grapes, and so he worked hard to try to convince Republicans that it was a bad vote.

Could you take us behind the scenes of the kind of bipartisanship that you’re talking about?

In November [2020], it became very clear that, with the majorities changing, leadership in the House and Senate had no desire to move forward another increment of COVID relief until they were sworn in and could direct things on their own. I recall a conversation on the floor of the Senate with Mark Warner [D-Va.]. I said, “You know, Alaska has been really, really, really hard hit. Our economy was slammed when the tourism sector was entirely shut down. We are hurting.” And he said, “You know, we’re not doing so well here in Virginia either.” This was right after the election. And we said, “You know what? We can’t sit back. We can’t wait for leadership.”

He invited four Democrats. I invited myself and three others. We went to dinner at my house. He bought dinner. I hosted. It was COVID, it was cold. We had to open the windows. We sat in a big circle, and we talked about whether we could actually do something. Dick Durbin [D-Illinois] was the only one in the group who was on leadership.

We introduced the framework in early December. Leadership didn’t like it, because it put them in a position where they were not in control, but as it got legs, they realized it had support from the public. And they



✦ Murkowski at Willamette College of Law in 2018. “The Senate by its design is supposed to get us to consensus,” she says.

took our framework and we passed the bill. As a very small group, we were able to show leadership that there was a path.

When the president introduced Build Back Better, we started talking again. We said, Is there something we can take from this and build out a bipartisan package? We expanded our group to ten. We met in different hide-aways; we’d go out to dinner. And it was hard. There were many times when somebody said, “I’m done.” Like any relationship, you don’t want both of you to get fried at the same time, because then you both can walk away. But everybody was in different phases of meltdown at different times. What we did was we built a trusting relationship. We listened to one another. We had good debates about how much was being spent on mass transit. It was hard, hard work. But the outcome, I think, has been extraordinarily positive.

So this all started with dinner at your house?

That’s true. Everything starts with food, right?

Can you take that pattern and put it to some of the other hard things that you face right now?

We’re doing that right now. If we can’t do full election reform, are there parts of it that we can address, and on a bipartisan basis? We said, “We’ve got to reform the electoral count act.” It’s not the same group, but it’s the same component pieces. Is there a way that we can do something with immigration? Is there a way that we can do more with some other knotty issues? Gun control is a model. It takes us out of the committee structure, which, as a big committee person, I wish we weren’t doing, but in fairness, some of our committees are not very functional right now.

Any advice for Willamette students or young alumni who are looking to follow a path of political leadership?

Don’t wait for a convenient time to become engaged in any level of political activity. There’s this sense that I have to have a certain resume. I have to have achieved certain things. But if you’re letting that hold you back, you’re probably going to remain held back. So put yourself out there and test yourself; go outside your comfort zone. Everybody’s waiting for the right moment, and there really never is one. You’ve just got to jump. ●

Erika Bolstad, a journalist in Portland, was the Washington, D.C., correspondent for the Anchorage Daily News from 2007 to 2011.

120 MINUTES WITH...

Mike Martinez



An industrial tour with a CEO working to sustain Willamette Valley agriculture

mIKE MARTINEZ BS'00, MBA'11 is an unassuming CEO, the kind of person happy to make a last-minute appointment with a prying reporter on what's actually the first day of his family vacation.

I arrive just after 8 a.m. at his office in a light industrial building in Salem. Martinez is standing near his desk in the open administrative space. Martinez serves as a trustee at Willamette and runs the twenty-five-year-old cosmetic oils producer Natural Plant Products. NPP is the manufacturing and marketing subsidiary of a business known as OMG, a cooperative of Willamette Valley grass seed farmers. Martinez is CEO of both companies.

It is a bright, sunny Monday in August. Martinez has brewed a pot of coffee and offers me a cup, along with half-and-half from a half-gallon carton. I take him up on

By SHELLY STROM /
Photographs by JULIAN CROMAN





↖ Martinez, far left,
 and three views of
 the manufacturing area.
 The Salem plant processes
 meadowfoam seeds
 into oil that is used in
 cosmetics. The oil is prized
 for absorbing quickly and
 not feeling greasy when
 applied to skin and hair.

both. Once the coffee is situated securely in travel mugs, we decide to go take a look at the manufacturing area.

NPP occupies 15,000 square feet within Mill Creek Corporate Center. The company's section of the complex, on this morning at least, is quiet, and is dwarfed by neighbors a mile to the north like Home Depot and FedEx, whose warehouse footprints take up ten to twenty acres. More recently, Amazon opened a million-square-foot warehouse with enough bays to load ninety semis at once.

The irony of twenty-acre buildings cropping up around the Willamette Valley—renowned worldwide for its rich soils and optimal agricultural conditions—isn't what brings me here today. Nor is the juxtaposition of an agriculture-dependent producer of niche beauty oil existing in the shadow of global retail giants.

So I follow Martinez's lead and put on a fluorescent yellow safety vest.

He tells me NPP recently moved into this space and that it's not merely a relocation. "This marks a new chapter for us: It means we have our own milling and production. With it we can process seventeen tons a day," Martinez says. That volume aligns with daily demand and allows NPP to flex according to anticipated need.

"We sacrifice some efficiency and pay a bit more to process," Martinez says, "but we have ownership over the successes and failures that come with manufacturing."

OMG AND NPP'S story dates to the 1980s, when seven farms whose primary crop was grass seed decided to collaborate on growing another crop—meadowfoam—for rotation. At the time, Willamette Valley grass seed farmers relied on field burning for pest control. Following harvest every summer they burned roughly 250,000 acres. Air pollution from those burns often became overwhelming. State lawmakers felt pressure to address the problem, and by the early 1990s, they had introduced a policy to phase out the practice.

Which brings us to the appeal of meadowfoam. This low-growing flower, whose scientific name is *Limnanthes alba*, was first classified in 1833. It earned its name because its tiny white flowers resemble the froth of ocean waves. As the co-op farmers discovered, it not only rejuvenates grass seed acreage without burning but also bears seeds rich with oil. This oil happens to have

Shelly Strom is a freelance writer who previously covered agriculture for Portland Business Journal as a staff writer. She grew up in Oregon, where she spent summers picking berries and later worked the sorting line of a fruit processor; and now splits her time between Vancouver, Washington, and Port Townsend, Washington.



↗ "We sacrifice some efficiency and pay a bit more to process, but we have ownership over the successes and failures that come with manufacturing," says Martinez of the move to in-house milling and production.

unique chemistry for rapid absorption when applied to skin and hair, without feeling greasy.

The co-op spent years researching and hybridizing the plant for varieties to cultivate commercially. By 1997, the cooperative grew to more than eighty farmers. They formed NPP that year with the hope of creating a commercial market for the oil.

A few years later, Martinez was hired fresh out of Willamette with a bachelor's degree in chemistry. He would be their first marketing director, joining the CEO as one of two employees. "When I started college, I didn't really know what I wanted to do, other than I knew I wanted to do something in science," he says. When he landed in his job, the organizations were struggling to overcome a debtload of \$10 million, surplus inventory, and a limited customer base.

Since then, NPP has gone from having piles of debt and unsold seed to generating annual revenue of \$10 million. Martinez became CEO in 2010. Today, the company's

oil is an ingredient in products such as Dior Prestige Le Micro-Caviar de Rose, Laura Mercier Nourishing Rose Oil, and Aveda color balm. The company has eleven employees, and Martinez anticipates adding another twelve once manufacturing moves fully in-house. OMG has fifty-three members farming meadowfoam on 10,000 acres throughout the valley.

STEPPING ONTO THE production floor, still sipping coffee, I notice humming. It's coming from equipment. Nearby, an NPP worker on a forklift feeds meadowfoam seeds into a hopper leading to an oil press. A contractor assesses how to make gates for chutes connected to storage tanks for seeds.

Critical pieces of equipment are on the way, including a distiller being built in the Czech Republic. Martinez says he hopes to have the machinery fully functional and all manufacturing happening on location by spring.

Martinez shows me the machine that extracts the oil. Dark, particulate-laden crude drains profusely from half a dozen openings into a channel feeding a 155-gallon vat. Cake left over from the pressing falls into a chute dropping to a 1,500-pound polybag. That cake is sold as fertilizer.

If you didn't know the history of grass seed farming in Oregon or how every year the state loses an average of 85,000 acres of farmland to other uses, it might be difficult to appreciate what's actually happening here: NPP is helping to keep Oregon agriculture alive.

"The market for meadowfoam is more reliable than grass seed markets. This contributes to the sustainability of many multi-generational family farms," Martinez says. He estimates revenue from meadowfoam amounts to 5 to 10 percent of revenue for each member farm.

After we see the plant floor, we walk back to the office and take seats at a table in front of a sunny window.

It's almost 10 a.m. Martinez pours more coffee, and we start talking about travel. This leads to a conversation about his family roots—his grandfather's family migrated from Chihuahua, Mexico, to New Mexico. Martinez tells me his grandfather was born in Gallup, New Mexico, and that his father was born in the Watts neighborhood of Los Angeles. His mom was born a stone's throw away from there, in Santa Fe Springs, California. Martinez himself grew up near the beach on the outskirts of Long Beach. Today, his favorite travels are to New Mexico.

I see it's almost 10:15: it's taken me more than 120 minutes to finish my coffee. So I put away my pad and pen, bid Martinez goodbye, and head to my car. He'll be catching a plane to Southern California in the afternoon.

