A PUBLICATION OF THE STANFORD ALUMNI ASSOCIATION

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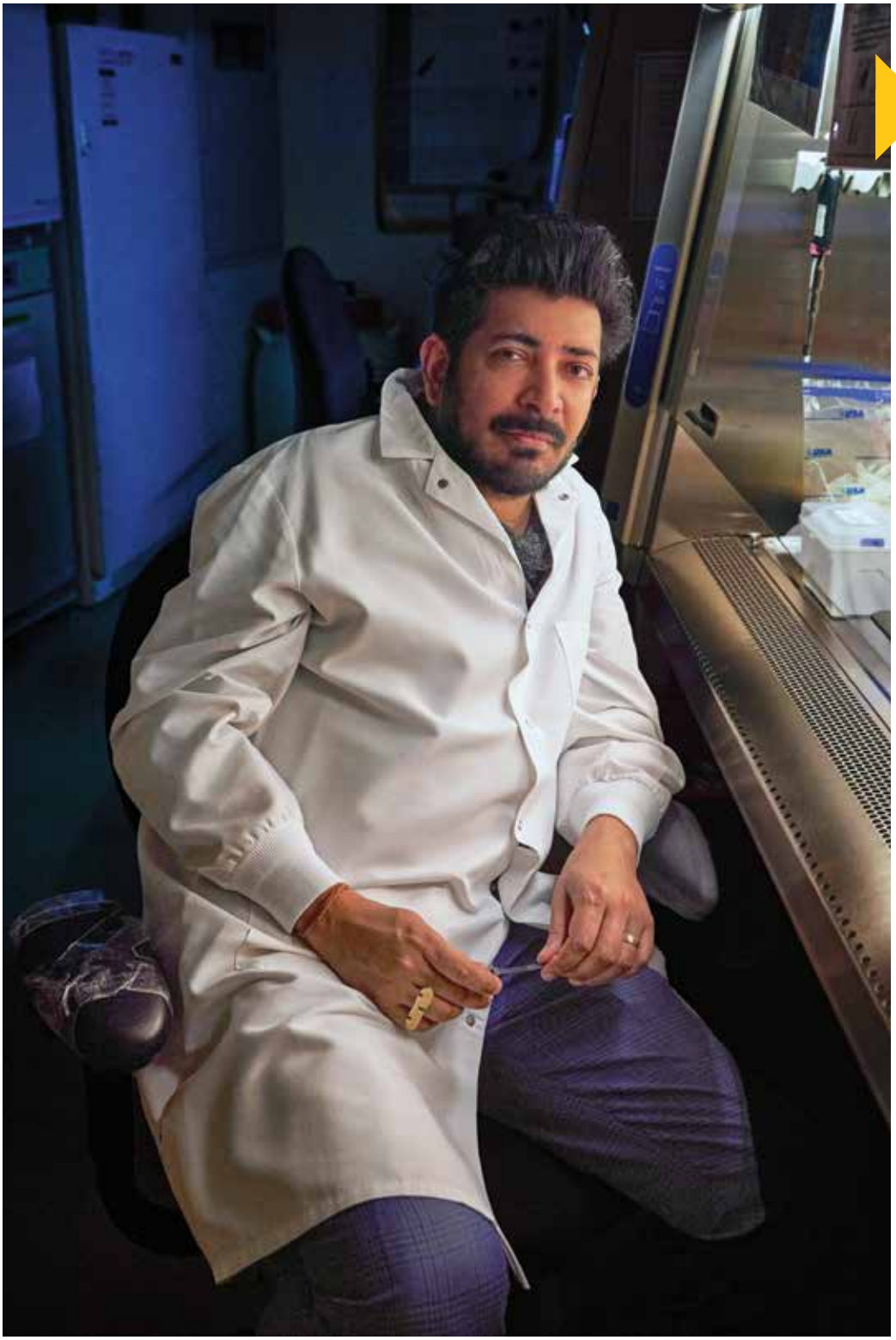
Contents



BILL WADMAN

ON THE COVER:
ILLUSTRATION: PETER STRAIN; **REFERENCE PHOTO:** CHRISTOPHER MICHEL/FLICKR

Contents

11

Meet Tamish Pulappadi

It all started with a green plastic guitar. He was 3 years old. Today, he blends technology tinkering and music making as a member of the Class of 2026.

20

'This Is Why I Love My Job'

After four years as dean of Stanford Law School, Jenny Martinez brings her experience as a scholar of international and constitutional law to the helm of Stanford as its 14th provost. She speaks about faculty excellence, free speech, and fun on campus.

24

Memories of a Mentor

Sen. Dianne Feinstein, '55, hired dozens of interns and staffers from Stanford during her 31 years in Congress. Eight spoke to STANFORD about "the gentlelady from California," who died in September.

Digital

NOW
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Our collection on resolutions

Opine on free will

Video of Tamish Pulappadi, '26

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The Transplant

A Tree grows in the ACC

PAGE 28

ALL RIGHT NOW

DEPARTMENTS

CLOCKWISE FROM TOP LEFT: TONI BIRD; ANDREW BRODHEAD; NICK ALLEN/PICTORIAL PARADE/ARCHIVE PHOTOS/GETTY IMAGES; CHRISTOPH HITZ


WORLD-CLASS GOLF
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Dialogue

Power Points

In September, STANFORD talked with experts about California's goal to reach 100 percent carbon-free electricity by 2045.

Storage technologies are important to develop, but California is doing a disservice not making nuclear a priority as well. It's safer and cleaner than most people are aware, and even though it's not technically renewable, it will last a long time. Not only can small reactor technologies play a critical role in future energy production, but technologies can also be developed to produce valuable radioisotope nuclear batteries. Imagine never recharging a phone or laptop in a lifetime.

Kevin Henderson, '92
Los Alamos, New Mexico

ANTON PETRUS/GETTY IMAGES

The cost of decarbonizing the grid with intermittent renewables goes severely exponential long before 100 percent. One of the reasons nuclear energy matters is that it can provide 24-7 reliable electricity. About two-thirds of California's electric energy is delivered 24-7. Delivering intermittent energy for one-third of the system needs is the "easy" part. Decarbonizing the 24-7 with intermittent renewables is hard—as in "not economical."

We may yet decarbonize California, but our choices make a difference. If we make uneconomic choices that nobody will follow, then we are not leaders. If we rekindle advanced nuclear, we will reduce our environmental footprint in the deserts and hilly mountains and not need all those transmission lines through our tinder-dry forests. To be guided and blinded by the religion of renewables-only will weaken our economy. We need to be technology-inclusive and economically realistic.

Ross Koningstein, MS '86, PhD '91
Atherton, California

The opportunity to engage consumers in the clean energy transition is often overlooked but extremely powerful. Smart, connected consumer technologies such as thermostats, appliances, and water heaters will allow us to consume energy more flexibly and efficiently. This will facilitate the integration of variable wind and solar generation and will reduce the need for a potentially massive investment in traditional power grid infrastructure. Paying customers to act as "virtual power plants" is the only decarbonization option that will put money directly back into the pockets of consumers.

