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Summer 2026

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Our summer reading list

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Dialogue

Checklist

The Spring cover story showcased nine inventions you may not have known about from the Farm's first century, including the computer mouse.

You correctly highlighted Stanford Research Institute engineer Doug Engelbart, but omitted the contribution of Bill English, MS '62. Bill built the first computer mouse and was the technical lead in setting up the mother of all demos, which showed not only what could be done with a graphical display on a single computer but also the value of the ability to communicate directly over a network, from one computer to another.

Joe Becker, PhD '72
Palo Alto, California

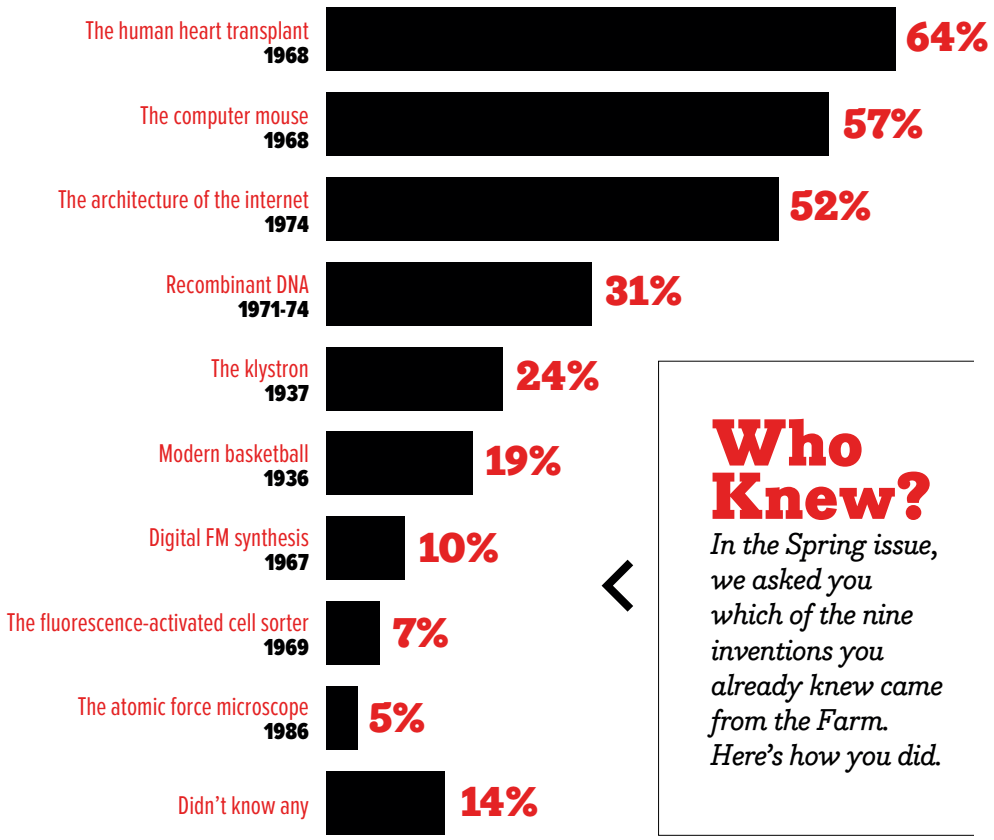
Dr. Norm Shumway performed a coarctation repair on my infant-sized aorta at Stanford Hospital when I was less than a year old. It was probably a routine surgery for him at that point in his career (1987) but a truly life-changing one for me. He passed away when I was an undergraduate, which I found out because I happened to walk by Memorial Church during his memorial service. The only thing to do was skip my afternoon class and step into the church.

Tara Laidlaw, '08
Talent, Oregon

My PhD adviser, Professor Herbert John Shaw, MA '42, PhD '48, and I invented the fiber-optic amplifier. It allows data to be transported at ultrahigh speed over fiber links thousands of miles long and led to the deployment of today's communication network. Everyone who has a cell phone or a computer uses fiber amplifiers. The lasers that cut metal in automobile manufacturing plants or that down missiles, as well all use fiber amplifiers. They have been used in tens of thousands of scientific experiments and have appeared in just as many scientific papers. Remove the fiber amplifier and we would never have been ushered into the digital era. You might argue that the same could be said of many other vital internet components—the transistor, flat panels, the optical fiber, and lithium batteries all had a comparable impact. But they weren't invented at Stanford.

Michel Digonnet, MS '80, PhD '84
Professor (research) of applied physics
Palo Alto, California

The article covers a slew of male inventors but not one woman. I'm not sure what message is conveyed by this choice. If it was impossible to find women from 50 or



Who Knew?

In the Spring issue, we asked you which of the nine inventions you already knew came from the Farm. Here's how you did.

LUKE LUCAS

100 years ago, you might explain their absence in your article rather than leave a glaring silence that you invite readers to fill.
Merete Rietveld, '00, MA '01
Los Angeles, California

A Fitting Tribute

The Spring issue included a story about student-athlete Lowell Wilson, who died in 1964 as the result of an accident on the football field.

My husband, Martin Lee, '66, teared up when I read this article to him. Despite having a memory impaired by Alzheimer's, Marty remembered Lowell Wilson as a "great guy" and recalled visiting him at the hospital after the accident. Wilson's accomplishments, aspirations, and courage in response to tragic loss and adversity certainly make him worthy of remembrance. I am grateful for the opportunity you provided to learn about this admirable young man.
Nancy Lambert
Durham, New Hampshire

Write to Us

dialogue@alumni.stanford.edu

Letters may be edited for length, clarity, and civility, and may appear in print, online, or both.

Editor's Note

SUMMER MOORE BATTE, '99

I'm Not Crying, You're Crying

Actually, we're all crying together.

I AM NOT A CRIER, except in one emotion category. Put me in the stadium as exuberant graduates toss their mortarboards, or in the War Memorial Opera House for the *Coppélia* curtain call—or heck, in a gym at the end of a fourth-grade musical production of *Peter Pan* (true story)—and I'm a goner. So when I saw video of the Stanford men's gymnastics team jumping, cheering, and generally collapsing into a single, hugging heap upon winning the 2026 NCAA championship and securing the Card's 50th consecutive year with at least one NCAA team title, I choked up.

There's a term (sadly, not coined on the Farm) for such sentiment: collective effervescence. It describes an intense emotional reaction experienced with a group. The vibe needn't always be joy and accomplishment, though those are what consistently open my personal floodgates. But it does typically arise from a sense that something special is happening, and it can foster a feeling of belonging to something bigger than oneself.

It's also why we felt strongly about celebrating Stanford's championship feat in our Summer issue, even if it meant our magazine team spent the spring sweating the postseason outcomes of at least eight Stanford teams—some of them past our printing deadline. More than a few people asked why we didn't just wait until the Autumn issue to cover the big 50, *if* it came to pass. (Pshaw, doubters.) But here's the thing about collective jubilation: It's felt in the now. And when you make a quarterly magazine, even "now" is late. This issue leaves our hands about a month before you receive it. Once men's gymnastics stuck their landing in mid-April, the streak was secure and we could proceed with our cover story (page 40). That left the deadline for the timeline of all NCAA champions (page 44), which we pushed as far out as possible, to capture any late-May wins. Still, dear reader, if any team pulls off a June surprise, grab a marker and take matters into your own hands.

Our production particulars are at the root of three other things you might notice about this issue. First, I'm not Kathy Zonana, '93, JD '96. She was on leave this spring, so the Summer issue was mine to lead, and one of the perks is writing this column. Second, sometimes Stanford giants die after we've made the difficult decision about whom to feature in Farewells (page 72), so the life and legacy of NBA player Jason Collins, '01, for example, will be covered in our Autumn issue.

Third: If you're an undergrad alum, yes, this issue is thinner than usual. Class Notes are exclusively online, an efficiency measure that allows us to send one version of the print magazine to all 248,082 alumni worldwide. Have no fear—they will be back in print this autumn, and the summer columns are just a QR code away, as you'll see on page 70. There, you'll also find highlights pulled from our 74 columns and 694 alumni updates. I read them all. And somewhere between the news of Evelyn Konrad, '49, MA '49, addressing the United Nations and Dede Trimble Griesbauer, '92, retiring from her Ironman career, darned if that feeling of being a part of something bigger than myself didn't bubble up. ■

Email Summer at summerm@stanford.edu.

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President's Column
JONATHAN LEVIN, '94

Simplify, Then Simplify Again

Cutting red tape to make Stanford work better.

STANFORD: Why did the university need a simplification initiative?

Jon Levin: When I was appointed president, I went around and talked to many people at the university. I kept hearing stories about being frustrated by bureaucracy and red tape. I was dismayed. I think Stanford needs to be an entrepreneurial place where faculty, students, and staff can make good things happen, and the university allows smart risks.

I talked to Richard Saller, who had had the same experience during his time as president. He had enlisted former provost John Etchemendy [PhD '82] to conduct a review. So I asked John and Richard, along with vice president for university affairs Megan Pierson ['82], to lead Simplify Stanford.

What were the pain points like?

Many had the flavor of, *A bad thing once happened, so rules were put in place to make sure it would never happen again*. A taco truck once caught fire on campus, so food trucks were regulated. Fifteen years later, students and departments were still getting tangled up in policies and approvals when planning events.

Other frictions were legal or regulatory. In many academic fields, faculty and students want to sign data-sharing agreements with companies. You need some structure to protect the researcher's autonomy and the confidentiality of the data. But we had 20-page contracts and months of negotiation rather than common sense.

These are specific examples, but when it's hard to get simple things done, the frustrations compound, and that's what we wanted Simplify Stanford to address and turn around.

What are some examples of improvements?

The initiative has prioritized changes that matter a lot to people. Faculty hiring is one of the most important things we do at Stanford. It takes time to be rigorous, but John and Richard pointed to a lot of unneeded administrative burden at the central university. We reduced turnaround times from 47 days to 20. We gave deans more authority to make fixed-term appointments, so they can be nimble when a school has an opportunity to bring in someone who's exciting. Similarly, we have a careful institutional review for social science surveys and experiments. It was terribly backlogged, and now it's about half as long.

One thing that infuriates people is filling out thickets of paperwork. There's a whole genre of academic stories about going to give a seminar and being forced to register as a vendor to get reimbursed for an Uber. The students in Computer Science 247S: Service Design, helped to set up a simple online portal and cut Stanford's reimbursement times from 13 days to two.

By now, there have been around 100 simplification projects. Students proposed ways to speed up approvals for class T-shirts and improve planning for events. Stanford staff, who suffer the most from bureaucratic sludge, have been responsible for the lion's share of the successes.

One reason universities have become more bureaucratic is that regulations have multiplied. But when I was a dean, there were times when I approved hiring new staff to navigate bureaucracy. That's a vicious cycle. We're trying to reverse the dynamic and have a virtuous cycle.

If in a few years you look back on Simplify Stanford, how will you know it's been a success?

Stanford is known for producing problem-solvers. That should apply to how the university works for its faculty, students, and staff. If there's a problem, we solve it.

I think if you spend time at Stanford, you come away deeply impressed by the faculty and students, and by the outstanding staff. The classrooms are invigorating. The research is pioneering. People should also walk away saying, "That place runs really well." Many parts of Stanford already do, so it's an ambitious and attainable goal. ■

Do you have a question for a future column?
ALU.MS/ASKLEVIN

TONI BIRD

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Clean Sweep

Stanford women's rowing made it look easy at Redwood Shores on May 2 as the team bested all six of Cal's boats in the Big Row. That final event of the regular season was a big go: Two weeks later, the Card won all five ACC championship regatta races for the second year running. It was the team's fifth consecutive conference title.

PHOTOGRAPH BY MADDIE HINKLEY/ISI PHOTOS

Research Shows Only 10% Of Eligible Borrowers Refinance Student Loans Despite Potential Savings

New data reveals a persistent savings gap among eligible borrowers, and the reasons behind it

For millions of Americans carrying student loan debt, payments are back. A familiar question has new urgency: how do you manage student loan debt without sacrificing everything else?

After years of disruption—the federal payment pause, legal battles over forgiveness, and the end of the SAVE repayment plan—many borrowers settled into a prolonged "wait and see" mindset.

The problem is that waiting has a price tag.

THE STUDENT LOAN SAVINGS GAP

Research shows less than **1 in 10 eligible[1] borrowers refinance[2] their student loans**, even when doing so could mean saving[3] money. That gap isn't about financial discipline. It's about clarity.

Refinancing replaces your existing loan with a new one, often at a lower rate, with terms that better fit your current life. It can reduce total interest paid, lower monthly payments, shorten your timeline to debt-free, or consolidate multiple loans into one.

The math can be striking. A $100,000 loan at 7% interest, refinanced to 5% over 10 years, could save more than $12,000 over the life of the loan—and reduce monthly payments by roughly $100. For borrowers carrying six-figure balances, the impact compounds further.

On paper, $101 per month may appear modest. But, it can mean breathing room, with funds put toward retirement savings, a mortgage, or simply greater stability.

The gap isn't in the math, it's in the action. Too many borrowers who would benefit from refinancing simply haven't made the move.

WHY MOST BORROWERS DON'T ACT

Common hesitations are often based on misconceptions. Many borrowers assume refinancing is complicated, costs money, or will ding their credit score. Earnest lets you check your rate in minutes with no credit impact and no commitment. But each month spent at a higher-than-necessary rate is money that can't be recovered.

Refinancing isn't right for everyone. Borrowers pursuing Public Service Loan Forgiveness or income-driven repayment plans should weigh whether staying in the federal system makes more sense. But for borrowers with stable income, solid credit, and no path to federal forgiveness, refinancing is one of the few direct levers available to potentially lower the total cost of debt.

WHY BORROWERS CHOOSE EARNEST

Earnest helps you build the financial life you envision and go from debt to wealth.

You can check your refinancing rate in minutes with no credit impact. And you'll never pay any fees, not even late payment fees. You can also customize your loan and pick your exact monthly payment down to the dollar.

The 1-in-10 statistic isn't just about missed savings. It's a signal that too many borrowers haven't taken time to understand their options.

Checking your rate isn't a commitment. It's a starting point.

	CURRENT LOAN	AFTER REFINANCING
Loan Amount	$100,000	$100,000
Interest Rate	7%	5%
Monthly Payment	$1,161	$1,060
Total Cost Over 10 Years	$139,270	$127,165
	Total Savings	**$12,105**
	Monthly Payment Reduction	**$101**

*Example above is for illustration only and may not reflect actual Earnest rates or terms. Eligibility and offers depend on your credit profile. Savings are not guaranteed and will vary.

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earnest

1 This claim is based on analysis combining publicly available data and proprietary underwriting models. We applied our proprietary data and underwriting criteria to estimate the portion of borrowers who are credit-eligible and could achieve savings through refinancing. Actual savings and eligibility may vary based on individual circumstances, creditworthiness, and current loan terms. This analysis reflects market conditions as of 2025 and is subject to change.

2 Please note that you will lose benefits associated with your underlying federal loans, such as federal Income-driven Repayment Plans, Economic Hardship Deferment, Public Service Loan Forgiveness, or other deferment and forbearance options, if you refinance into a private loan. If you file for bankruptcy, you may still be required to pay back this loan.

3 Choosing to refinance to a longer term may lower your monthly payment, but increase the amount of interest you may pay. Choosing to refinance to a shorter term may increase your monthly payment, but lower the amount of interest you may pay. Review your loan documentation for the total cost of your refinanced loan.

WHO WE ARE

Meet Aliya Alsafa

Piano is her forte. But it's only one part of her composition.

"Being passionate about something like piano helps you find the beauty in other fields, even if it's not related."

TIMOTHY ARCHIBALD

NEITHER OF ALIYA ALSAFA'S PARENTS played an instrument. But they did have a keyboard in their living room. "It was like decoration," Alsafa, '26, says. "No one ever touched it." Alsafa, though, was fascinated with its sounds from a young age. In response, her mom signed her up for piano lessons at age 3. Apt and eager from the start, Alsafa was soon taking classes at the Music Institute of Chicago, two hours from her home in Joliet, Ill. By her teen years, her family had moved to New York City so she could attend the precollege program at Juilliard. Her playing would take her to stages around the world, earn her elite distinctions such as inclusion in the Lang Lang Young Scholars Program, and necessitate practicing up to 10 hours a day.

Then came "the biggest fork in the road I think I've encountered in my life," she says. Should she attend a conservatory and attempt to be a concert pianist, or turn in a new direction? "I needed to take a chance to broaden my horizons," she says. "I came into Stanford thinking I really wouldn't do music anymore. Maybe I'll just keep it on the side and play for friends."

It wouldn't turn out that way exactly. Alsafa majored in computer science, an interest that started from watching her dad code. (Next year, she'll remain on campus to earn a master's in CS with a specialty in AI.) She also co-captained the K-pop dance team, XTRM. But piano remained central to her life. Alsafa co-founded the Stanford Keyboard Studies Committee and the Stanford Piano Society for, respectively, students and fans of the piano. She joined AI research efforts to model the stresses that piano puts on hands—particularly smaller hands like her own. And she continued to play. In April, Alsafa—a music minor—won the music department's Blew-Culley-LaFollette Prize for piano performance. "None of it is pressured or expected," she says. "That's probably the healthiest relationship with music that I've ever had." ■

SEE ALSAFA ON VIDEO AT
ALU.MS/ALIYAALSAFA

"I always say a prayer before I go on stage, and that's very grounding for me. Every time I perform feels more like a gift and an opportunity than something scary, or life or death.

"Feeling the energy in the room, feeling other people's energy, too, really helps me bring out different colors and different emotions in the piece.

"The first thing that I fell in love with Stanford-wise was computer science. I just loved systems and cybersecurity. It's so interesting to think that there are people trying to dismantle all these things that you've worked for, and you have to outsmart them.

"Because I am putting myself into many things, like CS and music and dance, there's less pressure in any one area.

"When I listen to classical music, it feels like work because I can't help but analyze it.

"I listen to pop music, to hip-hop, rap, and funk. I love Coldplay. Their music is very interesting and hits a sweet spot in between catchy pop and very thoughtful composition.

"I'm in a girl band called Girlband. We do covers. It is easy to play these songs, because it's, like, four chords and the same rhythm. It's really what you make of it, though. You can have so much variation in texture and dynamics and slight differences between choruses if you want a different effect. It makes you think about music as more of a fluid thing."

TIMOHTY ARCHIBALD (2)

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CLOSE UP: Jae (below) has photographed competitors at about 100 professional rodeos in recent years, including bull rider Wacey Schalla at the 2025 Santa Maria Elks PRCA Rodeo.

Not His First Rodeo

Or second. Or 30th.

LIKE A LOT OF PEOPLE, Ryan Jae, '19, felt like he needed to mix it up during the COVID-19 pandemic. But rather than bake bread, he jumped on the back of a bull and started competing in rodeos. Before he knew it, he was getting paid to photograph them too.

It started with horseback riding lessons. Jae, a software engineer who lives in Walnut Creek, Calif., had been looking for something athletic he could do outdoors. During one ride, a wrangler at the stables—slender, like Jae—mentioned that he also rode bulls. He recommended a place Jae could learn, if he was interested.

Jae soon attended La Grange Rodeo—his first—with his camera in tow. "I thought it was the most glorious thing I'd ever seen," he says. He snapped a lot of photos, then a week later tried roughstock himself, on steers, at Flying U Rodeo's Free Rough Stock School in Marysville, Calif. After getting thrown repeatedly, he stayed on one for about eight seconds. "That's when you get addicted," he says. "That was the most fun ever."

Next came bulls. "The first time on a bull I was as terrified as I've ever been," Jae says, even though he's "a bit of a thrill seeker" and has tried everything from skydiving to cage diving with sharks. "It's different when you climb on this animal and feel them. You think you're going to die, and then you don't die."

Since then, Jae has photographed about 100 professional rodeos, publishing in several pro rodeo news magazines, including *ProRodeo Sports News*, the official publication of the Professional Rodeo Cowboys Association since 1952. In 2024, he was the National Finals Rodeo Open and National Finals Steer Roping photographer. To capture the thrill of such events, he likes to get as close as possible to the bull—a calculated risk.

"Getting down low is the biggest thing," he says. "You're looking up at the most interesting perspective. That bull is larger than life. I'm lying on all fours in the dirt to get that perspective."

He has also competed in about 30 rodeos. Sure, he's gotten hurt. A kick to the abdomen lacerated his kidney and fractured his lumbar vertebrae. "You're always going to break something," he says. "I was in the hospital watching bull riding videos on my phone. I knew I was going to come back." ■

FROM TOP: RYAN JAE; NICOLE FAVA

A Different Class of Dancers

Students learn the art of being awkward.

"WELCOME TO BAD DANCING," says **Alex Ketley**, a professional choreographer and former member of the San Francisco Ballet who teaches Dance 123: Hot Mess & Deliberate Failure as Practice. Ketley, an advanced lecturer in the department of theater and performance studies and a former Guggenheim Fellow, says it's his most popular course.

About 20 undergraduates and graduate students have signed up for what the course catalog describes as "a dance class in how we become the worst dancer possible."

"That's something I've never been told to do," says Annika Younge, '27.

"Run with absolute abandon," Ketley says. And, like kids at recess, the students swarm onto the floor at Roble Gym, prancing, leaping, and stumbling into one another. Next, "make crazy monster faces," Ketley instructs. Now, he says, "Repeat the phrase: 'I'm alive and filled with watermelon.'"

After class, Ketley says that his objective is for students to challenge and expand their perception of what is beautiful by performing silly pantomimes and reacting to movement prompts that are virtually impossible to do well. "What happens," he asks, "if we accept failure as a creative virtue?" By letting go of perfection, students might discover something unexpected and quite beautiful, he says. From dancing at an elite level to rock-climbing for 30 years, Ketley has "obsessively" explored movement. He designed the course after using chaos in his own process and watching thousands of other performers: "I noticed a type of brilliance when people relinquish control."

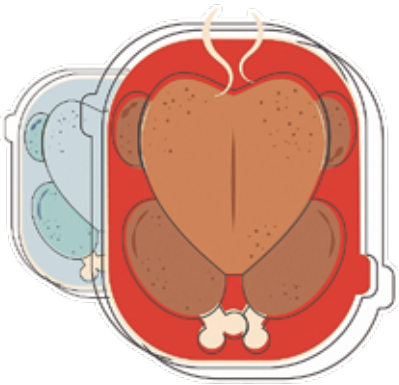
Why is dance the right medium? "It's fun," he says. "So much of our dance training is claustrophobically serious. Happiness, in a repressive culture, is transgressive."

The class culminates in a group performance when, Ketley says, students discover how far they've come from feeling fearful and embarrassed to dancing in front of complete strangers. "It's a very telling and liberating moment for them."

Elijah Williams, '26, took the course hoping it would be a confidence booster. Several weeks in, it's become one of his favorite classes—a helpful lesson in how to break out of your shell. Plus, he says, "I feel more able to express myself through failure."

"Artistic expression is quite limitless if we jettison the need to be correct," says Ketley. ■

FROM TOP: MICHELE MCCAMMON; COURTESY ALEX KETLEY



Flipping the Bird

The surprising strategy for minimizing precooked food waste.

WE MAY NEVER KNOW why the chicken crossed the road, but we do know what makes it fly off the shelf. Grocery store displays typically follow a "first in, first out" strategy—with older items placed in front so customers will buy them before they expire, minimizing the amount that gets thrown out. But that rule backfires when it comes to the fastest-growing grocery category: precooked foods, from sushi boxes and prepared salads to the undisputed king of them all, the rotisserie chicken. The piping hot birds may provide an instant solution to what's for dinner, but they also degrade quickly, turning dry and tough—and leading to a lot of waste. (Nobody wants this morning's wings.) When a retailer sought help reducing such waste, Graduate School of Business associate professor **Dan Iancu** and professor **Erica Plambeck**, MS '98, PhD '00, along with the New Jersey Institute of Technology's **Jae-Hyuck Park**, MS '15, PhD '21, made the surprising discovery that putting the freshest precooked items out front—and keeping them on the shelf longer—boosted sales and decreased waste. Switching to "last in, first out" had another benefit: Customers were buying better-quality items on average, Plambeck explained. "That leads to increased demand and, paradoxically, less gets thrown out." ■

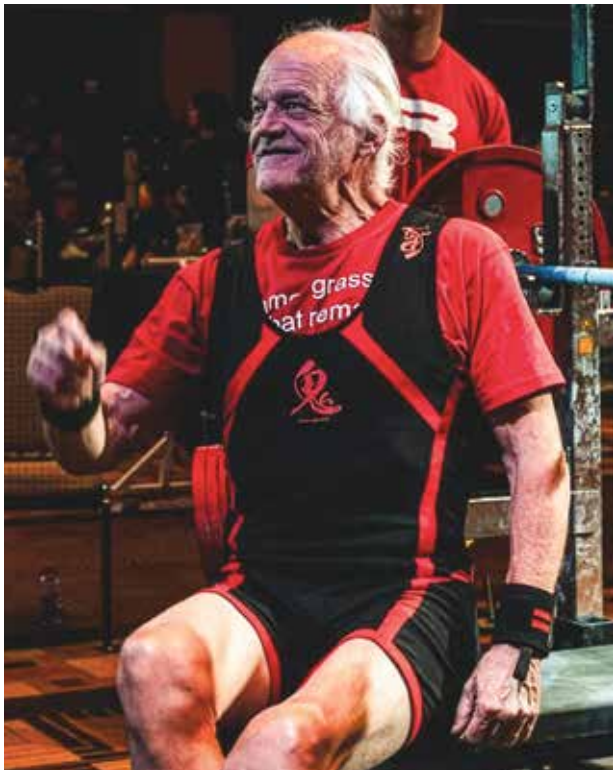
From Bridge Tables to Bench Presses

A retired postal worker delivers in the weight room.

IT WAS THE SPRING OF 2023, and **John Twineham**, ’69, had a problem. His 75th birthday dinner was two months away, and he was a dozen pounds too heavy for his favorite suit. He started to diet.

By summer, he looked svelte, but his success pushed him to do more. He hadn’t lifted weights in decades, but in April 2024, he started to bench-press, lifting around 165 pounds. It was only the beginning.

Twineham is not a man of moderation when it comes to hobbies. He made his career at the U.S. Postal Service because it gave him the flexibility to travel to bridge tournaments. For several years in the ’80s, he trained as a bodybuilder to get in better shape—and to gain an advantage at the bridge table. “Almost any sport has some psychology in it,” he says. “I decided I would try to be a little more physically imposing.” His other obsessions include collecting fine wines (amassing 1,400 bottles), pre-1600 Japanese swords, and thousands of science fiction books. “Whenever I get interested in things, I go whole hog.”



True to form, soon after returning to weightlifting, he was training three times a week at a community college gym near his home in Coos Bay, Ore., and competing a half-dozen times a year. Last November, at a meet in Bremerton, Wash., the 77-year-old benched 231.5 pounds—more than 50 pounds over his body weight—the third-best-ever in his age and weight class in the U.S. Powerlifting Association (until a new No. 1 bumped him to No. 4 in February).

The sport has brought him a host of physical, mental, and social benefits, not least the admiration of undergrads stunned to see a senior citizen pushing 225 pounds at the gym. “It’s great when you get 20-year-olds to come over and dap you up.”

Twineham would love to bench 300 pounds before he’s 80, though he knows time is a tough opponent. Even now, he’s usually the only entry in his category at meets. “I’m just competing with the record books,” he says. So he pushes ahead. “I’m working on trying to be better than I was.” ■

CLOCKWISE FROM TOP: UNITED STATES POWERLIFTING ASSOCIATION; FEDERAL RESERVE; KIRBY LEE/ASSOCIATED PRESS

THE TICKER

In May, **Kevin Warsh**, ’92, was confirmed as chair of the Federal Reserve.… Speaking of making bank, the WNBA and the Women’s National Basketball Players Association, which is led by L.A. Sparks forward **Nneka Ogwumike**, ’12, have negotiated the first comprehensive revenue-sharing model in women’s professional sports.… Ogwumike isn’t the only one making sports history. At press time, **José Feliciano**, MBA ’99, and his wife, Kwanza Jones, were poised to purchase the San Diego Padres for a record $3.9 billion.… Sometimes record lows are the way to go: **Sara Bei Hall**, ’05, placed first in the 2026 Boston Marathon master’s division in 2:31:55, while in the women’s division, **Jess Tonn McClain**, ’14, MA ’15, was fifth overall and the top American finisher, setting an American course record with a time of 2:20:49.… Also recognized for superlative performance are **Ruth Porat**, ’79, and **Ron Spogli**, ’70, both of whom served for a decade on Stanford’s Board of Trustees and are the newest recipients of the Gold Spike Award for volunteer service to the university.… Gold spikes could be ideal accessories for **Avianna Mynhier**, ’17, who wears yellow armor in the Disney+ show *Armorsaurs*, about teens who bond with dinosaurs and work together to fight aliens.

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The Mating Game

This zoo animal matchmaker can get you her digits. If you're a Peruvian firestick.

KATE RODRIGUEZ-CLARK is an expert on the birds and the bees. As a population ecologist and biologist at the Smithsonian National Zoological Park and Conservation Biology Institute, she acts as a matchmaker for animals in North America's Association of Zoos and Aquariums (AZA), which includes 240 institutions. To be sure, it's an exotic job. "There may be about 30 of us worldwide," says Rodriguez-Clark, '92. "We all know each other."

Unlike their wild brethren, zoo animals can't just head out on the prowl. Many need a scientific Cupid to keep family trees biologically healthy. That's where Rodriguez-Clark comes in. She and her colleagues ensure genetic diversity among zoo births and a right-sized population based on zoo capacity. That often includes pairing animals from different locations. "There aren't many industries that get together and cooperate the way the zoo industry has," she says.

Her current work involves 32 types of marine fish and eight other species, which include mammals such as the golden lion tamarin, birds such as the red siskin, and insects such as the Peruvian firestick. When she's working to match individual animals, she can be eyeball deep in spreadsheets for days or even weeks. Filling her screen are models that project species population growth as well as future gene diversity. She combs through database records showing the age, sex, parentage, and past pregnancies of potential mates. "It's a little bit like a giant sudoku puzzle," she says. Once she has completed her analyses, she meets with studbook keepers and species coordinators to create a master plan that

Golden Lion Tamarin

STATUS: endangered (but on the upswing, thanks to conservationists)

DATING RADIUS: open to long-distance, but travel is stressful, so nearby mates are sometimes preferable, even if they're slightly inferior genetic matches

OPEN TO INTERNATIONAL LOVE? hard pass—it can take two years to secure the permits needed for an international transfer, so it's only done in special circumstances

LOOKING FOR: someone similar in age, because such pairs have a higher chance of healthy babies

FLEX: puts his dad bod to good use as the go-to caregiver for his little ones

PHOTO: COURTESY KATE RODRIGUEZ-CLARK. ILLUSTRATIONS: MICHELE McCAMMON

Peruvian Firestick

STATUS: unknown (but it wants to stick around)

RED FLAGS: has a big family—the more relatives an animal has, the less genetic diversity her offspring will offer the species

SLIM-DOWN RITUAL: a diet made exclusively of ferns

FLEX: her fashion sense—unlike most stick insects, she purposefully stands out with bold black and red coloring (in fact, she's poisonous)

Red Siskin

STATUS: endangered (because a good egg is hard to find)

AGE PREFERENCE: a young, healthy chick—older animals or those that are sick are more likely to die before being brought together with their match

GIVES HIM THE ICK: flying, ironically, because it's becoming harder to find airlines that will carry wild animals

FLEX: such a handsome catch that his picture was on Venezuela's largest banknote for many years

can last for up to three years.