As I drive back up the valley toward home, I see grass seed farms bordering the freeway. This section of I-5 hasn't changed much in the five-plus decades I've been traveling it. And I'm thankful for *Limnanthes alba* and the part it's playing in maintaining a bit of the Oregon I know. ●

↘ The market for meadowfoam oil is more reliable than that for grass seed, Martinez says. He estimates that revenue from the oil amounts to 5 to 10 percent of revenue for each member farm.



— She observed brothers and sisters from an anthropological distance—
until she had children.

The Mysteries of Siblinghood

fOR YEARS, I'VE kept the same photo as my computer desktop background, one that represents what might be the most pivotal moment of my daughters' lives. It shows my oldest child as a toddler, a few days shy of three years old. She's in a hospital room, wearing a gold-striped shirt and a pair of tights patterned in pink bows. In the excitement, pants have been forgotten.

In the photo, she's peering into one of those translucent maternity-ward cribs at a swaddled little breadloaf of a newborn. For the first time, she is laying eyes on the person who will accompany her on more of life's road than anyone else: her sister.

Siblings are standard in the United States, if not universal. Researchers say about 80 percent of all Americans have at least one brother or sister. A growing body of research shows that siblinghood is among the most powerful human bonds we experience: our sisters and brothers have the potential to be the longest, most enduring family relationships of our lives.

I wouldn't know. I'm an only child, the sole product of a union between two aging former hippies edging their way into the 1980s. I can't say I wished much for a sibling as a child. To me, my parents, my goldfish, my dog, and an unending stack of books sufficed nicely.

Until I had children of my own, siblinghood was something I observed from an anthropological distance. In the hours I spent at friends' homes as a child, I took mental notes of sibling scenarios. There was the morose, door-slamming teenage brother who wore his

hair like a curtain across his face, appearing only briefly to microwave pepperoni pizza Hot Pockets before retreating to his room to blast TOOL. There was the wild-card little sister who ended up in the emergency room for sticking a bit of umeboshi (pickled plum) too far up her nose. Once, I sat aghast as that same sister admitted to using her sibling's toothbrush on purpose for months.

"I thought you wanted me to," she shrugged.

My life as an only child was not this exciting.

I still don't believe I had a lesser childhood, or that not having a sibling warped me particularly. (My husband might beg to differ.) As I became an adult, though, I began to see the full value of siblings. Brothers and sisters are shared historians, keepers of memories. Siblings confer a sense of rootedness in the world. "You've been my sea wall," is how the writer Mary Karr describes it.

So when I contemplated motherhood, I knew that I wanted

cycle of simultaneous love and strife, alliances and grievances constantly shifting. A reneged upon promise to play yet another game about dinosaurs with a little brother. A morning squall over socks, or oatmeal, or a borrowed hair scrunchie. But I also

By MICHELLE THERIAULT BOOTS BA'05 / Illustration by NESS LEE

any child I brought into this world to have a sibling. We had two daughters—the girls whose meeting is documented in that photo on my computer. And just when I thought my childbearing career was over, kismet delivered us a baby boy. And that is how an only child ended up the mother of three.

Now, every day, I watch the mysteries of brother and sister relationships play out in my own home, a minute-to-minute

see them shape each other's lives and personalities in subtle and profound ways.

One thing I had never understood as an only child is just how much new ground siblings take on. There is always a sibling who is the first: to get their ears pierced, learn to read, ride a bike to a friend's house alone, go away to camp. I realized this





when the sisters made a plan to meet up on the elementary school playground, so the older could give the younger, then a new kindergartener, a tour, imparting arcane knowledge about monkey bars and specific hills where specific sets of third graders liked to hang out. Or when the middle sister taught her little brother to pedal a bike, putting him through a rigorous set of driveway drills with the dedication of a high school football coach. I hadn't known how much of the world is first encountered through the experiences of brothers and sisters, the extent to which a sibling—not a parent—is a first, best guide.

I am no expert in sisters and brothers, and I know it. But as a close observer with a vested

interest, one thing is clear: The most certain poison to sibling relationships is competition. I try, in a surely imperfect manner, to avoid comparing my children. I probably fail in a hundred other ways, fodder for future therapists to unpack.

It's a comfort, though, that my three children are together

in this world. In my closely held hopes, they are adults who find not just comfort in their shared past, but the kind of friendship that's only possible with someone who has known you since birth.

When I tiptoe into the sisters' shared room at midnight the reading lamp is still on, but the room is quiet except for the sweet rhythm of breathing. I always find them curled asleep together in the bottom bunk, the occupants of a small, sovereign land of their own, to which I have no map. ●

Michelle Theriault Boots BA'05 is a reporter for the Anchorage Daily News. Her work has won local, regional, and national awards, including a 2021 National Magazine Award for community journalism. She was a 2017 Kiplinger fellow in public affairs journalism and a 2020 Harry Frank Guggenheim criminal justice reporting fellow. She and her husband, Kevin Boots BA'05, live in Anchorage, Alaska, with their three children and an elderly golden retriever.

Age 77



Age 36



Age 53

Most of us are afraid to grow old.

Is that any way to live?



Ages 39 & 40

Age 40



Age 29



Ages 3 & 7



Age 80

How to Age Well

By Naomi Shulman

Photographs by Evie Lane



Age 62

Stop to think about this:

To age “well” is to look or act as though you’re not actually doing it at all. The message we get from the culture at large is that if people can tell we’re getting older, we must be doing it poorly. The vast majority of Americans—87 percent, according to one survey by Pfizer—have a fear of getting older. Is that any way to live?

Aging is a process that begins the moment we are born. None of us can avoid it. So what is it we’re really scared of? Is it sagging skin and graying hair, as the booming plastic surgery and cosmetics industries suggest? Or, more darkly, is it the loss of dignity that often accompanies physical and mental decline?

Jennifer Sasser BS’89, a gerontologist, thinks fear is understandable, but also unfortunate and, moreover, unnecessary. She has

devoted her career to studying how we age and to improving the discourse around it. She thinks we can do better. She thinks that will make us happier, that it will help us lead fuller lives. She’s here to show us how.

THE SIMPLE AWARENESS that we are aging is part of what makes us human. However, the modern study of the biological, physical, and social aspects of aging is quite new. The word “gerontology”—the study of aging—was first coined in 1903, and it would be another four decades before experts in the field formed a dedicated academic society. Just as aging touches upon various aspects of our lives, so does gerontology employ multiple disciplines in

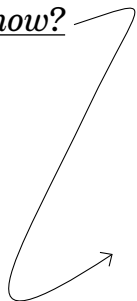
the humanities, hard sciences, and social sciences. Yet the first professional school for gerontology was only developed in the mid-1970s, at the University of Southern California. In other words, the study of getting older as still very young.

For such a new field, gerontology is hot—and that’s because aging is a growth industry. The U.S. healthcare infrastructure and our social safety nets have been braced for the Baby Boom generation to make its way to its golden years. By 2030, all Baby Boomers will be older than sixty-five. That’s also when, the U.S. Census projects, older people in the country will outnumber children for the first time. It’s not just Americans who are graying; by 2050, roughly 1.6 billion people worldwide will be older than sixty-five.

The people who work under the umbrella of gerontology include hands-on doctors and nurses; scientists looking for better therapies to alleviate age-related conditions; legal and governmental advocates who fight for access to better care and equal treatment; social workers who support the dignity of the elderly, whether at home or in nursing homes; and philosophers who try to take in the big picture of aging and its many aspects.

We asked Willamette alumni, staff members, and children to answer some of the same questions that Jennifer Sasser BS’89 asks in her teaching and research. See more photos and answers at willamette.edu/magazine. ▼

What do you appreciate the most about the age you are right now?



↑ Having my birthday. Sloane Reich, age 3, daughter of Tyler Reich BA’06 and Katie (Bechtel) Reich BA’06, MBA’12

↓ I’m still at an age where I can transform the direction. It’s not to the point that you feel like you’re defeated, that you can’t do anything. I’m still at the age that I can change. Nick Bondaug-Winn BA’05, MBA’09, age 39



↑ Age gives a healthy dose of perspective. Things may be a little messy, things may be uncertain, things may be complicated. But things almost always get better. I now have that longer perspective, and the understanding that if we do a good job of collaborating, we’ll figure out how to get through pretty much everything. Dan Findley BA’82, age 62

And Sasser? She's maybe a little bit of all of these.

When Sasser arrived at Willamette in the 1980s, she didn't imagine herself as a future gerontologist. (Let's face it: few people do.) Back then, she was a music therapy major. But in her first year, Sasser took a liberation theology course. "It changed my life," she says. For that class, she read *Pedagogy of the Oppressed* by Brazilian educator Paulo Freire, first published in English in 1970: "It destroyed me and rebuilt me all in one semester," Sasser recalls, "and that was the most consequential learning experience I'd had in my life." Sasser had been a musician and dancer throughout her childhood and teen years but felt she didn't have an intellectual or cultural framework for it. "Once I began to understand things cross-culturally and cross-historically, I had an outlet for my curiosity." She switched from music therapy to psychology with a music minor.

Sasser took on various jobs to make ends meet throughout her schooling, including getting trained as a certified nursing assistant right out of high school. "I worked in nursing homes to make money during the summer, and also while I was at Willamette," she says. "I was always attracted to medicine

and nursing, and thought I might become a physician or nurse." What she discovered, though, was that she especially loved caring for older people, even in terrible settings. It felt like such meaningful work.