Ryan Hledik, MS '06
Lake Oswego, Oregon

The Change

A September story covered Marc Tessier-Lavigne's resignation as university president and Richard Saller's appointment to the office.

Marc Tessier-Lavigne's fall from grace provides Stanford with a much-needed opportunity to step back and reassess its uncritical pursuit of techno-capitalist wealth and glory. One of the problems for Stanford arising from its neglect of the humanities in favor of a passionate and one-sided embrace of technological capitalism and its monetary rewards is that the institutional organs of the university normally devoted to critically thinking about the implications of this kind of trend become overwhelmed by and subservient to the dominant paradigm. Before another glamorous inhabitant of Silicon Valley gets installed as Stanford's next president, the current classicist incumbent should be empowered to perform a big-picture analysis of where Stanford is in its historical development, how it got here, and where it wants to go—taking into account factors other than the continued mindless pursuit of money and power.

Stafford L. Smith, '61
Poulsbo, Washington

As a [former reporter and editor], I've been impressed with the professionalism and breadth of the Loop newsletter and STANFORD. So I was disappointed with how you gave such short shrift to another talent: the *Stanford Daily*'s Theo Baker ['26]. You omitted the David vs. Goliath drama almost every other outlet reported: how, as a freshman, Baker became the youngest person ever to win a George Polk Award—one of the highest awards in journalism—for exposing the fraudulent graphics in MTL's research that the ex-president was in no hurry to correct. This alumnus hopes you will continue the best journalism practices you and your magazine have so clearly shown in other coverage and do a better job of telling important stories like this more fully and fairly for your future alumni readers—today's students.

Bill Moore,'65, MA '66
Sacramento, California

Write Us At

dialogue@alumni.stanford.edu

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Editor's Note

KATHY ZONANA, '93, JD '96

You Were Always Going to Read This Column

But will it compel you to respond?

I WAS WALKING to check in for my 30th reunion when I found myself overhearing the conversation of the group of men behind me. They were talking about Robert Sapolsky's new book on free will.

That in itself was interesting. Some 50 faculty members gave 34 talks during Reunion Homecoming, but Sapolsky, a popular lecturer and prolific writer, wasn't among them. Three days after publication, *Determined: A Science of Life Without Free Will* had hit the zeitgeist—or the Nerd Nation zeitgeist, at any rate.

Well, I thought, *I guess we got the cover right.*

The alums' conversation, from what I could discern, was spirited. As you will read in our story that begins on page 42, Sapolsky is a "hard determinist." The professor of biology, of neurology, and of neurosurgery believes that once we take into account all the influences that have affected us to this point—everything from genes to hormones to what we had for breakfast—there's no room for free will.

This doesn't necessarily go down easy. But, as one of the men behind me quipped, "even a moronic idea can be true."

Oh, I thought, *I hope he writes a letter to the editor.*

Sapolsky's thesis is precisely the type that enables rich intellectual debate. On page 47, you'll find a QR code that makes it easy to submit your thoughts.

Free will's not your jam? Perhaps you'd like to comment on political science professor Beatriz Magaloni's efforts to reform policing in Latin America (page 48). Or the insights about biology and life from physician-writer Siddhartha Mukherjee, '93 (page 36). Or the latest development in athletics, as the Cardinal prepares to join the Atlantic Coast Conference (page 28).

The rules of engagement are simple: Write a letter about a story that has appeared in the magazine. Ideally in the most recent issue or two. And keep it concise. We want to include as many points of view as possible and put them in dialogue with one another. Disagree with a letter? You can write in about that too. Together, we can create a section that showcases the wide-ranging, considered opinions of 242,223 alumni worldwide.

Now, if you believe Sapolsky, whether you'll write a letter to the editor is not up to you. But maybe reading this column has made it a smidge more likely. ■

Email Kathy at kathyz@stanford.edu.

STANFORD

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Excellence and Trust

The following is excerpted from the inaugural address President Saller gave in October.

THERE IS IRONY in appointing a Roman historian as president of Stanford, famous for its forward-looking innovation, but I believe that history provides a valuable perspective. The Romans ruled a Mediterranean empire of 50 million people for more than six centuries. Over that vast time span, they had no universities to nurture research, few innovative breakthroughs in technology, and no sustained economic growth.

As a result of this minimal research and economic growth, the imperial government's budget of the Roman Empire was about one-tenth the size of the current Stanford University budget as measured in tons of silver or bushels of wheat. That contrast says something important about both the Roman Empire and Stanford. Stanford is perhaps the leading university in the world in discovery and innovation. Today, the budget of Stanford and its hospitals is larger than the budgets of 13 states. Consequently, Stanford must be a force for good.

The university's positive impact must be grounded in our fundamental mission: excellence with integrity in education, research, and clinical care. *Integrity* means education and research done with high ethical standards and scientific rigor, and therefore deserving of trust. In the current political and cultural context, winning that trust is a challenge. As universities have become more influential in our society, they have attracted more criticism. The media carry stories about a culture of intolerance on college campuses, failure to comply with conflict of interest and commitment policies, or research misconduct, in ways that diminish the trust in higher education.

The importance of integrity in Stanford education has been increasingly recognized at all levels. Undergraduates must take a course in ethical reasoning, a requirement that can now be satisfied by the new COLLEGE course Citizenship in the 21st Century. Ethics courses will not instill a consensus about values among our students; rather, the aim is to sensitize them about the need for ethical reflection. Our differences will inevitably lead to debate, sometimes heated. The university must protect the academic freedom to allow for conflicting views and productive debate.

As for research, I am confident that the overwhelming majority of the work done by our faculty and students is done with integrity and is making remarkable contributions to the well-being of humankind.

'I am confident that the overwhelming majority of the work done by our faculty and students is done with integrity and is making remarkable contributions to the well-being of humankind.'

For example, Joseph Woo, chair of cardiothoracic surgery, is doing outstanding work, starting with basic research aimed at developing new therapies, new medical devices, and new surgical techniques. As a result, for the first time, a donor heart was transported and then transplanted all the while still beating, leading to a successful outcome in the recipient. This technique will improve health outcomes for recipients and boost the pool of available organs. This example would have to be multiplied thousands of times to capture Stanford's contributions to humanity and illustrates the value of interdisciplinary research.

The positive impact relies fundamentally on the integrity of the research and also on Stanford's *reputation* for integrity—a challenge for communications. The trust people place in our research, education, and clinical care is threatened because trust in all institutions is in decline. An illustration of our challenge of effective communication is Theranos, which continues to generate news reports with the Stanford name attached. Meanwhile, Woo's discovery of a successful technique to transport and transplant a beating heart has received no attention from the press. We will work to increase the spotlight on the powerful positive impact of Stanford research.