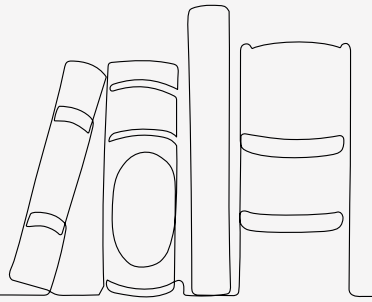
Kenton Kerns, a small mammal curator at the Smithsonian, works with Rodriguez-Clark to manage North America's golden lion tamarin monkeys. Rodriguez-Clark comes to their meetings with a list of the best genetic matches to keep the small populations as diverse—and thus resilient—as possible, while Kerns brings intel like which animals are currently ill, or which recently moved to a new zoo and need time to adjust before relocating again to meet their soulmate. Together, they create the monkey breeding and transfer plan.

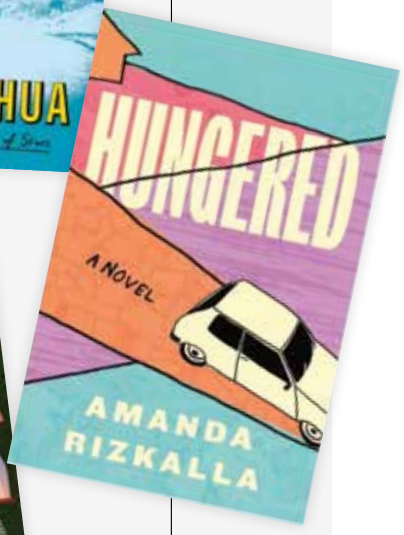
Breeding success rates differ for every species, and matches are never guaranteed—some animals simply don't like each other, and others mate without producing offspring. But the effort is well worth it to Rodriguez-Clark, because each successful pairing serves a larger purpose. The zoo animals she works with provide scientists with otherwise inaccessible insights that benefit both captive and wild populations. And some are bred specifically to help grow dwindling wild populations. Today, approximately half of all wild golden lion tamarins can be genetically linked to ancestors who were released from zoos to help prevent extinction.

"When you see a baby animal at an AZA zoo," says Rodriguez-Clark, "there's probably been hundreds and hundreds of hours that have gone into thinking about how to make that baby happen, and how to be sure that that baby is going to have the best chance possible." ■

Biblio File

Novel Reads





» **WHEN THE CHANG FAMILY MOVES** to the affluent Bay Area neighborhood of El Nido, they must learn to navigate shrill, wealthy neighbors, feelings of isolation, and—of all things—coyotes. In the gripping and heartfelt ***Coyoteland*** (Flatiron Books), **Vanessa Hua**, ’97, MA ’97, explores family and racism as her characters grapple with the suburban drama surrounding them.

» **“WE EAT WITH OUR EYES.”** This is the repeated refrain of Sofia’s mother, meant to curb their hunger during days and nights taking shelter in their car. In ***Hungered*** (Henry Holt), **Amanda Rizkalla**, ’20, gracefully paints a story of a young girl, her brother, and her mother, who dream of securing a home and attending school but must first find a safe and undisturbed place to park each night.

» ***THE COMPLEX*** (Viking) is a saga of Indian descendants vying for influence after the death of the family patriarch. **Karan Mahajan**, ’05, follows the Chopras as their lives divide between the United States and Delhi and they face struggles of love, power, and politics. What emerges is an unflinching characterization of humanity and its faults, be they jealousy, revenge, or infidelity.

Well Versed

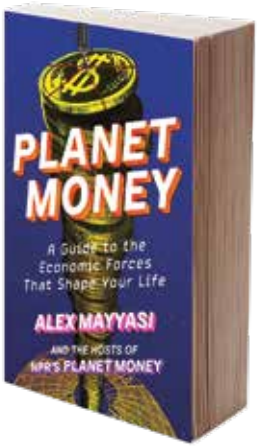
» **IN HER DEBUT** poetry collection, **Leigh Lucas**, ’10, explores the rocky landscape of grief following the suicide of an ex-boyfriend, recalling memories triggered in unlikely places. The narrator of ***Splashed Things*** (Boa Editions) undertakes the messy and complicated journey through life after losing a loved one as she attempts to piece together a coherent picture of the past.

» **BRAD BUCHANAN**, MA ’01, PhD ’02, emerges from treatment for T-cell lymphoma to witness and record the changing life he beholds in ***The Birds of Poverty Ridge*** (Finishing Line Press). Poems with varied structures probe the space between life and death and explore moments of fear, sickness, and love and its loss.

» **FORMER STEGNER FELLOW D.S. Waldman** crafts a medley of prose, essays, and poetry that winds through the valleys of grief, love, disability, and memory in ***Atria*** (Liveright). Shining through is a connection to place, with memories emerging from concerts, lakes, streets, and museums across California. The collection explores the tension between proximity and distance, questioning the possibility of genuine connection to each other and the world.

New in Nonfiction

» **WHAT'S WITH TOOTH FAIRY INFLATION?** **Alex Mayyasi**, '11, explains a complicated subject in an understandable, entertaining way in ***Planet Money: A Guide to the Economic Forces That Shape Your Life*** (W.W. Norton). The longtime contributor to the popular NPR podcast infuses the book with the quirky spirit of the show, whose hosts serve as his co-authors.



» **IN** ***Churn: The Tension That Divides Us and How to Overcome It*** (Liveright), professor emeritus of psychology **Claude Steele** examines the "worrisome vigilance" we can feel when we believe we may be judged on our identities—the sole woman walking into a high-stakes meeting or a white man feeling conspicuous in a diversity training session. Too often, Steele writes, we pretend our differences don't exist, rather than facing them and building trust.

» **SHOULD WE BAN SEX WORK**, medical aid in dying, fentanyl, kidney sales? In ***Moral Economics: From Prostitution to Organ Sales, What Controversial Transactions Reveal About How Markets Work*** (Basic Venture), Stanford economics professor and Nobel laureate **Alvin E. Roth**, MS '73, PhD '74, looks at tradeoffs (think Prohibition and black markets) and in general falls on the side of regulating, rather than forbidding, acts that repel some people but can't be prevented. "Anything you morally ought to do has to be something you *can* do," he writes.

» **DEPENDING ON WHEN** you were at Stanford and what you studied, you may or may not recognize the Farm described in ***How to Rule the World: An Education in Power at Stanford University*** (Penguin Press). **Theo Baker**, '26, enters Stanford enthralled by tech. Journalism is just a hobby. But as he reports on possible image manipulation in scientific papers co-authored by then-president Marc Tessier-Lavigne, the spoils of Silicon Valley lose some of their sheen.

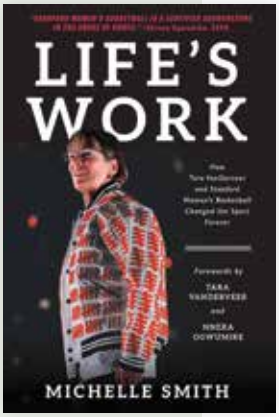
» **IN** ***How to Not Know: The Value of Uncertainty in a World that Demands Answers*** (W.W. Norton), journalist **Simone Stolzoff**, MA '18, makes the case that embracing the unknown leads to a better life. He supplies many real-world anecdotes to illustrate his points, including why to choose curiosity over comfort, and ends with a personal story about his wife's pregnancies that illuminates the challenge of waiting for news. Parenthood: The ultimate in managing uncertainty.

'I was only the tenth-best runner in the United States when I was twenty years old. And because of that, I was made to feel like I was a complete and utter failure.'

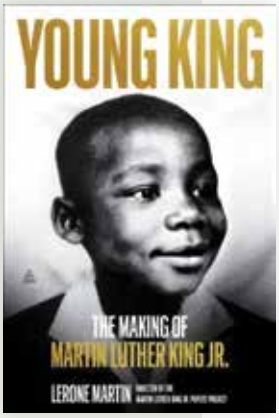
—*Medical student* **Mary Cain** in ***This Is Not About Running: A Memoir*** (Mariner Books)

Bio Box

» **AFTER 30 YEARS** of covering Stanford women's basketball, sports-writer **Michelle Smith** chronicles the story of its longtime legendary coach in ***Life's Work: How Tara VanDerveer and Stanford Women's Basketball Changed the Sport Forever*** (Triumph Books). Superfans will savor this courtside seat as they watch VanDerveer's travels from basketball-loving girl with limited opportunity to play the game to coach of collegiate and Olympic champions—and all of the teaching moments in between.



» **PREVIOUS BIOGRAPHIES** of Martin Luther King Jr. give us "a King who arrives in our consciousness and public memory as a determined superhero with no backstory," writes **Lerone Martin**, professor of religious studies and of African and African American studies and the director of the Martin Luther King, Jr. Research and Education Institute at Stanford. From a preschooler making mischief with his siblings to a teen spending a summer on a Connecticut tobacco farm—and glimpsing life beyond the Jim Crow South—***Young King: The Making of Martin Luther King Jr.*** (Amistad) captures the civil rights leader's early years, often with stories all the more endearing for their normalcy.



SPOTLIGHT

Off Script

Why prison psychiatrist Zaid Rafin started improvising at work.

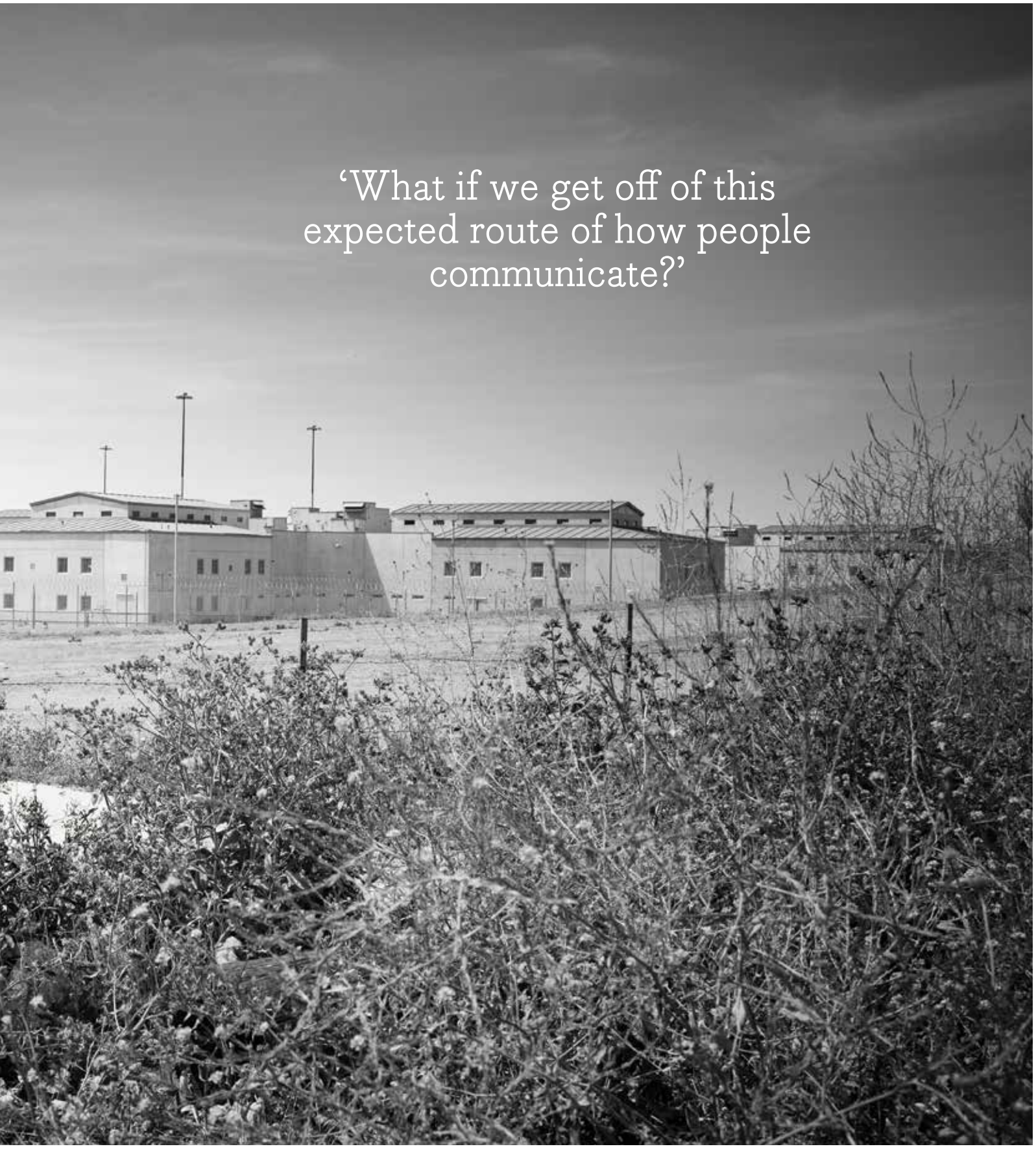
BY KALI SHILOH

MATT FURMAN

THE SESSION BEGAN LIKE ANY OTHER. For safety, psychiatrist **Zaid Yusufi Rafin** wore a push-button alarm strapped to his belt and a whistle around his neck. An arm's length from him sat his patient, Robert Nevels, wearing blue jeans and a blue shirt, the standard-issue uniform for the A Yard at the Richard J. Donovan Correctional Facility (RJD) in San Diego. It was 2021, and Nevels, then 57, had already served 28 years of a life sentence for murder. The two were alone in Rafin's sparse 8-foot-by-12-foot office, with corrections officers roaming beyond the closed door.

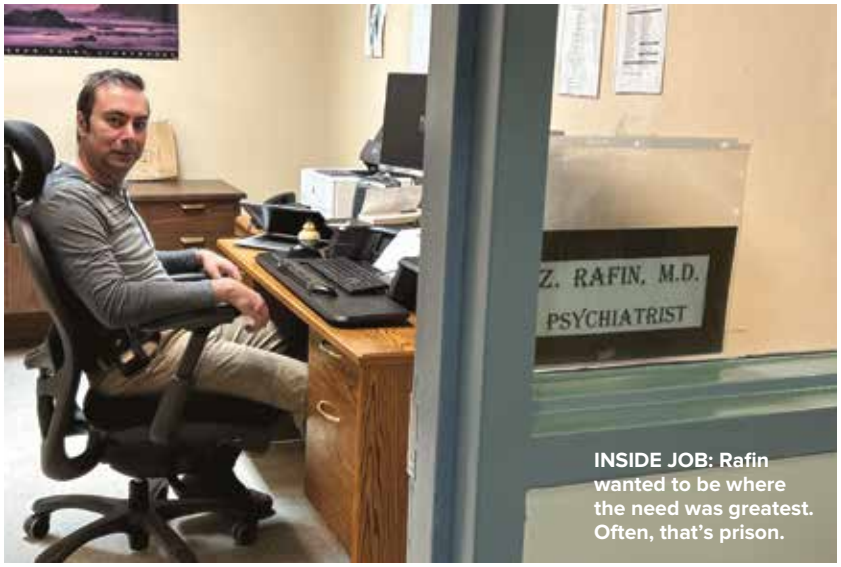
Nevels grew up in what Rafin, '00, calls "excruciating" circumstances, and his arms were crisscrossed with thick scars from cutting himself, a coping mechanism he'd used since childhood. His wife, daughter, and unborn grandson had died while he was in prison. Yet there was a moment during this session, Rafin says, when none of that weighed him down. In fact, if anyone had passed by, they would have heard a powerful bout of laughter.

"I don't think we laughed that hard—ever—before then," says Rafin.


‘What if we get off of this expected route of how people communicate?’

They had been trying an exercise Rafin learned at Finest City Improv in San Diego, where he'd been a student for the past year. While absorbed in improv exercises, Rafin says he "noticed the change in myself when I got pulled out of my own thought process." Sitting next to Nevels, he thought, *Would this potentially work in a setting like this?*

Over the past five years, Rafin has found that it can. Sometimes. But outside of patient sessions, improv has helped Rafin himself to embrace uncertainty. And it turns out that's important if you want to thrive in a workplace like RJD. No push-button alarm will protect you from an apple chucked at your forehead, and no whistle on a lanyard can ease your mind when your patient is struggling with a life sentence. In prison, as in life, there's only so much you can control.



INSIDE JOB: Rafin wanted to be where the need was greatest. Often, that's prison.

ON ITS FACE, RJD is the most controlled workplace Rafin could have chosen. It's a maximum security prison and state-designated institution for inmates with severe mental illness, with some 90 psychiatrists, psychologists, and social workers. About 70 percent of RJD's 3,000 residents have a diagnosed mental illness. That's nearly twice the average rate in U.S. prisons, and more than three times the rate in the general U.S. population.

When Rafin first visited, "it was a little scary," he says, "walking through all these chain-link fences, and they have cartoonishly large keys that open doors." In one of the restricted housing units, a sign reminds inmates that security threats can be met with lethal force. It reads: No warning shot.

Beyond Rafin's initial fear, however, he found familiarity—trauma, mental illness, and a lack of control that he recognized from his own life.

Rafin was born in Afghanistan in 1978, just before the Soviet invasion. When he was a toddler, his father, a law professor, was assassinated; when he was 5, his mother moved the family to housing projects in New York City, where Rafin remembers stepping over empty crack vials on the sidewalks.

He found solace at Public School 165 in Queens. "School provided structure in an otherwise tumultuous situation," he says. He felt great satisfaction in being organized and exacting, and he was an excellent student. But that mental willpower turned on him in high school, when he developed obsessive-compulsive disorder (OCD). The disorder flipped on like a switch one day, he says, beginning with part of a song chorus looping incessantly in his mind and expanding to include intrusive thoughts about contamination, harm, and other themes.

"It's kind of like a mental prison of sorts," Rafin says. His attempts to suppress those thoughts only made them worse, and by the time he entered Stanford, managing his mind was a full-time job. "That, I think, really was one of the most influential things that shaped my becoming a doctor," he says. "I didn't have to imagine what a patient has to go through. I could put myself in patients' shoes at will."

He eventually found some relief through a combination of medication and exposure and response prevention—a form of cognitive behavioral therapy—but he isn't free of the disorder. During periods of increased stress, his symptoms can worsen.

IN 2011, after medical school at USC and a psychiatry residency at Cedars-Sinai Medical Center, Rafin saw a job posting at RJD that piqued his interest. He wanted to be where the need was greatest and, when it comes to mental health, that place is often prison. About 95 percent of all incarcerated individuals are eventually released, so unmet needs in prison have impacts far beyond the barbed-wire barriers. "I wanted to give it a try," he says.

The work, as he'd hoped, was meaningful, and there were lighthearted moments. Once, a patient showed up with three pet lizards on shoelace leashes. "He just plopped them on my desk," Rafin says. But over the years, there were also patients who swallowed razor blades or amputated their own fingers. One patient had been incarcerated for more than 60 years. When he was placed in the prison's psychiatric hospital for active suicidal intent, he tore his gown in a way that could have been used to harm himself. "They were trying to pull this smock away from him—like, the only thing he had in his cell—and I was just trying to think to myself, 'What in my life has prepared me to try to say anything of use to this person?' "

"The extremity of the cases is definitely off the charts," says Ben Alpert, a psychologist who works with Rafin. "They're having hallucinations, they're having delusions." What's more, there isn't always a constructive outlet available. With wait lists to access educational and work opportunities, some patients have trouble filling their days, which Alpert says can lead to depression, substance abuse, and criminal activity.

All of which complicated Rafin's goal of discerning each inmate's psychiatric needs and framing treatment in a positive but realistic way. He felt a crushing responsibility to devise the perfect treatment plan for each of his 200 patients. But after nearly a decade

ADAM GARVEY

and more than 24,000 psychiatry sessions, his doubts that he was succeeding were straining him. "Psychiatry has so many limits," Rafin says. "There aren't cures, and so people have to live with certain amounts of dysfunction."

IN EARLY 2020—the cumulative stresses of work piling up—Rafin stepped out of his comfort zone when a friend invited him to a beginner improv class. "I was petrified," Rafin says. But week after week, during exercises like A Thing It's Not, in which participants rapidly point to objects around the room and say what they are not, he was forced to focus only on the present—trading mental rigidity for creative thinking. In the liberating unpredictability of Finest City Improv's small theater, Rafin let go. "The whole training is to just be in the moment," he says. "It made me lean into all sides of myself and put them out in the open."

Back at RJD, he felt power in his newfound ability to relax his grip on his thoughts and feelings.

"There's an improv saying that goes, 'Bring a brick, not a cathedral,'" Rafin told an audience at Stanford's 2025 Reunion Homecoming, where he spoke on a panel. "I stopped trying to find some perfect formula of meds and words to help each patient, which had made me uptight and afraid to fail."

A few months after his first improv class, Rafin was in that 2021 psychiatry session with Nevels, who had made great strides toward overcoming his self-injury and drug abuse issues. "But an element was missing," Rafin says.

What if we get off of this expected route of how people communicate? he thought. He asked Nevels to try an exercise called One Sentence at a Time, in which participants quickly build a story one line at a time by taking turns. The game often yields absurd twists as partners swiftly spit lines back and forth. "He exercises my mind," Nevels says. "Instead of me trying to figure out what I'm going to say—complicate what I'm going to say—I have to react right then and there."

Nevels has come to terms with his life sentence. He works as a clerk and a porter at RJD, cleaning and setting up rooms for group meetings. He's devoted himself to religion and disavowed violence. "The time don't bother me, because I got to pay the consequences for my actions," Nevels says. "I took another man's life because of my pain, so every day I wake up, I'm blessed."

"His history is so violent," Rafin says, "you would think this guy is thinking about violent things, but he's changed so much."

ONE SENTENCE AT A TIME: Rafin brings what he learns in improv to patients who have a healthy sense of humor and are emotionally open.

Then, in the middle of One Sentence at a Time, Nevels blurted out a violent plot point. It was so unexpected, so out of character, that they both started laughing. "It was such a huge relief, in a way," Rafin says. There was something revealing about that line, insight into the thoughts that cross everyone's minds, regardless of their past or penance. "Something was tapped by doing that that we could have sat in appointment after appointment and not really gotten to."

Not every patient is in a place to benefit from improv, Rafin says, but over the past five years, he's introduced it to several of them, including Derrick Palmer, who is serving 35 years to life for burglary. Palmer says he came to RJD "out of my mind" with hallucinations and "skittish" from a traumatic childhood. He fought with anyone who so much as touched him on the shoulder. Today, Palmer believes improv exercises have helped him be less impulsive in situations that might otherwise have erupted into fights. "I can stop and think things through," he says. "[I can] listen to that person entirely before acting on everything that I'm thinking."

Improv itself isn't a cure to problems, Alpert says. But when a patient has experienced trauma and is suffering, "finding any way to connect is crucial."

Rafin has worked at RJD for 15 years—longer than any other psychiatrist on staff. He credits his tenure to a new ability to see success in more than clinical outcomes. The goal of improv, he says, is "total engagement of one's mental and physical faculties for the purpose of connection and creation." The simple act of being with a patient, engaging with them in an honest way in the moment, is enough. ■

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FINEST CITY IMPROV (3)

STUDENT VOICE

Free Solo

Among college's unexpected lessons: the upsides of spending time alone.

BY SIDNEY SUH

AS A CHILD, I was never bothered by the idea of being alone. Being alone meant freedom—climbing on monkey bars without a teacher yelling at me to get my feet back on solid ground or stuffing myself full of saltwater taffy without my parents warning me about an imminent trip to the dentist. During the school year, the Pacific Ocean was my backyard, and a corroded blue bike got me around my coastal California hometown. In the summer, when I would visit my grandparents in South Korea, I had the urban jungle of Seoul to explore to my heart's content. Every side alley felt like a trail on a pirate's map, promising some small treasure at the end—a convenience store selling an elusive popsicle flavor or an air-conditioned bookstore where no one would bother me as I worked through a stack of novels. Truly, nothing seemed more spectacular than spending time alone.

However, when I came to college, it felt like a switch had been flipped. Suddenly, I was inundated with people and social activities almost every waking hour. If it wasn't a speaker event featuring a tech mogul, it was a dorm activity with free In-N-Out burgers (and free food was hard to pass up). I began to view any time spent alone as time not spent deepening my relationships with others. And at a one-of-a-kind place like Stanford, where students are constantly told that the connections they make on campus will be some of the most important of their lives, the scales never tipped in favor of being alone. (Exception: the occasional bout of cramming in Green Library.) Slowly but surely, spending time alone became something to avoid rather than savor.

The social choice was also the more comfortable one. Among incessant midterm schedules, internship recruiting cycles, and a creeping sense of existential dread, anxieties were ramping up to a degree I had never experienced. Spending any meaningful time alone meant coming face to face with those squirmy, hot feelings in the pit of my stomach, so I looked for ways to distract myself. I joined friends attending concerts with artists I had never heard of (and found myself dozing off in the stands of Chase Center and Bill Graham Civic Auditorium), sat in on classes in subjects I couldn't imagine pursing as a major, and attended networking events for career paths I had once scoffed at. A voice in the back of my mind would pipe up every now and then, questioning whether I was truly doing what was right for me. I quieted that voice with the conviction that spending time with other people—no matter what I was doing or how little I was enjoying the activity—provided me with something I wouldn't be able to find on my own.

It wasn't until I studied at the Stanford in Washington program the spring of my junior year that I was forced to grapple with this truth. Working an internship during the day and taking classes at night meant that I had little flexibility to coordinate other activities. If I wanted to make the most of my time, I had to do it whenever I found space in my schedule.

One day during a lunch break, I wandered into the United States Botanic Garden. A co-worker had recommended the location but couldn't join me for the outing, so I reluctantly ventured alone. The softly gurgling fountains, temperature-regulated humidity, and exotic flora provided a soothing escape from the hubbub of the workday. Sitting on a bench to

KALI SHILOH

NICHOL XU

admire my surroundings, I noticed groups of people milling around me—families, friends, and couples. It was like the sun had broken through a layer of morning fog. I realized this was the first time that I was voluntarily spending time alone since coming to Stanford. And what's more, I was enjoying it. The idea of being on my own had felt daunting, but I would have missed out on this experience if I had let that fear steer my decisions. The switch flipped again.

Emboldened, I booked Amtrak tickets for a solo weekend trip to New York to explore the city. Scrambling at the last minute to find somewhere to sleep for the night (other than the floor of Penn Station), I texted a high school friend, and she let me crash on her couch. That weekend, I saw Charli XCX at Barclays Center during her Brat tour and tried a few restaurants that had been sitting idle on my foodie list. A few weeks later, I hopped on an airplane to Los Angeles to catch a music festival that none of my Stanford friends were able to attend.

Since returning to campus for my senior year, I've had fewer "solo side quests" (as I informally dubbed these adventures), but I've tried to keep this spirit alive. In the fall, I trekked to San Francisco to check out a trendy coffee shop in the Dogpatch neighborhood that I found on social media. Intending to only spend the afternoon there, I ended up hopping around to three other coffee shops nearby and stayed in the City until nearly midnight. This winter, I returned to San Francisco to visit a Buddhist Zen center that I learned about in a book (although the true adventure was braving Highway 101 during evening rush hour), where I spent 90 minutes in my first group guided meditation. When participants were asked to break into small groups to discuss strategies for managing anger toward others, I joined three strangers next to me. One by one, we opened up about processing the anger of grief, distancing oneself in friendships, falling into the same arguments with lovers, and maintaining relationships with difficult family members. A kinship was formed in knowing that we would probably never see each other again, which led me to be more honest than I might have been with people I knew. And because of that honesty, I learned that, despite our age differences, we were all in a similar process—maybe lifelong in nature—of deepening our relationship with ourselves in an attempt to better understand the world around us.

My desire to spend time alone has morphed as I've grown older. With evolving relationships and responsibilities, peeling back those layers to find the original seed of what I loved as a child requires time and effort. But each new version of myself that I meet, as I try to better understand who I am, reminds me that the essence of that wonder remains intact. ■

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LIFE'S WORK

Heart Broken

Scientist Nazish Sayed beat cancer only to face a new threat—from the very drugs that saved his life.

BY TRACIE WHITE

The **WEEK AFTER** he moved from Texas to join a lab at the Stanford Cardiovascular Institute, **Nazish Sayed** was blindsided by a headache so intense it changed the course of his research—and his life.

"I went back home, slept, and the headache did not go away," says Sayed, a stem cell biologist and an associate professor (research) of surgery. "I started throwing up." His wife was out of town, so he called his cousin to take him to Stanford Hospital. It was May 2015, and it had only been a year since he'd undergone chemotherapy treatments and surgery for bladder cancer.

"The first thing I thought was that the cancer had metastasized," Sayed says. But the results of a CT scan ruled that out. Instead, Sayed had developed clots in the veins of his neck that were blocking blood flow from his brain to his heart. Had he waited a day or two to see a physician, those clots could have caused a stroke or a heart attack. He was immediately put on blood thinners and soon went home. But his ordeal was far from over.

Today, Sayed is among the 5 percent to 20 percent of cancer patients in the United States who suffer from cardiotoxicity, damage triggered by the chemotherapy drugs that save lives but can also wreak havoc with the heart and its vessels. As more people with cancer live longer thanks to improved treatments, these same treatments can cause serious complications—an unintended consequence fueling a new medical specialty known as cardio-oncology.

"I absolutely did not think about this when I was taking the chemotherapy drugs," Sayed says. "As a cancer patient, I kept my scientist hat away. I didn't care what the drug was. I just wanted them to cure me."

When Sayed's mentor Joseph Wu, a professor of medicine and the director of the Cardiovascular Institute (CVI), walked into his hospital room that day in 2015, he said, "Let's try to figure out what happened." Wu suggested that Sayed consider contributing to the lab's research into cardiotoxicity—hunting for molecular causes and potential cures. Something clicked with Sayed.

"I made this my mission—not only to do this research but to make people more aware that there is much more to cancer treatments," Sayed says. "I've gone through the gauntlet myself. I not only had cancer, which I'm free of now, but I still suffer from cardiotoxicity. I still get clots in my head. I live in fear of having a stroke. This is like a ticking time bomb."

FROM PHYSICIAN TO PATIENT

Sayed didn't set out to become a researcher. During medical school at the University of Mumbai, he was planning to specialize in cardiology. But over time, he gravitated toward understanding disease mechanisms as a scientist. In 2010, he came to Stanford for postdoctoral work in cardiovascular and regenerative medicine. After completing the program, he moved to Texas with his wife, Mehvish, and their 3-year-old daughter, Zara, to launch his career at Houston Methodist Research Institute. Before the year was out, however, he was hooked up to a chemotherapy drip.

"My back had started to hurt," he says. "Then it became debilitating. My wife took me to the emergency room. I thought it was a kidney stone." Tests showed a growth in his bladder. Next came the biopsy, then the cancer diagnosis. He sought care at UT MD Anderson, and his treatment plan consisted of chemotherapy followed by surgery to remove his bladder and prostate, which would leave him infertile. "The doctor was pretty blunt," Mehvish says. "You don't do this, and your chances of survival are very low."

Like many cancer patients, Sayed was given multiple medications designed to attack

ZÉ OTAVIO

his particular type of cancer. He underwent four rounds with four different drugs that included traditional chemotherapy drugs, which kill rapidly dividing cells indiscriminately, as well as tyrosine kinase inhibitors (TKIs), which can home in on and block specific signals that tell cancer cells to grow and multiply.

After five weeks of recovery, Sayed returned to work. In August 2014, he published a study in *Circulation* on the transformation of certain skin cells called fibroblasts into endothelial cells, which line the inside of blood vessels—research that would one day inform his studies on cardiotoxicity. In November, Sayed met Wu at a conference, where they discussed his medical condition and his research interests. Intrigued by Wu's work—and with greater family support in the Bay Area—Sayed raised the possibility of conducting research at Stanford.

"I hired him to work in my lab," Wu says. But shortly after Sayed arrived at CVI, he ended up in the hospital.

WHEN LIFESAVING BECOMES LIFE-THREATENING

The field of cardio-oncology has expanded in recent years, alongside dramatic improvements in cancer treatments, says June-Wha Rhee, a former postdoc in Wu's lab and now an associate professor of cardio-oncology at the City of Hope in California. While most patients are familiar with common chemotherapy side effects, such as hair loss, nausea, and diarrhea, she says there should be greater awareness of a far more serious side effect: cardiovascular disease.