"I didn't yet know there was something called gerontology until I was quite far along at Willamette and took a course on sociology of aging," she says. It turned out to be really hard for her. "I kept getting bad scores on my papers. It was confusing, because I felt like I was so engaged with the older people I took care of and wanted to be of help to

them, but the more intellectual aspects of gerontology didn't make sense to me." Sasser decided the solution was to dig deeper. She ended up pursuing an interdisciplinary master's degree at the University of Oregon with a focus on gerontology, which then flowered into a PhD from Oregon State.

Like Sasser herself, the field was just coming of age. In the forty-plus years since the start of the first dedicated gerontology program, dozens more popped up around the country. Sasser founded one herself, at Marylhurst University, south of Portland, and spent many years there as its director until that university closed in 2018. Now she's at Portland Community College, where she created a course that she believes is the first anywhere to take an intersectional approach to ageism as a form of bias.

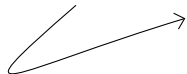


Jennifer Sasser
BS'89 is an expert on aging. She coauthored (with Harry R. Moody) the hallmark textbook on the subject.

"I'M SUPPOSED TO be on the cheering section for midlife zest," Sasser says. But she's the first to acknowledge that aging is hardly easy. "I always feel if I admit it," she says, "I'm being a bad gerontologist."

The information around aging can be contradictory and confusing. "It's no wonder people are confused—it's confusing,"

No matter where you are in your life course journey, what do you look forward to?



↑ I look forward to the challenge of learning new things in my career. And in my personal life, I like being challenged by different ideas.
Megan Oshiro, BA'15, JD'18, age 29

↓ I look forward to making an impact in a community that is underrepresented. As a disabled artist, I want to make other people's lives better. How can I connect with other people and make them feel like they're not alone? *Marie Conner MFA'19, age 52*



↑ I love watching my kids be passionate about something. In my case, a lot of that revolves around sports. At some point, especially with my oldest, her high school career is going to come to an end and she will move on to something else she's passionate about. Maybe it's her job, maybe it's her future family. Being able to be part of that, that's the thing that I'm very excited about. *Andy Miguel BA'01, age 43*

she says. “Wait, am I not supposed to drink alcohol? Is a glass a day protective or poison? That’s just one example.” Plus, we don’t age in a vacuum: “Age biases and discrimination are embedded in society and culture, and then through policies and practices. Aging intersects with racism, sexism, homophobia, ableism, and other forms of discrimination.”

All this goes back to the big question of her career: How can we truly age well? First, we need to stop trying to avoid it. Second, we need to reframe the question.

Gerontology is not just observing the process of getting older; ideally, it should contribute toward improving the experience, to making life better for people across age groups.

“When you think about the political economy of it all, the marketing money and products and big business and global consumer capitalism—that’s about selling particular ideas,” Sasser says. “Countering all of that, helping people to consume information in ways that will actually benefit them? That’s really, really challenging, but I think it’s extremely important. And fundamentally it boils down to: What gives our life purpose and meaning?”

Here’s Sasser’s advice: whatever your age,

take time to reconsider what’s gotten you to where you are now.

“What matters the most to you? There will be things that abide. Things that were important to me as a little girl are still important to me. But there are also new things that are important to me, and my values have shifted as I have gotten older,” she says. “So, you need to ask really good questions: What’s nonnegotiable in terms of purpose and meaning? And where is there room to adapt and compensate? Start with those questions. Those are the best questions.”

Big picture, she says, aging is about developing deeply as human beings. “The stuff about what happens to our bodies—what

can we do to modify risk factors and maximize well-being—those are very important questions, but they’re important because they have to do with how well we can travel through the very farthest reaches of our life’s course, and how well we’ll be able to be a part of the community and do things we want to do that make life meaningful,” she says. “You’ve got to have a body that can function pretty well. But none of us escapes leaving the planet through death. So what do we have purview over and what don’t we?”

Answering *that* question, for Sasser, involves a meta approach to the entire field. She talks to colleagues in the profession, for example, about how ageism is not only a problem outside of gerontology, but within it too. “How do we think critically and reflect on the ways that we have internalized those ideas about aging people, the very people we claim to do our work on behalf of?” she asks. “How do we—quite unconsciously—perpetuate a certain way of thinking about what’s possible as we grow older? It’s not like I have original ideas, by any means, but I do have a commitment to always standing back and saying, first of all, that gerontologists are not immune to ageism. We need to be more emotionally and intellectually honest.” If

“Aging is actually living! To be alive is to age—it’s the human journey.”

What does your future older self want to tell your present self?



↑ It is fun and hard. Harper Reich, age 7, daughter of Tyler Reich BA’06 and Katie (Bechtel) Reich BA’06, MBA’12

↓ Some of the present-day things that I deal with are not enjoyable. But even in that discomfort, there’s growth, right? My older self would tell me to be present in every single moment. Nathaniel Aggrey BA’09, JD’16, age 36



↑ My future older self says, “It’s time to express who you are. You weren’t able to for some reason, whether because of nurture or nature or society, but you have the ability to do that now. So do it.” That’s what I’m working on. Keith Bondaug-Winn BA’04, MBA’09, age 40

gerontologists can recognize ageism in their work, maybe that will help the rest of us recognize it in ourselves, too—and get out of our own way as we think about what the problems with aging really are, rather than what we expect or fear them to be.

In case it wasn't clear, Sasser is an expert with a healthy suspicion of "expertise," including her own. "I am not myself an older person yet, so I cannot be an expert on what it's like to be in that phase of the life course until I live it," she says. "We're not just floating in space, we're embedded in communities, socio-cultural global historical contexts that shape our experiences. Plus, I know the research, and I've got to say, it doesn't matter. At the end of the day, there are all these stories. All that matters is our experience."

She's not talking about dying. "Aging is not the same thing as dying," Sasser insists. "So much of the discourse is around optimal aging. Either it's 'Defy aging,' as if aging is a disease to cure, or it's 'Do these things and you'll live forever.'" If you're really going to study aging, however, you've got to look at the experience from zero on up, as aging is something we do from the very moment we are born.

To that point, she has another lesson to share in how to reframe the idea of aging—perhaps the most important of all. "Aging is actually living! To be alive is to age—it's the human journey." And that journey is about more than what happens in our bodies. It's—well, in a way, it's everything. "It's what happens to our consciousness, to our mind, to how we feel, to how we engage with other creatures, human and otherwise."

AS SASSER HAS GROWN older herself, she feels a poignancy that is not only about where she is in her own life course, but also in relation to those ahead of us in the future and behind us in history. "What is my responsibility?" she asks. "What will I step into and take responsibility for?" For those in midlife, people of her generation, "one thing we can say is that we're caught in the middle of people ahead of us and people behind us. All of gerontology has formed around the boomers, as if they're the only generation growing older. The millennials are a bigger age cohort, and in between are Gen-Xers. We have to see multiple cohorts living at the same time and traveling through time. Does it matter

what generation you're embedded in? Yes and no. Take, for example the climate crisis. I'm pretty obsessed with that. My kids' generation and those below them: what legacy am I leaving for them?"

We each pass the exact midpoint of our life without realizing it; we can't know in advance how long our particular path will be. "Aging is universal," Sasser says, "but also exquisitely individual, and unfolds within an individual's lived experience across the life course. I've never been dissuaded from being interested in and learning about complex questions that are best addressed across multiple disciplines, and I feel really lucky about that. That's at the heart of everything I've done."

If that sentiment is not the fountain of youth, it may at least be the key to aging well. ●

Naomi Shulman's writing has appeared widely, including in The New York Times, Parents, and Real Simple.

If you could share a secret with your younger self, what would it be?



↑ I would tell my younger self to moisturize, and wear that sunscreen, and hydrate, because that is a fantastic investment. I would tell my college-age self that it's both a wonderfully finite and expansive time, those four years. *Insil Kang, BA'04, age 40*

↓ Don't believe your self-perceptions. I'm short. I'm blonde. I'm female. There are short jokes. There are blonde jokes. There are female jokes. What's important is to develop a sense of yourself and focus not on your limitations but on your capabilities. *Julie Branford BA'67, age 77*



↑ Enjoy the ride and do as much as you want to do. And the more you do, the more you get out of it. *Jim Booth BA'64, age 80*

Willamette students helped spark a huge shift in legal education, one that aims to benefit anyone who'll ever need a lawyer—and that's basically all of us.

BAR NONE

STORY BY Erika Bolstad

PHOTOGRAPH BY Lauren Jones



FOR A MOMENT, STEP BACK INTO THE SPRING OF 2020,

when “everything was up in the air,” says Julie Preciado, JD’20. She and her classmates at Willamette Law were in the final weeks of their law school education. Preciado had clients she was representing at the school’s business clinic, and a job as a law clerk at the U.S. Attorney’s office in Portland. Within a matter of days, her entire law school experience was online, including graduation.

“I ended up having one law school friend come over and we did a little pretend ceremony outside, socially distant, where we walked across my driveway,” Preciado says.

At the time, no one knew how aspiring lawyers could safely take the bar exam, typically held over two days in late July, and in the company of hundreds of other people. For many lawyers, studying for the exam is an intense but mandatory rite of passage in the months after completing law school. But pile on a pandemic, and for the law class of 2020, the period after graduation proved an especially uncertain initiation to a legal career.