In the end, Rome lacked the institutions to generate a continuing flow of new knowledge to increase well-being and fuel sustainable economic growth. Today, Stanford serves just that function. ■

ANDREW BRODHEAD

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Professor of Medicine; Co-Director, Stanford Medicine Teaching and Mentoring Academy, Stanford School of Medicine

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Kenneth Fong Professor and Professor of Bioengineering, Genetics, Medicine, and Biomedical Data Science; Associate Director, Human-Centered Artificial Intelligence Institute, Stanford University

Kevin Struhl, PhD '80
David Wesley Gaiser Professor, Biological Chemistry and Molecular Pharmacology, Harvard Medical School

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Robert C. Malenka, PhD '82, MD '83
Nancy Friend Pritzker Professor of Psychiatry and Behavioral Sciences; Deputy Director, Wu Tsai Neurosciences Institute, Stanford University

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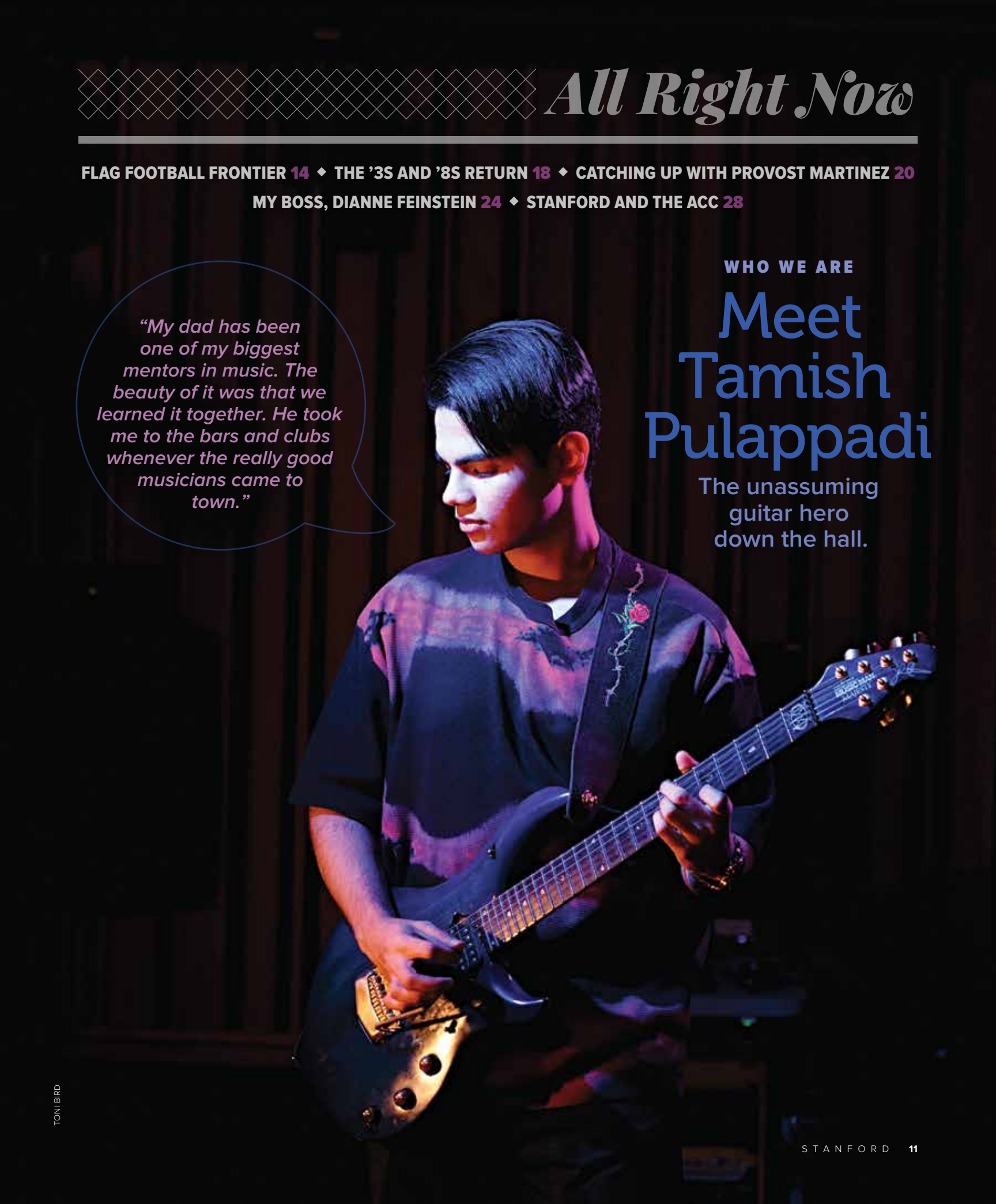
All Right Now

WHO WE ARE

Meet Tamish Pulappadi

The unassuming guitar hero down the hall.

“My dad has been one of my biggest mentors in music. The beauty of it was that we learned it together. He took me to the bars and clubs whenever the really good musicians came to town.”



TONI BIRD

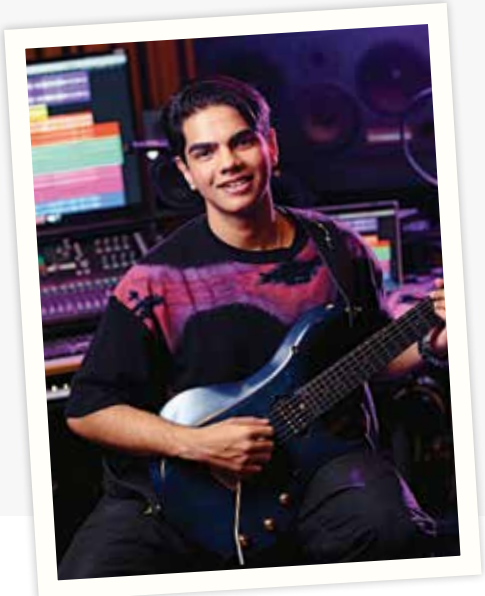
TAMISH PULAPPADI got his favorite electric guitar as a gift from the American manufacturer Ernie Ball Music Man, which sponsored him when he was just 13. Called the Majesty, it's dark blue and sleek, with shiny black panels. He spent endless hours with it as he grew from an instrumentalist into a singer-songwriter and music producer in his hometown of Bengaluru.