"The important thing is to allow patients to receive these lifesaving treatments," Rhee says. "But we need more treatments for cardiotoxicity, preventive strategies. Right now, there are no treatments for this." Different cancer treatments cause various types of cardiovascular disease, from irregular heartbeats and high blood pressure to heart attacks and vessel damage. The toxic impact of the drugs can be immediate or take decades to emerge.

At Stanford, Wu's lab has led the way in early research into cardiotoxicity, publishing dozens of articles on the molecular mechanisms that result in the disease. In 2016, a study on efforts to predict which breast cancer patients treated with doxorubicin, a traditional chemotherapy drug, are at highest risk of heart failure, triggered a flurry of research in the field. "Cardiotoxicity has gained more recognition as a real disease," Wu says. "Ten years ago, Stanford didn't have a cardio-oncology unit. Now we have a clinic staffed by three faculty. There's been an explosion in research across the country."

'I MADE THIS MY MISSION': Sayed, with (clockwise from center) Zara, Mehvish, and Zainab, studies cardiotoxicity in patients like himself.

Sayed spent six years in Wu's lab contributing to about a dozen studies on cardiotoxicity that investigated both traditional chemotherapy drugs and TKIs. In 2021, he opened his own lab and started a new study to test a theory of his. Scientists understood from past research that cardiotoxicity could occur, but precisely how it happened remained unclear. Sayed wanted to investigate whether a disruption in the functioning of endothelial cells was contributing to vessel damage that, in turn, could lead to blood clots or high blood pressure.

In September 2022, after seven rounds of IVF, Sayed and Mehvish welcomed their second child, Zainab. They bought a new house in Union City, California. Sayed was grateful to be cancer free and, seven years after his blood-clot episode, he was hopeful the cardiotoxicity was also behind him. *"OK, things are moving along,"* he remembers thinking. "All of a sudden, a headache starts, and it doesn't end after three days." A trip to the ER and an MRI revealed another clot in his neck. Again, he was prescribed blood thinners, and he went home with the realization that he had a chronic condition.

"That was pretty depressing," he says. "I'm still reeling from it."

MAPPING A NEW PATH

Sayed is seated in his office in Stanford Medicine's Biomedical Innovations Building. Across from his desk is a whiteboard with a child's drawing of a mother, a father, and two daughters. Zara, now 13, drew it years ago. Sayed has kept the portrait amid the swirl of constantly changing scientific equations to remind him of what's most important.

In December, he published his lab's first study on cardiotoxicity in *Science Translational Medicine*, including a proposal for a pharmacological treatment to prevent TKIs from causing cardiotoxicity.

"First, we made the patients' vascular cells in the lab and then exposed those cells to chemotherapy," Sayed says. The scientists also tested the drugs on lab-grown cardiac organoids—miniaturized models of the human heart derived from stem cells—as well as in animal models. Healthy endothelial cells

COURTESY NAZISH SAYED

line the insides of blood vessels like sardines, organized and aligned and all oriented in the direction of blood flow, he explains. But the drugs caused these cells to become disorganized and misaligned. In the human body, this could impair how blood vessels sense and respond to flow and communicate with surrounding tissues. Over time, that impairment can contribute to vascular stiffness, elevated blood pressure, and ultimately heart dysfunction. The scientists showed that certain cancer drugs disrupt a key molecular sensor in these endothelial cells that helps them respond to the physical forces of blood flow.

Next, the researchers tested potential drug therapies on the damaged cells in the lab and in animal models. They found that a molecule called Yoda1 can reactivate the molecular sensor and restore cell function. In the future, Sayed says, targeting this sensing function could help protect patients from cardiovascular side effects during cancer treatment. The research points toward a new strategy for making cancer therapy safer without reducing its effectiveness, he says. But the studies are still early stage. To transition their discovery into a viable treatment, Sayed's team has filed a patent to convert Yoda1 into a drug suitable for testing on animals and, eventually, humans. In the meantime, Sayed is delving into the genetic causes of cardiotoxicity.

"Why doesn't everyone who is treated with these drugs get the disease?" he asks. "It must be in their genetics." His lab has started genetic studies that could one day be used to determine which cancer patients might be prone to drug-induced cardiotoxicity. It could help guide oncologists' decisions on which medications to administer to which patients and at what levels, he says.

Sayed says he still struggles with depression and the fear a sudden blood clot could trigger a stroke or heart attack. He worries about what would happen to his family if he were to die. Last year, he published an essay in *JAMA* that describes the emotional roller coaster of his cancer diagnosis and living with treatment-induced heart disease. Many readers going through cancer treatment responded, thanking him, he says. "Like many survivors of cancer, I continue to live with the consequences of life-saving treatment," Sayed wrote in the essay. "The fatigue, the vascular fragility, the anxiety before every scan. These are not abstract issues for me. They are part of my daily life." His work to identify an intervention that could prevent cardiotoxicity helps him find value in the challenges he's faced. "I can't cure cancer, but I study cells," he says. "Maybe through this work, I can help find treatments that spare other people from the suffering I experienced." ■

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ADVICE

How to Network

Three steps to building meaningful connections beyond the dreaded mixer.

DAVIDRO

BY TRACIE WHITE

Her JUNIOR YEAR, Sylvia Chin, '25, was looking for a tech internship when she attended an Apple-sponsored networking session.

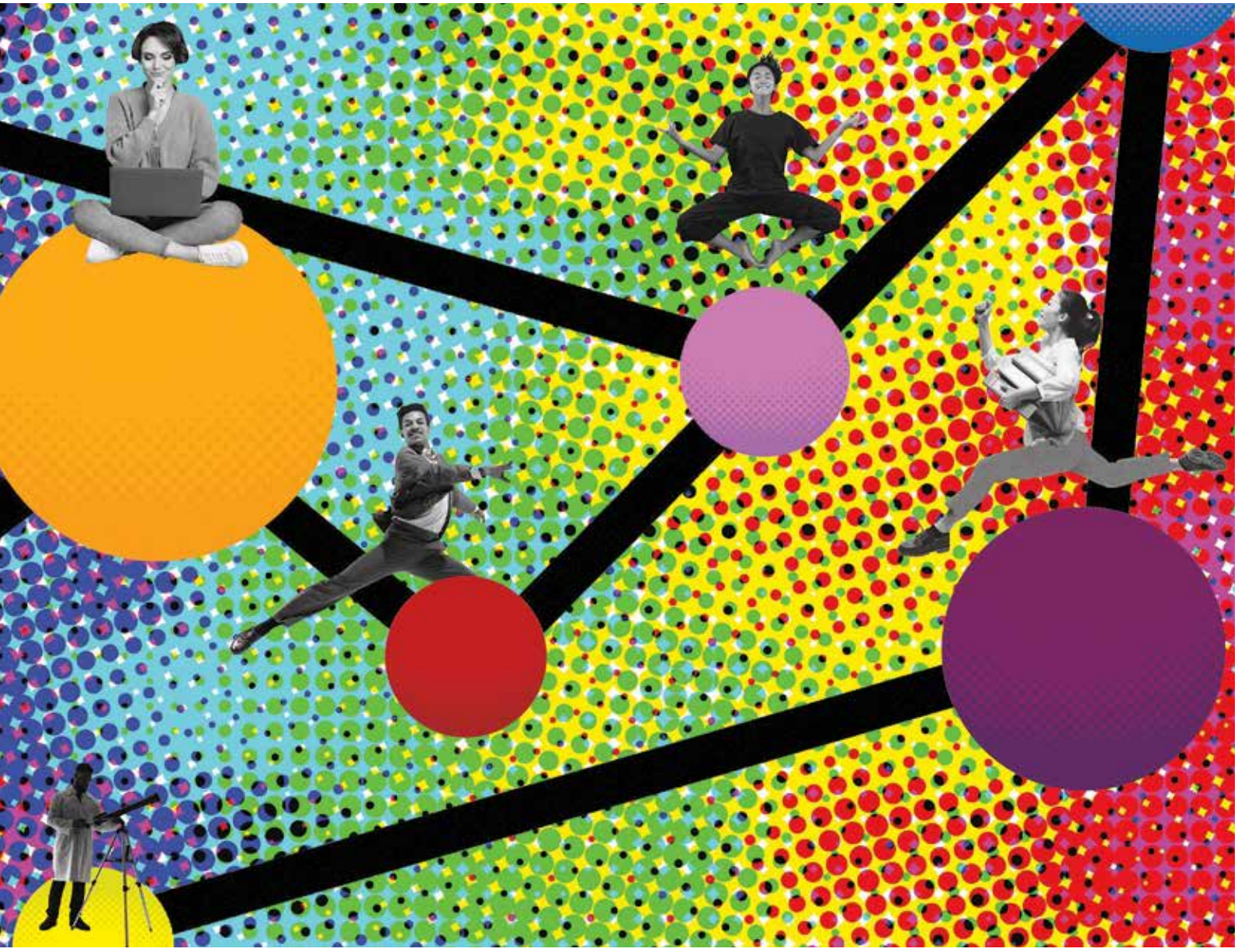
"It was a little overwhelming to see everybody rush toward their favorite [Apple] department," she says. Instead of getting swept up by the crowd, Chin gathered information on the presenters who sparked her interest and later contacted them through LinkedIn. As a former student of **Nita Singh Kaushal**, '03, a former Yahoo and Intel executive who runs her own leadership-training company, Chin followed her advice: Reach out, show up, follow up.

"I sent one of those notes on LinkedIn saying, 'I missed you at the event but would love to hear more about your role if you have 10 minutes to chat or get coffee,'" Chin says. "I ended up meeting people I will be working with." After two summer internships at Apple, she planned to start a full-time job there in June.

Networking—the art of making connections and building relationships—opens avenues for academic and professional growth and to resources like mentors, funding, and job leads. But networking is a word that can rattle people.

"It's cringy," says Kaushal, a lecturer on leadership and negotiation for both the School of Engineering and Stanford Continuing Studies, where she designs curriculum as well. "People are like, 'Yuck, this feels forced.' A lot of us are thrown into so-called networking situations, like a meetup or some sort of gathering, and it can feel superficial—the best part is probably the free food and drink."

It doesn't have to be this way. Networking is just one of many tools linked to long-term professional success and satisfaction, Kaushal says. For years, career experts have said that most job openings—with estimates as high as 80 percent—are never posted to the public. Personal connections might help



you find an unposted, "hidden" job—or help with career advancement and fulfillment.

"You can achieve success by yourself, but that might not be the smartest way to do it," she says. "It could be the hardest way to do it. Knowing how to ask for help and who to ask for help is an instrumental skill regardless of what your goal is, whether it's academic, professional, or personal."

REACH OUT

Big industry mixers have their place, but meaningful connections may be closer than you think, Kaushal says—and in places that feel more natural. Start with your existing circle—professors, co-workers, managers, family connections. Maybe you heard an impressive guest speaker recently or discovered that a friend's sibling does similar work to yours or learned that your alumni network will put you in touch with potential mentors.

People tend to overthink this step, Kaushal says. "Often, they're trying to find the perfect match, like a CEO of an engineering company. It doesn't have to be an Oprah Winfrey or some huge, high-profile person."

Ask yourself who you already know who might offer helpful career advice or show you how to take the next step. From mentors to managers, before you hunt for new contacts, examine and nurture the ones you already have.

If your current network seems lacking, do some research to find people with relevant expertise or who could be helpful collaborators. Be creative. Consider senior members of your organization, event organizers, club leaders. For example, if you're generally happy in your job, reaching out through LinkedIn or professional organizations may connect you with peers in your field with whom you can share ideas that allow you to approach your work with new energy and creativity.

"Think about people who can provide you with guidance, with insight, with help opening

that door to the next opportunity," Kaushal says. Some contacts may be mentors or role models, others can lend perspective on workplace politics or give advice on asking for a promotion, making a lateral move, or even switching industries.

SHOW UP

Introducing yourself to a speaker or fellow attendee at a conference or asking a professor for a letter of recommendation sounds simple, but Kaushal says that her students often feel like they're imposing. First, Kaushal says, remember that speakers typically want to share their knowledge and professors want to help their students. Next, you may feel more confident if you research the person and think carefully about why you are contacting them.

Kaushal has another tip: Avoid the generic email request—one you could have sent to 20 other people. Instead of vague statements like "I'm looking for a mentor" or "I would love to catch up," be specific and explain why their work interests you.

"Let's say one of my students is reaching out to me for additional guidance or support," Kaushal says. "So, she makes an introduction in an email: 'My name is Sarah Smith, and I had the pleasure of taking your business course last spring. The dashboard you introduced has been a complete game changer. I find myself using it all the time.' This shows me that we had a meaningful interaction. It's an example of someone trying to make an authentic connection with someone they are truly interested in." Articulate why this person could be uniquely helpful to you—at this point in your life.

To increase the odds the person will respond positively, Kaushal cautions against the "overwhelming ask." Avoid long-winded emails that may scare off the reader—or go unread. Be succinct and to the point.

"I always tell people to make their asks very clear and thoughtful and to be really flexible," she says. "I like it when people are appreciative of my time and don't make an overwhelming ask like 'We need to talk for three hours, and it has to be at this date, this time, and I need to do it now.'" Try something simpler and more specific like a quick chat to discuss how to get your manager to consider your ideas or to position yourself for a special project at work.

If you're asking for a letter of recommendation, give the professor plenty of time to meet your deadlines. If you're hoping to have a conversation with a work colleague, propose meeting for coffee or arranging a short Zoom call. Here too, be specific and flexible. Your email might say, "I'm working on a new customer survey and would love your advice. Maybe we could talk for 20 minutes whenever is convenient for you?"

'Knowing how to ask for help and who to ask for help is an instrumental skill regardless of what your goal is, whether it's academic, professional, or personal.'

FOLLOW UP

You did your homework and crafted a thoughtful email, but it's been a week or more without a reply. What then? Don't worry, Kaushal says.

"I get plenty of emails I'm not quick to respond to," she says. "It's nothing personal." You can try resending the message with a new intro at the top like: "I wanted to follow up on the email I sent below to see if you have 20 minutes to chat about sustainable investment trends." Avoid guilting them for not responding, Kaushal says. And if you never hear back, try not to let it get you down.

"Sometimes we take it as an automatic rejection: 'See, I knew they weren't going to respond. I knew they didn't like me,'" she says. "But more often than not, it has nothing to do with you. Maybe they were sick or maybe they were out of the country. And just because somebody is amazing at their career doesn't mean they'd make a great mentor. The important thing to remember throughout this process is to not take it personally."

When things do go as planned, thank them for their advice or for pointing out a helpful resource.

"This shows sincere interest and that their time mattered," Kaushal says. "The other beautiful thing is that it keeps the door open for future correspondence." So don't be afraid to reach out again down the line. People appreciate hearing how their advice may have helped you. And maybe you kick off a correspondence that becomes meaningful for both of you.

"There are different tiers of connection in our lives," Kaushal says. Some relationships are going to be more shallow, which is fine. With others, you may feel a genuine connection that makes you want to maintain a longer-term relationship. By reaching out and meeting for an occasional coffee, you may find you share a lot in common or develop an interest in collaborating.

"I always try to see if there is a way to collaborate, because it really builds trust in the relationship quickly," Kaushal says. It could be formally through a work project or informally outside of the workplace—some way for both of you to share personal knowledge or guidance or best practices.

"What I'm seeing out there is that what's keeping us human is still so important," Kaushal says. "Even though there's a lot of buzz and excitement about AI and how fast things are moving, there are still huge questions: How do we create value? How do we stay relevant? I think an instrumental part of figuring that out is having the ability to connect with people on your journey." ■

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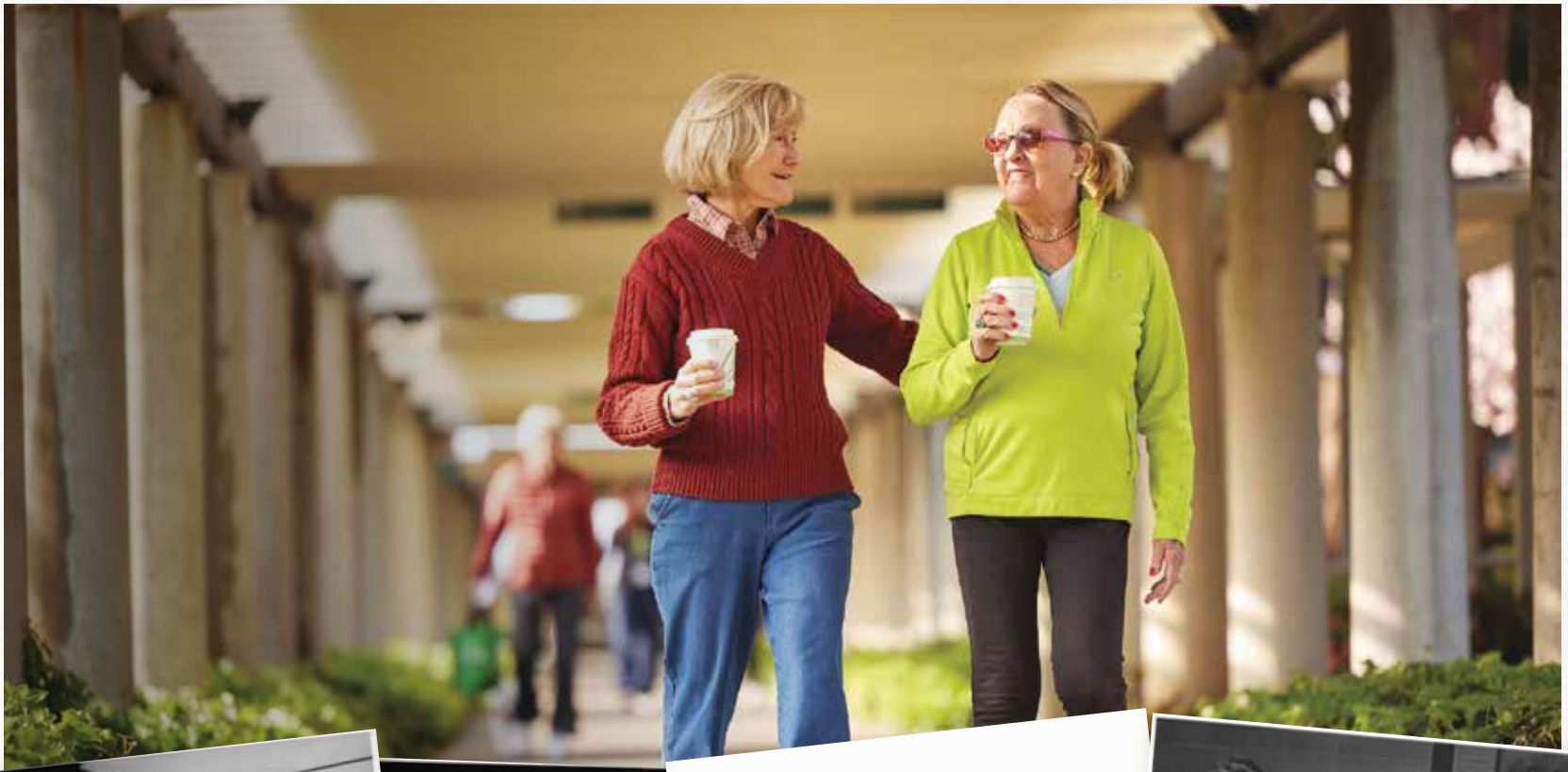

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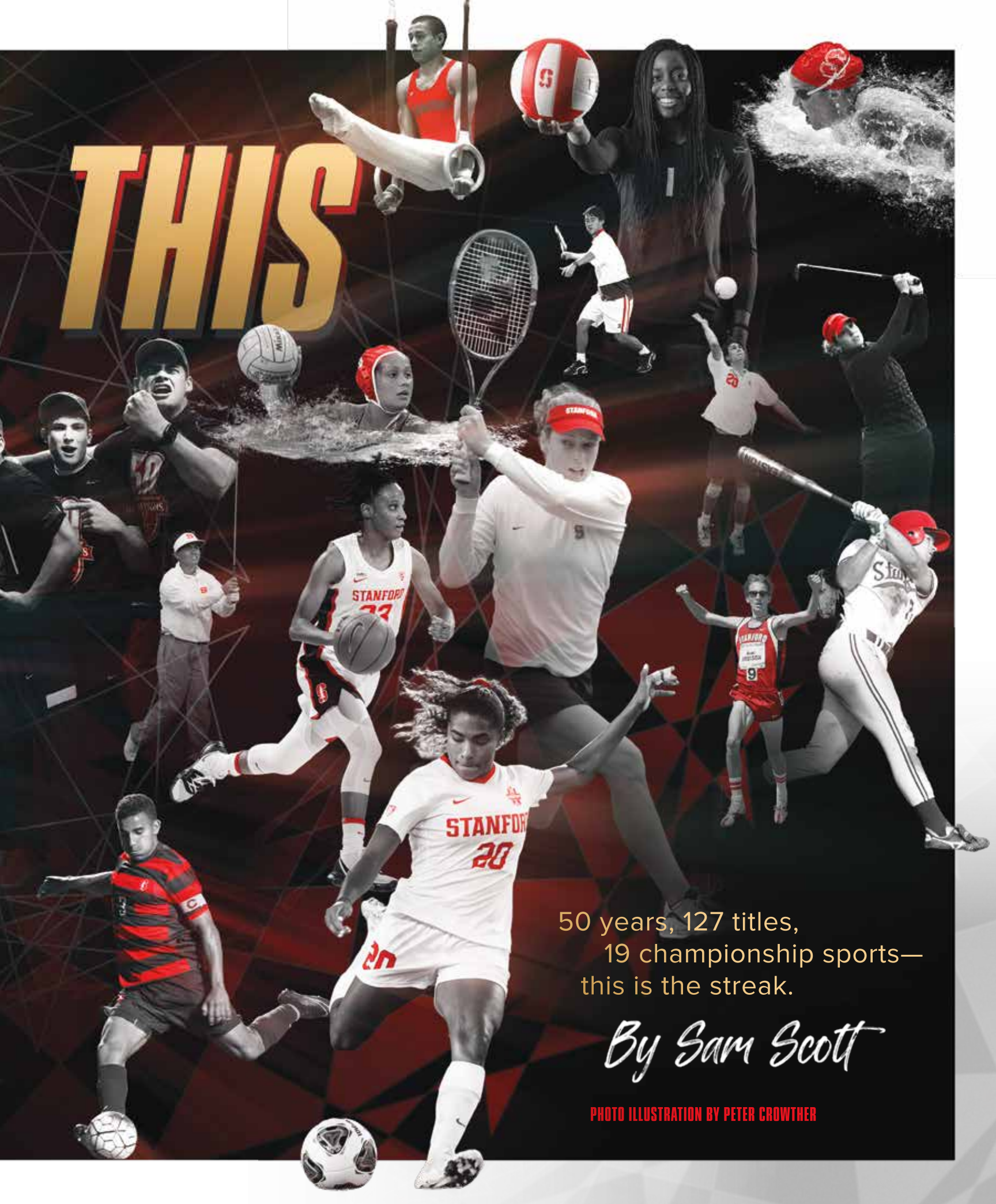


50 years, 127 titles,
19 championship sports—
this is the streak.

By Sam Scott

PHOTO ILLUSTRATION BY PETER CROWTHER

If there was a flaw

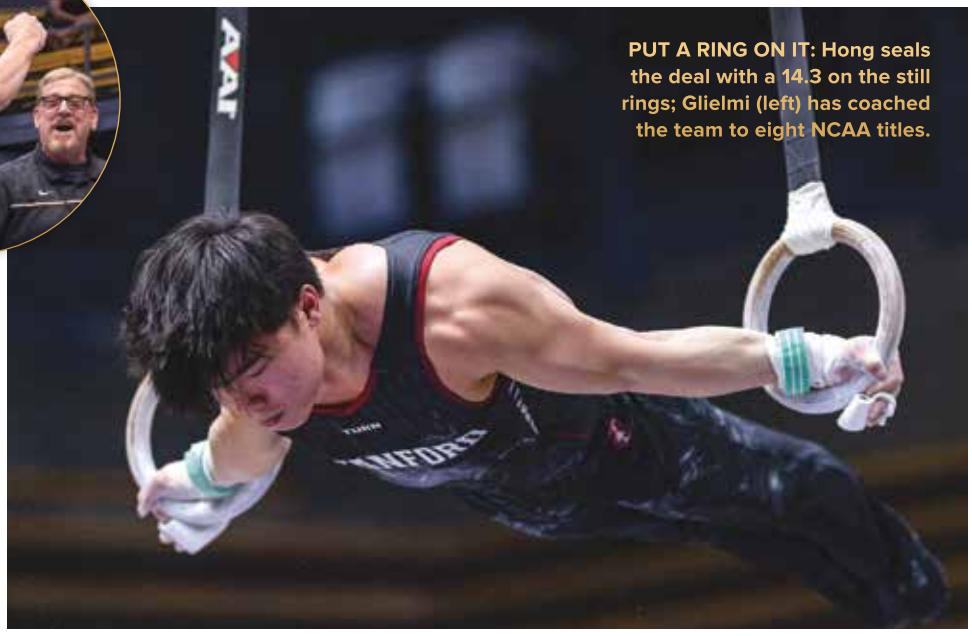
in **Asher Hong**'s rings routine to close out the 2026 NCAA men's gymnastics championships in April, it was the small hop after his dismount—a double-twisting double layout. But the senior's smile as he raised his arms in salute told the bigger story. With the night's final performance, Hong—an Olympic bronze medalist, 12-time All-American, and defending individual collegiate champion in the event–had erased a nearly 13-point deficit and vaulted Stanford to victory, the team's sixth NCAA championship in seven years and its 11th overall.

STANFORD SENSATIONS: From top left, Katie Ledecky, '20; Jair Lynch, '93; Inky Ajanaku, '16, MS '16; Jenny Thompson, '95; Tom Wilkens, '98; the 2025–26 men's gymnastics team; Brenda Villa, '02; Alex Kim, '01; Matt Fuerbringer, '97; Rachel Heck, '24; William Yanagisawa, '95; Kiana Williams, '21; Laura Granville, '03; Grant Robison, '01; Paul Carey, '90; Eileen Richetelli Crozier, '94; Gabe Jennings, '01; Leila Burr, '97; members of the 2024–25 women's rowing team; Kathryn Plummer Boden, '20; Brandon Vincent-Comolli, '16, MBA '23; Catarina Macario, '21.

And in winning yet again, Hong and his teammates had stuck the landing on one of the most remarkable milestones in collegiate sport history: 50 consecutive years of Stanford winning at least one NCAA team championship. "We've won before, but there can only be one team that keeps the 50 years alive," says men's gymnastics head coach Thom Glielmi. "It's just a tremendous joy and honor to be part of."

At half a century, Stanford's run of championships is now almost three times the age of the youngest athletes extending it—Hong's mother wasn't even born when it started. It's an unbroken record of success stretching back to the days of disco, the Ford administration, and 60-cent gallons of gas, now reaching into the new world of transfer portals, image rights, and conference realignment. No other school has an active streak even in the double digits. It has brought Stanford such a bounty of glory—127 titles in 19 sports (at press time), sometimes as many as six in an academic year—that it can be easy to view as automatic. But for those who've battled for titles, each extension of the streak is a defiance of the gravity that tugs on even the greatest teams. Tara VanDerveer, who won three titles in 38 years as head coach of Stanford women's basketball and who made it to the Final Four 11 other times, believes it's almost impossible to convey the challenge of winning a national championship to someone who hasn't been there. "It's so hard and it's so fragile," she says. "Even if you have the absolute best team, sometimes it just doesn't happen." The delicacy of each successful run, and the endurance to do it again, makes each title that much more amazing, she says.

Certainly, things weren't always this way. Before the 1970s, a faithful Stanford fan often had to be contented with a title a decade. When men's swimming and diving won the NCAA title in 1967, it was Stanford's first NCAA championship since men's golf in 1953, which itself had been the first since 1946. "The feeling was that it's nice to be competitive at our level; we're good, but we're not great," says Dick Gould, '59, MA '60, a former Stanford



PUT A RING ON IT: Hong seals the deal with a 14.3 on the still rings; Glielmi (left) has coached the team to eight NCAA titles.

KAREN HICKEY/ISI PHOTOS (2)

PREVIOUS PAGE IMAGES: FROM TOP, LEFT TO RIGHT, BILL DALLY/ISI PHOTOS; STANFORD ATHLETICS; JOHN TODD/ISI PHOTOS; ROD SEARCEY/ISI PHOTOS; ISI PHOTOS; MICHAEL HICKEY/STANFORD ATHLETICS; STANFORD ATHLETICS; ROD SEARCEY/ISI PHOTOS; ISI PHOTOS; AL CHANG/ISI PHOTOS; ROD SEARCEY/ISI PHOTOS; BOB DREBIN/ISI PHOTOS; STANFORD ATHLETICS (2); ROD SEARCEY/ISI PHOTOS (2); DAVID GONZALES/ISI PHOTOS; ISI PHOTOS; SCOTT GOULD/ISI PHOTOS; MIKE RASAY/ISI PHOTOS; CASEY VALENTINE/ISI PHOTOS; AL CHANG/STANFORD ATHLETICS

CALIFORNIA DREAMS: VanDerveer and the 1991–92 team (left) took down Western Kentucky for the title in Los Angeles.

tennis player who was the men's head coach from 1966 to 2004. "We got used to it."

That would change utterly in the early '70s, a transformation that Gould credits in no small part to a sport that doesn't bestow an NCAA title at the Division I level—football. John Ralston, Stanford's head football coach from 1963 through the 1971 season, operated by the mantra, "What the mind can conceive, the body can achieve." His teams' back-to-back victories in the 1971 and 1972 Rose Bowls against giants Ohio State and Michigan, respectively, shattered the notion that Stanford athletics couldn't perform on the biggest stage. "He believed it could be done, which is a big thing, because everyone else had thrown the towel in," Gould says.

Already on the ascent, the men's tennis team wasted no time getting to the top, winning NCAA championships in 1973 and 1974, the first two of Gould's 17 titles. No Stanford coach has more.

It would fall to a less likely team to start the streak, however. In the fall of 1973, Stanford men's water polo lost every one of its conference games for the second time in four seasons. The sport was an overlooked adjunct to the swim program, says 1984 Olympian Drew McDonald, '77, MS '80. But in 1974, the school hired its first full-time water polo coach, Art Lambert, a hard-driving taskmaster who had helped lead the U.S. team to fifth place at the 1968 Olympics. At his first Stanford practice, he set up one-on-one drills. Whoever kept possession the longest wouldn't have to run the stairs in Stanford Stadium on the sweltering summer day. "Guys were getting after it, they were pummeling each other," says goalie Chris Dorst, '77, MBA '82, another 1984 Olympian. "It was a wake-up to everybody. There's a new sheriff in town."

Lambert was not a cuddly creature—Dorst remembers submerging his ears to muffle the coach's rants—but his focus, tactics, and expectations reforged the team. By the NCAA playoffs in November 1976, they were undefeated in conference play and performing with a sense of destiny. "I knew we were winning that championship," McDonald says. "Never worried about it, period." His four goals in the final helped Stanford to a 13-12 victory over UCLA. Men's tennis would follow by winning

IN THE BEGINNING: Lambert.

BEYOND THE NCAA

Stanford has an all-time total of 178 national championships: 139 in NCAA competition and 39 in other collegiate championships. In 2025–26 alone, sailing won its third straight Inter-Collegiate Sailing Association women's team race and fourth straight women's fleet race titles, and artistic swimming (above) tallied its second consecutive USA Artistic Swimming collegiate national championship.

What's your favorite memory related to the streak?

ALU.MS/NCAA50

FROM TOP: STANFORD ATHLETICS; LYNDSAY RADNEDGE/ISI PHOTOS; RICHARD KHARIBIAN/ISI PHOTOS

On the Dotted Line
EVERY TEAM WIN

The Empire
The longest streak within the streak was six wins straight (1985–86 to 1990–91) by the most-decorated women's tennis team in NCAA history, coached by Frank Brennan.