“We had to finish up law school at home, scared of the virus, scared to go out, not knowing what was going to happen,” Preciado says. “And those of us that had just graduated, without the ceremony, had to start prepping for the bar exam.”

What happened next, though, marked the beginning of a major shift in how Willamette Law will teach future lawyers, one that positions the school as a leader in what many experts say is a long-overdue national reckoning with the bar exam.

Most people need a lawyer

at some point in their lives, whether it’s when buying a house, filing for divorce, writing a will, or settling business or personal disputes. And for anyone accused of a crime, a lawyer ensures their constitutional right to representation. To find a good lawyer, people often ask friends and family, or seek out a referral from a local bar association. They may check whether their lawyer has expertise in a particular subject matter, or whether

they’ve been disciplined by a state licensing agency. One thing they’re unlikely to do, though, is ask how their lawyer scored on the bar exam.

For much of the profession’s history in the United States, becoming a lawyer did not require formal schooling. Few states had requirements that lawyers pass an exam—aspiring attorneys often studied the law as apprentices with practicing lawyers. Law school education began to formalize in the 1870s, along with other professions like medicine, engineering, and journalism. To attract students, law schools promised what was known as “diploma privilege,” the right to practice law on completion of a law school education at an accredited school. The move toward formal examinations and licensure standardized the practice of law, often to the benefit of consumers by improving the quality and competency of the profession.

But formalization also served as gatekeeping. As more Black lawyers began attending law schools, for example, their white counterparts found ways to exclude them. Some states began requiring that prospective lawyers graduate from schools accredited by the American Bar Association, even though, starting in 1912, the ABA explicitly barred Black lawyers from membership. In 1925, Black attorneys formed their own organization, the National Bar Association, and it was not until 1950 that the ABA admitted Black lawyers for membership.

Even today, the legal profession does not reflect the racial or ethnic makeup of the nation. Practices rooted in the white supremacy of the nation’s founding linger in the law, particularly in the criminal court system. Judges and prosecutors are more likely than the general population to be white, as are the defense lawyers who represent criminal defendants—even as a disproportionate number of the people who face charges or incarceration are Black. Many people who need lawyers for criminal and civil matters may not be able to find one who understands their language or cultural background.

Today, each state administers its own bar exam and determines what qualifies as a passing score on it. Most jurisdictions, including Oregon, have adopted the

“Uniform Bar Exam,” a test given nationwide regardless of which state the test-taker is in. The UBE tests broad swaths of the general knowledge base necessary to be a lawyer: contracts, constitutional law, criminal law and procedure, evidence, real property, torts, and civil procedure.

What it means to pass the UBE is not uniform, though. As Willamette Law Dean Brian Gallini points out, Oregon has set the passing score on the UBE at 270, while New York’s passing score is 266. This means those who score 268 have failed in Oregon, but they can “port” their score to New York in order to register a passage on the exam. Another problem is in the questions themselves. Many argue they are riddled with biases that may prevent smart, talented people from becoming lawyers. In 2021, the

“We showed that grads could start putting their skills to good use more immediately,” says Julie Preciado JD’20.

American Bar Association for the first time released statistics that broke down bar exam passage rates by race. It showed that during the 2020 bar exams, white test-takers across the nation were far more likely to pass than test-takers of other races. It was the first time such statistics—broken down by race—were shared by the National Conference of Bar Examiners, and it exposed an ugly truth about who passes the exam. Law schools took notice nationwide.

Some critics have called the bar exam a “test of resources” that benefits those who can afford preparatory classes and the time to take them. Surveys suggest that those who studied more than forty hours per week were much more likely to pass, as were those who paid for bar exam preparation courses. At a disadvantage are those who work full-time while studying for the exam and who do not have forty hours each week to study.

“It’s healthy to re-examine these things from time to time,” Gallini says. “And this is an exam that has largely gone without reform for the better part of a hundred years that we’ve been administering it.”

Beyond its exclusionary history, though, the bar exam may not actually measure what it takes to be a good lawyer. As a 2020 op-ed in the *San Diego Union-Tribune* pointed out, some of what’s tested on the California bar exam is not even part of state law. And in the words of an October 2020 report by the Institute for the Advancement of the American Legal System: “The unfortunate reality is that, although the bar exam has existed for more than a century, there has never been an agreed-upon, evidence-based definition of minimum competence. Absent such a definition, it is impossible to know whether the bar exam is a valid measure of the minimum competence needed to practice law or an artificial barrier to entry.”

The death of George

Floyd only amplified long-standing concerns about equity within the legal profession. His killing in May 2020 by a Minneapolis police officer sparked nationwide racial justice protests that led many institutions, including law schools, to examine their role in perpetuating unjust systems. Willamette was among them. At Willamette, law students formed a task force to examine systemic racism within the Oregon legal system.

These students looked at how jury selection in Oregon might reflect what’s known as implicit bias, which is when people—sometimes even those with the best of



PHOTOGRAPH BY KRISTINA BARKER

intentions—inadvertently bring stereotypes to their actions or decisions. Specifically, the students explored how implicit bias may affect outcomes in jury trials, particularly with the use of the peremptory challenge, a tool used by attorneys during jury selection to strike jurors from a panel without having to state a reason.

And here, we come back to the pandemic. The very reason these law students were able to work on the task force is that they did not need to spend their time studying for the bar exam. In June 2020, the Oregon Supreme Court voted to give graduates of the state's three law schools what's known as emergency diploma privilege. New graduates poised to take the bar exam were allowed to begin practicing law in Oregon without taking the test. (As with all aspiring lawyers, they had to pass an ethics exam and a background check.) Three other states—Louisiana, Utah, and Washington—as well as Washington, D.C., also granted diploma privilege to many of their law school graduates in 2020, and Wisconsin has long granted it.

In Oregon, 234 aspiring lawyers sought diploma privilege that summer. Preciado was among them. So was Eden Vasquez JD'20, now a lawyer at Miller Nash in Portland, and one of the leaders of Willamette's Racial Justice Task Force. Ever since then, Vasquez has been thinking about how to test someone's readiness to be an attorney. She can see how future students might use their time at law school to prove their qualifications to practice law, including by doing the type of research she did on the task force.

It's "a mindset shift," adds Preciado. "These grads don't necessarily have to spend three months studying for a bar exam that so many people have criticized for being exclusionary. All of that had already been floating around, but we were able to say, 'Hey, at least on an emergency basis, this is possible.' We showed that grads have a lot to offer and could actually really start putting their skills to good use more immediately."

The Oregon Supreme Court

took notice. In September 2020, Oregon Chief Justice Martha Walters asked a task force to consider how the state's law schools could implement curriculum that offers pathways to licensure aside from the bar exam. And in January 2022, the court gave conceptual approval to two new ways law school graduates could become licensed attorneys in the state. One is called the Oregon



"It's healthy to re-examine these things from time to time," says Brian Gallini, dean of the law school.

Experiential Pathway. The other is known as the Supervised Practice Pathway. Both remove the requirement of the bar exam.

If the state Supreme Court approves these new pathways—which most observers expect it to do—students entering Willamette Law will be able to choose the Oregon Experiential Pathway in their second year of law school. This could happen as early as 2023, for the class of 2026. The first year of school will remain largely the same as before, but in their second and third years, students on this pathway would work on an experiential capstone project and then submit it for approval to the Oregon Board of Bar Examiners. That capstone project would be on the same level as the work Willamette students with diploma privilege undertook on the Racial Justice Task Force in 2020 when they examined implicit bias in juries.

In fact, diploma privilege, although temporary in Oregon just for 2020, has been an important selling

THE BAR EXAM HAS GONE WITHOUT REFORM FOR A CENTURY. AND THE FACT IS, IT MAY NOT MEASURE WHAT IT TAKES TO BE A GOOD LAWYER.

point for alternative pathways, in part because it drew attention to what students might do instead of taking the bar to become licensed lawyers. The work completed by the Willamette students on the Racial Justice Task Force showed how law school students can make meaningful contributions to the profession. And as they worked together, the students on the task force built their own skills in collaborative research, conflict resolution, and leadership—“in other words,” says Gallini, “the kinds of skills that employers would expect from newly licensed lawyers.”

Gallini announced in January 2022 that the law school will hire new faculty members to expand the University’s experiential offerings. “For Willamette, we are already a law school and a faculty that’s heavily invested in skills-based learning,” he says. “So we aspire to be the Pacific Northwest’s leading experiential law school already, and the fact that the bar-reform conversations are moving in this direction just is a natural fit for our vision.”

The experiential pathway is “a fantastic opportunity for Willamette to showcase what great stuff it already has, but also put it on the map for being innovative and taking the time to try and create more equity within our licensing world,” says Nancy Schierhorn JD’86, chair of the College of Law Leadership Cabinet, as well as executive vice president and chief development officer for the Bristol Bay Native Corporation in Alaska.

The second alternative, the Supervised Practice Pathway, is aimed at law school graduates from outside of Oregon who want to practice here. Instead of taking the bar exam, they would pursue 1,000 to 1,500 hours of supervised legal practice to gain licensure after graduation.