"What's so great about it is its versatility," says Pulappadi, a sophomore computer science and music major who has been written up in *Rolling Stone India*. He's played everything from hard rock to blues to jazz fusion, winning awards and performing for hundreds at festivals. But the Majesty wasn't the first guitar he fell in love with. That was a green plastic toy guitar that he got when he was 3 and refused to put down. That is, except when he was playing with remote-control race cars, eventually taking them apart to see how they worked. He loves to tinker around and make things, producing his own album and rebuilding junkers with a lemon car racing team. Fittingly, he studies the intersection of music and technology. ■

SEE PULAPPADI ON VIDEO
ALU.MS/TAMISHPULAPPADI

"When I was 7 or 8, my dad introduced me to classic rock music, like Guns N' Roses, and I saw Slash, their lead guitarist. I was like, 'Hey, I wanna be like that guy.' My dad was like, 'OK, let's give it a shot.' So I started taking guitar lessons. I began with hard-core rock but then transitioned into instrumental rock, then prog rock, to a bit of math metal and jazz fusion. And a lot of blues. My first performance was when I was 12. We had a band at my music school and performed Radioactive *by Imagine Dragons.*

"At around 11 is when I started posting my music videos online. That's when I started getting noticed and got invited into this group called the Brotherhood of the Guitar, with some of the best elite young guitarists from across the world.



"I was always tinkering around with stuff as a kid, building stuff with small circuit boards, learning how to code things up, making practical sorts of gadgets.

"I was aiming for a university where I could study music and technology, and Stanford was at the top. I take classes like electronic music composition, where they teach you about synthesis, how you can create sounds—from the absolute fundamental frequencies to the sound of a guitar or piano or anything you hear —using software.

"I started sim[ulation] racing when I was a kid, playing computer games like Gran Turismo. *I learned about cars on YouTube and dove deep into the craft of racing. One of my dormmates freshman year was on a lemon car racing team, and I was talking about my love for cars. And she was like, 'you should come check it out.'*

"The premise of lemon car racing is you have a $500 budget and have to build a race car out of a junk car, and it's an endurance race, so it goes over the course of 24 hours. That's why it is called the 24 Hours of LeMons. I helped rebuild a junk Mazda 323 last year. We got it out on the track, but the car died in about six or seven hours. A lot of cars didn't even start, so that was a lot of fun."

TONI BIRD (2)

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Coaching Girls on the Gridiron

Former Stanford QB John Paye brings pro plays to California's newest high school sport.

WHEN JOHN PAYE, '87, attended a meeting at Menlo School last spring to gauge interest in California's newly sanctioned high school sport of girls' flag football, he noted the excitement and high turnout—30 girls, from a pool of about 200—and knew he wanted to coach the team. The former Cardinal quarterback and point guard also knew who should be at his side: his former San Francisco 49ers teammate Steve Young.

In the fall of 1987, when Paye was a 49ers rookie, NFL players went on strike. That left him and fellow backup quarterback Young with a lot of free time. When the two stopped by Paye's sister Kate's basketball practice at Menlo one day, they got talked into coaching the team. Young went on to become a Hall of Fame quarterback, a broadcaster, and a private equity investor. Paye left the NFL after two years and his fourth shoulder surgery but continued coaching the Menlo Knights, leading Kate, '95, JD/MBA '03 (now the associate head coach for Stanford women's basketball), and her teammates to three straight state division titles between 1989 and 1991. After stepping down in 1994 to start a family and build a real estate career, Paye returned to Menlo in 2008 and won another basketball title in 2019.

Flag football crowns may be in the future, but this year Paye and Young, whose two daughters are on the team, are focused on teaching gridiron newbies how to shake defenders and connect with receivers in stride. The two have modified past 49er plays for flag football, which has seven players to a side and allows no blocking, tackling, or contact—a play ends when a flagged belt is yanked off the ball carrier. This year, it also has no leagues or standings. "It's like old-school athletics where you play for the fun of it," says Paye. "So many sports today are considered stepping stones to college scholarships, which puts stress on kids."

Even with 34 athletes crowding his sideline, Paye plays everyone. "He does a good job keeping a balance between firing us up and not being too intense," says Paige Miller, a senior at Menlo. "He has a high bar, but he's engaging and fun."

Players aren't the only ones fired up by this new sport. "I love teaching," Paye says, "and I think it's pretty neat that girls now have an opportunity to play football for their school."

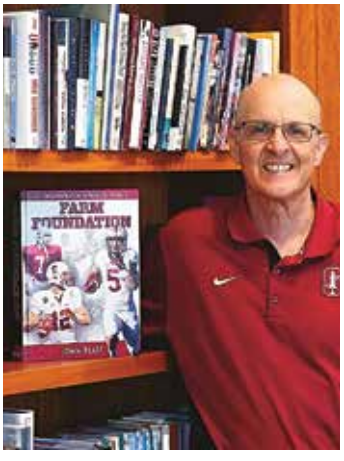
—Kelli Anderson, '84

Football and the Farm

A new book chronicles the ups and downs of 115 seasons.

IN 2010, John Platz got a seat on a "rocket ship" about to launch. The longtime radio voice of Stanford basketball, Platz, '83, JD/MBA '89, was hired to help broadcast Stanford football just in time to report on one of its greatest years. The Cardinal shut out three conference opponents, won Big Game 48-14, and rode roughshod over Virginia Tech in the Orange Bowl. "That was the best team I've seen in all the years I've spent watching them," Platz says. "I was spoiled."

But Platz is equally appreciative of all 115 years of Stanford football: the peaks, the troughs, and all between. He throws his arms around it all in a hefty new book, *Farm Foundation: An Illustrated History of Stanford Football*, weighing in at five pounds, 420 pages, and 160 photos. It begins, naturally, in the beginning, but Platz—the author of *100 Years of Stanford Men's Basketball*—pays closest attention to the decades since 1970. If you're interested in the years you went to school, there's probably 10 pages on just that, he says. It's available at the Stanford Bookstore. ■



CLOCKWISE FROM LEFT: GLENN MATSUMURA (2); DAVID GONZALES, '93

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The Accidental Artist

What happens when a graphic designer starts tinkering at the kitchen table.

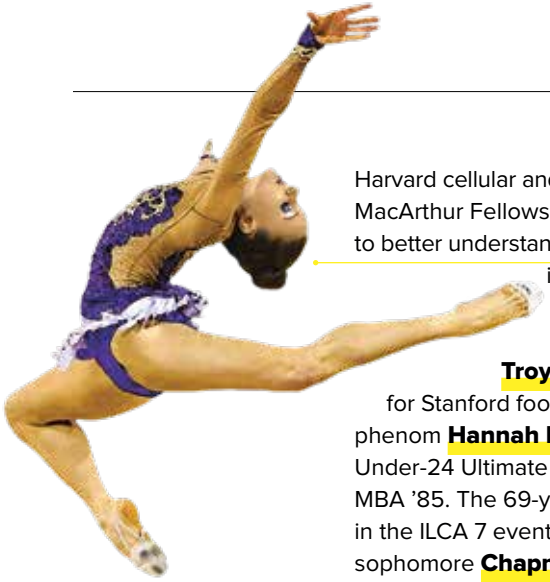
FIVE YEARS AGO, Jason Robinson, '93, MA '95, started waking up, night after night, thinking about things he wanted to create—handmade wooden tables, cool light fixtures, sculptures. It was like the makerspace in his brain suddenly got switched on and wouldn't turn off. So, he started tinkering at the kitchen table, and the next thing he knew, he'd taken his life savings and opened an art and design studio in Brooklyn, N.Y.