↓WOMEN'S CHAMPIONSHIPS

WOMEN

YEAR | 76-77 | 77-78 | 78-79 | 79-80 | 80-81 | 81-82 | 82-83 | 83-84 | 84-85 | 85-86 | 86-87 | 87-88 | 88-89 | 89-90 | 90-91 | 91-92 | 92-93 | 93-94 | 94-95 | 95-96 | 96-97 | 97-98 | 98-99 | 99-00 | 00-01

MEN

↑MEN'S CHAMPIONSHIPS

SPORTS

- BASEBALL
- BASKETBALL
- CROSS COUNTRY
- GOLF
- GYMNASTICS
- ROWING
- SOCCER
- SWIMMING
- TENNIS
- OUTDOOR TRACK AND FIELD
- VOLLEYBALL
- WATER POLO

EVENTS

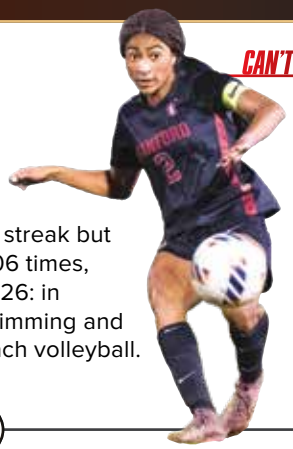
- VICTORY
- DYNASTY

Spring Shellacking
In 1995–96, men's tennis lost the team doubles point to undefeated UCLA in the first-to-four showdown. But the Card, coached by Dick Gould, '59, MA '60, trounced the Bruins in simultaneously played singles matches. After points one and two were in the bag, points three and four were won in a span of two minutes.

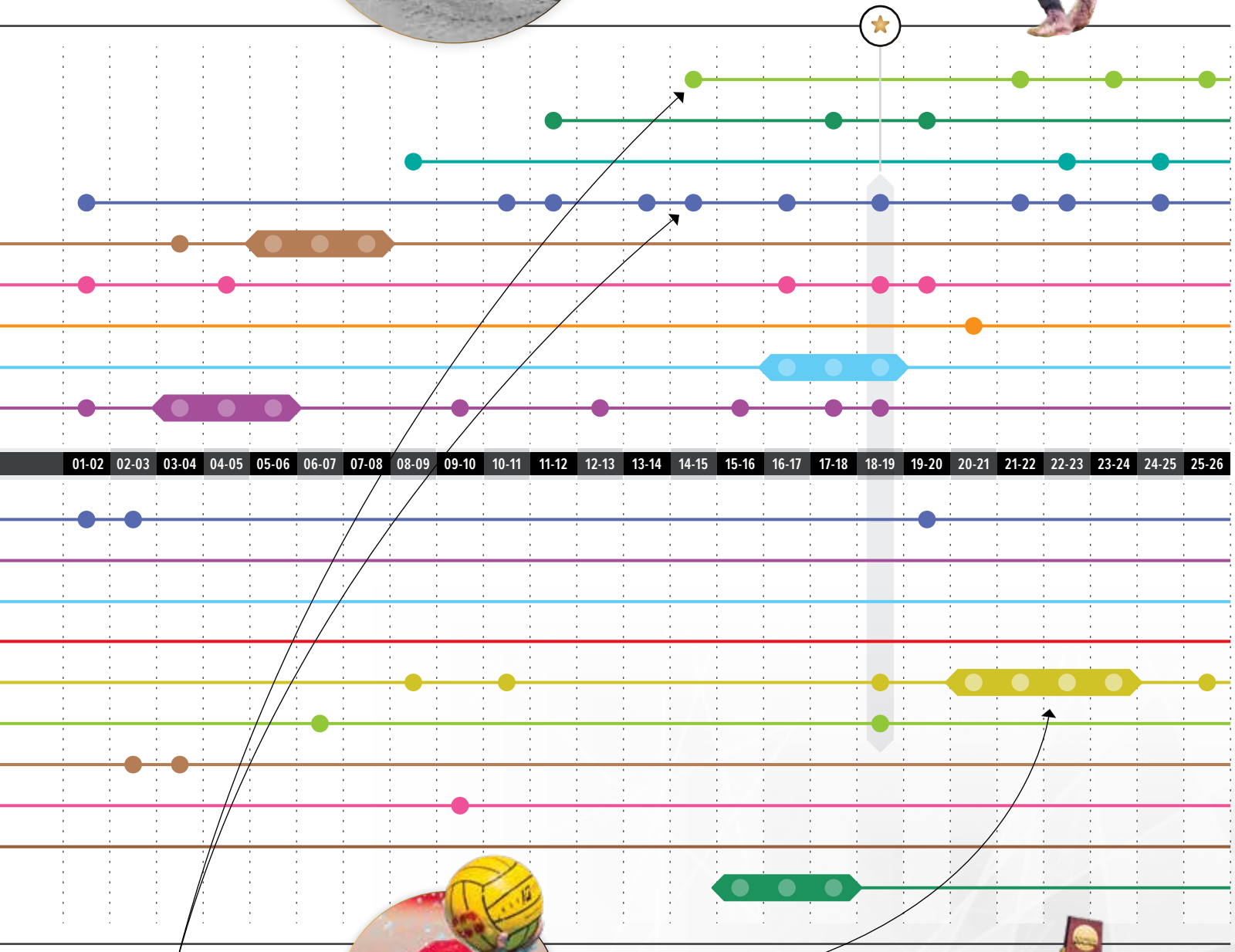
INFOGRAPHIC: JUAN MARTINEZ

CAN'T TOUCH THIS

For the Record
For 11 years (1988–89 to 1998–99), women's swimming, coached by Richard Quick, either won or was runner-up, a stretch unmatched during the streak.



Powerhouse
Stanford teams have not only won 127 titles during the streak but have been NCAA runners-up 106 times, including four times in 2025–26: in women's soccer, women's swimming and diving, women's golf, and beach volleyball.



Squeaking Out the Streak
In 2014–15, women's golfer Mariah Stackhouse, '16, made the winning putt in sudden death to defeat Baylor. And in women's water polo, Kiley Neushul, '15, converted a penalty shot for the game-winning point against UCLA with 11 seconds remaining.

Mind the Gap
Spring 2020 championships were canceled due to the pandemic, so for men's gymnastics (right, celebrating their 2020–21 win), this is kind of a five-peat, coached by Thom Glielmi.

championships that spring and the next. The streak was on—at least on one side of the athletic department.

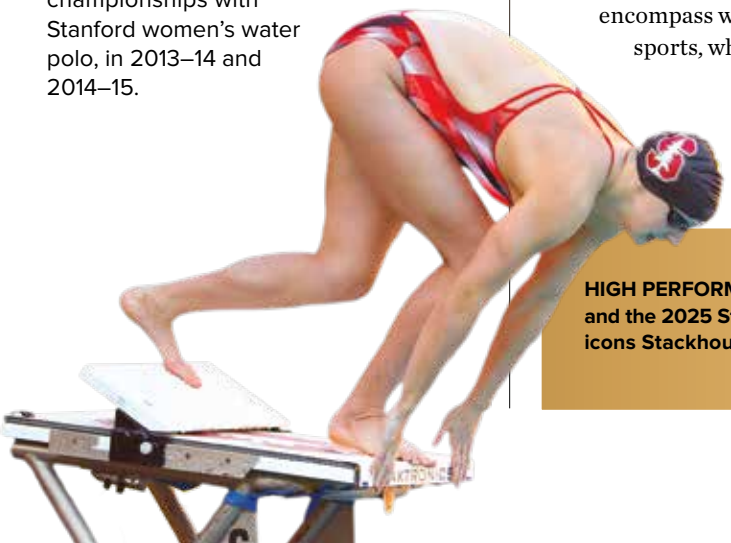
Today, you can't talk about the success that followed without talking about the power of Stanford women's sports. From the sudden-death heroics of Mariah Stackhouse, '16, to give women's golf its first title in 2015 to the utter dominance of Katie Ledecky, '20, and the 2018 swimming and diving team to basketball's nail-biting one-point team victory in 2021, women's sports have supplied many of the streak's most iconic—and essential—moments. Prior to 2025–26, the streak had been kept alive by a single team 11 times, eight of them women's, five of those women's tennis. Indeed, the streak was never in greater peril than in the spring of 2013. In the fifth overtime of the final match, No. 2 women's water polo fell to USC. With the school year expiring, women's tennis was the next best bet. But the team was seeded 12th and coming off a down year—a long shot at best. "The streak is in grave condition," one commenter wrote on a Stanford fan site, where an article gave it a 4 percent chance of survival. And yet the team rallied to become the lowest-seeded team to win the title (a distinction since claimed by the 15-seed 2016 Stanford women's tennis team). "I can't explain to people how incredible this was," says Kristie Ahn, '14, who won the decisive match. "To be able to come out on top, to know what was on the line for the school, for our program, it was just like the ultimate redemption arc." Amid the celebrations, the team tweeted out a picture of the championship trophy: "Someone said we still needed an NCAA championship in 2012–13?"

When the streak began in 1976, the NCAA did not yet encompass women's sports, which were only just emerging from generations of nationwide neglect characterized by a dearth of scholarships, scant recruitment, and little coaching. Lele Forood, '78, who won 10 titles as head coach of Stanford women's tennis from 2001 to 2024, says that when she arrived as a student in 1974, her team was more like a glorified PE class. "We played a schedule of eight matches; we were not a varsity team," she says. But the school's embrace of Title IX, the 1972 federal law banning sex discrimination, would lead to rapid change. In 1978, women's tennis would go 21–2 en route to Stanford's first national title in women's sports, then under the auspices of the Association for Intercollegiate Athletics for Women. Swimming and diving did the same in 1980. Momentum was building. In the 1981–82 school year, the dawn of women's sports under the NCAA, tennis again prevailed to secure Stanford's first NCAA women's title. Swimming and diving again followed, in 1982–83. Even though its first two national titles are excluded on a technicality, Stanford women's sports now account for 68 NCAA titles, more than half of the 127 championships racked up during the streak.

If there's a human embodiment of the streak's endurance, John Tanner, '82, may well be it. When Lambert was coaching the men's water polo team to that first championship season, Tanner was a junior at nearby Menlo-Atherton High School watching the Card's home games. After he enrolled at Stanford, he won three NCAA water polo championships, scoring 27 goals in the undefeated 1981 season. And as coach of the women's water polo team since 1998, he has led

QUITE THE TALENT POOL

Chris Dorst, '77, MBA '82 (top), played on the men's water polo team that started the streak. His wife, Marybeth Linzmeier Dorst, '85 (middle), was a swimmer on the women's team for its first NCAA win, in 1982–83. The couple's youngest daughter, Emily, '15 (bottom), won two NCAA championships with Stanford women's water polo, in 2013–14 and 2014–15.



HIGH PERFORMERS: Ledecky, a 14-time Olympic medalist and the 2025 Stanford Commencement speaker, and streak icons Stackhouse and Ahn.

ISI PHOTOS, COUNTER-CLOCKWISE FROM TOP: DAVID MADISON; TIM DAVIS; MACIEK GUDRYMOWICZ; HECTOR GARCIA-MOLINA; CASEY VALENTINE; DAVID ELKINSON

TOTALLY TUBULAR: From top left, Brennan, center, and the 1981–82 women's tennis team; men's track and field middle distance runner and 2004 Olympian Jonathon Riley, '01; and the 2018–19 women's water polo team, which outscored USC 9–8.

the sport's winningest collegiate program to 10 NCAA championships. A 16-year-old when the streak started, Tanner is now Stanford's most senior coach. Like VanDerveer, he knows serendipity is always an essential ingredient. "So many things have to come together, and you have to be fortunate too," he says. Sports on the Farm aren't just feeding off one another, he says, they're taking inspiration from the broader excellence at Stanford. "When you walk across campus, the thing that is amazing about this place is you just feel this energy, this electric current that is just running slightly above your head, and you feel that energy all the time," he says. "It tends to elevate everyone. You raise your game to meet a standard that you feel comprehensively."

So how long will the streak persist? College sports have arguably changed more in the past five years than they did in the prior 50, with new rules about how athletes can be compensated and how frequently and easily they can transfer. It's a new world entirely from 1976 and yet, so far, the Cardinal's still in the game. John Donahoe, MBA '86, who just completed his first academic year as Stanford's athletic director, says the pieces are in place to keep going. "The combination of Olympic-caliber student-athletes and world-class coaches has us uniquely positioned to contend for national championships on an annual basis." Inevitably, the streak's duration will involve luck. Not that coaches like Glielmi or his gymnasts count on that. Less than 48 hours after winning their latest title, most of his team was back in the gym for optional practice—learning new skills, getting ready for national camps, or just enjoying the camaraderie.

"They all wanted to be back in," he says. "If the athletes are willing to do it and they're willing to put in the time, then I'm going to match it."

That's how something so fragile becomes so strong. ■

SAM SCOTT *is a senior writer at* STANFORD. *Email him as sscott3@stanford.edu.*

ATHLETES, PAGES 44-45, FROM TOP LEFT: Eleni Rossides, '89; Janet Evans, '93; Elise Evans, '26; Ryan Wolters, '99; Kiley Neushul-Hernandez, '15; members of the 2020–21 men's gymnastics team.

PHOTOS, FROM TOP LEFT: (ALL ISI PHOTOS) TIM DAVIS; ROD SEARCEY; JIM SHORIN; ROD SEARCEY; MACIEK GUDRYMOWICZ; KAREN HICKEY

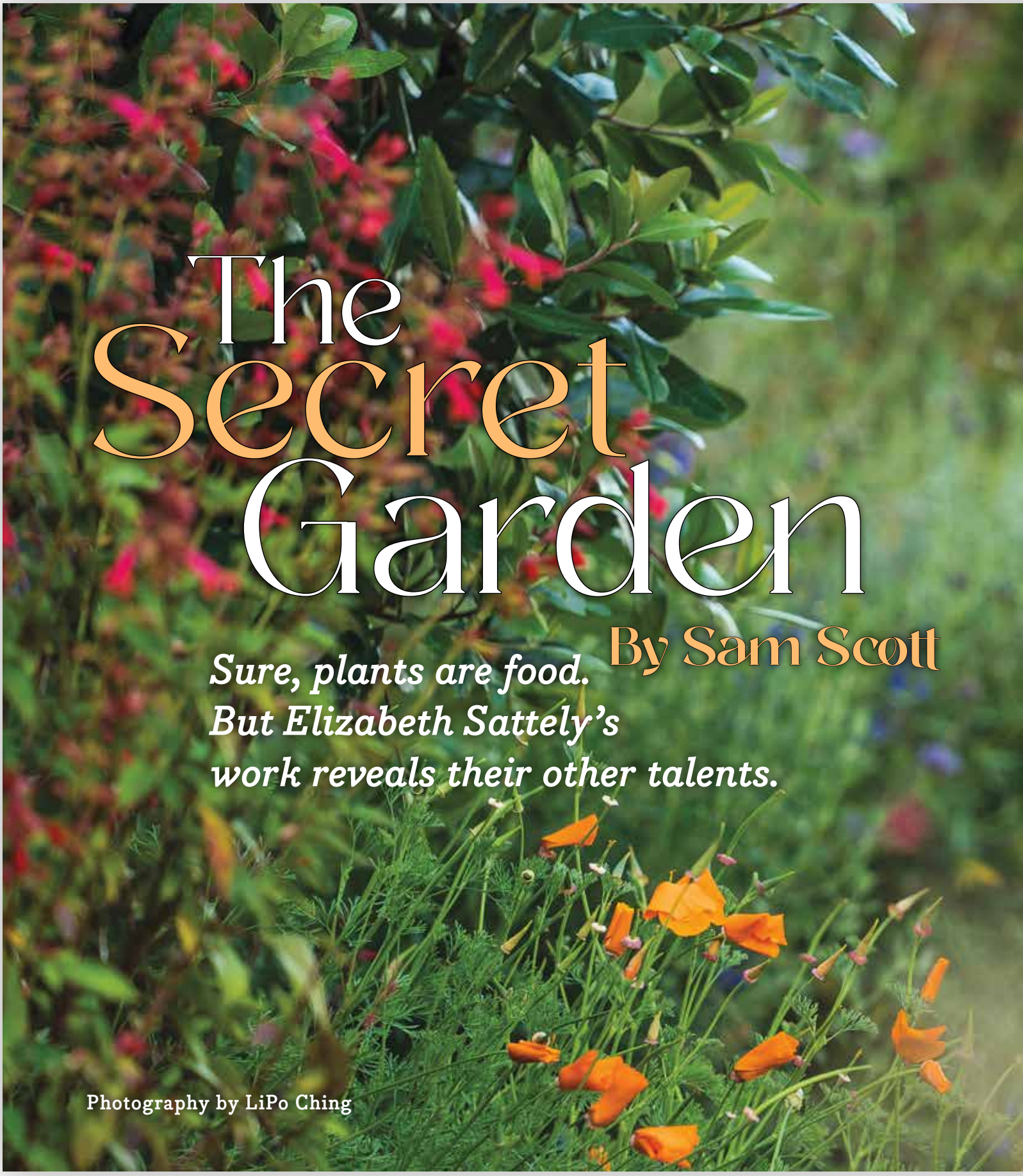
FROM TOP: STANFORD ATHLETICS; ISI PHOTOS; JOHN P. LOZANO/ISI PHOTOS

ON SECOND THOUGHT

In May of 1999, women's tennis saved the streak, prevailing 5–2 over Florida. That academic year, seven Stanford teams—more than in any other year—were NCAA runners-up in their championships: women's swimming and diving, and men's cross country, soccer, swimming and diving, indoor track and field, outdoor track and field, and water polo. Consequently, 1998–99 is the most successful year that almost snapped the streak.

WHEN 70% IS AN A+

Of the 25 women's water polo title matches held since the sport was brought into the NCAA in 2000–01, the Cardinal has appeared in 18—a higher proportion than any other Stanford team. (Women's tennis follows, appearing in 27 of 44 final matches since 1981–82.)



The Secret Garden

By Sam Scott

Sure, plants are food. But Elizabeth Sattely's work reveals their other talents.

Photography by LiPo Ching

Overhead, underfoot, and on our dinner plates, plants surround our lives, though few of us see them the way **Elizabeth Sattely** does. The associate professor of chemical engineering has a lifelong love of plants rooted in her mother's gardening. Sattely moved around as a child, and she remembers her mom's green thumb transforming yard after yard. "She had this way of creating magic with plants," Sattely says. But it was years later, as a doctoral student in organic chemistry at Boston College, that Sattely developed the appreciation for the hidden powers of plants that is central to her research at Stanford. At the time, Sattely was spending long nights over beakers and flasks, heating, filtering, and mixing "nasty" chemicals to make tiny amounts of complex products from scratch. She loved the challenge, but she became fascinated to think that many of the molecules she was toiling to assemble in the lab could be found in nature, where plants made them seemingly out of thin air. It was the dawning of a perspective she distills to a sentence: Plants are the world's best chemists.

That prowess allows them to overcome their more obvious physical limits. Fixed in place, plants can neither flee predation nor seek out sustenance, and their roots—what Sattely dubs their "inside-out intestines"—lay exposed to whatever bacteria or fungi may lurk in the soil. Yet they account for 80 percent of Earth's biomass, including some of the planet's largest and longest-living organisms. Their dominance is thanks in no small part to the extraordinary ability to turn sunshine and carbon dioxide into arsenals of chemicals that bend the environment to their needs. Want to repel an insect, fight fungi, or recruit beneficial bugs? Plants make molecules for that.

Sattely has dedicated much of her career to discerning how this ability can help feed and heal humanity. Her recent research has implications for everything from how we think about food allergies to how we make cancer medicine. "She's an amazing thinker. She really is looking for important problems," says Mary Beth Mudgett, a Stanford biology professor whose collaborations with Sattely uncovered a chemical in plants that can vaccinate crops such as tomatoes and peppers against bacterial speck, a common disease impacting fruit quality and yield. Sattely, she says, is a rare blend of old-school chemist, cutting-edge molecular biologist, and restless innovator eager to apply her expertise to new challenges. "I think she's truly one of a kind."

Decoding a Killer

Sattely brings next-generation genetic tools to her quest, but the instinct to tap plants for their chemicals is, of course, an old one. Aspirin, one of the world's most-used medicines, first came to us from the bark of willow trees. In 1960, the National Cancer Institute, a division of the National Institutes of Health, systemized the turn toward plants on a scale never seen before. Over the ensuing two decades, scientists tested some 35,000 plants in hopes of finding new weapons in the fight against cancer. None proved more important than a stand of Pacific yews in Washington's Gifford Pinchot National Forest whose bark was sampled on a hot August day in 1962.

Yews have ancient association with long life (their own) and quick death (anyone consuming them). The hags incanting "double, double toil and trouble" in Shakespeare's *Macbeth* aren't trying to please the palate when they throw "slips of yew" into their cauldron with eye of newt. But the advent of chemotherapy in the 1940s gave new medicinal value to such poison if it could be appropriately targeted. In the late 1960s, lab tests revealed the Pacific yew's bark had a killer bite against cancer cells. Scientists dubbed the active compound paclitaxel—a leading chemotherapy more commonly known by the brand name Taxol that is used to treat ovarian, breast, lung, and other cancers.

There was a problem, however. Producing enough Taxol to treat a single patient could require felling multiple slow-growing trees. Scientists later learned to make the drug from a precursor compound called baccatin III, which could be gleaned from the needles of a cousin species, the English yew. Other researchers—including Stanford chemistry professor Paul Wender—puzzled out how to make Taxol entirely in the lab, but fully synthetic options required dozens of steps and proved too pricey for widespread adoption. Taxol production has remained connected to slow-growing yews, a contributor to its high cost. Recent figures put the going rate for a kilogram of Taxol at more than $20,000.

For molecular scientists like Sattely, another option beckoned. What if you could find the genes that yew trees use to make Taxol, then transfer them to faster-growing organisms more amenable to husbandry to let them do the work? The idea has loomed as a holy grail in the world of synthetic biology, where organisms are engineered to attain new abilities, Sattely says. A dozen genes in the Taxol-creation process had been identified, but a series of daunting problems had stalled progress for decades. Yews have approximately 50,000 genes, more than double what humans have, and they are far less understood. In some organisms, genes that work together cluster near each other. In plants, those pathways are often scattered across the genome in what can seem like impenetrable chaos.

"For a long time, it was near impossible to find all of the genes responsible for a molecule as complicated as Taxol," says Sarah O'Connor, director of the department of natural product biosynthesis at the Max Planck Institute for Chemical Ecology in Jena, Germany. But around 2010, the advent

Yews have ancient association with long life (their own) and quick death (anyone consuming them).

of powerful and rapid sequencing tools gave scientists new ways to explore plant genomes, a development that jolted the once sleepy world of plant chemistry, she says. Sattely has been in the vanguard translating those advances into new discoveries. "I would say Beth has been one of the people who really cracked this open," O'Connor says. "She has been one of the key people who developed the methods, set the standards, and really led the field."

Several years before taking on Taxol, Sattely used RNA sequencing to track down six of the 10 genes that an endangered Himalayan herb called the mayapple uses to produce the basis for another chemotherapy—etoposide. She and grad student Warren Lau, MS '12, PhD '17, then successfully transferred the relevant genes into a fast-growing relative of tobacco, surprising even Sattely, who wasn't sure you could throw so many genes into a new plant and have the engineered result thrive. The findings were published in 2015 in *Science,* where an accompanying news piece ran with the headline: "Genetic engineering turns a common plant into a cancer fighter." "That was our sort of proof of concept that you could go into a plant like the Wild West and pick apart how it makes a molecule that is useful in the clinic," she says.

In 2018, Sattely's lab began working to fill gaps in the longer genetic pathway behind Taxol. Yews, of course, don't produce the drug in order to fight human cancer. They use it as a defense against colonizing fungi and other threats. To prompt this defensive reaction, the team agitated thousands of cells from yew needles with bacteria, salts, fungi, and other stressors, then extracted their nuclei and sequenced their RNA to see what genes had activated in the response. In essence, the strategy was to provoke the cells into revealing their secrets. "What we really needed to do was flip a ton of switches and see which lights turned on and off together," says Conor McClune, the postdoc in Sattely's lab who led the project.

Still, at one point, the trail seemed hopelessly lost. "Maybe the tree just makes a crazy number of molecules, and you can't engineer any one of the pathways," Sattely recalls thinking. But she's learned to have faith that there's a logic to metabolism—no matter how disorderly it may appear.

FROM TOP: CRAIG CHANOWSKI/GETTY IMAGES; ISABELL SCHATZ/ISTOCK/GETTY IMAGES PLUS

She and McClune persisted and found the gene behind an overlooked enzyme that was key to unlocking the process. "Once we found that, it all kind of came together and started to work," she says.

Ultimately, the team identified the eight missing genes needed to make baccatin III, the precursor to Taxol, and then transferred those genes into the same type of tobacco relative used in the mayapple experiments. The altered plants produced baccatin III at a concentration higher than found in English yew needles. "The findings are a major leap forward in efforts to secure a reliable supply of paclitaxel," a reviewer wrote in *Nature*, where the team published its results last year. Almost simultaneously, a team at the University of Copenhagen identified two more genes that, combined with the work of the Sattely lab, may provide a path to harvest Taxol without a yew in sight. A *Science* account of the experiments ran under the headline: "Newly discovered plant genes could slash cost of making key cancer drug." The Sattely lab is working on transferring the genes into yeast, which can be easily grown in lab vats commonly used to produce pharmaceuticals. "Of all the things we have done in the lab, it probably has the most translational importance," Sattely says. "It would be a huge benefit to have a bioprocess that uses enzymes—instead of synthetic chemistry and isolation from *Taxus* plant tissue—to produce that molecule."

The Path to Plant Chemistry

Like her mother, a retired nurse, Sattely is a constant gardener, one who is apt to return from the local nursery with greenery "coming out of every window" of her minivan, says her husband, Stanford bioengineering professor Michael Fischbach. "It's a large vehicle, but not large enough. If you came to see our place, a reasonable question would be: Who's in charge here? The people or the plants?" Gardening seems to match Sattely's disposition. She speaks with an unassuming poise, and it's no stretch to imagine her tranquilly tending her California natives or retiring a lab plant to a new life in her backyard. "I find a lot of joy in it," she says.

'I do enjoy taking some risks. I like novelty, and I like feeling discomfort, and I like going with my gut on things.'

But the turns and leaps of her career hint at a less obvious side to her personality. When she was growing up, her dad, who worked in jobs ranging from computer programming to construction, used to lead her on impromptu excursions with a tinge of danger, like exploring mineshafts or walking up the middle of a deepening river. Once, when a hurricane hit their hometown in New Jersey, he rallied her to come out into the storm. "My dad had no regard for safety," she says. "He was like, 'Let's see what it's like to be in the middle of a hurricane.'" Whether it's inherited or not, Sattely has her own affinity for taking chances, a quiet derring-do that has shaped her path almost as much as her love of plants. "I do enjoy taking some risks. I like novelty, and I like feeling discomfort, and I like going with my gut on things."

For many rising academics, a postdoctoral position is a chance to add to the momentum gathered during a PhD program while moving in a similar direction. But after earning her doctorate from Boston College in 2007, Sattely turned from the temperature-controlled world of synthetic chemistry to the aqueous swirl of biochemistry in living systems. She was lucky, she says, to land a position with the late Chris Walsh, an internationally renowned enzymologist at Harvard Medicine, despite barely knowing her basic amino acids. Her work in Walsh's lab focused on bacteria. When it came time to embark on her own research career, she veered again. She received funding that allowed researchers to work outside their expertise, and she dove into plant chemistry. "It just felt like this was an area that was rich with applications," she says. "We need plants for food, we use them for medicine, we rely on them in so many different ways. It would be a cool way for me to use my skills in an area that I find fascinating."

From a distance those might seem like minor lane changes. They are, in fact, a pair of sharp pivots that would test many elite researchers, says Chaitan Khosla, a Stanford professor of chemistry and of chemical engineering, as well as the director of Stanford's Innovative Medicines Accelerator. "That requires guts," he says. Sattely nevertheless found traction quickly. Her mayapple paper, which Khosla considers particularly impressive for an early-career researcher, came less than five years after she arrived at Stanford in 2011, as did several other notable papers, including one on how plants metabolize pollution. The breadth of her background, and her nimbleness on new terrain, gives her a powerful way to connect different types

of chemistry and biology, Khosla says. Just over a dozen years ago, Khosla founded the Chemistry, Engineering and Medicine for Human Health Institute (now known as Sarafan ChEM-H), hoping, he says, to attract researchers to Stanford whose "imagination, intellectual restlessness, and sheer ability allow them to jump across a variety of chasms that surround molecular science, especially in the direction of health care." Sattely fits that vision to a T. "Basically, Beth personifies ChEM-H more than anybody else I know."

Food for Thought

Sattely remains committed to understanding plants as the world's ultimate "chemical factories," but she will also gravitate to new areas if she thinks she can have an impact. "She's always willing to move into totally new fields if that's where the interesting questions are," says her friend and collaborator Polly Fordyce, PhD '07, an associate professor of genetics and bioengineering. "She's pretty fearless scientifically."

The result is that her lab—currently 14 people strong—publishes on topics far beyond her well-publicized cancer-related studies. Her group has identified genes in rice that produce compounds called momilactones, which inhibit competing plants from growing nearby. By transferring those genes to other plants, Sattely hopes to produce crops that act as their own weedkillers, a possible response to the global rise in herbicide resistance. They have uncovered the genetic paths that metabolites in edible plants use to medicinal effect, including the way broccoli and cabbage interact with bacteria in the intestines to create compounds that protect against cancer. And they've done work aiming to wean farmers off the fossil-fuel-based fertilizers that help feed the world at the cost of tremendous greenhouse gas emissions and energy use. A Bay Area-based start-up called Switch Bioworks, which Tim Schnabel, '15, MS '17, PhD '21, spun out from his research in Sattely's lab, produces a microbial powder that can be added to seeds. As the microbes grow, they naturally produce the nitrogen that crops need to flourish. "An ounce of powder can replace tons of fertilizer," Schnabel, the company's CEO, says.

More recently, Sattely's lab has ventured into the interface between plants and our immune system. In March, the group published a paper looking at the flip side of food allergies: food tolerance. Traditionally, people assumed that tolerating food was a nonevent, simply the absence of an allergic response, Sattely says. Scientists now consider it an active process, in which immune cells size up food before giving the thumbs-up. Sattely's study, published in *Science Immunology*, identified protein fragments from plants such as corn, soy, and wheat that stimulate this copacetic response. The findings could help advance therapies for disarming food allergies.

"She takes one idea from one area and draws a connection to another idea in a completely different area," says Catherine Liou, PhD '22, a postdoc in the lab. "She doesn't just jump and leave what she used to work on. She keeps those old skills with her as she's moving into a completely new area."

Growth Goals

Sometimes, when people learn she's a Stanford professor, they remark how smart she must be, Sattely says. She disagrees. She says she is lucky. Neither of her parents earned a four-year college degree (they got GEDs, and her mom added an associate's degree in nursing), and nobody she knew growing up had been to grad school. But her mom worked hard to find her mentors. "I'm the same smart like everybody else, just all the stars aligned, and I got to be here." That sense of serendipity feeds her sense of duty to make the most of her opportunity for the public good. "I have a strong feeling that universities should be doing more," she says. "It's a privilege to be here and we need to be doing more for the world."

That instinct is behind her latest effort. Much of her work touches upon areas related to diet and food production, and she's concerned by what she sees. Global agriculture is a huge consumer of energy and water and a major source of carbon emissions. Meanwhile, people in rich countries are succumbing to illnesses like heart disease that are exacerbated by poor diet, while people in poorer areas struggle with malnutrition. Those are major problems beyond the ability of any one lab or professor to address, and Sattely returned from a yearlong sabbatical in the fall with a plan for a campuswide food initiative that would bring Stanford researchers into collaborations to look for solutions. Currently, she and three other researchers meet regularly to think more exactly about how they can define problems so researchers across Stanford can marshal resources to focus on them. "We have all these people that don't have food, then we have people who are eating the wrong kinds of food," she says. "It's costing us a huge amount of money, we're destroying the planet as we're producing this food, and we're just going to sit there and, like, let it happen?"