And the bar exam will remain an option for Willamette Law students, too, especially for those who aim to

practice in states that do not have alternative licensure. Many will likely continue to take the exam. Vasquez and Preciado, in fact, both took and passed bar exams in other states. Preciado, now an attorney at Dunn Carney in Portland, chose California. Vasquez sat for the Washington bar exam.

Both point out that there’s also a financial equity issue at the heart of the bar exam. For Willamette Law alumni in the class of 2021 who incurred law school debt, the average amount of the debt is \$148,177. On top of that, Gallini says, many students have to pay for a bar review course as well as defer income until they begin jobs as lawyers in the fall. While Gallini points out that working while studying for the bar is one predictor for failing the bar exam, many students nationwide have no choice but to do so.

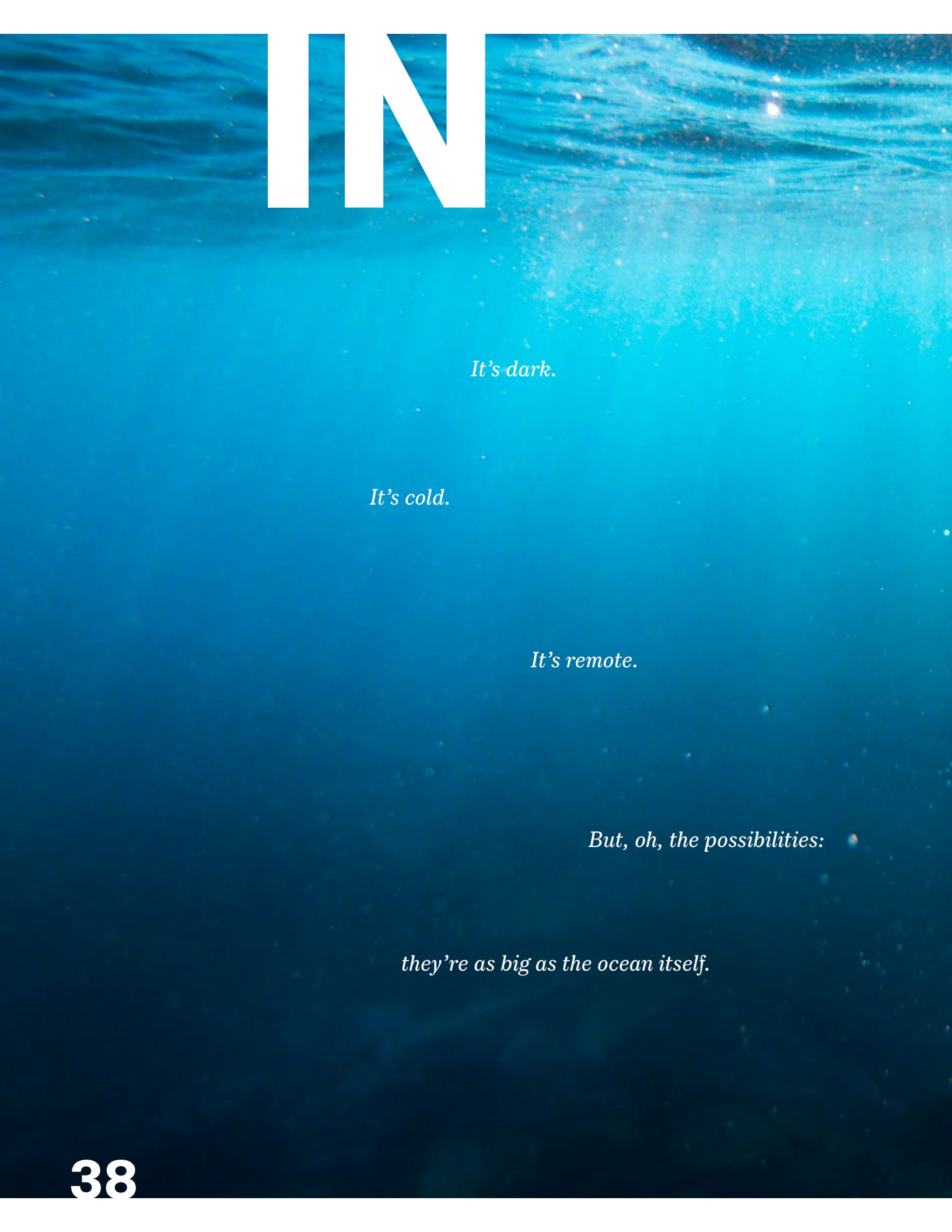
Studying for the exam is a stressful period for many aspiring lawyers, says Lucy Jensen JD’13, MBA’13, principal legal counsel at the Utah solar company Sunrun and a member of Willamette’s Law Leadership Cabinet. “There’s a lot of pressure there. And I do have concerns about the mental and emotional health and wellbeing that people go through during that time,” she says. “This could open the doors for individuals who may have been intimidated or were off put by having to take a big test. People sometimes are not great test takers, and that is not indicative of how they perform in their profession. I think this could open the door to encourage and invite other individuals who typically would not pursue a legal career.”

Gallini recently emailed 6,000 law alumni outlining the university’s support for the state’s alternative licensure plan. Since then, he has had hundreds of conversations with alumni. Jensen says that for some alumni, there was an initial reaction to oppose any changes, simply because they suffered through the bar exam and believe that future lawyers must experience the test as a rite of passage too.

“The gut response was: ‘Wait a second. This is the way it’s done. This is the way it has been done. And if you don’t do it, you’re not a real lawyer,’” Jensen says. “Once you start talking to people more and explaining all the good that can arise from it—not just for the law students, but for the legal profession as a whole and whom they serve—I think, more often than not, their minds change and they get on board. It’s a modernization that needs to happen.”

For aspiring lawyers—or anyone who needs an attorney—it’s about time. ●

Erika Bolstad is a journalist in Portland and the author of Windfall, out in January 2023 from Sourcebooks.

An underwater photograph showing the surface of the ocean above. Sunlight rays penetrate the water, creating a shimmering effect. Small particles and bubbles are visible in the water.

IN

It's dark.

It's cold.

It's remote.

But, oh, the possibilities:

they're as big as the ocean itself.



by MARY ELIZABETH STRUNK

DEEP

This story is so

vast,

swirling, and

improbable

that we can't

just dive in

anywhere.

Let's start by floating back in time.

Picture a teenager, driving away from her tiny mountaintop town in Puerto Rico at the turn of the twenty-first century. Just fourteen years old, Rosa León Zayas is about to join a community of her fellow “science nerds” at a magnet boarding school on the other side of the island. Rosa’s mom waves goodbye and is struck by a feeling—not of foreboding, but of swelling pride—that her knowledge-hungry daughter is never coming back.

Now picture a gleaming-white submersible on the dock of the Woods Hole Oceanographic Institution in Massachusetts. It is 1964, and a crowd has gathered for the commissioning ceremony of the *Alvin*, which is strewn with patriotic bunting. Chubby and compact, *Alvin* resembles a child’s drawing of a submarine, yet its capacities as a crewed deep-sea research vehicle are unmatched.

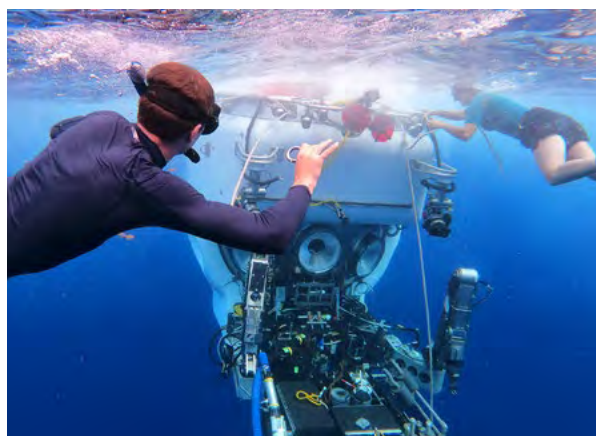
Alvin’s ability to carry people is key. Before the 1950s, scientists had almost no information about the deepest parts of the sea floor, and no access to it. Submarines existed, but they tended to be windowless, and couldn’t venture into the pitch-black, frigid, and crushingly high-pressure environments of ocean depths more than 3,000 meters (almost two miles) below the surface. One might as well have tried to sail into outer space on a hang glider. Yet Woods Hole scientist Allyn Vine (for whom *Alvin* is named) insisted that unlocking the mysteries of the ocean would depend on getting people into the

most remote corners of the deep sea. As Vine reasoned, underwater instruments could only perform tasks for which they were designed. But underwater scientists? They could respond versatily to surprises, and that’s when the real learning would get underway.

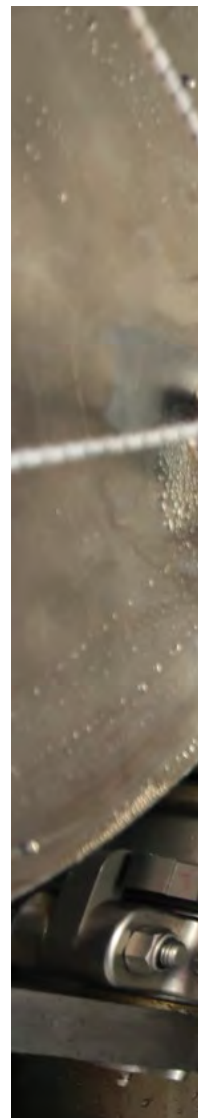
Vine’s prediction was correct. León Zayas’s mom’s prediction was, too. At the time that each launched, *Alvin* and fourteen-year-old Rosa were set on a course to one day travel the world in service of ocean research. Many years on, León Zayas and *Alvin* were also destined to become collaborators of sorts. But that part of the story comes later.