"The funny part was, I didn't know how to make anything at first," says Robinson, who had spent the previous four years designing humanitarian aid tools for UNICEF and, prior to that, had run his own graphic and digital design company. But through a series of trials and errors, experimenting with wood and resin and a basement 3D printer, he began to turn his nighttime visions into real-life objets d'art: a cylindrical table that can be split into two end tables and a handmade dimmable LED lamp, for starters.

"I had to know if I could do this, even if I went broke, even if it didn't work out," he says. Now he's a full-time artist whose work leads him in several directions. Since the pandemic hit, he has found himself increasingly influenced by social issues, like Black Lives Matter, and what he describes as a growing sense of disconnection in the digital age. My So-Called Digital Life, Robinson's sculpture of a woman surrounded by a video screen of social media channels, was exhibited in 2021 at Design Miami, and his original Laguna Table was selected for 2022's Launch Pad, a showcase for emerging home-decor designers at WantedDesign Manhattan.

And while his new career has blossomed, he has, of course, had moments of doubt. "At one point, I was thinking about trees and these bushy canopies and thinking about origami and blended them together into an idea for a table," Robinson says. "The whole thing collapsed on me, literally. I felt like such a fraud. I thought, 'What are you doing, man?'"

It was never Robinson's dream to be an artist. He'd never considered it. "I didn't think being an artist was something you could do. I didn't know if that was a respectable career." But now? "I guess I am an artist," he says, still surprised at this. ■



THE TICKER

Harvard cellular and molecular biologist **Jason Buenrostro**, PhD '16, was awarded a 2023 MacArthur Fellowship, aka genius grant, for his work developing new methods and tools to better understand how and when genes are expressed.... **Jasmine Kerber**, '20, MA '21, is also enjoying a moment in the spotlight. The two-time Rhythmic World Championships all-around finalist has been inducted into the USA Gymnastics Hall of Fame.... We're doing flips for familiar Farm voice **Troy Clardy**, '97, who this fall became the lead play-by-play radio announcer for Stanford football and men's basketball.... Our American idol on land is Frisbee phenom **Hannah Huddleston**, '23, who won gold with Team USA at the 2023 World Under-24 Ultimate Championships in England.... But our hero at sea is **Walt Spevak**, '76, MBA '85. The 69-year-old lifelong sailor has qualified for the 2024 U.S. Olympic sailing trials in the ILCA 7 event, which features dinghies crewed by solo sailors. Among his competitors: sophomore **Chapman Petersen**.

CLOCKWISE FROM TOP: NAOMI CAVANAUGH; JOHN D. AND CATHERINE T. MACARTHUR FOUNDATION; JOHN LOZANO/ISI PHOTOS; GARY HERSHORN/GETTY IMAGES

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They Played. They Learned. They Connected.

Reunion Homecoming drew 8,284 Cardinal guests. We asked for their six-word updates.

Twists and turns, no new wisdom.
—Minjia Zhong, '18

30 years later. Palm Drive awe.
—Sonya Crawford Bearson, '93

Fearless journalist, broke silence, launched movement.
—Gretchen Carlson, '88

Had a baby. (Technically, wife did.)
—Joel Stein, '93, MA '94

Adventure, writing, love, faith; challenges met.
—Wayne Raffesberger, '73

GOT AN UPDATE? LET YOUR CLASS CORRESPONDENT KNOW AT **ALU.MS/SUBMITCLASSNOTES**

CLOCKWISE FROM TOP: H. TAGHAP; DAVID GONZALES, '93; H. TAGHAP; DAVID GONZALES; STANFORD ATHLETICS

Stanford
Summer Session

Share the Stanford Tradition

Stanford Summer Session invites visiting students to live and study on campus during the University's fourth academic quarter.

PROGRAM DATES: SATURDAY, JUNE 22 – SUNDAY, AUGUST 18

Visiting undergraduates, graduate students, and a limited number of advanced high school students take courses alongside current Stanford students, developing a global network of friends while experiencing life on the Farm.

ASKED AND ANSWERED

‘This Is Why I Love My Job’

Stanford’s new provost on faculty orientation, free speech, and the fun factor.

BY KATHY ZONANA

AFTER 20 YEARS on the faculty, the past four as dean of the Law School, Jenny Martinez has become the university’s 14th provost, overseeing the deans of all seven schools, the vice provosts for undergraduate education, graduate education, and student affairs, and 17 other units, ranging from admissions to athletics to religious and spiritual life. Four weeks into her new post, she spoke with STANFORD.

STANFORD: The provost is the chief academic and budget officer. What does that mean to you in this role?

Jenny Martinez: The provost has this unique view on our academic mission of being able to see all of what’s going on on campus. It’s exciting to have that perspective and to think about how I can use the resources of the university to support research and to support our students and their education.

How are you getting your arms around it all?
One day at a time. I have a general sense of a lot of it from having served on the executive cabinet as a dean. Now I’m going deeper on the parts of the university that I didn’t know before. And that’s a lot of fun.

I went to New Faculty Orientation, and listening to the 30 or so new faculty describe their research in everything from artificial intelligence to the history of architecture as it relates to climate change to music was incredible. They were all doing such different things, but such interesting things, and with such a level of excellence that it was a moment of *This is fantastic. This university is amazing. This is why I love my job.*

There has been in the last year or so a sense that Stanford has been facing a lot of headwinds. But one of the things that has positively impressed me is just how strong the fundamentals are—that is, just how excellent our faculty are across virtually every discipline.

You mentioned the headwinds. What are the big ones, and how do you think the university should work on them?
I think we need to refocus on our core mission, which is excellence in research and education and clinical care with integrity, as [President] Richard [Saller] has been saying. Higher education is facing a lot of societal backlash. The questions of “What are universities for?” or “What is the value of higher education for students?” are ones that are

ANDREW BRODHEAD

not unique to Stanford, but that we see a lot of national debate around. I think universities play a critical role in society, a critical role in democracies, and we can't lose sight of that. If you look at authoritarian regimes around the world, one of the first things that they do is go after universities because it's a place where freedom of thought exists.

We are devoted to producing knowledge for the benefit of humanity, and in a way that no other part of society does—the basic science research, for example, that 10 or 20 years in the future might lead to cures for cancer or other diseases; the basic research into humanities fields like history that help us understand the world and our place in it, and how that changes over time.

I also think our education mission is extremely important. If you look at the transformational impact of coming to Stanford for our students and the life trajectories that they're on after coming to Stanford, I think it's undeniable that we have a vital role to play.

There are definitely undergraduate alumni, though, who are not so much doubting that research and teaching are excellent here, or doubting that higher ed is important, but are saying, "Well, but see, it's just not as fun as it used to be." Is there work Stanford needs to do?