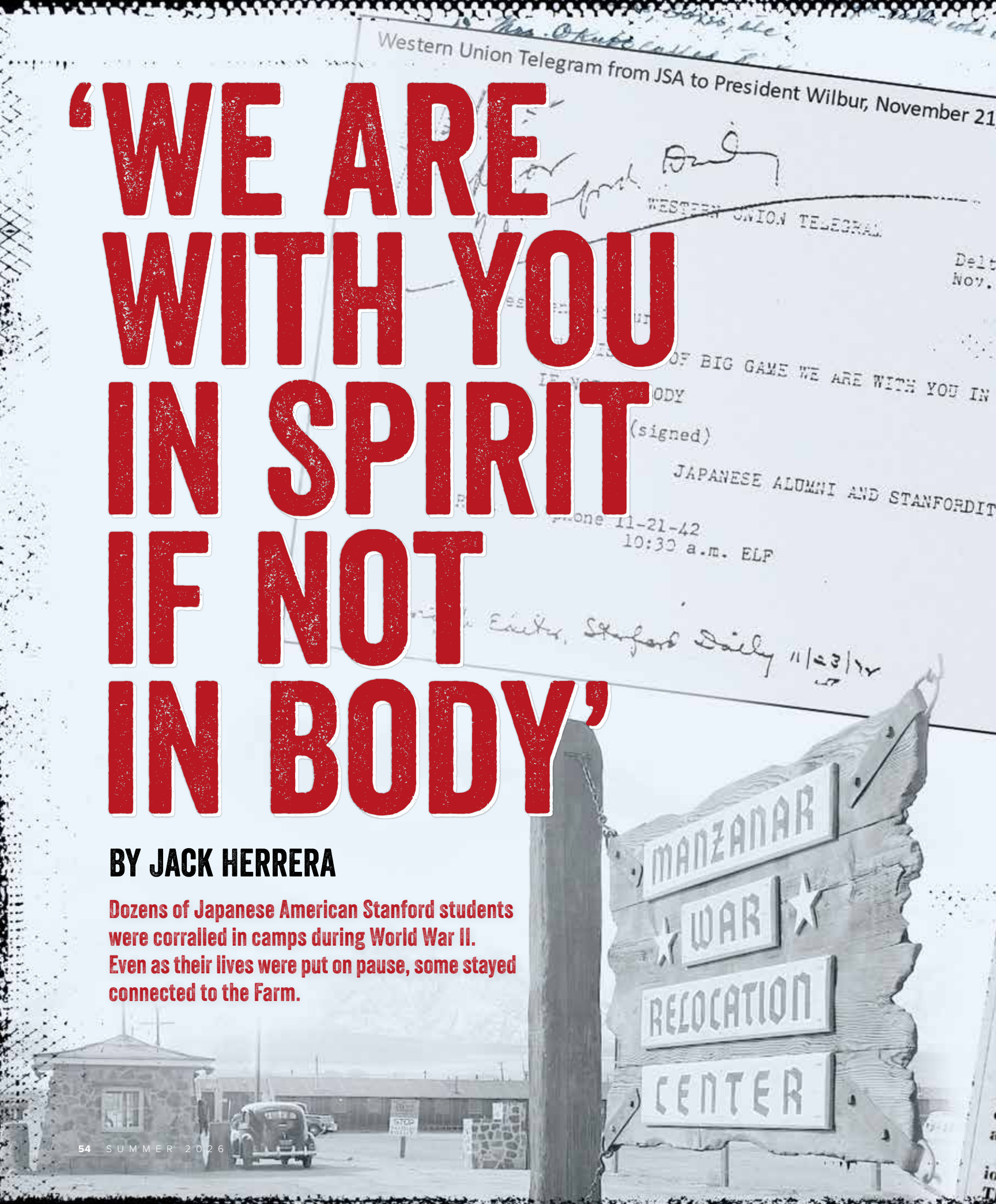
If solving that sounds ambitious, some who know her best would agree. "She is questioning the way a giant portion of our society functions," Fischbach says. "Having the audacity to think that you could improve the way we make and grow and consume food is just totally absurd. And so that's why it's perfect for her." Because, like plants themselves, Sattely has hidden powers to make things happen. ■

SAM SCOTT *is a senior writer at* STANFORD. *Email him at sscott3@stanford.edu.*

‘WE ARE WITH YOU IN SPIRIT IF NOT IN BODY’

BY JACK HERRERA

Dozens of Japanese American Stanford students were corralled in camps during World War II. Even as their lives were put on pause, some stayed connected to the Farm.



CAMPUS

AMERICAN-JAPANESE THANKS

(Editor's Note: The following was addressed to Dr. Wilbur by the Japanese Student Association ... Stanford.)

STANFORD UNIVERSITY JAPANESE ASSOCIATION MAY 13, 1941

Japanese ... To Leave Tomorrow

By WAT TAKESHITA

Tomorrow, Japanese students and their organization will be gone from the Farm.

President Yoshiro Oishi and Vice-President Paul Yamamoto of the Japanese Club will lead the group of student evacuees from Stanford. It won't be much of a hegira, perhaps scarcely noticeable at all. For the last group of Japanese students, who have held out until today, number less than a dozen.

Of this group, several are ... in their last ...

ON DECEMBER 7, 1941,

the lights were off and all was quiet at the home of **Yamato Ichihashi**, Class of 1907, MA ’08, Stanford’s first and, at the time, only professor of Japanese descent. A historian who studied U.S.–Japan relations, Ichihashi was in a state of shock. Japan had attacked Pearl Harbor, and suddenly, the country of his birth was at war with his adopted nation. As the sun rose the next morning and President Franklin Roosevelt prepared to give his “Day of Infamy” speech to Congress asking for a declaration of war, Ichihashi agonized over whether to go to his classroom. That quarter, he taught an 8 a.m. course on the political, social, and economic development of Japan.

He crossed campus and shyly poked his head in the door. “Shall I come in?” he asked. The class had swelled from its usual 30 to more than 100 students, and they all broke out into applause, welcoming Ichihashi into his lecture hall. He took his spot at the front of the class. One of the students, Leslie Langnecker Luttgens, ’43, would remember decades later that Ichihashi looked like “a broken man.”

In the Stanford dormitories, Japanese maids stopped chatting with each other in Japanese and spoke English instead, according to one senior’s diary. Japanese Student Association president Yoshiro Dan Oishi, ’42, began considering how to respond to the attack. Oishi and his brother Goro, also ’42, lived in Stanford’s Japanese Clubhouse, a handsome craftsman-style home a few blocks off the Row, along with many of the roughly 30 students of Japanese descent then at Stanford. (That number had grown from six when Stanford opened its doors in 1891.) A mere mile away, Palo Alto police started detaining and questioning any Japanese person found “motoring” on the city’s roads, on instruction from the FBI. Across the West, the FBI fanned out and arrested more than 1,500 *issei* (the generation of Japanese who first immigrated to the United States). Pastors, business leaders, journalists—anyone deemed to have sway was targeted. That included the Oishi brothers’ father, Yoziro, a community leader and farmer near Santa Barbara, Calif.

Within six months, Yoshiro, Goro, and nearly two dozen other people of Japanese descent on Stanford’s campus would be incarcerated, as would 110,000 others across the American West.

Today, 80 years after the last Japanese concentration camp closed, none of these students (nor Ichihashi) is still living. But some of their descendants are working to ensure that successor generations remember what they went through during World War II. Caroline Takahashi, ’79—the daughter of Kazuyuki “Kaz” Takahashi, ’40, MD ’49, a PhD student at the time—recently loaned her father’s papers to Stanford Special Collections to be digitized and shared publicly. Available since February, these papers include a trove of letters and notes from Kaz’s time in the Manzanar camp. Those letters, alongside interviews and other documents, show how Stanford faculty maintained ties with their students, and even the university president sought to keep in touch. These Stanford students continued to pursue their education in the camps—one freshman finished his spring finals from a horse stall—even as incarceration cost many of them their careers, property, and years of their lives.

CAMPUS, DECEMBER 1941

Palo Alto had seen a spate of “ugly anti-Asian agitation” during the early 20th century, writes history professor Gordon Chang, MA ’72, PhD ’87, in his 1997 book, *Morning Glory, Evening Shadow*. But “the Stanford vicinity,” he adds, “had not been known to be particularly anti-Japanese in climate, and the university itself had been a relatively hospitable place for students of Japanese ancestry.” After Pearl Harbor, as much of California exploded into anti-Japanese hostility, this welcoming attitude on Stanford’s campus appears to have remained intact.

JAPANESE STUDENT ASSOCIATION, 1941: Front row, from left: Paul Yamamoto, Yoshio Okumoto, President Ray Lyman Wilbur, Professor Yamato Ichihashi, Matsuye Takeshita; Second row: Yoshiro Oishi, Setsuo Dairiki, Alan Yamakawa, Cornelius Chiamori, Kay Kitagawa, Ichiro Nagai, Takeo Omori; Third row: Peter Ida, Kazuyuki Takahashi, Goro Oishi, Thomas Kawahara, Iwao Bando, Paul Fujii; Fourth row: Harold Arai, Roy Nakagawa, Neil Kosasa, Wataru Takeshita, Tohru Inouye. Top row: Elmer Tanase, George Kitagawa.

CARLOTTA CASE HALL/COURTESY SPECIAL COLLECTIONS & UNIVERSITY ARCHIVES/STANFORD UNIVERSITY LIBRARIES

(PREVIOUS PAGE): CLOCKWISE FROM TOP LEFT: OKADA HOUSE/STANFORD UNIVERSITY; YAMATO ICHIHASHI/COURTESY SPECIAL COLLECTIONS & UNIVERSITY ARCHIVES/ STANFORD LIBRARIES; STANFORD DAILY; BERTON W. CRANDALL/COURTESY SPECIAL COLLECTIONS & UNIVERSITY ARCHIVES/ STANFORD LIBRARIES; BUREAU OF PUBLIC RELATIONS, U.S. WAR DEPARTMENT/LIBRARY OF CONGRESS; STANFORD DAILY; ANSEL ADAMS/LIBRARY OF CONGRESS

Wataru "Wat" Takeshita, '42, MA '52, a reporter for the *Stanford Daily*, would later remember Stanford as "an island of tolerance amid the surrounding sea of hatred and animosity." In the months after the attack, Takeshita sat in gaggles of students listening to the news on portable radios. "They all treated me like any other student on campus," Takeshita wrote in his 2002 memoir, *The First 80 Years*.

On December 10, three days after the attack, Stanford president Ray Lyman Wilbur spoke to an audience of 3,500 on campus. "We've got to eliminate the Japanese as a major power in the Pacific," he said. "There is no safety for California or for the United States until they are eliminated." At that time, it was unknown whether Japanese aircraft were in range, and Wilbur, Class of 1896, MA '97, MD '99, ordered all students to strictly obey blackout orders. "We are right up against the guns," he warned. But the president made it clear that Japanese and Japanese Americans on campus were not the enemy. "They are just as good Stanford people as we are," Wilbur said.

The next day, the Japanese Student Association published an open letter to Wilbur in the *Daily*. In the letter, signed by president **Yoshiro Oishi** and secretary **Peter Ida**, '43, the students took the opportunity to profess their loyalty:

> "As American citizens of Japanese ancestry, we have been prepared to assume and discharge our duties and responsibilities which have been placed upon us. Yet little did we dream that we would be called upon to prove our loyalty under the circumstances in which we now find ourselves.
>
> "Realizing the necessity of unity in the critical period ahead, we, the members of the Japanese Student Association, pledge our full support in the present emergency."

In the days following, campus emptied out as students went home for winter break. Takeshita had plans to return to his family's farmhouse in Selma, Calif. But when he tried to buy a bus ticket at Palo Alto station, he was refused: "Japs" were not allowed to travel beyond three miles, the attendant told him.

Another Stanford student, "a complete stranger," he recalled, overheard the conversation and offered to drive Takeshita as far as his own hometown, Fresno. At the Fresno bus depot, Takeshita was turned away again. So his fellow student drove him the extra 15 miles to Selma. "I do not remember the Good Samaritan's name; I don't even recall what he looks like," Takeshita wrote 60 years later. "But I am forever grateful to him and others like him."

Back at home, things were tense. Takeshita argued with his father about how the U.S. government would respond to Pearl Harbor. The elder Takeshita warned his son that mass detention could be in their future, but Wat dismissed his father's concerns. "For alien Japanese maybe," Takeshita told him. "But for us, that would be impossible. After all, we're American citizens."

REMOVAL

When Yoshiro and Goro Oishi returned to Stanford from winter break, they were just months from graduating—Yoshiro, the eldest, studied economics; Goro was premed.

On February 19, 1942, Roosevelt issued Executive Order 9066, establishing special "military areas" across the West Coast and authorizing the forced removal to "relocation centers" of anyone deemed a threat to national security. While the language was ambiguous, there was no confusion that the order would target people of Japanese descent.

California Attorney General Earl Warren, who would be elected governor later that year (and eventually serve as Chief Justice of the United States Supreme Court), testified before Congress two days later, arguing that, even though the United States was at war with Germany and Italy as well as Japan, ethnic Japanese in the United States deserved harsher treatment. "We believe that when we are dealing with the Caucasian race, we have methods that will test the loyalty of them, and we believe that we can, in dealing with the Germans and the Italians, arrive at some fairly sound conclusions," Warren said. "But when we deal with the Japanese, we are in an entirely different field."

CAMPUS OPINION

AMERICAN-JAPANESE THANKS

(Editor's Note: The following was addressed to Dr. Wilbur by the Japanese Student Association of Stanford.)

DEAR DR. WILBUR:

It has been with increasing concern that we have noted the developments in international relationship which have finally culminated in the declaration of war between our country and Japan.

As American citizens of Japanese ancestry, we have been prepared to assume and discharge our duties and responsibilities which have been placed upon us. Yet little did we dream that we would be called upon to prove our loyalty under the circumstances in which we now find ourselves.

Realizing the necessity of unity in the critical period ahead, we, the members of the Japanese Student Association, pledge our full support in the present emergency.

If we can be of service in any manner you deem necessary, please feel free to call upon us at any time.

Very sincerely yours,

The Japanese Student Association of Stanford University
Yoshiro Oishi, President
Peter Ida, Secretary

Some Japanese American Stanford students immediately began arranging to transfer to universities in the Midwest, where they wouldn't be subject to evacuation orders. The entire Japanese population of the United States at the time was just 127,000, and over 60 percent were U.S. citizens. By the end of 1942, 110,000 of them were ordered behind the barbed wire of rapidly built camps across the West. Another 16,000—including 6,000 newborns—would join before the war's end.

Incarceration occurred in waves. California and other states were split into "exclusion areas," and people of Japanese descent were ordered to travel to assembly centers zone by zone. Nuclear families—especially parents and minor children—were generally permitted to remain together, but more distant relatives, friends, and loved ones often got separated. Some Stanford students traveled home when their parents received their relocation orders, to ensure they stayed together. Kaz Takahashi, then a doctoral student in biology, proposed to his Palo Alto-born girlfriend, Soyo, and they rushed to get married so they could remain together in the camps. "We honeymooned at Santa Anita assembly center," Soyo would later remark to *National Geographic*. (Soyo's mother, a maid at Stanford, got a letter from the university letting her know that, while the university hoped to keep them at work until their removal dates, she and other Japanese maids might be fired prior to relocating, in order for the university to ensure continuity by hiring new staff.)

By May 1942, just seven undergraduate students remained in the Japanese Clubhouse, mostly seniors like the Oishi brothers and Takeshita. On May 23, an official military poster with the title "Civilian Exclusion Order No. 96"—Santa Clara County's forced removal order—was tacked on the telephone pole outside the Clubhouse. All people of Japanese descent had to report to a registration site

within two days. There, they were given a departure date and location and told to bring only what they could carry. For the remaining Stanford crew, that day would be May 26.

In *Morning Glory, Evening Shadow*, a biography of Ichihashi that includes his journals, Chang writes that the professor and his wife, Kei, were devastated by the order and its rapid timeline. The couple rushed to find someone to tend to their home and expansive garden; a neighbor agreed to rent out the house for them. The Stanford history department promised to hold Ichihashi's salary for him, and his office was closed up and locked. A little after 3 p.m. on May 25, Ichihashi went to Wilbur's office to say goodbye and leave a new mailing address.

That day, Takeshita published his final *Daily* article: "Japanese Students to Leave Tomorrow." "It won't be much of a hegira, perhaps scarcely noticeable at all," he wrote. "For the last group of Japanese students, who have held out until today, number less than a dozen." On May 26, Yoshiro led the small group of students off Stanford's campus; some of them would never return. The Japanese Clubhouse was leased to a local co-op, with the plan to welcome Japanese students back one day. But it would never again serve as such a home. In the 1960s, the house was demolished.

At the relocation site in Palo Alto, a local Quaker woman saw Ichihashi with his wife. "He sat quietly halfway down on the left side of the bus, very disciplined and remote from his fellow passengers," she said, as her husband later recalled in a letter to Chang. She sensed "the humiliation he must have been feeling."

It's impossible to capture the diverse array of emotions the people on that bus felt. For Yoshimaro Shibuya, a freshman at Stanford in 1941-42, it was resignation. "I guess those were different days. It was no big surprise or anything. You just did what you were told to do," Shibuya said in an interview in 2017, shortly before his death. "It happened, and I went. There were no two ways about it. You just went."

INCARCERATION

The federal government moved at such speed to incarcerate people of Japanese descent that tens of thousands were initially housed in temporary "assembly centers" while the 10 long-term concentration camps were completed. Most of the Stanford group who left campus in May went to the Santa Anita racetrack, where the Army had rushed to convert horse stalls into barracks.

Kaz and Soyo Takahashi were placed in a stall with another pair of Stanford newlyweds—George Taoka, '40, MA '42, and Matsuye Takeshita Taoka, '41 (Wat Takeshita's sister). Manure flecked the walls, and squalid dust fell from the walls and ceiling as the two couples moved about the cramped space. They slept on straw mattresses atop wood-frame cots. The four of them were allotted one roll of toilet paper per week.

The couples did their best to adapt. Kaz used wrapping paper to cover the manure dust on the walls; Soyo hung a Stanford pennant as decoration. On June 6, nearly two weeks after arriving at the camp, Takahashi wrote a letter to one of his advisers at Stanford, anatomy professor Hadley Kirkman. He told Kirkman how he and Soyo had torn down the stable door to use as a table and fashioned scraps of wood into shelves. They had hung a sheet on some spare rope strung along the ceiling to give themselves and the Taokas some privacy. "If one does not ask too much, this center is a fairly comfortable place," he wrote.

'IT HAPPENED, AND I WENT. THERE WERE NO TWO WAYS ABOUT IT. YOU JUST WENT.'

In a stall nearby, Shibuya, the freshman, completed his spring quarter finals. At that time, he and the other incarcerated people had no idea how long they'd be in the camps—a year? A decade? Letters establish that the simple matter of survival was on many of their minds, but some of the Stanford students expressed angst about their education.

In the weeks after their arrival at Santa Anita, news reached the Stanford students that a nonprofit organization, the National Japanese American Student Relocation Council, had been established to help place students in colleges in the Midwest. Professor Ichihashi met with some of the NJASRC representatives, and on July 3, 1942, he wrote to Wilbur—who had been a leader in the effort—to update him.

Takeshita Taoka, who, in 1941, was the only female member of the Japanese Student Association, wrote to Stanford professor Payson Jackson Treat, PhD 1910, to express her excitement about the "encouraging news about student relocation," which offered her the chance to continue her education. Kaz Takahashi also wrote to Treat—the first professor of "far eastern" history at an American university—to tell him the prospect of relocation had improved morale in the "Stanford barracks."

But instead of immediately pursuing relocation, Takahashi sought a job as an educator in the camps, for students of all levels. Multiple Stanford leaders wrote letters of recommendation to Santa Anita officials on his behalf. "I trust that you will do what you can to see that Mr. Takahashi is put in a position where his training and personal attributes will be of the greatest service to the community," wrote Wilbur. "He is a young man not only of superior brains and superior training but also of unusual personal charm, outstanding ability, and reliability."

As the permanent camps were completed, families were shipped east out of the assembly centers. Kaz and Soyo Takahashi went to Manzanar, on the desolate eastern reaches of California's Sierra Nevada. Several other Stanford students were sent to Topaz in Central Utah. Ichihashi was shuffled among multiple detention centers and, at Tule Lake, separated from Kei for a while. Once reunited, they were moved again, to the Granada War Relocation Center, known to camp residents as Camp Amache.

Life behind barbed wire did not stop Stanford students from celebrating Big Game. At the Topaz camp in 1942, some 350 students and alumni of both Cal and Berkeley built a bonfire to celebrate. Some of the students sent a telegram to Wilbur: "On this eve of Big Game we are with you in spirit if not in body.'"

UPSTANDING: Newlyweds Kaz and Soyo Takahashi were incarcerated at Manzanar, where Kaz helped found the Manzanar Junior College. The all-*nisei* 442nd Regimental Combat Team (right) became one of the U.S. military's most decorated units.

FROM TOP: ANSEL ADAMS/LIBRARY OF CONGRESS; BUREAU OF PUBLIC RELATIONS, U.S. WAR DEPARTMENT/LIBRARY OF CONGRESS

At one point, Yoshiro and Goro Oishi were reunited with their mother, Tama, and siblings. In the summer of 1942, the family was put on a train to Casa Grande, Ariz., near Phoenix. From there, buses took them through desert to the Gila River Indian Reservation, where the military was still completing the Gila River camp. Rows and rows of barrack houses—white with red roofs—stretched out to the horizon. Summer daytime highs in the camp were over 100 degrees most days. Some people braved scorpions and snakes to sleep outside. Dust filled every corner, every eyelash, and hung in the air.

At the camp, Yoshiro and Goro would have had one consolation: The Stanford Board of Trustees had decided to award them their diplomas even though they couldn't complete their final exams. They received them by mail in June. Yoshiro's daughter, Carol Nagai, said that Stanford's decision was a kindness her father would be grateful for throughout the rest of his life. He told her that some of his former professors wrote him letters at Gila River, checking in on him and Goro.

Within a year of arriving at Gila River, Yoshiro and Goro—like many young Japanese men in camps across the West—left for work assignments (Goro, at a hospital; Yoshiro, a factory) and then served in the U.S. military. Shibuya also served. All three worked in the Military Intelligence Service, a branch of the Army that placed a premium on Japanese fluency.

Nagai recalls that her grandfather did not

REMEMBRANCE ROLL

A 1993 Reunion event honored Japanese American students incarcerated during World War II, including, above, Tetsuo Okada, '45, Andow, and Takeshita. The plaque now hanging in Okada, the Asian American theme dorm, recognizes their "indomitable spirit and courage during a shameful chapter in the history of our nation." The students incarcerated include:

Ryuji Adachi
Eric Andow
Iwao Edward Bando
Cornelius Yasushi Chiamori
Clesson Yasuto Chikasuye
Setsuo Dairiki
Paul Shinobu Fujii
Walter Funabiki
Alto Higashiuchi
Kimiko Higashiuchi
Aiko Abe Higuchi
Tomiharu Hiratzka
Peter Mitsuo Ida
Robert Tadashi Ishii
Nicholas Mineo Iyoya
George Kitagawa
Kay Ichi Kitagawa
Albert Yoshiro Nagahashi
James Hiroto Nakano
Tatsuo Niki
Hiroshi Herbert Nishino
Goro Oishi
Yoshiro Oishi
Tetsuo Okada
Henry Ichiro Okagaki
Yoshimaro Shibuya
Madoka Shibuya
Noboru Shirai
Kazuyuki Takahashi
Walter Wataru Takeshita
George Mazumi Taoka
Matsuye Takeshita Taoka
Kazuo Alan Yamakawa
Paul Hiroshi Yamamoto

approve of his son joining the Army. "Why would you join?" Yoziro asked his son. "The United States is going to lose the war."

Yoshiro, however, was a deeply proud American. "My dad told his father, 'You don't know American ingenuity—the Americans are going to win the war, and I'm going to join the Army,'" Nagai recalls.

Many *nisei* (the first generation born on U.S. soil)—including Eric Andow, '43—served in the famous 442nd Regimental Combat Team, an all-*nisei* unit that fought in some of the most ferocious battles against Germany and Italy. Throughout the war, about 14,000 men served in it. With 21 Medals of Honor, 9,486 Purple Hearts, and an uncommon eight Presidential Unit Citations, it was the most decorated unit for its size and length of service in U.S. military history.

Takahashi found another form of service. He helped found the Manzanar Junior College, an accredited school for people incarcerated there. He taught physiology and eventually served as the college's registrar. Despair, though, crept into his thinking. In a letter to Treat in 1943, he wrote, "I really feel helpless and thoroughly sick in seeing race hatred develop right in front of my eyes."

LEGACY

Before the last of the camps closed in 1946, many Stanford students had already left—some for the Army, others to continue their education through the relocation program. Shibuya finished his degree at the University of Nebraska. After serving in the Army, George Taoka moved with Matsuye to Ohio to do postgraduate work. Takahashi became a graduate student at Washington University.

From his new home, Takahashi wrote a letter to Professor Treat: "I cannot express in words how happy we are to have left Manzanar. That place is a moral concentration camp; and we used to joke about 'barbed wire neurosis,' though we knew that that was partially true."

The effects of incarceration were both psychological and economic. Though Matsuye Taoka had a Stanford degree in political science, in Ohio she took a job as a billing clerk. By the time Yoshiro and Goro Oishi's family members were released, they had lost everything—the farmland they'd once leased was taken over, and squatters had ransacked their home in Guadalupe. In 1983, a study commissioned by Congress estimated that people of Japanese descent incarcerated during the war had suffered economic losses between $2.5 billion and $6.2 billion (as much as $20 billion in today's money). Those released from camps early after a loyalty check—in 1943 and 1944—couldn't even have come home; California barred people of Japanese descent from returning until January 1945. Yoshiro eventually left the Army and returned to Southern California, but discrimination stunted his job prospects. An honorably discharged veteran with a Stanford degree, he eventually found work selling vegetables from a cart.

Over time, vegetable peddling turned into a small grocery store, then a restaurant. By the time Nagai was old enough to remember, her father was supporting both her grandparents in the house next door, and her uncle Goro was working at Yoshiro's various businesses.

Nagai remembers that her father's loves included a steak, golf, and Stanford. Though he lived in Los Angeles, Yoshiro was a football season-ticket holder, a die-hard Stanford fan. Father and daughter traveled to Stanford for games multiple times each season, and they almost never missed a chance to root against the Trojans at Stanford-USC games.

Nagai said that her father never expressed bitterness about his time incarcerated, at least not openly. But Goro sometimes wished he could've been a doctor. Instead, he worked at a market and a restaurant run by his brother, later returning to school to become a hospital lab tech.

For Ichihashi, the camps appear to have smothered his intellectual life like a blanket over a candle. During his early years incarcerated, he kept detailed journals, hoping to write an account of his incarceration after his release. But as the years went by, and he was shuttled between different detention centers under fierce suspicion of treason, his journals thinned out. He stopped publishing. Though he eventually returned to Stanford's campus, he would never teach again. Stanford made him an emeritus professor in 1943. He died in 1963, less than two weeks before his 85th birthday. ■

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HONORING
STANFORD LEADERS

Gold Spike

In 1969 the Stanford Cabinet designated the Gold Spike award as the highest annual honor for leadership service to Stanford. The original gold spike was driven by Leland Stanford in Utah in May 1869 to mark the final link in the nation's first transcontinental railroad.

Stanford Medal

Introduced in 2006 by Stanford Associates, the Stanford Medal recognizes select alumni leaders who have provided decades of distinguished and significant service to Stanford.

2026 GOLD SPIKE RECIPIENTS

Ruth Porat, '79 is one of Stanford's most important and influential advisors, building strategic, impactful relationships with stakeholders across the university. On the Board of Trustees, she balanced data-driven decisions with human connection, and transformed the Compensation and Finance Committees to achieve greater efficiency. A sounding board for senior leaders including presidents, provosts, and deans, Ruth has brought remarkable acumen to roles on the Humanities and Sciences Council, Stanford Management Company Board, and Stanford Challenge Leadership Council. With exemplary commitment to mentorship and service, Ruth inspires students and alumni, reinforcing her legacy as a champion of Stanford's mission.

Ron Spogli, '70 has demonstrated a passionate commitment to advancing the university's goals on both local and global scales. His transformative contributions to the Freeman Spogli Institute have profoundly enhanced Stanford's impact in international studies. Ron's tenure on the Board of Trustees and the Hoover Institution's Board of Overseers and Executive Committee demonstrates his dedication to fostering dialogue and addressing critical issues. As a regional chair for the Campaign for Undergraduate Education and co-founder of the Stanford Southern California Advisors, he has provided strategic guidance while mentoring key philanthropic partners. With unwavering loyalty, Ron exemplifies remarkable service to Stanford.

2026 STANFORD MEDAL RECIPIENTS

Melissa Foster Fetter, '82 is an unparalleled champion of the arts and education, dedicated to enhancing Stanford's cultural and intellectual landscape. As chair of the Cantor Director's Advisory Board, the Stanford Arts Advisory Council, and the Stanford Arts Task Force, she ensured the museum's vitality and facilitated landmark installations across campus. From the Anderson Collection Management Committee to Museums by Moonlight to the Campaign for Undergraduate Education, Melissa's commitment, strategic insights, and collaborative spirit significantly enrich the community.

Srinija Srinivasan, '93 is a dynamic leader who has influenced campus discussions and policies around the arts, humanities, and technology. On the Board of Trustees, her insightful counsel guided the evolving student experience during university headwinds. Her impactful service includes the Humanities and Sciences Council, the Stanford Live Advisory Council, and the SAA Board. As co-chair of the HAI Advisory Council, Srinija brings unmatched creativity and expertise to address ethical considerations in technology at Stanford and beyond.

Jorge Tapias, '94 exemplifies a deep commitment to public service and alumni engagement. As chair of the Haas Center's National Advisory Board, his guidance was pivotal to launching Cardinal Service, dramatically increasing internships and service-learning opportunities. Jorge's strategic vision has benefited the SAA Board, Stanford National Latino Alumni Association, Stanford Live Advisory Council, and LEAD. An invaluable advisor to Undergraduate Education and the School of Humanities and Sciences, he brings inspiring dedication to serving the university.

FIRST IN FLIGHT: Josh Haner became one of the earliest drone operators for news reporting in the United States. In 2015, he used the approach to document changes on the Greenland ice sheet.

GAVIN A. SUNDWALL

The art—and science—of bringing visual journalism to the fore at the *New York Times.*

Photo Ops

By Kali Shiloh

Josh Haner was in a flock of fellow photographers, each snapping furiously from a 2-by-2-foot square taped on the floor. He wanted to beat them all. He switched among three cameras—one that hung from his neck, heavy under the collar of his tuxedo, and two more holstered at his sides. An Ethernet cable dangled from each camera, tethered to the device that had gotten him here, to the elite first group of red-carpet photographers at the 2010 Academy Awards.

The cables plunged underground, far below the great migration of Jimmy Choos, and linked via fiber optics to a room half a mile away, where they connected to a server Haner had spent months customizing. What had begun

EMILY VAN METER (INSET)

as a jumble of tech in a backpack the year before was now a plug-in remote streaming system. It was how Haner, '02, a relative newbie on the *New York Times* photo staff, had persuaded his editors to send him to the event.

Meryl Streep in a white Chris March gown. George Clooney in an Armani tux. In a flash, Haner's photos were on the server, and then, via high-speed internet, with his editors in New York. With some photos, the team scooped not just every other photographer, but also the Academy's live television coverage—the first and last time any media outlet would be allowed to publish with such speed. "That was the moment where I realized I'm beating the broadcast delays that are baked into these big news events and forcing the event coordinators to change restrictions related to photo publishing," Haner says.