Back to Puerto Rico

in the early 2000s. An aptitude for science propelled Rosa León Zayas to the Scripps Institution of Oceanography at the University of California–San Diego, where she received a PhD. She became Dr. León Zayas, environmental microbiologist, genomics expert, and, since 2017, an assistant professor of biology at Willamette.



↑
A dive off *Alvin*,
and a peek at it
under water.





León Zayas's own education was shaped by a rising tide of new oceanographic data that *Alvin* had helped collect in the forty years before she went to college. By the early twenty-first century, scientists were able to read the ocean floor as an archive that held clues to Earth's geological history and the evolution of its climate and species. They also knew more about the astonishing organisms found in the ocean's most inhospitable depths.

The deeper in the ocean a life form is found, the more enigmatic its existence. Sunlight penetrates the water no more than 1,000 meters (six-tenths of a mile) past the surface. Life forms beyond that depth live in darkness, with few resources apart from whatever drifts down from the surface as so-called "marine snow," which is a mixture of fecal matter, remnants of dead organisms, and silt. How, then, do these deep-sea life forms harness energy? For that matter, at sea depths where the pressure is potentially a thousand times greater than on land, why do they not implode?

León Zayas has dedicated her career to answering these kinds of questions. For example, she's documented a range of surprising things that deep-sea microbes can metabolize into assets, using chemicals, rather than

sunlight, as their energy source. León Zayas's specialty is identifying the genes and genetic "on-switches" that microbial communities must possess to survive in the Earth's most remote and extreme environments, including in the ocean's hadalpelagic zone.

The hadalpelagic, or hadal, zone describes plunging trenches at least 6,000 meters deep, comprising the deepest depths of the ocean. To appreciate that superlative, consider that the average depth of the global ocean is approximately 4,000 meters, or about the same height as Mount Hood with two Portland Wells Fargo Centers stacked end-to-end on top. By contrast, the deepest crevice of the Pacific Ocean's Mariana Trench stretches down a jaw-dropping 11,000 meters. The Mariana Trench as a whole could contain Mount Everest.

Named for Hades, the Greek god of the underworld, hadal zone trenches are estimated to have formed sometime between 120 million and 200 million years ago, when one rocky slab of the ocean floor buckled and slid beneath another. The resulting deep pockets of ocean became rarified undersea ecosystems with enough uniquely adapted species to keep León Zayas busy with a lifetime of inquiries—which suits her fine. She

↑ Professor Rosa León Zayas exits *Alvin* after her first dive in July. Touching down on soft sediment in the Puerto Rico Trench felt "a bit like landing on the moon," she told a writer for the Woods Hole Oceanographic Institution. Last year, Willamette awarded her its Renjen Prize for Faculty Excellence, and the Maxwell/Hanrahan Foundation spontaneously gave her a \$100,000 grant.

has conducted research on samples from the Mariana, Tonga, and Middle American trenches, all located in the Pacific Ocean.

Yet, for all her growing expertise on trench organisms, León Zayas had yet to spend time in an ocean trench. Like many other marine scientists, she obtained some samples with “landers,” or tools that freefall to the ocean bottom and later bob back to the surface with whatever they collect. Valuable ocean floor sediment samples are harder to get, as these require a gravity core instrument, and an assist from a robotic device. Beyond 6,000 meters below sea level, the ocean’s archive has mostly been barred to human exploration. More people have visited the moon than have personally visited the deepest parts of the ocean.

With an assist from León Zayas, *Alvin* is going to change that.

Today, *Alvin* looks

less like a cartoon sub and more like WALL-E’s underwater cousin, with two robotic arms and a large front collection basket. Piece by piece, the sub has been revamped half a dozen times, so it could stay at the forefront of submergence technology and keep up with its hard-working research schedule. France, Japan, Russia, and, lately, China have deep-sea research vehicles that can go as deep or even deeper than *Alvin*, but no human-occupied submersible in the world has been as proven or productive. In its fifty-eight years, *Alvin* has gone on 5,075 dives, which is more dives than those undertaken by all the other countries’ submersibles put together.

A recent \$8 million overhaul increased *Alvin*’s depth rating from 4,500 meters to 6,500 meters. To understand the ramifications, consider that, at the time of its prior upgrade in 2013, *Alvin* was able to explore 63 percent of the ocean. Having cleared its final safety-test protocols, the new *Alvin* now has access to 99 percent of the ocean, including all but the most extreme of the hadal zone depths. Geologist Adam Soule of Woods Hole says the newly accessible depths almost guarantee the discovery of novel species with each descent.

When Soule set out to choose a research crew for the upgraded *Alvin*, he turned to none other than León Zayas. In addition to asking her to join the mission, he sought her help in choosing the other participants. As the youngest of *Alvin*’s planning team, León Zayas helped review applications to assemble a diverse, multidisciplinary group of deep trench scientists. Each participant’s individual research interests had to complement those of the rest of the group. Not all will dive on *Alvin*, which can carry only two scientists and a pilot. Some will instead serve aboard *Alvin*’s tender ship, *Atlantis*. Essentially a floating, twenty-four-hour scientific operation, *Atlantis* has both the technology and the square footage to host the geologists, chemists, biologists, and other subject experts who help process *Alvin*’s findings. Those onboard *Alvin* get to collect their own research samples, but they also must gather up items requested by others: sediments, vials of water, and even tiny critters.

In July, León Zayas participated in the upgraded *Alvin*’s first science verification dive, a ten-hour

Alvin’s...

WEIRDEST MOMENT:

being lost on the bottom of the ocean between 1968 and 1969

GREATEST ACCOMPLISHMENT:

discovery of hydrothermal vents, or evidence of sub-seafloor volcanic activity that enables vibrant ecosystems in extreme ocean depths, in 1977

CELEBRITY ENCOUNTER:

exploring the wreckage of the R.M.S. *Titanic* in 1986

WITNESS TO DESTRUCTION:

documenting the effects of oil spillage on deep-sea corals after the 2010 *Deepwater Horizon* disaster



opportunity to test the sub’s enhanced equipment, including its new ability to share images with *Atlantis* in real time. The dive also helped determine best practices for the descent and ascent (an important consideration on a craft with no bathroom).

For her inaugural dive, León Zayas donned warm clothing (temperatures inside *Alvin* hovered around 45 degrees Fahrenheit), climbed through *Alvin*’s hatch, and settled within the curved walls of its titanium personnel sphere. She, along with *Alvin*’s pilot and one other scientist, spent two hours descending, feeling the temperature dip, and watching as the ocean waters outside *Alvin*’s five small windows changed from blue-green to dark blue to inky black. They sank through the darkness until the pilot flicked on *Alvin*’s exterior lights. Then León Zayas peered out at the Puerto Rico Trench, which she had studied, but had never witnessed directly with her own eyes.

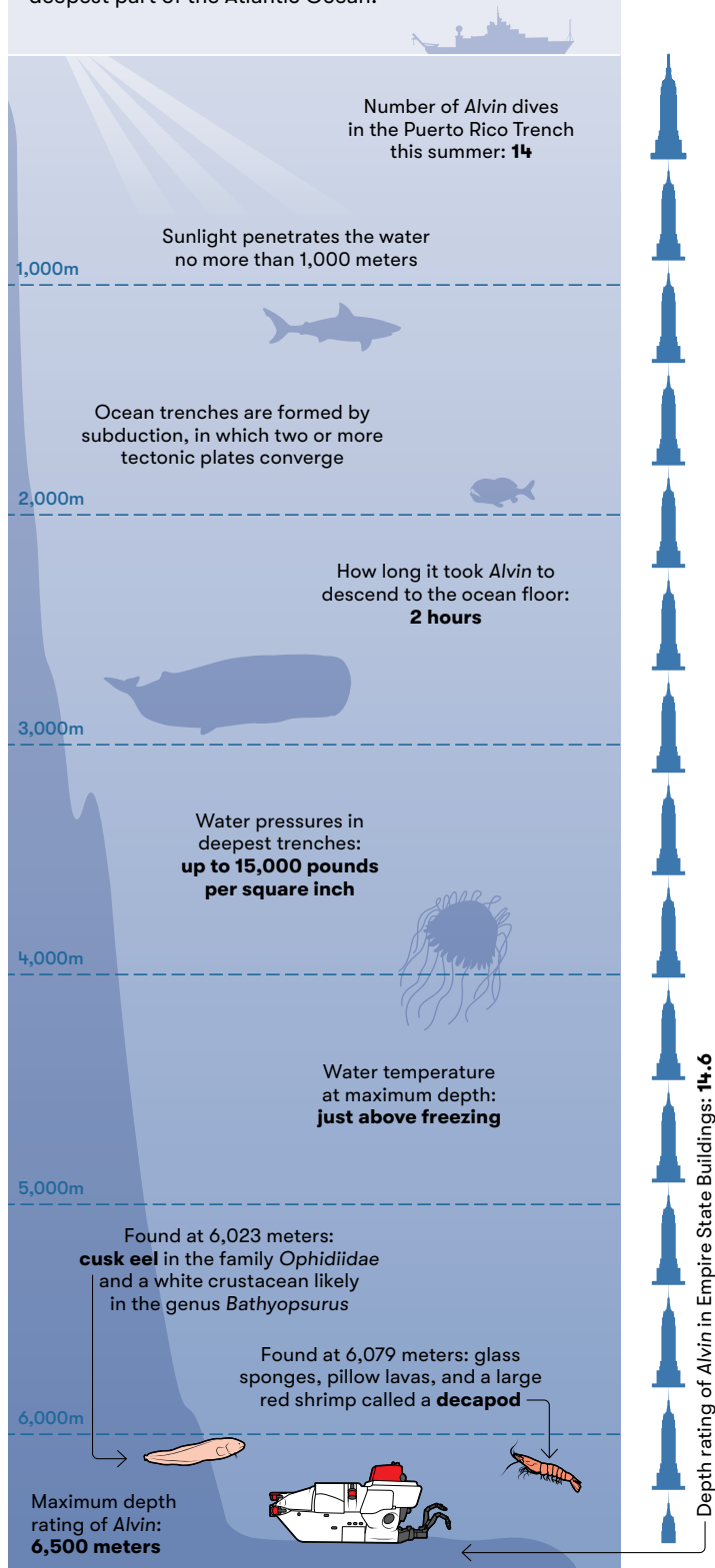
Picture a Willamette professor, about a month earlier, animatedly explaining messenger RNA in her Olin Science Center office, and grinning modestly at the suggestion that her *Alvin* dives would pique her students’ interest in field biology. In fact, they’re already hooked. That morning, the biology department had