I think there is. One of the things that has distinguished Stanford is its culture, in the undergraduate community especially, of being a place where students work incredibly hard but also have a sense of whimsy and fun. While the university is always changing and has to change to keep up with the times, we want to keep that special quality to the experience for students. So, yes, I think that is something that we need to look at.

What kind of tools do you think a lawyer brings to the provost position?

At their best, lawyers think rigorously and logically about issues, and I think that's a real help in a job like this. Lawyers can get a bad rap for writing long gobbledygook. But good lawyers try to communicate clearly and persuasively. And understanding some of the big issues that face higher ed, like free speech issues or the Supreme Court's decision ending affirmative action—it's helpful to have some legal context on that. Particularly because I teach constitutional law and I'm interested in the First Amendment, I'm

actually bringing that background to bear on some of my work as an academic leader.

It seems like you know where your true north is on free speech. Could you talk about how you got there?
At my high school, the principal censored the school yearbook. They had a survey on drug and alcohol usage that showed that students drank alcohol, and the school didn't want this going in the yearbook. I was on the school's model judiciary team, so I kind of became the lawyer for the yearbook, and learned that under the Supreme Court decision in a case called *Tinker*, students don't shed their constitutional rights at the schoolhouse gate, and that as long as student speech doesn't create a material and substantial disruption of school activities, it is permitted. So, we had these armbands that said "Free Press," and we had pamphlets about the First Amendment, and we engaged in a protest that very carefully complied with the Supreme Court's decision. The vice principal confiscated my First Amendment pamphlets, and I thought, *Well, that's going to be a great lawsuit. You've taken my pamphlets about the First Amendment.* We won our victory outside of the court system, but it really sparked an ongoing interest.

In college, I worked for a summer at the Student Press Law Center, defending student journalists. I did a summer research project on the end of the Pinochet dictatorship and how loosening of restrictions on freedom of the press led to the plebiscite that moved Chile to democracy. I wrote my senior thesis as a history major on the role of African American newspapers in the post-Reconstruction South. I've had a long-time interest in the role of freedom of speech not only in the U.S. today, but internationally and historically, and how freedom of expression was used to advance the rights of groups who were discriminated against or disenfranchised, and how important freedom of expression and freedom of the press have been to securing their rights in our broader legal system.

There are faculty policy decisions that are still to come in the wake of *Students for Fair Admissions v. Harvard*. But what can you say about how Stanford is going to adapt admissions or increase outreach?
I think it's important to emphasize that diversity is still something that Stanford values. And it's important that we comply with the Supreme Court's decision. And it's also important that we look at what is allowed under that decision. Outreach will become important in terms of getting the message out to students from all walks of life that Stanford is a place that welcomes them, that our extremely generous financial aid programs mean that they can come to Stanford. A longer-term goal is thinking about what Stanford can do through its Education School and through other programs to ensure that by the time students get through the K–12 system, a diverse set of students are competitive to come to a place like Stanford.

What do you most like to do when you're not at work?
I am a soccer mom. All three of my teenage daughters have played competitive soccer. Tomorrow morning, I'm driving up to Napa with my twins for their game.

We acquired a lot of pets in the pandemic. I have four chickens, two feral cats, and a sheepdog. So, I take care of all my animals, including the teenage animals.

What else would you like alumni to know about you?
It's particularly meaningful to me to become provost. My dad, Tomás Martinez, was a lecturer here in 1970–72 and taught some of the first Chicano studies classes at Stanford. At Reunion weekend, I met some of his former students, who talked about how meaningful it was for them to have him as an instructor. He didn't end up staying at Stanford, but he is so proud that I've ended up here.

That's a really neat full-circle moment, because 1970–72 is when you were born, right?
I was born in 1971! ■

KATHY ZONANA, *'93, JD '96, is the editor of* STANFORD. *Email her at kathyz@stanford.edu.*

THE *Degree of Uncommon* CITIZEN

The university's highest honor for volunteer service to Stanford was inspired by President Herbert Hoover, Class of 1895, who said, "Great human advances have not been brought about by mediocre men and women; they were brought about by distinctly uncommon people with vital sparks of leadership."

PHILIP H. KNIGHT, MBA '62

A DEDICATED ALUMNUS OF Stanford Graduate School of Business, Phil Knight has repeatedly distinguished himself as one of the university's most visionary and generous alumni. The legendary Nike co-founder and chairman emeritus has been a pillar of the Stanford community for more than six decades—the quintessential model of innovation, optimism, and perseverance.

Phil has quietly shared his humble counsel, discerning guidance, and friendship with people across the university, from Stanford's presidents and senior leaders to faculty, staff, and students. Phil's commitment to Stanford reverberates across campus, touching everything from scholarships to athletics to complex academic research.

Phil's devotion to Stanford is also evident through his remarkable philanthropy. In 2011, Phil made a transformational gift to the GSB, enabling the development of the inventive and expansive school complex that bears his name. Inspired by then-president John Hennessy's vision of a novel graduate-level scholarship program to prepare future leaders, he helped launch the Knight-Hennessy Scholars program in 2016. Phil is also a longtime champion of the humanities, providing vital support for faculty in the creative writing program. Most recently, he and his wife, Penny, established the Phil and Penny Knight Initiative for Brain Resilience, a cutting-edge research endeavor to combat neurodegeneration.

Phil has left his footprints across campus: literally, in concrete at the Knight Management Center, and figuratively, through his rare and extraordinary service to the university.

CAPITOL CARD

Memories of a Mentor

Dianne Feinstein's staffers and interns on leadership, loyalty, and service.

ELECTED AND ELATED: Feinstein was appointed mayor after Moscone's death, then won a second term.

BY CHRISTINE FOSTER

DIANNE FEINSTEIN, '55, WAS WELL KNOWN as the San Francisco mayor who helped the city find its way forward after the 1978 City Hall assassinations of George Moscone and Harvey Milk, and later as one of the first pair of women to represent California in the Senate. She also had a less visible identity: mentor to generations of Stanford students who served as interns and staffers in her office. Several of them share their memories of the senator, who died September 29.

Feinstein was quick to make the Stanford connection.

ZOE LEE-CHIONG

Sebastian Alarcon, '18, intern 2017, staffer 2018–2021, now a JD candidate at Stanford Law School: I remember when I introduced myself on the first day, she was like, "Oh, you're a

FROMT TOP: NICK ALLEN/PICTORIAL PARADE/ARCHIVE PHOTOS/GETTY IMAGES; COURTESY SURAJ PATEL

Stanford graduate," and asked everyone who had any connection with Stanford to raise their hands. Then she said reluctantly, "OK, if you have a connection to Cal, you can also raise your hand."

READ OUR 2017 PROFILE OF FEINSTEIN

Suraj Patel, '05, intern 2004, now an attorney and lecturer at New York University: I know how much of a bleed-Cardinal-red person Senator Feinstein was. She would wax poetic about her time there.

Many remember Feinstein's example as a leader, especially as a woman in predominantly male spaces.