Haner has an artist's eye—one that won him the 2014 Pulitzer Prize for feature photography. But he also lives for the newest technology: the Backpack. Video. Drone photography. Mobile phone footage. "We're constantly racing to have not just the first but also the best image out there," he says. That drive has propelled him to the forefront of the everchanging world of photojournalism. In 2021, he was named the *Times*'s first "photo futurist," responsible for developing tools, technology, and workflows for visual storytelling. Today a deputy editor in the photo department, Haner is reinventing the rules of his field for one of the few legacy news organizations with the resources to invest in it, ensuring the *Times*'s 22 staff photographers, 60 photo editors, and thousands of freelance photographers make images and videos relevant to the 96 percent of *Times* readers who no longer look for journalism on a printed page.

"I've always called him Jimmy Neutron because he's always light years ahead of everybody else," says *Times* senior photographer Doug Mills. In 2024, Mills used an upgraded version of Haner's Backpack to transmit images of the first attempted assassination of Donald Trump, including the photo of the bullet whizzing by his head that earned Mills his third Pulitzer. "If Josh is teaching it, it's legit, and you better listen, and you better learn," Mills says. "Otherwise, you're going to get left behind."

Perhaps ironically for someone so averse to staying in his comfort zone, Haner lives in the house he grew up in, in the Cole Valley neighborhood of San Francisco. He tinkered his way through childhood, regularly bringing home discarded rotary phones or speakers to take apart with a screwdriver or, for stubborn objects, a hammer. While attending a free after-school program at the Harvey Milk Center for the Arts, he found a new outlet for his dabbling: photography. "The part that really drew me to photography was the technical side of things," he says, "developing the film, putting it in an enlarger, seeing it projected, the magic of it appearing."

> 'Photographs were often considered illustration of the story that the writer was presenting. We tried to turn that on its head on the climate desk.'

As a freshman at Stanford, where he double majored in symbolic systems and art, he was intent on becoming a photographer and confident in his photographic point of view. That is, until he shared his photos in a Wednesday night critique session for advanced students.

"They were pictures of, like, windmills at sunset," says professor emeritus of art and art history Joel Leivick, who ran the course. "They were really corny."

"I think he at one point called them postcards you might find at a 7-Eleven," Haner recalls. He would need to raise his game before coming back to the sessions. At Leivick's suggestion, Haner began looking at the work of photographers such as Diane Arbus and Bruce Davidson, who didn't just capture an aesthetically pleasing moment but added to the canon of the field. When Haner returned to the critiques, he was more educated, experienced, and humble. "He became so damn good," Leivick says. "You can't just be confronted with a pretty sunset and make a pretty picture. You have to really dig into it."

Haner spent the first nine months after graduation living in a trailer park in Redwood City and documenting the lives of his neighbors, part of a longform photojournalism project he'd started at Stanford. Using a portfolio of those photos, he got a job as a photo editor at *Fortune* magazine alongside a mentor, Meaghan Looram, '96, working for Michele McNally. She later brought him along as a freelance nighttime photo editor when she became the *Times*'s director of photography in 2004. By 2006,

SCENE-SETTING: During his time on the *Times*'s climate desk, Haner photographed a fisherman-turned-mayor at the former site of Bolivia's second-largest lake, and he shot Yellowstone National Park's Grand Prismatic Spring (below) from a helicopter.

JOSH HANER/© 2018 THE NEW YORK TIMES COMPANY

he'd persuaded McNally to make him a full-time photographer.

The youngest and newest on staff, Haner had the 3 p.m. to 11 p.m. shift, which often ended with a concert. Each night, after taking a thousand or more photos of Taylor Swift, or Bon Jovi, or Snoop Dogg, he'd head back to his apartment, where he'd spend another hour or two downloading the memory cards, choosing the best images, color correcting them, adding captions, and sending them to his editors.

"I started realizing that if I could engineer a way to make that process faster, it would be a huge benefit," he says. The editorial team would be able to publish a concert

He shoved a Linux computer, a cellular connection device, a battery, and a fan mounted to a piece of plywood into a photography backpack.

review hours sooner, maybe even before the night was out, and, importantly, Haner would have more of the evening to spend with friends.

In the spring of 2009, Haner spent a weekend soldering and wiring. Before his next concert, he shoved a Linux computer, a cellular connection device, a battery, and a fan mounted to a piece of plywood into a photography backpack.It was a crude prototype, but it worked. He sent images to his editors from the front row. He had just created a remote streaming device.

"The Backpack was foundational to how the *Times* does photojournalism today," says Andrew Rossback, a member of the newsroom design team that works on individual stories as well as broader product development projects. "It was one of the early experiments in getting content from the field directly onto our website."

Haner has since pioneered remote streaming devices that use cellular and satellite technology, with tools like multi-carrier eSIMs and Starlink, so that photojournalists working from a country at war or in a natural disaster can transmit their photos even when cellular networks are down. "It's not enough for a photographer to be in the right place at the right time to make a historic image if you can't get it out," Haner says. And the speed has driven huge traffic increases to the *Times*'s social media accounts and website during events like New York Fashion Week and the Olympics.

Today, 10 staff photographers travel with remote transmission units the size of a large cellphone, and hundreds of freelancers upload their photos and videos directly to the *Times*'s publishing system—bypassing the need to download and edit on a computer—using a proprietary iPhone app. Both were inspired by the Backpack.

On April 15, 2013, Haner was at the *Times*'s headquarters when word spread of explosions at the finish line of the Boston Marathon. He grabbed his gear and sped to Boston, where he spent 10 days capturing the aftereffects of the bombing. As he was driving back to New York, sleep deprived, his editors asked him to return to Boston a few days later to follow one of the victims. This time, speed wasn't part of the plan.

Jeff Bauman, a spectator at the event, had been photographed being wheeled away from the scene, singed and bloody. Hours later, both of his legs were amputated. Haner would be documenting Bauman's recovery in excruciating detail.

"I told him I thought this was a story he could really sink his teeth into," Looram says in an email interview. (Looram took over as the *Times*'s director of photography in 2018.)

Along with writer Tim Rohan, Haner spent nearly every day for three months by Bauman's side, earning the trust to hold up a lens during family arguments, medical appointments, and tender moments. "He was there for more than the photos," Bauman says. "He wanted to get to know me."

When Bauman's sutures were taken out, about a month into his recovery, the procedure was especially painful. At home afterward, he threw himself onto his bed, exhausted. "It was the most distraught I'd seen him," Haner says. Bauman's girlfriend, Erin Hurley, arrived home and went immediately to comfort him. Haner followed. "I had a sense this would be an important moment," Haner says. As Hurley

FROM TOP: JOSH HANER; JOSH HANER/© 2014 THE NEW YORK TIMES COMPANY

folded herself next to Bauman and wrapped her arms around his chest, Haner climbed onto the bed next to them and snapped a few pictures before leaving the room. The poignant portfolio earned Haner a Pulitzer.

But photos were only part of the story. "One of the things I'm most proud of out of that project is actually the video piece," says Haner, who hadn't filmed professionally before. Carrying up to four cameras at a time, he switched between photography and cinematography throughout the assignment, debating in every moment whether he should take a still picture or let the camera roll.

"I felt like I was working with a one-man band," Rohan says.

Haner produced a mini documentary for the *Times* featuring Bauman, in his own words, describing the moment the bomb went off, and his pain and goals on this new life path. "It was my very first exploration into multimedia storytelling, and [it] showed me that I could reach people in many different ways," Haner says.

That was how Haner approached his photography career—a solo experimentalist with an eye for a good story. "Anytime I could get my hands on a new tool, or a new piece of technology, I really wanted to understand it as

MOVING MOMENTS: A collection of Haner's still photographs of Boston Marathon bombing victim Jeff Bauman won the 2014 Pulitzer Prize for feature photography, but Haner was equally proud of his efforts during that assignment to learn video reporting.

well as I could," he says, "and just try to figure out how I could use it to better tell stories."

By 2015, he was on the climate desk, working to bring photos to the fore. "Photographs were often considered illustration of the story that the writer was presenting. We tried to turn that on its head on the climate desk," he says. "It was a visual-first type of storytelling."

Drones, already popular with hobbyists, became his tool of choice. As the FAA issued regulatory exemptions and made the use of drones possible in film production and news reporting, Haner became one of the first drone operators in the country to take the FAA's new certification exam, which didn't require a pilot's license. He quickly mastered the manual finesse of operating an airborne camera, then circled the globe on assignment, filming and photographing from the sky to capture migrants in Niger fleeing their drought-stricken homelands and villages flooded by sea level rise in Micronesia.

After a 12- to 14-hour workday, Haner would copy all his photos in triplicate, handing one hard drive to the story's writer, putting another in a hotel-room safe, and sleeping with a third. During one assignment, in Kiribati, he had to choose between bringing a pallet of drinking water or his drone when boarding a boat. "I called my wife from the satellite phone and I said, 'I can either take water or my drone. Can I live on coconuts?'" She looked it up: He could live, but he'd get diarrhea, she told him. He took the drone.

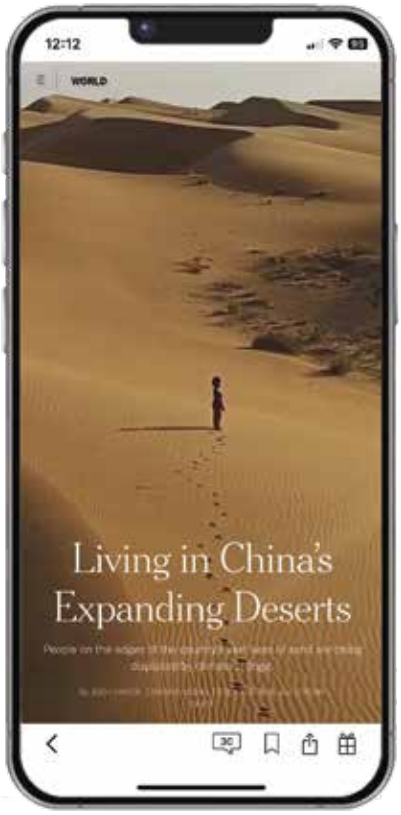
His photo series, Carbon's Casualties, won the 2017 Documentary Project of the Year from Pictures of the Year International.

In 2021, after 15 years as a photographer, Haner joined the *Times* leadership team, and his one-man band became an ensemble.

"Josh is very forward-thinking, a quality that inspired me to create the photo futurist role for him," Looram says. Now also a deputy editor, Haner leads all technology initiatives in the photo department and helps modernize the team's structure and workflow.

He has assembled a small crew of experimentalists: David Guttenfelder, an eight-time Pulitzer Prize finalist for photography, and senior photo editor Cath Spangler, who edited the Bauman video. Together, the trio tests out new ways to capture images before establishing best practices and training the rest of the photo team. "What we're piloting is sort of where we're hoping the rest of our visual journalism staff will be in 12 to 18 months," Haner says.

For the past two years, the most significant and challenging part of their work has been learning how to best shoot news photography and video for the narrow, vertical frame of a phone screen. A big photo on the front page of the newspaper—known at the *Times* as the A1 photo—no longer has the impact it once did, since about 80 percent of their readers will only ever see a story on their phone.



Haner's efforts to make photography a digital-first art have been so successful that photos taken for phones now sometimes make their way into print.

Many of the well-established rules of photography break when the target viewer is looking at an image on a tiny screen. The rule of thirds, for example, which segments a photo in a way that appeals to the eye, "almost becomes a rule of fourths," Haner says. He and his team teach new still photography techniques and compress years of cinema studies into workshops for the photo staff.

"I had to change basically 30, 40 years of looking at things," says Mills. He and his colleagues need to assimilate new skills quickly, making them second nature by the time they're snapping away in a trench next to a Ukrainian soldier or between ICE agents and protesters on the streets of Minneapolis. To tilt his horizontal world sideways, Mills has spent many an evening picking Haner's brain, contemplating the art of filling this new canvas. Mills now keeps more of a scene in focus and makes a point to create "layers"—perhaps a spectator's hand visible in the foreground—to add depth and context to a frame with no sense of periphery. "Those are the things that I think bring a reader in to keep them looking at your photo a little bit longer," Mills says.

When Mills heads to the White House to shoot both pictures and video, he uses a custom mount Haner added to his Sony A1 Mark II camera, so his phone can record while his camera captures a horizontal image. And Haner has implemented software that displays a secondary grid in digital cameras, so photographers looking through their eyepiece can also see what fits in the crop for a phone screen.

Haner's efforts to make photography a digital-first art have been so successful that photos taken for phones now sometimes make their way into print—even onto A1. Recently the front-page photo was a screen grab from a video—possibly for the first time in the paper's 174-year history. In Haner's mind, that success is part of an effort to show readers "something unvarnished and true."

"We live in a world that's increasingly polished and curated," Haner says. "Authentic stories provide the friction we need to stay grounded. Without them, we're just living in an echo chamber, completely untethered from the people and events that are shaping our future." ■

KALI SHILOH *is a staff writer at* STANFORD. *Email her at kshiloh@stanford.edu.*

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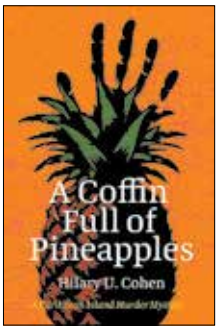
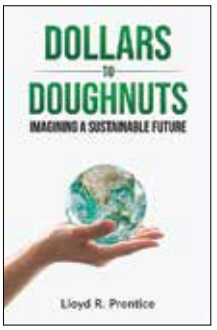


A Coffin Full of Pineapples:
A Caribbean Island Murder Mystery

By Hilary U. Cohen, '69

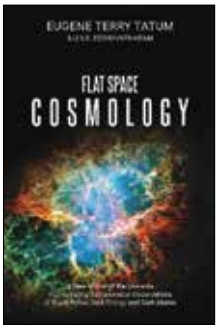
The remote Grenadine Islands—sailing paradise of the southen Caribbean. Home of Maggie and Jake's popular charter boat company and, now ... murder. In this sequel to *A Turquoise Grave*, praised as a "page turning, eco thriller," Maggie Mullaley takes on an agricultural conglomerate whose dark secrets from the past threaten tiny St. Vincent with environmental degradation and human catastrophe. hilaryucohen.com



Dollars to Doughnuts:
Imagining a Sustainable Future

By Lloyd R. Prentice, MA '71

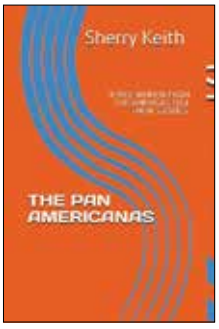
Dollars to Doughnuts: Imagining a Sustainable Future explores how we can create a thriving future without exceeding planetary limits. It examines how societies can meet basic needs while protecting ecosystems that sustain life. It offers ideas, inspiration, and practical resources for readers who want to help build a livable planet for future generations. Urgent but hopeful, it shows that solutions are already emerging— and that each of us has a role to play.



Flat Space Cosmology:
A New Model of the Universe

By Eugene Tatum, '78

This compilation, based entirely upon recent peer-reviewed scientific journal publications, encapsulates how the Flat Space Cosmology model has become the primary competitor to the inflationary standard model of cosmology. New ideas concerning black holes, dark energy and dark matter are presented and shown to correlate well with astronomical observations. Available now at online bookstores.



The Pan Americanas

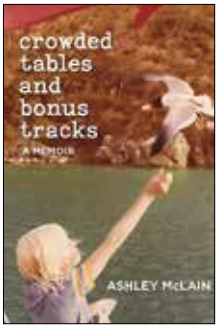
By Sherry Keith, PhD '74

We were three young women from the Americas: Brazil, Mexico and California. We crossed the Atlantic to do things we shouldn't be doing at that time in our lives. Instead of getting married or having babies, we went to graduate school. Our friends and mothers said no! We went anyway. We had adventures and learned lessons no school could teach...We were the Pan Americanas before we knew that was a thing! We want young women today to do the same. sherrykeithauthor.org

The Corporate Innovator's Playbook

By Steffen Bartschat, MS '11

Your company generates plenty of good ideas, but how many of them have been turned into businesses that move the revenue needle? This book provides a practical path to scaling innovation, shaped by the hard-won lessons of Silicon Valley corporate innovation leaders. With the Innovation Canvas, teams learn to combine startup agility and corporate scale to turn ideas into new global businesses.



Crowded Tables and Bonus Tracks

By Ashley McLain, '90

In her memoir, Ashley McLain traces her journey from a shy, adopted child in 1970s Dallas to a pioneering environmental consultant who co-founded and sold a thriving company in a male-dominated field. At 53, she found the courage to search for her biological family, confronting long-buried questions of identity, belonging, and what it means to define "enough" in life and work. Ways to buy available at Ashleymclain.com.

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Class Notes Highlights

Looking for your class column?

It's online at Stanfordmag.org—you can reach it via the QR code or at Stanfordmag.org/class_notes.
Class Notes will be back in print for the Autumn issue. In the meantime, we've gathered some of the summer highlights shared with your trusty class correspondents.

Hot Dog!

When Alex Hall won gold in freestyle skiing men's slopestyle at the 2022 Olympic Games, his parents, **Marcus Hall**, '81, and Elena Conti, couldn't attend because of COVID restrictions. So you'd better believe that they and their other son, Aldo, were in Italy in February to witness Alex win silver. Alex told *People* that he was inspired to become a freestyle skier by watching old videos of his dad trying out tricks and goofing around—"hotdogging"—on the slopes.

Read your class column at **STANFORDMAG.ORG/CLASS_NOTES**

Never Forget

In January, Holocaust survivor **Evelyn Konrad**, '49, MA '49, addressed the United Nations Observance of International Day of Commemoration in memory of the victims of the Holocaust.

Personal Pursuits

Don Nelson, '58, performs occasionally with the Los Trancos Woods Community Marching Band, which was founded by his Stanford roommate **James Harvey**, '58.... **Robyn Harrison Alexander**, '90, says that when she's not working, she's "keeping calm one little stab at a time" with counted cross-stitch and Japanese *sashiko* embroidery techniques.... **Rachel Purcell Fountain**, '13, spends Saturdays as an information desk volunteer for the New York American Museum of Natural History.... And **Lois Wilson Hoy**, '57, has helped raise more than 1,000 orphaned or injured creatures as part of her work in wildlife rehabilitation.

Wanderlust

Carlos Hernandez, '79, took 53 flights and three train rides last year to destinations ranging from Rome and Vienna to Savannah, Ga., and Kauai, Hawaii, where he has a home.... **Dafri Morgan Estes**, '66, and her husband, Mike, have been to 58 countries and all seven continents—most recently, Antarctica.... **John P. Ikeda**, '83, retired a few years ago and has since been traveling, logging more than 2 million air miles. In 2021, he and his partner, **Michael Phelps**, '83, MS '92, traveled to the Galápagos Islands with Stanford Travel/Study. They're looking forward to another Travel/Study adventure, this time to Southeast Asia, where they will celebrate Michael's upcoming retirement.

CLOCKWISE FROM TOP: COURTESY MARCUS HALL; EVAN SCHNEIDER/UN PHOTO; COURTESY CARLOS HERNANDEZ

Shifting Gears

Minli Lim Virdone, ’03, MS ’03, and **Lori Wu Malahy**, ’03, who met in Donner, have transitioned from working as tech professionals to ceramic artists. They say they’re “having a blast making things and finding new ways to laugh at ourselves.”… **DeAngela Burns-Wallace**, ’96, recently completed a six-year term on the Stanford Board of Trustees—an experience she calls “both humbling and profoundly meaningful.”… **Mohammad Al-Moumen**, ’09, MBA ’15, a former consultant, quit advising executives in order to roast them. He runs Wazza Studios, which aims to help organizations inspire their employees and customers through humorous videos that are played at corporate events and campaigns.

Home Work

After graduating, **Javi Lopez**, ’22, worked as an EMT and a volunteer with the Lakota Youth healing camp in his home state of South Dakota. He’s now a student at the University of South Dakota Sanford School of Medicine and says he feels “prepared to advocate for the betterment of all communities—especially the most marginalized.”… **Erica McDowell**, ’16, moved to Las Cruces, N.M., after graduation, where she worked with the ACLU’s New Mexico Regional Center for Border Rights before taking a job at a local middle school. She fell in love with teaching and has been doing it ever since. After seven years in Las Cruces, Erica moved back home to Albuquerque, N.M., where she teaches high school science.

CLOCKWISE FROM TOP: BBC LIVE; COURTESY CHRISTINA ZHOU; JEOPARDY! PRODUCTIONS, INC.; COURTESY MINLI VIRDONE

Good Sports

Dede Trimble Griesbauer, ’92, departed Wall Street in 2005 to embark on a 20-year professional Ironman career. She’s retiring with three Ironman titles, two half-Ironman titles, and two Ironman World Championship wins. In 2020, she set an Ultraman-distance (515 km) world record of 22 hours, 48 minutes, and 31 seconds. Longtime race emcee Mike Reilly, right, came out of retirement to call Dede across the line one last time.… Inspired by her first trek up Mount Vesuvius, **Loretta Ramirez**, ’95, has set a goal of hiking volcanoes around the globe.… **Kim Chan**, ’92, MBA ’97, is preparing for a half-marathon in Berlin and a full marathon in Sydney.… **John “Jack” Elder**, ’64, participates in a master’s rowing club.… And **Roberta “Robbie” Ralston Dimond-Stonesifer**, ’62, MA ’63, and her mixed doubles tennis partner, Charlie Smuck, have been national super senior tennis champions two years in a row.

‘I didn’t win, but I had a fabulous time.’

—Marissa Klein, ’08, MA ’14, who was a *Jeopardy!* contestant in March

Something Borrowed, Something Blue

Marilyn (Schoefer, ’59, MA ’60) and **Larry Wagner**, ’59, MS ’60, recently celebrated 67 years of marriage. They met in 1956 at a frosh dinner and skating party between Branner and Wilbur, and they’ve lived in Mendocino, Calif., for the past 30 years.… **Christina Zhou**, ’14, MS ’15, and **Clarence Chio**, ’14, MS ’14, were married in 2024 under redwoods, in a ceremony officiated by **Yik Lee**, ’14, MS ’14.

Farewells

FACULTY/STAFF

Bahram Beyzaie, of Palo Alto, December 26, at 87. He was a celebrated filmmaker and playwright hailed as a giant of Iranian cinema whose work blended history, mythology, and politics. Over his prolific career, he directed 10 feature films; 14 plays, including six at Stanford; and published more than 70 books. In 2010, he left Iran to join Stanford as the Bita Daryabari Lecturer of Persian Studies. Survivors: his wife, Mojdeh Shamsaie; and children, Negar, Niloofar, and Niassan.

Charles Pius Bonini, of Stanford, June 6, 2025, at 92. For more than four decades, he served on the faculty at the GSB, where he held the William R. Timken Professorship of Management Science. His research focused on the application of quantitative and statistical techniques to decision making, and he was known for "Bonini's Paradox," a foundational aspect of systems theory. Survivors: his wife, Barbara; children, Cissie Bonini Rafferty, '69, MA '70, PhD '74, Julia, '84, Charles, Barbara, Sheila, MBA '92, Griffin, and Colin; stepdaughter, Liz; and nine grandchildren.

Michael John Flynn, of Palo Alto, December 24, at 91. He was a professor emeritus of electrical engineering who studied the interface of hardware and software in computers. He was best known for developing "Flynn's taxonomy," a framework that remains central to computer architecture more than five decades later. He was predeceased by his wife, Patricia Ann; and daughter, Theresa. Survivors: his children, Frank, Kathleen, '81, and Margaret; stepchildren, Kirsten, Ken, and Don; nine grandchildren; two great-grandchildren; and brother.

Thomas James Fogarty, of Portola Valley, Calif., December 28, at 91. As a medical student at the University of Cincinnati, he invented the balloon catheter, a device that revolutionized vascular surgery and saved millions of lives by removing blood clots from patients' limbs. During his prolific career, which included nearly 200 medical patents, he taught cardiovascular surgery at Stanford and worked closely with Stanford Biodesign. Survivors: his wife, Rosalee; children, Thomas Jr., Jonathon, Patrick, and Heather; and 10 grandchildren.

Robert John Herfkens, of Austin, Texas, February 22, at 76. A professor emeritus of radiology, he oversaw the transition from film to digital radiology imaging at Stanford Medicine. His research helped establish MRI as a cardiac diagnostic tool, and he was also recognized for his pioneering work with CT and PET scans. He authored over 200 peer-reviewed publications, 28 book chapters, and three books. He was predeceased by his wife, Tricia. Survivors: his children, Meagan Herfkens Hency, '07, and Garrett; and four grandchildren.

Joel Clinton Peterson, of Salt Lake City, November 25, at 78, of complications from a stroke. An adjunct professor of management, he taught popular classes for 33 years at the GSB. He founded investment firm Peterson Partners, served on more than three dozen public and private boards, and authored several books. Survivors: his wife of over 50 years, Diana; seven children, including Clint, '01, Leah, '02, Benjamin, '06, Annie Wheeler, '08, and Elise Peterson Finlayson, '14; 31 grandchildren; and two great-grandchildren.

Alice Anne Segers Whittemore, of Palm Desert, Calif., December 2, at 89. She was a professor emerita of epidemiology and population health. In a Stanford career that spanned 40 years, she developed statistical methods to study the effects of genetic, environmental, and lifestyle factors on ovarian, breast, prostate, and skin cancers. She served as chair of the department of health research and policy. Survivors: her daughters, Margot Palermo and Gayle; stepchildren, Sarah and Jeffrey Keller; eight grandchildren; and sister.

1940s

Thomas Banks Carvey Jr., '43 (mechanical engineering), of Santa Barbara, Calif., January 8, at 103. He played football. He served in the Navy. He spent 40 years at Hughes Aircraft, working in line management, rocket motors, propulsion power systems, and guided missions. He was involved in statewide politics and served four years as president of the California Democratic Council. Survivors: his wife of 52 years, Donna; children, Denise Hill, Crile, Geoffrey, and Christopher; stepson, Scott Taber; and sister.

Shirley Anne Beine McDonald, '43 (mathematics), of Petaluma, Calif., February 2, at 103. She co-owned an auto parts store in Petaluma and tutored middle and high school math. She was active in the Petaluma Community Guild and a volunteer with the Stewards of Slavianka and the Petaluma Historical Library and Museum. She loved musicals and spending time on the coast. She was predeceased by her husband of over 60 years, Robert, '43; and son Douglas '71. Survivors: her sons Keller and William; seven grandchildren; and 15 great-grandchildren.

Margery Gray Sheiber Silk, '46, of Westport, Conn., December 12, at 101. She was a founding member of the Aspetuck Land Trust and championed many environmental causes. She played tennis and bridge, loved art, animals, music, and culinary pursuits. She was predeceased by her husband, George. Survivors: her children, Shelley Silk Wehrly, Stuart, and Georgiana; eight grandchildren; and 12 great-grandchildren.

Beverly Jeanne Waters Strong, '47 (psychology), of Los Altos, November 27, at 100. She was a professional genealogist who published six books about her family's history. She enjoyed traveling to her family cabin in Tahoe and to the U.K. and Europe. She had a private pilot's license and flew her family around Northern California. She loved ballroom dancing and was a lifetime bridge player. She was predeceased by her husband of 63 years, Ted, '48, MBA '50. Survivors: her sons, Dave and Don; four grandchildren; and two great-grandchildren.

Morton Cheim Cohen, '48 (economics), of San Francisco, January 7, at 98. He was an editor for the *Stanford Daily*. He served in the Merchant Marines and the Army. He worked in the apparel industry before devoting over four decades to a new career as the co-owner of the Land, Sea, and Air Travel Agency. He was predeceased by his wife, Janice. Survivors: his children, David, Fred, Steven, and Laurie; stepchildren, Gary and Debra Rubin; 11 grandchildren; 14 great-grandchildren; and sister.

Margaret Moore Lewis, '49 (Spanish), of Yakima, Wash., November 27, at 98. She was a frequent traveler with Stanford Travel/Study. She was a tireless volunteer, serving on the boards of the Nature Conservatory in Washington state and the Yakima Greenway and as board president of the Capitol Theater and Warehouse Theater. She also founded Yakima Town Hall. She was predeceased by her husband, Walter, MBA '50. Survivors: her daughters, Carol, '72, Jennifer Gardner, and Christine; five grandchildren, including Joe Byers, MBA '22; and siblings, Kathy Moore Cusick, '51, and Jim, '75, MS '75.

Robyn Jean Hasty Ledwith Mar, '49 (English), of Los Altos Hills, December 12, at 97, of cancer. She founded Robyns Travel Inc. in Palo Alto. She started the Widows and Widowers grief recovery program and wrote three books on grief. A breast cancer survivor, she volunteered for Reach for Recovery and served as director of Visitation Volunteers at El Camino Hospital. She was predeceased by her first husband, Charles Ledwith, '47, MBA '49, second husband, Mun, and one stepdaughter. Survivors: her children, Alyson D'Auteuil, Mark, Ryan, and Tyler; three stepchildren; six grandchildren; six step-grandchildren; and four great-grandchildren.

Vilma V. Hottinger Starnes, '49, of Chico, Calif., November 26, at 98. She handled the books for her husband's business, Butte Roofing Company, and served as president of the Chico Soroptimist Club. She loved spending time at the family cabin at Bucks Lake, where she entertained friends, went fishing, and water-skied with her children. She was predeceased by her husband of 66 years, Ted; and son, Craig. Survivors: her children, Dianne Donoho and Jane Cleland, and Mike; 11 grandchildren; 17 great-grandchildren; one great-great-grandchild; and sister.

Alfred Lee Zeigler, '49 (Latin American studies), of San Francisco, August 4, at 98. He served in the Navy. He directed the Bi-National Centers for the U.S. Information Agency in Ecuador, Bolivia, and Chile and the International Student Office at the University of Hawaii. Later, he directed Stanford's Bechtel International Center for 18 years and served as president of NAFSA: Association of International Educators and the National Council for International Visitors. Survivors: His wife of 64 years, Peggy; children Mark, '85, and Rebecca Zeigler Mano, MA '92; and four grandchildren.

1950s

Dona Jean Adams Affleck, '51 (biological sciences), of Rescue, Calif., March 27, 2023, at 93. She was president of the Stanford Alumni Association of Sacramento, organized an auxiliary for Planned Parenthood, served on the State Board for the Children's Receiving home, and sat on several boards. She enjoyed traveling the world with her husband, including to Madagascar and the Galápagos Islands. She was predeceased by her husband, James, '52, MD '56. Survivors: her children, Adrienne Mintz, Nila Henneman, and A.J.; five grandchildren; and seven great-grandchildren.

Charles McGee Pigott, '51 (industrial engineering), of Medina, Wash., January 21, at 96. He was in Beta Theta Pi and served in the Navy. He worked

at Paccar Truck company for over 30 years. Under his tenure as president, Paccar's sales increased from $320 million to over $4 billion. He was a Stanford Trustee and served on boards including Boeing and the National Boy Scouts of America. He was predeceased by his daughter Dana, '84, and one grandson. Survivors: His wife of 73 years, Yvonne (Flood, '52); children, Mark, '76, MS '84, Nora Kenway, '79, Lynn Mowe, '81, John, '86, Thomas, '91, and Douglas; 17 grandchildren, including Theiline, '20, Reilly, '23, Blake, '26, Avery, '28, Claire Nassutti, '09, John Ahrens, '15, Jack, '18, Kerry Lewis, '09, MA '10, and Turner Varady, '11, MA '12; 13 great-grandchildren; and brother, James, '58.

Marjorie Eunice Gavin Simons, '51 (education), of Tucson, Ariz., December 15, at 95. She taught elementary school in San Francisco before moving to Tucson, where she was president of the PTA and the Junior League and a docent at the Arizona Sonora Desert Museum. She loved genealogy and travelled worldwide, enjoying the birds and landscapes of Antarctica, Africa, and Arizona. She was predeceased by her husband, Bernard, MD '52; and daughter, Kim. Survivors: her sons, George, Gordon, and Tad, '75, PhD '82; and six grandchildren.