↑
Atlantis carries *Alvin* to its deep-water destination.



About the Expedition

Aboard the submersible *Alvin* this past summer, Professor Rosa León Zayas and other scientists explored the Puerto Rico Trench, which is the deepest part of the Atlantic Ocean.



congratulated León Zayas's two summer research students, who spent months isolating the specific genes that allow "plastic eating" microbes to biodegrade plastics. The microbes they were studying happen to live on land, but the potential application is a clear source of hope for the ocean's plastic problem.

By next summer, *Alvin*'s deep trench dives will have brought their own new discoveries, and ultimately, new knowledge and applications. "There's so much to learn," says León Zayas, "and it feels like it's just the beginning."

What is now hidden below the sediment of the hadal zone may ultimately help us remediate ocean environments and devise cures for human maladies. Trench microbes have a story of survival and adaptation written in their DNA. Thanks to León Zayas and her fellow deep-sea researchers, that story is finally beginning to surface. Read backwards, it documents the evolution of life in the ocean depths. Read forwards, it may reveal a path for our planet's future. ●

Mary Elizabeth Strunk writes about science and history and the big ideas that are changing both.

The King

tHE FIRST MONTH of fall is her favorite of the year. Since mid-July, everything has been sun-scorched and sapped of water, the moss growing brittle, fern leaves curling in the heat, gravel dust kicking up from the road and coating vine maples around the A-frame cabin her father moved into after her parents split, and where Skye now spends every weekend. But after a few days of rain, all the plants brighten again, as if electrified, while the ground goes dark and pungent with the smell of rotting leaves and fir needles, and mushrooms pop out of the

ground everywhere. Some are smaller than the nail of her pinky, others the size of a dinner plate. Skye loves watching them split the soil and unfurl like little umbrellas over the course of a day or two, and then she spends hours taking pictures of them with her phone, trying to capture them from all angles, not so she can identify them—she's tried using her father's mushroom guide and quickly tires of reading about gill shape and spore size—only to show off their strangeness and beauty.

But show off to whom? Her friends at school could care less about mushrooms, and if she texted them the pictures, they'd call her Cave Girl or Mountain Mama and think she's even weirder than they now believe. No other seventh-grader she knows rides forty-five minutes east of Salem every Friday afternoon, skipping slumber parties and soccer games and excursions to the mall in favor of trees and rocks and mud. So she keeps the mushroom snaps in a separate folder from her other pictures, the selfies before her ballet recitals and the ones in which her friends make funny faces as they wait to board buses after school. She's let her mother scroll through them a couple of times, and while the latter has made appreciative noises and complimented Skye's attention to detail—"ooh, that one's gorgeous," or, "you really got the color on this one"—after looking at a dozen or so, her attention wanes, and Skye snatches back her phone.

Her father, on the other hand, will study each one intently, with his massive guidebook next to him on one side, on the other a legal pad into which he makes meticulous notes about cap and gills and stem. He's turned it into a project: they'll identify as many as they can, record the variety and richness of their home. And she

goes along with it, because it means he encourages her to take the pictures, though knowing the Latin names for what she finds is beside the point, as far as she's concerned. She prefers the common names, which she repeats to herself during the week, bored in Social Science class: fairy saddle, pig's ear, destroying angel. Mostly she's just amazed by their otherworldliness, these alien life forms that spread secretly underground in spring, wait quietly all summer, and then colonize the land when rain drives people inside. No one else seems to realize how bizarre it is. So she waits until she's in bed at night to scroll through the pictures on her own.

tHIS EARLY IN the season, the rain falls intermittently, and there are still enough sun breaks to spend hours by the river or on trails heading up into the surrounding hills. Her father wants a good workout when they hike, and she knows he's frustrated by her pace as she stops every few feet to snap photos. But he also wants them to stay together when they're in the woods—he's reminded her multiple times that people have spotted black bear out here, and cougar, though he's never seen either—so he slows and says nothing. The trees grow thicker as they ascend, some of the Doug fir trunks six feet across, the grooves in their bark deep enough to stick a whole fist in. Others fallen during storms have been slowly decomposing for years, blanketed in moss and lichen, fringed with licorice fern, little forests of wild blueberry growing on top, and this is where she often finds the most interesting things to photograph: spiky coral fungus, bright yellow slime molds, a purple mushroom her father

By SCOTT NADELSON / Illustrations by GRACIA LAM



describes as lewd, though he won't explain why, another that looks like discarded orange peels.

Occasionally they spot something he wants to take home. Compared to other endeavors—especially those to do with spending money, according to her mother—he's cautious when it comes to eating wild mushrooms. At least he is now. Last year he cooked up a pile of what turned out to be false chanterelles and made himself sick for three days. This year he swears he'll pick only things he's absolutely sure about. Oyster mushrooms growing on alder logs. Chicken of the woods on fir stumps. Lion's mane on a scarred oak. Cauliflower mushrooms that look less like cauliflower than a pile of curly noodles someone swallowed without chewing and then hurled beneath a hemlock. She won't eat any of them, though she enjoys the portabellas he buys from the supermarket and sears on the propane grill.

Today, though, she finds something that excites him more than usual. "Is that what I think it is?" he asks, and then crouches with obvious pain, pressing a hand to his lower back, to scrutinize it from below. It's a big mushroom with a wide brown cap, a stout stem, spongy underside rather than gills. "It is," he says. "No question." He claps and whistles. "The king. We're in for a treat tonight."

"Are you sure it's safe?" she asks. "I hate listening to you barf."

"We'll double-check the book. Do a spore print if we have to. But I'm pretty sure."

"Sounds like a wolf coughing up live chickens."

"King bolete. Prize of the woods."

"Last time I thought you were dying. I almost called an ambulance."

"Porcini, baby. You pay big bucks for them in Italian restaurants. And those have usually been sitting around in oil for years."

"Does it have look-alikes? Death king? King of the underworld?"

"We'll look it up and make sure when we get home," he says, his fingers already gripping the stem. "But I'm like ninety-nine percent sure it's the real deal. Maybe ninety-seven. But we'll do our due diligence."

"Get your grubby hands off," she says. "I'm not finished yet."

He backs away, and she takes several more shots from different angles. It truly is grand-looking, noble, even, though

when she teases it up from the soil, small black bugs scurry beneath the cap. She's able to brush some off, but at least a few duck into the pores that line the underside.

"We'll soak them out when we get home," her father says before easing it into a sealable plastic bag and tucking it into his backpack. "I'm telling you, Sills, this is one you'll want to try. Best mushroom in the world. Except maybe for the morel. But those don't come until spring. We'll make fresh pasta. Or maybe homemade pizza. If we've got any flour. And cheese. We can probably get most of what we need at the market in Mill City. Hell, we can drive all the way to the Safeway in Stayton if we have to. No point ruining the king with crappy ingredients."

He chatters the whole way down the trail. She hasn't seen him this happy in months, and for that alone she's grateful enough to determine she'll try the mushroom even if it makes her nervous. The black beetles aren't what bother her most—they're hardly bigger than a pinhead—nor even the possibility of eating something poisonous. Rather, it's that she feels she shouldn't take things from the forest, at least not without leaving something in return. But that isn't quite right, either: all summer she picks thimbleberries and huckleberries and sour grass without the slightest compunction. A mushroom, though, is different somehow, belonging to the secret time when the woods are mostly free of people. She wants to make an offering of some kind, but she can't imagine what. Instead she decides she'll get one of these photos printed and hang it on her wall.

WHEN THEY GET back to the cabin, she says she'll clean up the kitchen while he goes to the store. She doesn't want to be in the car, she tells him, or around people, both sentiments he understands and admires. The truth is, she wants more time to arrange and photograph the king. She sets him up on the deck, propped so he appears to be blooming out of the railing, out of a bird feeder, out of the palm of her hand. She arranges him with a little ceramic gnome her father bought years ago as a joke—he'd get up early in the morning and move him around their yard in Salem, and Skye, even though she knew who was behind it, would make a big show of searching and exclaiming over the little guy's magical abilities—and snaps a dozen more photos. She shoots the king on the kitchen table, on the couch, in her bed with her stuffed animals: a goat, a sheep, a sloth. She's quickly come to think of him as a new friend, an adopted family member, and starts to doubt the idea of having him for dinner, though she's caught whiffs of his nutty flavor and finds herself growing hungry.