Alarcon: She talked about beginning her political career at Stanford when she was running for student body vice president, and she discussed the [terrible] treatment she got for being a woman running on campus during that time. I think that concern

animated a lot of her approach to politics and really wanting to be perfect in as many aspects as she could; she wanted to leave a good impression and she knew that it would be tougher for her to do so because of her gender, at least for a majority of her career.

Patel: Man, I mean, she was just a trailblazer. [She] not only wedged herself into the boys' club in San Francisco and the U.S. Senate, but even within the confines of the U.S. Senate—intelligence, armed services—those things are even more boys-y. I think it was really awesome to watch that happen.

Sima Gandhi, '04, intern 2003, now a tech entrepreneur and regulatory expert: She was able to attract really great and loyal talent. [It was] a testament to her ability to pull together strong experts to do what was right for the country. They got a lot done. There was no drama. Her expectations were clear. That's good leadership.

Elizabeth Bernal Cate, '16, MA '17, intern 2015, staffer 2017–2020, now a law clerk: Looking back as a young intern and a young staffer, there was always just almost like a star quality. Whenever she walked in the room, she just kind of epitomized everything that a woman in politics and a leader should be—just very intelligent, very hardworking, but also very friendly, very graceful. Just an all-around great person.

Each of the alumni can point to an issue on which Feinstein was particularly effective during their time in her office.

Patel: This was the spring when the Abu Ghraib [prison abuse] stuff came out. I think this one really shook her to her core as a person who was an Intelligence Committee person from day one and a supporter of law enforcement throughout her prior career. She considered her life's most important work that 2014 torture memo. I remember being there for the genesis of that.

Juliana Yanez, '09, intern 2007, now an attorney: The big issue that I recall being foremost in importance to her at the time was waterboarding. Then, as you know, she became one of those holding the CIA accountable for coercive interrogation tactics. I think she was extremely instrumental. She went on to become the chair of the Intelligence Committee, bringing to light some of the things that happened.

Michael Madderra, '11, intern 2010, now an attorney: If something really caught your attention, you could bring it up the flagpole. I was looking into debt figures at the time of the Greek financial crisis. I basically was allowed to put together a presentation for the senator and some of the senator's staff. It was definitely an exciting moment for a college junior.

Alarcon: I did a lot of immigration [work]. I remember very vividly how she reacted to the reports of children in cages. [It] was a very visceral reaction. That's the reason why she led some caucuswide bills to abolish the practice of family separation.

Bryan Benitez, '24, intern 2023, current senior: She was always passionate about environmental issues as they related to California. That was a big thing because she would always have to find the middle ground between economic necessity of the state and environmental protections.

In an increasingly contentious environment, Feinstein built relationships and strove to get things done.

Patel: She worked a lot across the aisle. She was very friendly with Jon Kyl, who was the chairperson on [the] Victims' Rights Amendment, which was something she was really pushing hard on, [for] survivors of rape, abuse, violent crime, having the right to be heard.

Alarcon: One of the things she pushed for maybe more than other senators was to have a partner in something—one possible Republican partner—because that would

FROM TOP: MICHAEL MADDERRA; ALEJANDRO CATALA SICILIA; LATHAM & WATKINS; KATHLEEN NGUYEN; BARAK SHRAMA

help make a bill pass. I think just because of her seniority and her real depth on these issues, even the Republicans listened. They knew that she demanded that respect by her aura as well as her achievements.

Cate: She epitomized what it means to serve our country. She was really tough and really sharp but always willing to work with anyone for a better future.

In the end, alums remember Feinstein as someone who valued individuals.

Solina Kwan, '92, intern 1992, now a quantitative economist: She was so human that she would talk about being a wife or a mom and a grandmother—she would take the time to ask questions, to listen, and to connect. When she talked about her success, it was not about an election she won. It was about the people she impacted and the difference that she made, one person at a time.

Benitez: You see the emphasis she placed on making sure her constituents were taken care of, in whatever capacity that meant. That expedited passport—even if it's not the most glamorous, she always made sure to emphasize that that was really important.

Alarcon: One thing that she taught me is the idea that public service is about making a difference in individuals' lives, even when you represent millions of people. I remember one immigrant who was in a wheelchair. She would have died because Guatemala could not provide her the sort of medical care [she needed]. Senator Feinstein brought her as quickly as she could to the judiciary committee, to essentially corner another senator and be like, "Hey, please meet this person. Don't you think she's great? Listen to her story. Don't you think we should do something to make sure she's allowed to stay in the country?" The idea that she was willing to get that face time was really, really powerful and something that I don't think a lot of senators do often. It shows how much she cared. ■

SOLINA KWAN

CHRISTINE FOSTER *is a writer in Connecticut. Email her at stanford.magazine@stanford.edu.*

JOURNEYS

Nice to Beat You

Goodbye, West Coast rivalries. Hello, whole new ball game.

BY IVAN MAISEL

STANFORD UNIVERSITY is today, as it always has been, 20 miles or so from the Pacific coast and about 3,000 from the Atlantic. But the intercollegiate world, at least as refracted through Cardinal-colored glass, has become a lot smaller.

On September 1, after weeks of negotiation and politicking, Stanford accepted a hard-won invitation to join the Atlantic Coast Conference, effective fall 2024. Joining the Cardinal on this transcontinental trek will be its nearest and dearest archrival. The University of California-Berkeley is the alma mater of Roy "Wrong Way" Riegels, infamous for running most of the length of the field toward the incorrect end zone in the 1929 Rose Bowl.

Nearly a century later, the Bears and the Cardinal are headed much farther in the wrong direction but for all the right reasons. In early August, the Pacific-12 Conference imploded, with five schools announcing fall 2024 departures for conferences east of the Rockies, bringing the total number of defectors to eight. Stanford Athletics needed a home.

So much of the attraction of collegiate athletics relies on the emotion generated by rivalry and nostalgia. In more than a century of competition, the Pac-12 has been the home of powerhouses in football (USC), men's basketball (UCLA), track and field (Oregon), and pretty much everything else (the Farm). Its collapse means that Stanford must consign its annual competitions up and down the West Coast to the history books. This is a gut punch to the Cardinal faithful.

"We wish we could [have found] a way to keep the Pac-12 solvent. When that didn't happen, we feel fortunate to have landed in the ACC," says athletics director Bernard Muir.

Moving to the ACC keeps the Cardinal in a Power Four conference, which provides the high level of competition that the university and its student-athletes seek to maintain. But the cost will be significant in dollars, time, and tradition. Travel costs will skyrocket, and the ACC's newest schools, as a condition of membership, agreed to forgo tens of millions of dollars in conference television income over the next nine years. Meanwhile, in most sports, the Cardinal's decades-long West Coast rivalries no longer will be renewed annually.

"We tried to do our part to keep the over-100-year tradition continuing," Muir says. "We weren't able to accomplish that. Now we are going on to the next chapter."