Robert Winton Brown, '52 (economics), of Los Gatos, Calif., January 31, at 96. He was a member of Phi Sigma Kappa and the marching band. He attended Stanford on the GI Bill and worked at Rossotti's (Alpine Inn) on Fridays. After graduation, he worked in sales in Europe and Japan and then joined his brother Wayne, '48, MBA '50, at Brown & Kauffmann homebuilders. Survivors: his wife, Lou Rae Kagel; children, Karina Brown Hamilton, '82, and Christopher; and two grandsons.

Barbara Jane Monroe Dorn, '52 (education), of Columbus, Ohio, January 20, at 94. She taught elementary school in Southern California. After sailing to Europe as a ship's cook, she met her husband while racing sailboats in San Francisco Bay. Her husband's work eventually brought the family to Ohio, where she found community through Liberty Presbyterian Church, the Alum Creek Sailing Club, and teaching English to immigrants. Survivors: her children, Michael, Lorissa Wright, and Margot; and three grandchildren.

Ruthann Person Taylor, '52 (education), of Oakland, November 16, at 94. She was a lifelong educator, serving as a teacher, school counselor, and vice principal before becoming the principal of North Elementary in Hillsborough, Calif., for the last 30 years of her career. She also served as a member and later president of the Livermore school board. She was predeceased by her husband, Clyde, '52, MS '53. Survivors: her children, Anna Brewer, Clyde, and Carol; seven grandchildren; and seven great-grandchildren.

Jacqueline Zed Anthony James, '53 (history), of San Mateo, Calif., January 24, at 94. For 35 years, she taught history and social studies at Hayward High School, where she was a respected mentor and counselor. A champion tennis player until age 88, she was also an avid gardener and Stanford sports fan. She was predeceased by her son, Mark. Survivors: her daughter, Connie Dorland; and two grandchildren.

Benjamin Franklin Johnson III, '53 (economics), MBA '55, MS '58 (statistics), of Los Altos Hills, February 5, at 94. He was a member of Sigma Nu and ROTC and served two years in the Army. In 1968, he founded Woodmont Properties with his Stanford roommate Tad Taube, '53, MS '57. He was a classically trained pianist, avid photographer, and amateur magician. Survivors: his wife of 66 years, Sylvia (Ghelardi, '60); children, Catherine, Victoria, MA '18, PhD '18, David, and Sarah; and five grandchildren.

Alan Thorndike Sortor, '53 (biological sciences), MD '56, of Fresno, Calif., December 26, at 94. He was a member of Alpha Sigma Phi and the crew and water polo teams. After medical school, he served as a lieutenant and physician in the Navy. He completed a surgical residency at Presbyterian Hospital in San Francisco before establishing his surgery practice in Fresno. He was predeceased by his wife of 62 years, Wanda. Survivors: his children, Kelly Lofstedt, Kathy, '76, MA '80, Marci, and Michael; and six grandchildren.

Margaret Loomis Benson Maradudin, '54 (history), of Newport Beach, Calif., January 14, at 93. After earning two master's degrees from UC Irvine in Slavic studies and modern European history, she taught at community colleges in the area. She also served as a docent at the Bowers Museum in Santa Ana, Calif. Survivors: her husband of 71 years, Alexei, '53, MS '54; children, Claudia Gurevich and Peter, '81; two grandchildren; and two stepgrandchildren.

Harmon Clifford Brown Jr., '55 (history), of Naples, Fla., December 1, at 92, of a stroke. He was a member of Kappa Sigma. He started his career in finance and became a pioneer in the wholesale flower business in Bogota, Colombia. He founded Harmon's Restaurant in Telluride, Colo., and later owned and operated a winery in Napa Valley. Survivors: his wife, Joanne; daughters, Lesley Robert and Allyson Becker; stepchildren, Jennifer Pisani and Joshua Corzine; and six grandchildren.

Frederick Shepherd "Fritz" Hoedemaker, '55 (biological sciences), of Seattle, December 22, at 92. He was in the ski club. He practiced psychiatry and psychoanalysis in Bellevue for 33 years. He loved working with patients and teaching, first at UCLA and later at the U. of Washington and the Seattle Psychoanalytic Institute. After retiring, he spent summers in Sun

Biologist Who Warned About Population Growth

CHUCK PAINTER/STANFORD NEWS SERVICE

When Paul Ehrlich joined Stanford in 1959 as an assistant professor of biology, the chair of his department had one request: Could he teach a course on entomology and one on evolution? To Ehrlich's delight, those would be the only administrative instructions he'd receive in more than 60 years on the faculty. "Stanford left you alone," he wrote in his 2023 memoir, *Life*.

For Ehrlich, that freedom meant more time chasing butterflies, his life's passion and the heart of his celebrated scientific career. But it was one of the requested courses, Evolution and Human Affairs, that would lead to his greatest fame—and infamy—as perhaps the world's most recognized prophet of doom. In the 10-week course, Ehrlich devoted nine weeks to reviewing humans' evolutionary past and one week looking ahead to a planet stressed by industrial pollution and an exploding population. It was a grim conclusion but also spellbinding material. Soon Ehrlich was invited to speak to outside groups, gaining the ear of David Brower, executive director of the Sierra Club, who urged him to write a book.

The result—written in "three weeks of evenings" with his uncredited co-author (and wife), Anne—was *The Population Bomb*, a slim book published in 1968 that predicted a litany of calamities tied to overpopulation. Despite its bleak message, the book was a runaway success, selling 3 million copies, turbocharging the movement to halt population growth, and launching Ehrlich into unlikely celebrity. He would appear on *The Tonight Show Starring Johnny Carson* some 20 times and was featured as recently as 2023 in a *60 Minutes* piece on impending environmental disaster. But to some critics, he was a Chicken Little alarmist who never acknowledged that some of his catastrophic predictions, including worldwide famine and "hundreds of millions" of deaths, may have been premature or wrong.

Paul Ralph Ehrlich, a professor of biology emeritus, died in Palo Alto on March 13 due to complications of cancer. He was 93. Blunt to the end, says his daughter, Lisa Marie Daniel, '77, he called out his doctor for soft-pedaling the inevitable. "He said, 'Can I just die? I don't want to 'pass on,'" she said. "He hated euphemism."

Ehrlich was a ceaseless worker, Daniel says, with little interest in downtime. If someone was picking him up in five minutes, he'd finish one project and start another. He was the author, co-author, or editor of more than 40 books and hundreds of scientific articles. In 1990, the same year he was awarded a MacArthur Fellowship, he won the Royal Swedish Academy of Sciences' Crafoord Prize, established to recognize research in disciplines not eligible for a Nobel. Still, his most important scholarship was a 1964 collaboration with then-colleague Peter Raven that explained how interacting species—such as butterfly caterpillars and plants—develop together in an evolutionary dance. More than 60 years later, the paper stands as a seminal moment that introduced the concept of co-evolution.

Ehrlich's legacy at Stanford is woven into the campus. In 1971, he helped found the human biology major—today Stanford's second most popular after computer science—and was a driving force in protecting Jasper Ridge Biological Preserve, where he spent decades studying the bay checkerspot butterfly. Saving the site from development in 1973 was the most important thing he did at Stanford, Ehrlich said in a 2023 interview.

In addition to his wife of 72 years and his daughter, Ehrlich is survived by his two granddaughters; step-granddaughter; two great-grandchildren; four step-great-grandchildren; and sister.

—Sam Scott

Valley, Idaho. Survivors: his wife of 68 years, Gloria; children, Karen Hogan, Peter, and Gretchen McKay; seven grandchildren; seven great-grandchildren; and twin brother, David, ’55.

Sally Ann Ferguson Kelly, ’55 (nursing), of University Place, Wash., August 31, at 92. She traveled the world first as a flight attendant with Pan Am and later as an Army wife in Germany and throughout the United States. She loved the water, had a lifetime of adventures, and supported her hometown Seattle Seahawks. She was predeceased by her husband, Edward. Survivors: her children, Kimberly, Christine Putnicki, Victor, and Leslie; and three granddaughters.

Mona Melva Palmer Onstead, ’55 (psychology), of San Jose, January 15, at 93, of lung disease and pneumonia. In 1978, she founded Judyth’s Mountain Specialty Foods, and in 1979 her hot pepper jelly won the Specialty Food Association’s Best New Gourmet Product of the Year. A member of SFA’s board for many years, she was the second woman to serve as chair. In 2015, she was inducted into their hall of fame. Survivors: her husband of 70 years, Shel; and children, Mirela Maereanu, Michael, and Kevin.

Virginia Louise Waxman Stern, ’55 (history), of Washington, D.C., December 6, at 91. She earned a master’s degree in deaf education from Gallaudet University. She worked tirelessly to expand STEM opportunities and resources for people with disabilities. She was recognized as a Champion of Change by the White House in 2012. She was predeceased by her husband of 65 years, Robert. Survivors: her children, Adam, MBA ’87, Ami Gordon, Mark, ’86, and Rachel Davis; and seven grandchildren.

Richard Warren Calfee, ’56, MS ’60 (electrical engineering), of San Jose, September 21, at 90. He was a member of Chi Psi. He served in the Marine Corps. He worked at IBM and then Data Disc before starting a company called Zentec. Later, he worked for a start-up that made protective equipment for athletes, and he remodeled homes in San Jose. Survivors: his wife, Patricia (Holve, ’55, MA ’56); children, Rebecca and Curt; and two grandchildren.

Rex Willard Kramer Jr., ’56 (political science), of Colorado Springs, Colo., January 14, at 91, of complications from a stroke. He served in the Navy for 23 years, primarily in the nuclear attack submarine program. Following his military service, he worked as a CPA and small business owner. He was predeceased by his first wife, Karen; and son James. Survivors: his wife, Cynthia Crater; children, Laurie Zickefoose, Timothy, Tamara Dickson, and Elizabeth Brunner; six grandchildren; three great-grandchildren; and sisters, Louise Kramer Siri, ’60, and Judith Kramer Schluchter, ’66.

Donald Gene Mosher, ’56 (mechanical engineering), of Monticello, Ill., May 26, 2025, at 92, of Alzheimer’s disease. He was stationed at White Sands Missile Range in New Mexico as a project engineer and later worked for Honeywell as a lead production engineer. He earned numerous trophies playing golf on the Central Illinois Senior Amateur Tour and played the baritone ukulele. He was predeceased by his wife of nearly 70 years, Donna Jean. Survivors: his daughters, Stephanie Mosher-Williams, Catherine, and Rebecca Elliott; two grandsons; and sister.

Jack Van Bergen, ’56 (Latin American studies), of Santa Maria, Calif., January 24, at 91, of heart failure. He was a member of Sigma Alpha Epsilon and played water polo. He spent 27 years working for Bank of America, including in the Caribbean, England, and Central and South America. He enjoyed fishing, musicals, and cheering for the San Francisco 49ers. Survivors: his wife of 66 years, Leanore; daughters, Katherine Levenson, Marlena Sobel, and Jacqueline Janosky; and six grandchildren.

John Riley Brodie, ’57 (history), of La Quinta, Calif., January 23, at 90. He was a member of Zeta Psi and played golf and football. He was the star quarterback for the San Francisco 49ers for 17 seasons and was named the NFL’s most valuable player in 1970. He then became a football analyst for NBC Sports before returning to professional sports as a golfer on the Senior PGA Tour. Survivors: his wife, Sue (Blevins, ’58); children, Kelly Brodie Stefanki, ’80, Cammie, Diane, Erin, and Billy; 11 grandchildren; two great-grandchildren; and sister.

Roger Deane Cannell, ’57 (speech & drama), of Olathe, Kan., September 18, at 89, of a stroke. He was a member of Phi Sigma Kappa, participated in drama, and was on the KZSU staff. He served in the Marines. He worked as an aviation insurance underwriter before joining his father’s CPA practice. He held a commercial pilot’s license and received the Wright Brothers “Master Pilot” award in 2011. Survivors: his wife of 63 years, Mary Jean; children, Todd, Karen Brennecke, and Kevin; six grandchildren; and two great-grandchildren.

Wesley William Davis Jr., ’57 (architecture), MA ’59 (art), of Santa Barbara, Calif., January 5. At Stanford, he was active in theater, acting in plays and choreographing musicals. During his 45 years living and working in New York, he became the art director of Basic Books, a subsidiary of HarperCollins, was a dancer with the Merce Cunningham Dance Company, and danced and choreographed for the earliest concerts at the Judson Memorial Church. Survivors: his partner of 70 years, Albert Reid, ’56.

Arthur Allen Harlow, ’57 (economics), MA ’59 (food research), of Spokane, Wash., July 17, 2025, at 90, of congestive heart failure. He played soccer and rugby at Stanford. He worked at the Bonneville Power Administration, retiring in 1994. He was enormously proud of the Harlow Ranch in Thompson Falls, Mont., founded by his grandfather in 1919. He played soccer until he was 70 and was a passionate collector of vintage cars. Survivors: his wife, Mary Giannini; daughters, Melinda Anakalea and Margaret; three grandchildren; and great-granddaughter.

Rodger Raymond “Rus” Rodgers, ’57 (mechanical engineering), of Midlothian, Va., December 13, at 91. He served in the Naval Reserves and the Coast Guard Auxiliary, reflecting a lifelong commitment to service and the sea. Curious and analytical, he worked as a computer engineer but found his greatest joy on the water and had a deep love of sailing. Survivors: his wife, Debbie; and children, Christine Rodgers Norton and Michael.

Stanley Davies Cook, ’58, MS ’59 (petroleum engineering), of Bakersfield, Calif., January 1, at 89, of pneumonia. He worked for Chevron for 39 years in California and Alaska. He volunteered for humanitarian projects in Mexico and India with the Bakersfield Rotary Club and served as a deacon at the First Presbyterian Church of Bakersfield. He loved the outdoors, where he especially enjoyed fishing and sailing. Survivors: his wife of 64 years, Fay; children, Judith McCaffrey and David; and three grandchildren.

Charles Eugene Cosper, ’58 (psychology), of Sacramento, Calif., December 22, at 90, of lung cancer. He worked for the state of California from 1961 until retiring in 1988. He held various roles in multiple departments, ultimately becoming a senior management analyst at CalTrans, where he helped save the state millions of dollars through efficiency reports and management training programs. He spoke several languages and hosted many foreign exchange students through Sacramento State. Survivors include his children, Glori, Alex, Cindy, John, and Don.

Harry Robert Glatstein, ’58 (biological sciences), MD ’61, of Saratoga, Calif., February 28, at 90. An internal medicine physician, he co-founded the Good Samaritan Medical Group of Santa Clara Valley. He was a member of the American College of Physicians, the Medical Board of California, and the Santa Clara County Medical Association, and his work reflected a commitment to high standards and ethical responsibility in medicine. Survivors: his wife, Glenda; children, Laura and Jeffrey; and three grandchildren.

Bowen Hadley “Buzz” McCoy, ’58 (economics), of Los Angeles, January 25, at 88. He was a member of Theta Xi. He served in the Army. After 28 years in investment banking at Morgan Stanley, he shifted his focus to public service and philanthropy. He endowed Stanford’s McCoy Family Center for Ethics in Society. He was predeceased by his first wife, Janice (Arthur, ’60). Survivors: his wife, Barbara; children, Elizabeth McCoy Chen, ’89, John, and Anne; three stepdaughters; and six grandchildren.

Donald Beckley Mitchell, ’58 (mechanical engineering), of Albuquerque, N.M., December 3, at 89. He was a member of ROTC. He served in the Air Force as a mechanical and aeronautical engineer, reaching the rank of lieutenant colonel. He later worked at Sandia National Laboratories. He was a devoted fan of Stanford sports and the San Francisco Giants and 49ers. He was an avid runner, completing several half marathons. Survivors: his wife, Barbara; children, Marjory Prisco and Gregory; and four grandchildren.

Judith Avery, ’59 (history), of Palo Alto, January 29, at 87. She served on the boards of the New England Historical and Genealogical Society and the Santa Monica Heritage Museum. In her 50s, she earned a master’s degree in archival preservation from UC Riverside. She loved the culture and beauty of the Bay Area. She was predeceased by her former husbands, Russell Lawler, ’55, and Joel Newkirk, ’59. Survivors: her children, Michael Newkirk, Caroline, ’84, Jonathan Newkirk, and Diana McKee; 10 grandchildren; and brother.

Patrick Charles Pinkham, ’59 (geography), of Lincoln, Calif., December 25, at 88. After graduation, he returned to his hometown, Exeter, Calif., and joined his younger brother on property they farmed for over 50 years. He grew unique grape and tree fruit varieties that flourished in the Tulare County agricultural region. He was featured in *American Vineyard* in recognition of his innovative method of trellising table grapes. Survivors: his wife, Mary; daughters, Dianne Tully and Elizabeth; and four grandchildren.

Jerome Russell Reinhart, ’59 (engineering), of Fullerton, Calif., at 88. He played football and was a member of Phi Delta Theta. He began his career in Silicon Valley before moving to Fullerton to pursue engineering, sales, and marketing opportunities, including a five-year contract with Georg Fisher of Switzerland. He ran a metal stamping manufacturing company until retiring in 2020. Survivors: his wife of 66 years, Mary (Dwight, ’60); children, Carolyn, Susan, and James; six grandchildren; and six great-grandchildren.

1960s

William Baerg, ’60, PhD ’65 (chemical engineering), of Carmel, Calif., November 13, at 87. He was a member of Sigma Alpha Epsilon. He worked for Ford Aeronutronics before forming his own company, Linviron, to work on water purification using reverse osmosis. He also invented a device to improve water quality at home. Later he joined Intel as one of the first 25 employees and retired as a senior scientist. He was predeceased by his wife, Martha. Survivors include his children, Elisabeth Cooper, Margaret Plavocos, and William; and stepchildren, Bonnie and Karl Schisler.

Lawrence Frederick Baum, ’60 (geology), of Camano Island, Wash., December 2 at 87. He was a geology professor at the University of Bahia in Salvador, Brazil, and at the University of Idaho. Over the years, he taught rock-hounding classes and opened several small businesses, including a bicycle shop, mining consulting practice, custom sailboat manufacturing shop, and sailing school. He was an avid cyclist up until his last day. Survivors: his children, Heidi Monroe and Andrew; three grandsons; great-grandson; and sister.

Eugene Fumiyoshi Miyahara, ’60 (history), of La Verne Calif., August 7, at 87. He worked in the insurance industry and opened his own brokerage business. After selling his company, he joined Primerica, retiring as national sales director. He served as the advancement chair for the Boy Scouts’s Los Angeles Area Council. He was predeceased by his wife, Sandra Miyahara. Survivors: his children, Michael, Derek, ’86, MA ’86, MA ’95, and David, MA ’88, MA ’91, PhD ’95; seven grandchildren, including Amy, ’23; and his former wife, Ilene Miyahara.

David Bruce Montgomery, ’60 (electrical engineering), MBA ’62, MS ’64 (statistics), PhD ’66 (business), of Highlands Ranch, Colo., November 14, at 87. He was a member of Sigma Alpha Epsilon. He taught at the GSB for 29 years and was recognized as a Centennial Alumni Catalyst. He came out of retirement to serve as dean of the business school at Singapore Management University. Survivors: His wife of over 65 years, Toby (Franks, ’61, MA ’66, JD ’78); children, David, ’84, Scott, and Pamela Shields; and five grandchildren.

Thomas Edwin Perry, ’60 (history), of Santa Rosa, Calif., October 7, at 87, of complications from Parkinson’s disease. He was a member of Delta Chi. He served in the Army and National Guard. He taught history, PE, civics, and ESL at Woodland High School for 35 years. He also coached football and girls’ softball, and was a foreign student adviser. Survivors: his wife of 67 years, Darlys; children, Anne Pond and Richard; three granddaughters; and great-grandson.

John Walter “Jan” Stypula Jr., ’60 (architecture), of Pebble Beach, Calif., February 26, at 87. He was a member of Alpha Tau Omega. He played football his freshman year. He was a principal architect at Spencer Associates in Palo Alto. Among his major projects: the California State Railroad Museum, Coyote Point Museum, the Saratoga Library, and the Badlands Nature Interpretive Center. Survivors: his wife, Gail (Aguilar, ’59); and sons, John and Michael.

Lloyd Charles Chiswick II, ’61 (history), of Dunsmuir, Calif., January 5, at 87. He was a Russian linguistic specialist in the Army. He worked in Los Angeles and the San Francisco Bay Area before moving to Dunsmuir. He became a well-respected rifle builder under his company, Classic Arms Corporation of Palo Alto.

Susan Allen Cotter Johnson, ’61 (history), of Piedmont, Calif., January 10, at 86. Active in Republican politics, she was appointed to a state commission on educational reform and to California’s seven-member social welfare board by Governor Ronald Reagan. She loved skiing, tennis, gardening, and playing bridge. Survivors: her children, Carrie Pomerantz, Virginia Davis, and Charles; 10 grandchildren, including Samantha Schwab, ’18, MA ’23, MBA ’23, Leigh Pomerantz, ’19, Ross Pomerantz, MBA ’20, and Haley Schwab Cassidy, JD ’22; and three great-grandchildren.

Michael Sears Fullerton, ’62 (philosophy), of Berkeley, January 5, at 85, of cancer. He attended graduate school at UC Berkeley and served in the Peace Corps in Kenya. He was a lifelong progressive and active in electoral politics. He was a co-editor of the Berkeley Co-op News and later worked at UC Berkeley Extension. In retirement, he tutored math at King Middle School and privately. Survivors: his wife, Sandy Horwich; son, Blair; and two sisters.

William Richard Bruner Jr., ’63 (architecture), of Palo Alto, July 30, 2025, at 83. He was a member of Delta Upsilon. He was an architect for the U.S. Department of Forestry, designing visitor centers that harmonized with the environment. He also contributed to projects including Half Moon Bay’s Ritz-Carlton Hotel and the Rosewood Sand Hill in Menlo Park. He built telescopes and chased solar eclipses. Survivors: his children, Jessica Aalami, Amy, Meta, Dan, and Jeffrey; 12 grandchildren; sister; first wife, Nancy Clough; and second wife, Joy Chase.

Jacob Archibald Butts III, ’63 (political science), MBA ’65, of Nashville, Tenn., May 14, 2025, at 84, of dementia. He was a member of Phi Delta Theta and the soccer, gymnastics, and boxing teams. He worked in finance and produced sports-related content for television, including an Academy Award-nominated film about a frisbee championship. He later started Cameron Communications, which helped executives and politicians become better public speakers. Survivors: his children, Callie Butts Ban and Coleman; two grandchildren; and siblings, Cameron Butts Bianchi, ’68, and Donald, ’64.

Michael James Cunningham, ’63, MS ’65 (electrical engineering), of Palo Alto, January 1, at 84, of Parkinson’s disease. During his long career with Hewlett-Packard, he worked in Palo Alto; Edinburgh, Scotland; and Santa Clara, Calif. In retirement he moved to Carmel-by-the-Sea, Calif., where he served on the planning commission and was elected to the city council. A dedicated runner, he completed marathons in San Francisco, New York, and Boston. Survivors: his wife, Judith; children, Julie and Timothy; three grandchildren; and sister.

Gail Ray Patterson, ’63 (political science), of Sisters, Ore., March 12, 2025. She earned a master’s degree in political science from UCLA. Survivors include her wife, Pam.

Aimée Sue Dorr, ’64 (mathematics), MA ’66, PhD ’70 (psychology), of South Pasadena, Calif., January 24, at 83. She was a longtime professor of education and academic leader who served as dean of the UCLA Graduate School of Education and as vice president and provost of the University of California. She shaped countless lives through her compassion and ability to uplift the human spirit. Survivors: her husband, Don Simpson; children, Simeon Leifer, JT Dorr-Bremme, Dan Simpson, and Genevieve Sanders; four grandchildren; and four sisters.

Robert Mason Letteau, ’64 (English), of Beverly Hills, Calif., December 18, at 83, of pneumonia. He was a member of Kappa Alpha. He graduated from Hastings College of the Law and was a partner in Ross, Pierson & Letteau before being appointed to the Los Angeles Superior Court. He earned numerous honors, including Trial Judge of the Year. He was on the Inglewood Park Cemetery board for 35 years. Survivors: his wife, Donna; and daughters, Lara Goss, Tracey, ’92, and Loren Moran.

Stephen Michael Durst, ’65, MA ’66 (history), of Kamuela, Hawaii, February 2, at 82. He was a member of Phi Kappa Psi. He was the founding director of the International Lunar Observatory Association and the publisher of Space Age Publishing Company. He was a driving force behind lunar observatory efforts, ILOA Galaxy Forum, Stanford on the Moon, and Ad Astra Kansas. Survivors: his wife, Joann; children, Sol Ethier, Sidra, Arian, Selena Durst Mao, ’14, and Mira; three grandchildren; and two siblings.

James Bernard Heian, ’65 (economics), of Sarasota, Fla., November 7, at 81. He was a humanitarian and an educator. After earning a PhD, he devoted his career to teaching and mentoring, guiding students and fellow faculty with patience, curiosity, and integrity. He volunteered for his church and neighborhood and with Habitat for Humanity. He was predeceased by his son Robert. Survivors: his wife, Darlene; children, Ellen, Laura, Derek Six, and Siri Sorensen; seven grandchildren; four great-grandchildren; and two sisters.

James Wood Benson Jr., ’66 (biological sciences), of Seattle, February 19, 2025, at 81, of Parkinson’s disease. He graduated magna cum laude from Harvard Medical School. He started work as an endocrinologist at the Virginia Mason Medical Center in Seattle, where he remained for 30 years, including more than 20 years as director of medical education. He later worked for Group Health. Survivors: his wife of 51 years, Bobbi; children, Laurie, ’03, MS ’04, and Mark; and three grandchildren.

Ronald Walter Kaiser, ’66 (geology), MBA ’69, of Santa Rosa, Calif., January 11, at 81, of cancer. He was a member of Phi Kappa Psi. He co-founded the investment advisory firm Bailard, Biehl and Kaiser, serving as director of real estate research and contributing to the company’s success for 56 years. He loved the mountains and model railroads. Survivors: his wife, Pamela; children, Allison Kelly, Christine Young, and Paul; and two sisters.

Gregory Stephen Strong, ’66 (mathematics), of Saint Paul, Minn., May 5, 2025, at 80. He held actuarial and financial positions at Western Life Insurance Company and its affiliates for 15 years. He then joined Securian Financial Group, where he served as vice president of finance, chief financial officer, and chief actuary and treasurer during his 25 years at the company. He was a proud board member of organizations including HealthPartners and Regions Hospital. Survivors: his wife, Betty; sons, Mark, David, and Kevin; four grandchildren; and sister.

Cylia Sue Walker Kamp, ’68 (medical microbiology), of San Antonio, December 26, at 78, of Lewy body dementia. She earned a PhD in pharmacology from the University of Oklahoma and devoted her career to medical research and teaching anatomy at the University of Texas Health Science Center, where she inspired generations of students with her dedication and expertise. She was predeceased by her son

Sean. Survivors: her husband of 57 years, John, ’68; son Ian; and brother.

Mark Hugh Miller, ’68 (history), of San Francisco, October 19, at 80, of pneumonia. He was a member of Theta Delta Chi. He began his career with the *Associated Press* and *National Geographic* before moving to Los Angeles. There he worked as a screenwriter for Universal Pictures, a Michelin Guide editor, and a columnist for the *San Francisco Examiner*. For 15 years, he was a writer/producer for CBS Radio Los Angeles. His wife, Barbara Smeltzer, passed away one month after his death. Survivors include his brother, Guy.

Nancy Pennington, ’68 (mathematics), MA ’69 (education), of Boulder, Colo., November 6, at 79, of cancer. She was in the ski club. She was an applications programmer before earning a PhD in education at Harvard. She pursued research on problem-solving and legal decision-making as a member of the faculty at the University of Chicago and later at the University of Colorado. Survivors: her sons, Andrew and James Hastie; partner, Michael Mitchell; and second husband, Reid Hastie, ’68.

Susan Corliss Heinberg-Moore, ’69 (sociology), of Costa Mesa, Calif., November 21, at 79, of sepsis. She worked in the banking industry in corporate training and employee relations. Later, she became a director in personnel and human resources at Flying Tigers and Polar Air Cargo. She also started two human resources consulting firms. She was predeceased by her ex-husband, Hollis Moore, ’64, PhD ’72. Survivors include her stepdaughter, Melissa Moore Leasure, ’91.

1970s

Janet Wolf Hara, ’71 (English), of Hilo, Hawaii, December 22, at 77, of cardiac arrest. She earned an elementary school teaching certificate from San Jose State and an MBA from the University of Hawaii before becoming a certified public accountant. In Hilo, she was a founding partner of Taketa, Iwata, Hara & Associates and served on the boards of many charitable and civic organizations. Survivors: her husband, Glenn, ’68, JD ’72; children, Matthew, Jessica Hara Boyadjian, ’07, and David; four grandchildren; and three siblings.

Patricia Jean Rogers, ’71 (music), of Point Arena, Calif., January 6. She taught music at Horicon Elementary School in Annapolis, Calif. Survivors include her brothers.

Joseph Erskine Welsh, ’71 (biological sciences), MD ’75, of Atherton, Calif., February 27, at 76. He was a member of Beta Theta Pi and was on the water polo and swimming teams. He was a neurosurgeon who gracefully merged the complexity of brain surgery with empathy for the physical and emotional suffering of others. Survivors: his wife, Anne; children, Joseph, Lindsay McConnon, ’99, MBA ’04, Erin Keefe, Courtney Yarbrough, Jacob, and Zachary; 10 grandchildren; and four siblings, including Jeffie Welsh Feakins, ’68.

Janet Mary “Jane” Turner Hart, ’72 (English), of San Francisco, January 6, at 75, of Alzheimer’s disease. She earned a master’s in teaching at Brown University and taught English at Needham High School in Massachusetts. After earning a master’s in management at Yale, she worked in finance as an investor for Aetna Realty and later for the Nature Conservancy (on the Cosumnes River Preserve project) and the Trust for Public Land. Survivors: her husband, Kevin, ’72; son, Bill, ’07; and two grandchildren.

Frederick Gillespie Mann, ’72 (communication), of Greensboro, Vt., February 13, at 75, of complications from Alzheimer’s disease. He was on the *Stanford Daily* staff. At the *Philadelphia Inquirer* for over 20 years, he became the assistant managing editor and was known as a champion of women in the newsroom. He also worked as vice president of communications at the Robert Wood Johnson Foundation. Survivors: his wife, Nicole; children, Ted, Jason, Lindsay, and Cassie; stepchildren, Andy, Hilary, and Brette; grandchildren; two brothers; and former wife, Robin Layton.

Carol Ann “Cammy” Mowery, ’72 (undeclared), of Seattle, December 10, at 75, of cancer. After medical school at the University of Washington, she became a pediatric orthopedic surgeon. She practiced with profound skill, empathy, and humor at Group Health Cooperative, Swedish Hospital, and Children’s Hospital, all in Seattle. She declined sabbaticals to assure consistent care for her “kids” (her patients). She was an avid athlete, weaver, knitter, and gardener. Survivors: her husband of 22 years, William McGillin; and two siblings.

David Robert Rada, ’72 (music), of Los Angeles, February 7, at 75, of Parkinson’s disease. He worked in the entertainment industry and was musical director at the American Musical and Dramatic Academy for over 15 years. Joyful and talented, kind and honest, he led the way, alongside his partner, toward acceptance and understanding through music and comedy, and by example. Survivors: his husband of 49 years, Hal-James Pederson; and three brothers, including Stephen, ’65, and William, ’67.

Alfonso Thomas Villanueva, ’72 (sociology), of Claremont, Calif., December 31, at 75. He was instrumental in the creation of El Barrio Park in Claremont, and founded and led the Árbol Verde Preservation Committee, a grassroots organization committed to protecting the barrio. He retired from the California Youth Authority. A devout Catholic, he led a spiritual life that honored his Native American heritage. Survivors: his children, Alfonso, Magdalena Serrato, and Ruben; grandson; two brothers; and former wife, Janet Coyle.