She doesn't want to disappoint her father, but now she thinks eating the king would be like eating a chicken she raised. She brings him outside

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again, sets him on a bed of moss beside the path to the river, and takes one last picture. She'll leave him there just until her father gets home, she thinks, a few more minutes in his natural habitat, and now she does tidy the kitchen counter, which is covered in plates from breakfast. If she left it to her father, he'd just pile them all in one corner while he cooked dinner, and they'd be teetering by evening; more than once he's accidentally tipped a stack into the sink and broken whatever was perched on top.

But she isn't at it long before she sees the king again. Through the window over the sink, he should be slightly out of view, except here he is, directly in front of her, in the grip of a squirrel. One of the little brown ones with an orange belly, a native species, her father has told her, unlike the big gray invasive ones that have taken over the parks in Salem. She knows they're rare, and normally she's happy to see them, but this one is chewing on the king's cap. "Stupid squirrel!" she cries and drops the coffee cup she's been washing. It rolls into the sink but doesn't break, or at least from the sound it makes she doesn't think it's broken but doesn't check to see because now she's running outside, shouting and waving her arms. The squirrel takes off with the king. It ducks beneath a sword fern and then through the prickly leaves of Oregon grape and up the nearest fir, where it perches on the lowest branch, twenty feet above her head. There it squats and munches, giving her its full profile so it can keep her in view. Its teeth work methodically around the edge of the cap, and when it's gone, down the length of the bulbous stalk. Bits of the king rain down and dot the bare soil around the tree's trunk.

She's weeping when her father returns with two bags of groceries, blubbing so incomprehensibly it takes several tries to explain what's happened, punctuating

every other statement with, "I'll kill that stupid squirrel!" And then she adds, because she knows she can get away with it, "Stupid fucking squirrel." One of the things she relishes most about being at the cabin is that she can swear as much as she wants, without anyone telling her—as her mom always does—to make sure she curbs herself while she's at school. She knows how to curb herself plenty. What she wants is someone to encourage her to quit curbing so much, to say whatever she wants, which is what her father does when he's in the right mood, when he's not too depressed or suffering with back pain. She'd like to say things about the terrible year she's been through, the shock of her family falling apart, all the more upsetting because she knows she should have seen it coming. Instead, she cries, "I'll wring that fucking squirrel's neck."

She also apologizes several times, says she shouldn't have left the king alone, but he shrugs it off, tells her it isn't her fault, she shouldn't be so hard on herself. Still, she sees the disappointment in his face, stubbled and tired-looking now, a hint of the sorrow he always tries and fails to hide from her darkening his features as he gazes up into the tree.

"Hey," he says, setting down the grocery bags. "It's no big deal." He tries to hug her, but she bats his hands away. "It's just a mushroom. We'll find more, right? At least now we know it really was what I thought it was. Squirrel's got good taste."

Nothing he says consoles her. She left her precious king exposed, let the enemy steal in undetected, and now he's gone inside its horrible orange belly.

"I've got to get these inside," her father says. "I bought ice cream. And I picked up portabellas in case you weren't ready to try the bolete. So we're good. We've got plenty to eat. We'll still make a feast. And you've still got your pictures."

She lets him go in. She's done crying now, but the anger lingers, along with the pain. There's a smell in the air, moist and dank, that wasn't here before, and she guesses it's the scent of the ravaged king. She shouts up the tree, tells the fucking creature what she'll do if she ever catches it. She doesn't care if it's endangered—she'll show it what endangered really means. But the squirrel is gone, either too high up in the branches for her to see, or onto another tree, though she didn't witness its escape. She pulls out her phone once more and takes a photo of the carnage on the ground, the scattered white strands, one fingernail-sized chunk of the king's cap against last year's downed needles. This picture she'll show no one.

"Hey," her father calls from the deck. "It's just a fungus, right?" ●

Making Waves

Pay close attention to the two circles! In a sense, they are stylized depictions of the word that should be placed within them. For the solution to the puzzle, go to willamette.edu/magazine.

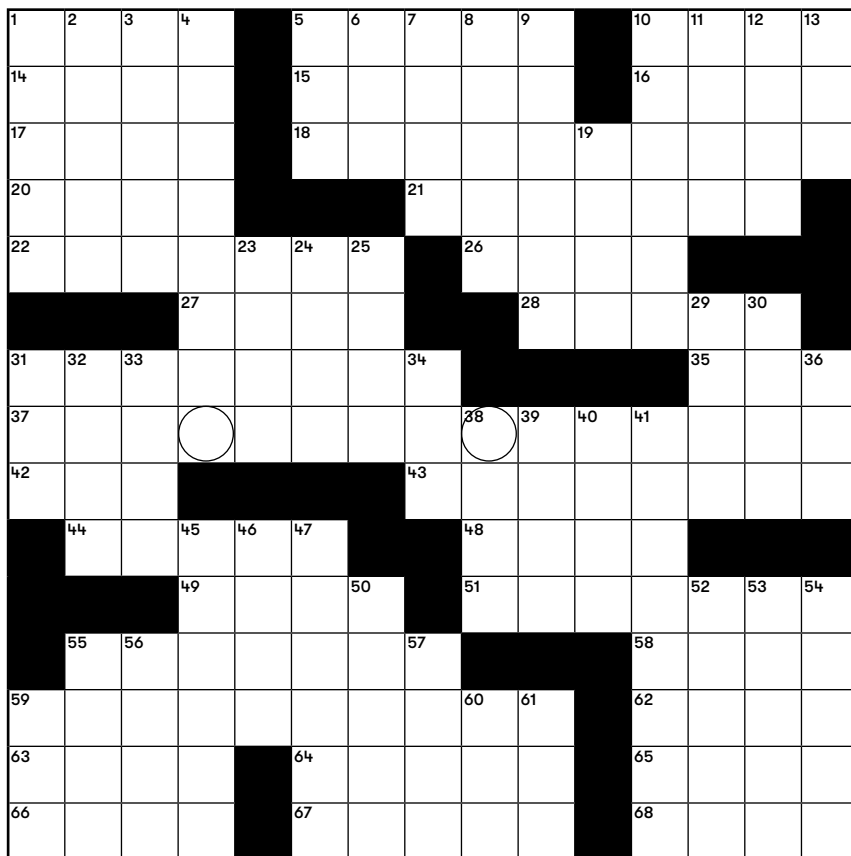
ACROSS

- 1 End-of-semester hurdle
5 The "M" of M.O.
10 Like 37-Across on one's birthday, often
14 Call back?
15 Actress Téa of *Madam Secretary*
16 Hot stuff
17 Secure a ship
18 With 21-Across, annual race held by some Willamette MBA students...
20 Sound of entering the water
21 ...as depicted by the circles in 37-Across
22 Help navigating a webpage
26 Hockey fake-out
27 Paul who played *The Riddler* in *The Batman*
28 Linguistic flair?
31 "Ground Control to _____"
35 Support provider?
37 It runs through the heart of the Salem campus
42 Homer's neighbor
43 Use fightin' words
44 Capital of Belarus
48 Lamar _____, former NBAer
49 Grp. that controls over 80 percent of the world's oil reserves
- 51 Does some lab work for a vacationing professor?
55 "My Way" singer
58 Laugh riot
59 Flotation devices seen in 37-Across... and represented by 2 squares there
62 "I'm _____ you!"
63 College student staple
64 Get out of Dodge
65 Info on a Bearcats game ticket
66 Not much
67 Type of macaroni
68 "So do I!"

DOWN

- 1 Seasonal workers, say
2 Danger in undercooked chicken
3 "Aw, darn it!"
4 *Where a submarine missile is fired from
5 Org. with Angels and Giants
6 "_____ the ramparts we watched..."
7 Way in or out
8 Like a bachelor or bachelorette
9 Just barely burns
10 Christian of *True Romance*
11 Appliance unit
- 12 Colorful part of the eye
13 Women's History month (Abbr.)
19 Come to
23 Old-timey school teacher
24 Against
25 Game in which you need to take cues?
29 "Likely story..."
30 Title for a German woman
31 Hood, for one: Abbr.
32 Professor's attention-getter
33 Yoda and Obi-Wan, e.g.
34 Metric volume units: Abbr.
36 Fender guitar accessory
38 Shoulderless, sleeveless women's clothing item

- 39 Part of a debate
40 Horse's gait
41 "Ba-dum-tss" sounds
45 "Don't bother, you've done enough"
46 Have a verbal back-and-forth
47 Need for making tea
50 Like unconstitutional punishments
52 Region of Ancient Greece
53 Native American carving
54 Keep frozen, say
55 Bad mood
56 Worshipper of the sun god Inti
57 Simple rhyme scheme
59 401(k) alternative
60 Sporty Mitsubishi model, for short
61 Fix a pair of socks, say



Evan Mahnken, who grew up in Bellevue, Washington, and now lives on the East Coast, has been constructing crossword puzzles since 2017. Several of them have appeared in the New York Times.

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