Samuel Brown Casey III, ’73 (English), of Stallings, N.C., August 15, at 74, of brain seizures. He was a member of Sigma Alpha Epsilon and played soccer. He earned a JD from the University of San Francisco and became a partner at Orrick, Herrington & Sutcliffe. He later shifted to nonprofit work, serving as the executive director of the Christian Legal Society. He received a Lifetime Achievement Award from the National Institute of Family and Life Advocates. Survivors: his wife of 52 years, Jill; children, Kelly and Sam; four grandchildren; and sister.

Eric I. Hemel, ’74 (economics), MBA ’77, PhD ’80 (business administration), of Scarsdale, N.Y., July 27, 2025, at 72. He was a senior policy adviser on Ronald Reagan’s domestic policy staff, staff director of the Council of Economic Advisers, and chief economist at the Federal Home Loan Bank Board. He later worked as the co-head of U.S. equity research at Merrill Lynch. Survivors: his wife of 45 years, Barbara Morgen; children, Deborah and Daniel; six grandchildren; and brother, Neal, ’79.

Christopher William Blakely, ’75 (communication), of Los Angeles, December 13, at 71. He played water polo and was on the *Stanford Daily* staff. After earning a JD from USC, he started a motion picture production company. He worked on corporate films, commercials, and rock videos, and his project *X: The Unheard Music* was screened at the Sundance Film Festival. He was the founding director of the Surfrider Foundation. Survivors: his wife, Betsy; children, Lauren and William; and brother.

Charles R. Corder, ’76 (political science), of San Francisco, January 16, at 71, after a brief illness with a rare blood disorder. He was a member of Alpha Sigma Phi and was on the swim team. He worked in human resources with PG&E and Sharper Image, and volunteered as a counselor at the St. Vincent de Paul Society. He received the Stanford Associates Award of Merit for volunteer excellence. Survivors include his sister, Janet, and his nieces and nephews.

Susan Marie Ogden-Malouf, ’76 (psychology), of Placentia, Calif., January 2, at 71, of Parkinson’s disease and bronchiectasis. She earned a PhD from Northwestern and was a professor of theater at Bethel College, Bryn Mawr, and Haverford before starting her own theater to stage original works. She later earned a PhD in psychology and worked as a therapist specializing in trauma therapy. Survivors: her husband of 49 years, Jeff, ’76; daughter, Carter Malouf Boghosian; and grandson.

Stephen Kirk Ingebretsen, ’77 (human biology), of Greenwood Village, Colo., October 25, at 70. He was a member of Sigma Alpha Epsilon. He earned a JD at the University of Colorado; was an adjunct law professor at CU; and volunteered with the Rocky Mountain Law Center, the Challenge Foundation, and the mock trial program at Colorado Academy. He had impeccable taste and delighted in a well-poured gin and tonic. Survivors: his wife of 34 years, Anne; daughters, Claire, Ingrid, and Grace; and sister.

Thomas Kevin Konicek, ’77 (international relations), of Santa Rosa, Calif., March 8, at 71, of a heart attack. He was a member of Delta Upsilon. After graduating from Loyola Law School, he practiced with Clapp Moroney and Lanahan & Reilley. In 2006, he opened Zyromski Konicek, a litigation firm in Santa Rosa he founded with a business partner whom he later married. A fourth-generation Santa Rosan, he was an active community member. Survivors: his wife, Michelle; and two sisters, including Patricia Konicek Dietzen, ’78.

Gregory Frechette Hodson, ’78 (physical science), of Mendocino County, Calif., August 3, 2024, at 68, of heart failure. He was a member of Delta Kappa Epsilon and the track and field team. He started his career with the U.S. Geological Survey and then the Army Corps of Engineers before spending 32 years as a hydrologist with the U.S. Forest Service in Covelo, Calif. His heart failed while doing what he most loved: competing in a USA Track and Field event. Survivors: his siblings, Linde Hodson Carley, ’76, and Geoffrey.

Phebe Ann Prescott Greenwood, ’79 (international relations), of Sterling, Va., November 2, at 67, of colorectal cancer. She was on the track and field team. She worked with USAID in Togo, Africa, before earning a master’s in public policy from Harvard. She worked in economic policy with the California Public Utilities Commission and Virginia Department of Transportation, and later became a project manager. Survivors: her husband, Douglas, ’79, MBA ’89; children, Phebe Polk, Hannah Moore, Elizabeth, and Douglas; and two sisters.

1980s

Karen Ann Kalmanir Escobar, ’80 (history), of Clovis, Calif., December 14, at 67. After graduating from Lewis & Clark Law School, she became a member of Senator Al Gore’s staff. She then worked for the Department of Justice before

serving for over 35 years as the assistant U.S. attorney for the Eastern District of California. She was a proud member of the California Narcotics Officers Association. Survivors: her husband, David; children, Caroline and Mateo; and sister.
John Carlton Backus Jr., '81 (economics), MBA '84, of Great Falls, Va., November 21, at 67, of chronic lymphocytic leukemia. He was a member of Kappa Alpha. He started his career in consulting at Bain & Company before working in the airline, finance, and tech industries. He then pivoted to venture capital, helping run Draper Atlantic, New Atlantic Ventures, and PROOF. He was known for his work ethic and relentless optimism. Survivors: his children, John, '16, William Benjamin, '20, and Helena; and siblings, Fritz, '83; and Sylvia.
Thomas Allen Roupe, '87 (art and English), of Houston, January 25, at 60. He was a member of Delta Upsilon. His career was spent in the financial sector at companies including Apple, Xerox, and Morgan Stanley. He was proud of his community work in Houston and served as a board director for many organizations, including UT MD Anderson and the Museum of Fine Arts. Survivors: his wife, Jessica; children, Georgia and Jack; mother, Barbara (Doyle, '59, JD '76); and sister.

1990s
Lyle Donovan Perrigo III, '91 (industrial engineering), MS '92 (engineering-economic systems), of Placentia, Calif., May 13, 2024, at 55. He served in the Army and later worked at Raytheon and Chip Shot while earning an MBA from Haas School of Business. He joined McKenna Labs, serving as executive vice president. He enjoyed competing in triathlons, scuba diving, and singing in choirs. Survivors: his wife, Myriam (Perez, '91); children, Christopher, Sage, and Emma; mother, Dalene; and siblings, Dale, '95, MS '96, Juliann Talkington, '85, MS '87, and Susan Covello, '88.

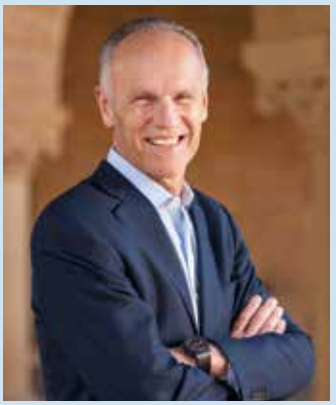
BUSINESS
Charles Elmer McLaughlin, MBA '51, of San Francisco, October 10, at 99. He joined the Navy at age 17 and then worked for California as a civil engineer. Later, he worked for American Standard before establishing his own business, McLaughlin Associates. He was an active member of Christ Church Episcopal and enjoyed tennis, traveling, painting, classical music, and Stanford football. He was predeceased by his wife, Nancy (Bennet, MA '50). Survivors: his children, Michael, Amy, and Peter; six grandchildren; and three great-grandchildren.
Ronald Sheridan Patten, MBA '58, of San Mateo, Calif., September 12, at 93. He formed Stewart and Patten, an investment management company, and devoted his life to building the business and creating deep and lasting relationships, both professional and personal. He had a deep love for the outdoors and shared his enthusiasm for backpacking, fishing, and bodysurfing along with his children and grandchildren. Survivors: his wife of 73 years, Sally; children, David, Linda Montgomery, and Cynthia Murner; grandchildren; and sister.
John Gibson Crossman, MBA '60, of Bonita, Calif., November 9, at 89, of stomach cancer. He enjoyed a long career as a financial manager, market forecaster, investment manager, and company director in cities across the country. He was a gifted storyteller, attentive listener, and student of history and current politics. He belonged to a Bible study group that featured particularly good breakfasts. He was predeceased by his first wife, Nancy. Survivors: his wife, Carol (Thompson, '58, MA '59); children, John, Claire, and James; and four grandchildren.
Gerald C. Gray, MBA '62, of Omaha, Neb., April 29, 2024, at 85. He enjoyed a distinguished career in data processing, leaving an indelible mark on each organization he served. He volunteered with nonprofits including Goodwill and Meals on Wheels, was active in the Countryside Church, and founded the Alvamar Invitation Golf Tournament in 1971, a tradition that continues 55 years later. Survivors: his wife of 62 years, Mary; sons, Scott, Jeffrey, and Brian; six grandchildren; and six great-grandchildren.

ENGINEERING
Darrell R. Pieper, MS '56 (civil engineering), of Sisters, Ore., November 15, at 92, of Alzheimer's disease. He was on the gymnastics team. He served in the Navy. He spent 20 years with Bechtel and worked on engineering teams designing airports around the world, including Los Angeles, Pakistan, and Saudi Arabia, before "retiring" to raise alpacas with his wife. Survivors: his wife of 70 years, Barbara; children, Scott, Donna, and Steve; and three grandchildren.
Mary Irene Carswell Peden, MS '58, PhD '62 (electrical engineering), of Seattle, August 22, at 99. She was the first woman to graduate from Stanford with a PhD in electrical engineering, to be hired at the University of Washington in the College of Engineering, to conduct research in the interior of the Antarctic, and to serve as the president and on the board of the IEEE. She was predeceased by her husband, Leo. Survivors: her stepdaughters, Jefri Donovan and Jennifer Conor.

Trustee Who Saw What Was Possible

Steve Denning was attached to his antiquated Casio electronic organizer. When fellow Stanford trustee Isaac Stein, JD/MBA '72, asked why a pioneering tech investor hadn't updated to something more modern, Denning said he couldn't risk losing all the data: birthdays, names of friends' children, and decades of personal notes. "He wanted to be fully connected to people," Stein recalls.

Steven Aaron Denning, MBA '78, a former chair of Stanford's Board of Trustees who helped shape many of the university's most consequential philanthropic and visionary efforts, died April 27. He was 77.



A first-generation college graduate from Salt Lake City, Denning earned a bachelor's degree from Georgia Tech. He served in the Navy, earning a master's degree from the Naval Postgraduate School, before attending Stanford Graduate School of Business. There he met Roberta Bowman, '75, MBA '78, who became his wife.

After graduating from the GSB, Denning was hired by McKinsey & Company. In 1980, he left the consulting giant to work for General Atlantic, a fledgling investment firm. He stayed for four decades, eventually serving as CEO and chair, helping to develop a family office into a global institution. He brought the same expansive instinct to Stanford, pushing the university to think more globally, inspired in part by how his own horizons had broadened after he left Salt Lake City. "When he was at McKinsey, he was going to Amsterdam, and he wanted to make sure it was Amsterdam, the Netherlands, not Amsterdam, New York," Roberta recalls, laughing.

Denning served on the Stanford Board of Trustees from 2004 to 2017, including five years as chair. From 2005 to 2012, he co-chaired the executive committee of the Stanford Challenge, the university's largest fundraising campaign. "Steve had a rare ability to bring people together and inspire them to do more than they imagined they could," Stanford president Jonathan Levin, '94, told *Stanford Report*.

That vision of what was possible drew Denning to support the Stanford Institute for Human-Centered Artificial Intelligence. In 2018, he became one of HAI's earliest proponents, helping computer science professor Fei-Fei Li build its founding circle. Denning insisted AI would fundamentally reshape the university, from medicine to law to English, recalls philosophy professor John Etchemendy, PhD '82, a former provost who served as a founding co-director of HAI along with Li. "Steve was crystal clear," he says. "He never had any doubts about how AI was going to affect things."

His ability to think big extended to his support for Knight-Hennessy Scholars, a graduate-level, leadership-development program. He and his wife made the gift to build Denning House, which serves as the convening hub for the interdisciplinary program.

Li, who now co-chairs HAI's advisory council, remembers an early lunch in Palo Alto, where Denning quickly moved past fundraising and strategy to get to know her. "He wanted to support a human being," she recalls. "He wanted to understand who I am as a person, why I could be the leader of this effort, and how to support me personally."

Denning's energy and foresight never waned. Li remembers that in some of their final conversations, he would say: "There's a lot more to do. We haven't done enough."

In addition to his wife, a current trustee, Denning is survived by his daughter, Carrie Denning Jackson, '08, MA '09, MBA '15; son, Robert, MBA '11; and grandson.

—Christine Foster

LINDA A. CICERO/STANFORD NEWS SERVICE

Fred Lewis Smith III, MS ’64, PhD ’68 (electrical engineering), of Montrose, Colo., February 25, at 86, of a stroke. After teaching at Colorado State University and serving as the manager of engineering at Armco Autometrics, he spent 27 years at Ball Aerospace’s systems division. He was technical manager for the Shuttle Star Tracker program and was involved with the Deep Impact program and Chandra and Hubble telescopes. Survivors: his wife, Elizabeth (Imle, MA ’67); children, Catherine Stroh and Gregory; and granddaughter.
Russell Duane “Deek” Hensley, Engr. ’66 (aeronautics and astronautics), of Germantown, Tenn., July 18, 2020, at 89. He served in the Air Force. His career spanned nuclear engineering, global telecommunications, and geopolitics. He helped develop the nuclear rocket engine, worked on the Arab oil embargo under Nixon, and was president of Aetna Diversified Technologies. He was predeceased by his daughter Mary Adams. Survived by his wife of 63 years, Lillie Johnston; children, Laura Matson and Russell; seven grandchildren; three great-grandsons; and brother.
Peter Kimble MacEwen, MS ’69 (civil engineering), of Glen Mills, Pa., January 26, at 91. He worked in water supply and resource engineering for 40 years and was the executive manager and chief engineer of the Chester Water Authority for 24 years. He was active in many civic organizations and served as director of the Chester Boys Club for 23 years. He was predeceased by his wife of 57 years, Rita. Survivors: his children, Brian, Lynne Quinn, and Diane DiMarco; five grandchildren; and four great-grandchildren.
John Francis “Skip” Igoe Jr., MS ’70 (civil engineering), of Foster City, Calif., September 13, at 83. He served in the Air Force. A leader in engineering and real estate development, he was a construction project manager for San Francisco’s Moscone Convention Center and guided major real estate and campus developments for numerous companies, including more than 23 million square feet for Google. Survivors: his wife of 59 years, Peggy; children, Susan, Matthew, Rebeca Bertolina, Ben, and John; and 13 grandchildren.
George Urban “Bud” Ramos, PhD ’70 (computer science), of Nipomo, Calif., July 22, 2025, at 83, of leukemia. He worked at Hughes Aircraft, Sylvania, and ROLM, where he served as regional manager in Virginia and Connecticut. An avid outdoorsman, he rafted through the Grand Canyon, trekked to the pyramids in Central America, and toured around the world in 68 days. Survivors: his wife of 62 years, Eileen; children, David, ’88, Leo, ’90, and Jeff; five grandchildren; and three siblings.
Diosdado Pamittan “Dado” Banatao, MS ’72 (electrical engineering), of Palo Alto, December 25, at 79. An engineer, entrepreneur, and mentor, he was a central figure in the early semiconductor and personal computing industries, helping to develop the first 16-bit CMOS Ethernet transceiver. He co-founded two start-ups, Chips and Technologies and S3, and later founded Tallwood Venture Capital. He established the Philippine Development Foundation to strengthen the Philippine innovation ecosystem. Survivors: his wife of 53 years, Maria; children, Rey, Desi, and Tala; and nine grandchildren.
William Richard Bryg, MS ’79 (electrical engineering), of Saratoga, Calif., July 2, 2025, at 67, of sudden cardiac death. He was on the fencing team and a member of Ram’s Head. He worked for Hewlett-Packard, Amara, and Sun Microsystems, and he held numerous patents for semiconductor design. He retired early and enjoyed a quiet life with his wife. Survivors: his wife, Catherine; and brothers, Lance Lefevre and Robert, ’76, MS ’77.

HUMANITIES AND SCIENCES
Galen Kent Howard Hilgard, MA ’59 (biological sciences), of Santa Cruz, Calif., November 22, at 92. She taught UCSC Extension courses in marine biology and volunteered at her daughters’ schools, often leading field trips on which students could explore intertidal flora and fauna. She enjoyed watercolor and printmaking and was an editor and contributor to *Observing Marine Invertebrates, Drawings from the Laboratory*. She was predeceased by her husband of 53 years, Henry, MD ’62. Survivors: her daughters, Julia Hilgard Ritter, ’82, Galen Hilgard Roll, ’86, and Adaline; and six grandchildren.
Martha Monserrat Santi Foschi, MA ’64, PhD ’70 (sociology), of Vancouver, British Columbia, December 22, at 88, of complications from dementia.

Sisters, Best Friends, Adventurers

Caroline Clabaugh, ’03, followed her big sister, Liz, ’95, to Stanford. Liz studied human biology while Caroline majored in computer science, but the sisters had the same love for the mountains and often met to ski in the Sierra Nevada. “They made a huge effort to have adventures together,” says Liz’s husband, Jeff Johnson, ’95, MS ’96. “They were best friends.”

On their final adventure, backcountry skiing on a professionally guided trip in the Sierras, the sisters, along with four close friends and three guides, were killed in the deadliest avalanche in California’s history. **Lizabeth Clabaugh**, 52, of Boise, Idaho, and **Caroline Clabaugh Sekar**, 45, of San Francisco, died on February 17, skiing to the trailhead after two nights at Frog Lake. Their friend Carrie Atkin, the wife of Peter Atkin, ’02, also died in the avalanche.

EXPLORERS: Sekar and Clabaugh.

“[Caroline] was most happy in the mountains with her family and her friends,” says her husband, Kiren Sekar, ’02. The two started dating after college, skiing and rock-climbing together. The day before the sisters left for the backcountry trip, they skied with family and friends in Tahoe.

The sisters grew up in Southern California before moving to Washington state, where they attended high school.

“I met my soulmate on my first day at Stanford,” Johnson wrote in an email. “Everyone (including me) immediately fell in love with her charisma.” After graduation, Liz joined the Peace Corps in Zambia. In 2000, she earned a nursing degree at the University of Washington and then worked as a perinatal nurse educator in Hawaii and as a labor and delivery nurse in New Hampshire and New Mexico before moving to Idaho. For the past six years, she directed a graduate nursing residency program, training hundreds of new nurses, at St. Luke’s Health System in Boise.

Johnson says that his wife was always looking for the next adventure. Together they traveled to 40 countries and lived for extended periods in Ecuador, Chile, and Italy.

“The outside was her special place,” says Liz’s 18-year-old daughter, Ella Johnson. Their last family trip took them to the island of Vanuatu. “I don’t know many moms who would pick out a bat in a marketplace, eat it, and climb a volcano. She was the best mom.”

As an undergraduate, Sekar joined the Bermuda Computing Curriculum Project, developing a computer science curriculum for the island’s public schools. Her early career spanned several technology companies—including Apple, Oodle, SolutionSet, and Cisco Meraki—before she opened a consultancy to build community platforms.

Sekar’s gift, friends say, was bringing people together. She scheduled carpools, held potlucks, planned ladies’ nights out, and organized family trips to go hiking, mountain biking, skiing, and rafting. Friends remember that she would listen for hours as they navigated divorce or death. They also recall her easy generosity, dashing over with baby gear at a moment’s notice or showing up with flowers for their birthday.

“She was just incredibly caring and thoughtful,” says Brenna Lord, ’03, MS ’04. “We’d go for hikes and see these elderly women and say, ‘Well, that will be nice someday.’”

In addition to her husband and daughter, Clabaugh is survived by her son, Charles. Sekar is survived by her husband and two children. Both are survived by their parents, Ted and Vicki Clabaugh; and brothers, Mark Hitchcock and McAlister Clabaugh. *—Tracie White*

COURTESY CLABAUGH/SEKAR/JOHNSON FAMILY

From 1967 to 2003, she was professor of sociology at the University of British Columbia. Her research interests were in social psychology, inspired by the work of Stanford professors Joseph Berger, Morris Zelditch, and Bernard Cohen. In her honor, UBC established the Martha Foschi Award for Excellence in Research and Teaching. Survivors: her husband, Ricardo, MS '64, PhD '66.

Frances M. Scholz, MA '64 (German studies), of Auburndale, Mass., June 25, 2025, at 84. She was a professor of German literature at Brandeis University. She traveled throughout South America and Europe, practiced meditation daily, and regularly engaged in philosophical discussions. A loving anchor in her family, she broadened their world by engaging them in political, historical, and spiritual discourse. Survivors: her husband of 49 years, Homer Franck; children, Jonathan, Mary Cleary, and Michael; seven grandchildren; and brother.

David Stevens Garlick, MA '65, PhD '73 (German studies), of Charlottesville, Va., December 3, 2024, at 86. He taught at Pomona College, Middlebury College, the College of Wooster, and Mary Baldwin University before retiring in 2004. He loved German culture, but his true passion was music. With a strong bass-baritone voice, he studied singing in Boston and at the Hochschule für Musik in Berlin. He performed in various operas and soloed in oratorios. Survivors include his wife, Nancy, and two sisters.

Allen Marshall Goldman, PhD '65 (physics), of Mendota Heights, Minn., May 16, 2025, at 87. He was a Regents professor emeritus of physics and astronomy at the University of Michigan, where he was on the faculty for 60 years. He was a giant in the field of superconducting thin films, and his work led to numerous impactful discoveries and experiments. He mentored over 60 doctoral students. Survivors: his wife Katherine (Darnell, '62); children, Matthew, Benjamin, and Rachel; two grandchildren; and sister.

Wesley George McCain, MA '66, PhD '69 (food science), of New York, January 14, at 83, of pneumonia and Parkinson's disease. He taught finance at Columbia University, taking a leave in 1969 to serve as an economist in the White House. While still teaching, he founded Towneley Capital Management. His career spanned money management, mutual and hedge funds, and venture capital. He loved the outdoors, especially hiking New Hampshire's White Mountains, and endowed a tap-dancing scholarship. Survivors: his wife, Noreene Storrie; son, Malcolm; and two siblings.

John Richard Collins, MA '72, PhD '76 (comparative literature), of San Francisco, October 30, at 77, after a brief illness. He was a professor at City College of San Francisco, where he was founding chair of the country's first gay and lesbian studies department. He taught composition, creative writing, and gay literature, and published widely. He was predeceased by his partner, Martin Cogan, '70. Survivors: his siblings, Eddie, Mike, Joanne, Jimmy, Kevin, Patti, and Peggy.

LAW

Robert R. Granucci, JD '57, of San Francisco, January 14, at 92, after a long illness. He was on the *Law Review*. He specialized in appellate law as a deputy attorney general for the California Department of Justice, and he argued multiple cases before the U.S. Supreme Court. He was active in church and community services, and loved duck hunting, competitive shooting, and writing. He was predeceased by his wife, Muriel. Survivors: his sons, David and John; and two grandchildren.

Sheldon S. Baker, JD '61, of Glendale, Calif., February 14, at 89, of cerebrovascular arteriosclerosis. He was an attorney, author, and legal thought leader. A partner at Halstead, Baker, and Olson, and later Baker, Olson, LeCroy & Danielian, he specialized in business, estate planning, property, and tax law. He served as mayor of Glendale and was honored by the Boy Scouts of America for his decades of service and mentorship. He was predeceased by his wife, Marilyn. Survivors: his children, Melissa O'Gara, Curt, and Jon; six grandchildren; and three great-grandchildren.

Dale Kent Neal, JD '73, MBA '73, of Pacific Palisades, Calif., October 13, at 77, of complications from cancer. He played rugby. During his 32 years at Latham & Watkins, he became one of Los Angeles's most respected land use attorneys, working on large development projects like Playa Vista and Warner Center. He was also known for his pro bono work on behalf of LA schools and housing developments. Survivors: his wife, Christal (Johnson, '74); children, Sarah Neal Kline, '99, and Tyler, '98; seven grandchildren; and two brothers.

John Steven Zignego, JD '73, of Red Wing, Minn., March 13, 2025, at 76. He graduated Phi Beta Kappa from Carleton College. After law school, he worked as a self-employed attorney in Minnesota. He was a loving, kind, thoughtful, and conscientious son, brother, uncle, cousin, and friend. Survivors include his sister, Julie, and three nieces and nephews.

MEDICINE

Demosthenes "Demo" Pappagianis, MD '62, of Davis, Calif., March 8, at 97. After working at UC Berkeley Naval Biological Laboratory and teaching at UC Berkeley and Stanford, he joined the faculty at UC Davis School of Medicine as the founding chairman of the department of medical microbiology. He was a renowned expert on coccidioidomycosis (Valley fever) and a lifelong Democrat with a passion for civic responsibility. He was predeceased by his wife of 63 years, Alice. Survivors include his daughters, Michele and Marika, and two grandchildren.

SUSTAINABILITY/EARTH

Keith Arthur Kvenvolden, MS '58, PhD '61 (geology), of Palo Alto, October 25, at 95. He served in the Army. He worked at NASA's Ames Research Center, leading a team analyzing moon rocks, and then joined the U.S. Geological Survey, conducting marine-based research all over the world. He was a consulting professor in geology at Stanford and published over 200 papers in scientific journals. He was predeceased by his wife, Mary Ann. Survivors: his children, Joan Lewis and Jon; and three grandchildren.

William Lang Cameron, MS '62 (geology), of Easton, Md., December 6, at 89, of pneumonia. Early in his career, he was the first to study several regions—in Alaska and Labrador, Canada—from an economic geology perspective. He worked for Hanna Mining in Montana and Jododex Australia in Perth, and was a vice president at Pacific Tin and Chemical Bank, both in New York City. He was an avid sailor and, once retired, enjoyed building model boats. He was predeceased by his wife, Judith. Survivors: his children, Cynthia and Douglas; and grandson, Thomas.

Do you know of a Stanford alum who has recently passed away?

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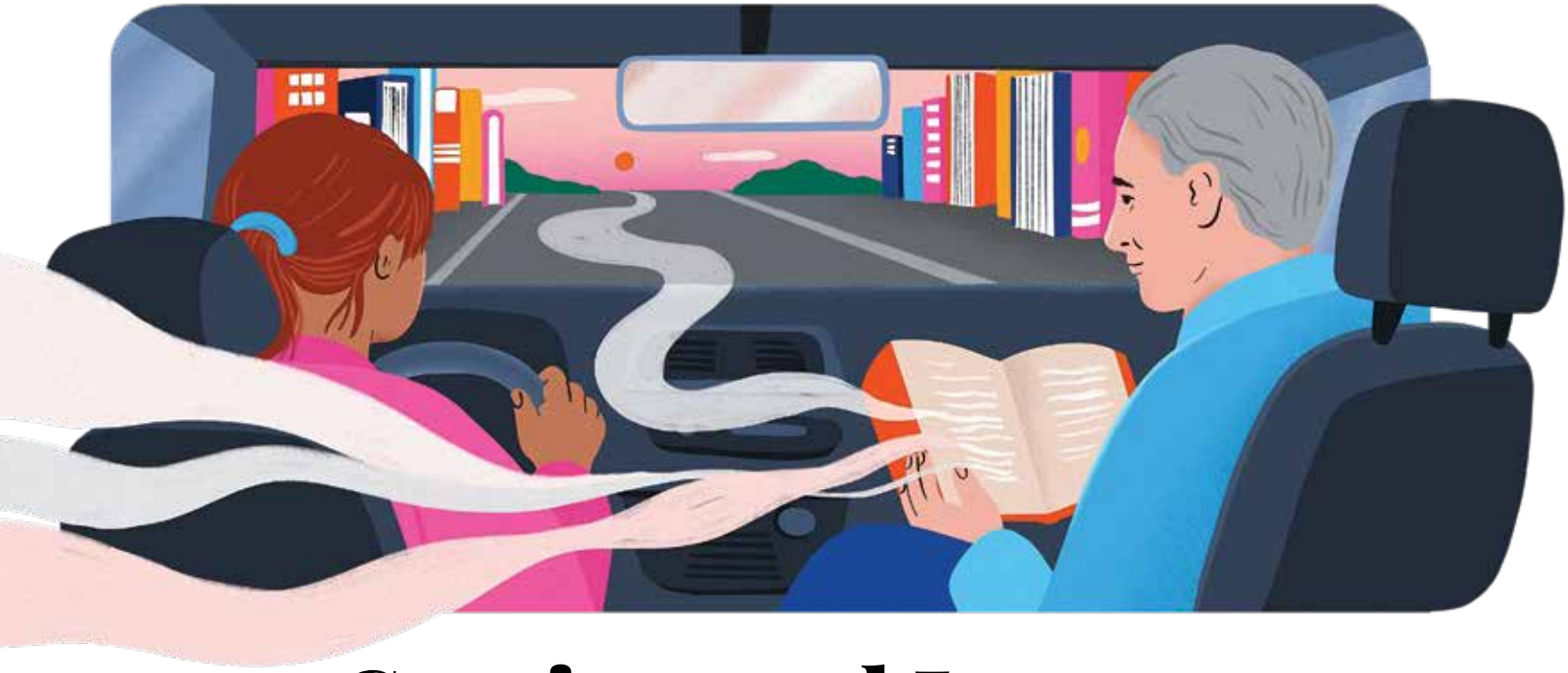

Sentimental Journey

One more chapter, for the road.

IN A WORLD of iPads and audiobooks, is it hopelessly old-fashioned to read aloud to your child to pass the time on a road trip?

What if your child is 22—and she's doing the driving?

I had planned to read *The Best American Essays of 1999* silently, as any unhip, 20th-century dad should. But somewhere along Florida's Interstate 75, I noticed an essay by my daughter Sophie's idol, Joan Didion. I thought Didion could add some color to the dusty landscape, and Sophie turned off Phoebe Bridgers and indulged me.

My tongue hit Didion-induced potholes on every page of "Last Words," about the world of unauthorized posthumous Hemingway collections. My kind child never complained, though she did offer to let me make the next music selection.

Instead, I noticed and read to her an essay by John Lahr, then a drama critic for the *New Yorker*. He was also the son of Bert Lahr, aka the Cowardly Lion in *The Wizard of Oz*. In fact, "The Lion and Me" was about his relationship with his dad, and his dad's relationship to his most famous character. For a friend of Dorothy like me, the *Oz* arcana in the piece (his tail was operated by a stagehand holding a fishing rod offscreen!) was catnip.

Bert was already a Broadway star when he was cast in *Oz*—the Lion's songs were written specifically for him. But the legend of the movie overshadowed the rest of Bert's career like a tornado over Kansas. The realization that he would be largely remembered as Judy's furry sidekick wounded his fragile psyche and, by extension, everyone around him. Sadly, he seemed to care more about his career than he did about his family.

And yet John Lahr held none of this against his father. *Oz* brought magic to the world, and if his father provided part of the sparkle, that's a sweet legacy, despite the cost. If you happened to be a fusty dad reading this story aloud to your indulgent daughter, you might have shed a tear thinking about a child's unconditional love.

Did I let Sophie see that I was as mushy as the Cowardly Lion? Of course not. I quickly wiped my face, steadied my voice, and turned the music back on.

Then I glanced at my baby, all grown up and driving us to her first apartment. And I found myself thinking about Charlotte and Wilbur, Amelia Bedelia, and the BFG. They were the co-stars of both my daughters' childhoods. I started reading to them when they were infants, lying on my chest until they fell asleep. In our house, we took *Hop on Pop* literally.

Many parents have something special connecting them to their kids: sports, cooking, scary movies. For us, it was books. (What is the true definition of parental love? Reading all seven Harry Potter books aloud *again*, to your younger child.)

Unfortunately, reading aloud is a bond that comes with an expiration date. Except, for a few hours on I-75, I got to turn back time. And you know what? I might try it again. Because I learned something on that trip. Sharing a book with someone you love is a feeling that never grows old, even when the parents do. ■

MARC PEYSER, '86, *is the co-author of* Hissing Cousins: The Lifelong Rivalry of Eleanor Roosevelt and Alice Roosevelt Longworth. *Email him at stanford.magazine@stanford.edu.*

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