The next chapter has been a national power in men's basketball, men's and women's lacrosse, and field hockey. Stanford's new home will feature 10 public and eight private institutions. Nine of them, including Stanford and Cal, are members of the Association of American Universities, the country's leading research institutions. "If you look at the composition of the schools, intellectually, academically, and athletically, we're a very good fit," says Megan Olomu, '23, a track athlete from Dallas and co-chair of the Student-Athlete Advisory Committee (SAAC).

The move of Stanford, Cal, and Southern Methodist University to the ACC is the latest paroxysm of realignment in intercollegiate athletics, all in the pursuit of television revenue, which the Pac-12 failed to generate in

CHRISTOPH HITZ

sufficient amounts to keep its members together. Chalk it up to bad decisions—a conference-owned Pac-12 Network that never flourished—and bad timing. Most of the aforementioned TV revenue comes from football, and the league's teams fell into a competitive slump as the major networks chased ratings with increased fervor and funds. As the Pac-12 struggled to attract viewers, in 2022 Fox bankrolled the heist of the Los Angeles schools into the Big Ten beginning in 2024. Last summer, Colorado announced it would leave for the Big 12, and once the Pac-12 unveiled the offer of a television contract from Apple that relied on streaming and subscription revenue, five of the remaining nine schools bolted, leaving behind Stanford, Cal, Oregon State, and Washington State.

Four teams do not a conference make. In football, Muir says, a scheduling consultant explained that Stanford would have to start out playing the other three schools home-and-home every season, as in basketball. "As much as people love Big Game," he says, "I don't think they're ready for two Big Games in one season."

Independence, i.e., belonging to no conference at all, is also logistically untenable. Imagine attempting to schedule 36 sports when nearly every other school has to play a full slate of conference games. There's a reason that Notre Dame, proudly an independent for more than a century, joined the ACC in all but football a decade ago, and that BYU, independent for 12 seasons, leapt at the invitation to join the Big 12 this year.

Another impetus for the move, according to the announcement by university leaders, is the desire of Stanford athletes to continue playing top-level competition. That necessitates time-zone travel. Neither of the western alternatives, the Mountain West and West Coast, is among the top collegiate conferences.

"People come here for high-level

Cardinal Numbers

108
Age, in years, of the Pac-12 Conference

118
Age, in years, of the annual Stanford-USC football game

1
Stanford's rank among U.S. universities in producing Olympians (followed by UCLA, USC, and Cal)

26
Learfield Directors Cups, awarded 29 times to the most successful intercollegiate athletics program, won by Stanford

96%
Graduation rate of Stanford student-athletes

5 hours 35 minutes
Duration of air travel, San Francisco to Boston

1 hour 51 minutes
Duration of car travel, at rush hour, Stanford to Cal

competition. I think that's why everybody thinks Stanford is so great," Olomu says. "It would have been a really big hit to the program if we had entered some smaller league with weaker competition."

Adds SAAC co-chair Hunter Hollenbeck, '24, a diver from Okemos, Mich., "We recognized how unique Stanford is and, frankly, how we're willing to make sacrifices to keep that special nature that Stanford has had for so long."

There will be financial sacrifice as well. Stanford, Cal, and SMU became attractive to the ACC because of the structure of its TV contract with ESPN, which states that if the conference expands its membership, ESPN must provide a pro rata share annually for each new member—and there's nothing in the contract that says the ACC must give that money to the new member. "Had that clause not been in there, we probably would be scrambling, trying to figure out what the next steps are for us," Muir says.

To secure the deal, the three new members agreed to forgo some (Stanford and Cal) or all (SMU) of that new ACC television revenue for their first nine years in the league. Some of those funds will be apportioned among the existing members, with the remainder placed in a performance pool for ACC teams and doled out based upon competitive success.

"There's more money for them to go get," Muir says. "What is great is that we all have the opportunity to go get this, even the new schools. Let's see who earns it."

The good news is that Stanford will receive a full conference share of whatever the ACC earns from the College Football Playoff and the NCAA men's and women's basketball tournaments. The better news is that the university has assured the athletics department, historically expected to be self-sufficient, that it will cover the financial shortfall over the next decade. The increased cost is expected to be $25 million next year, which will come from the president's discretionary funds.

"I think the Board of Trustees understands what athletics brings to the overall fabric of the campus, so this commitment was well worth the effort to allow our student-athletes to continue to compete at a high level," Muir says.

"It's a really good sign for us to know we have that support," Olomu says. "I really do think it should be a symbiotic relationship. We can help each other out, you know?"

Competing at the varsity level requires considerable sacrifices in time and energy before the first book is opened, and there remain only 10 weeks in a quarter, seven days in a week, and 24 hours in a day. Next fall, the two-hour flights for Pac-12 competition will become six-hour flights in the ACC.

"They're going to have fly out now earlier in the week to make sure they have a practice day, a rest day to compensate for all the physical hassles from travel," Olomu says. "They're going to get back a lot later on those Sundays."

Not all athletes will traverse the continent. Five of the six sports that compete in the Mountain Pacific Sports Federation—artistic swimming, men's gymnastics, men's volleyball, and men's and women's water polo—will remain there (fencing will move to the ACC). Beach volleyball and men's and women's sailing will also remain west. And several sports already travel nationally.

"If you're a golfer, you play in tournaments all over the country and then you go to your conference tournament," Muir says. "If the conference tournament is in Atlanta, so be it. For 14 sports, there is a change. You're playing an ACC schedule. We're still trying to work through what that looks like, sport by sport."

The Stanford field hockey team has an inkling. It has been a member of the America East Conference for seven seasons. "You were always doing homework between games, on planes," says Emma Christus, '19, a former field hockey starter. "It was, 'Can I

The New Rivals

Boston College
Clemson
Cal
Duke
Florida State
Georgia Tech
Louisville
Miami
North Carolina
NC State
Notre Dame
Pitt
SMU
Syracuse
Virginia
Virginia Tech
Wake Forest

squeeze everything in?' since we're always on the road. The social implications of that—in season I was basically never around. I feel like we were MIA for the whole fall."

The 2023 team made four trips to the Eastern time zone. It helped to make two of them before classes began on September 26 (raise a glass to the quarter system). Next year, the travel will bring a better payoff: The ACC is the most competitive field hockey conference in the NCAA, with five national titles between 2015 and 2022.

But travel will add stress to a group of student-athletes who put great demands on themselves to succeed competitively and academically. The Stanford athletics department already employs four sports psychologists and has access to the counseling resources at Stanford Medicine. More help is on the way. "I would expect that would expand and [we will] have other clinicians available to us through this transition," Muir says.

Athletics department personnel spent the autumn discussing with the ACC office in Charlotte, N.C., how to make this marriage work. Can the fall sports front-load their travel into the weeks before classes begin at the end of September? (Hope so.) Is it possible to schedule two or three Stanford teams on the same ACC campuses simultaneously, to save airfare? (Probably not. The savings are not worth the cost in time of one team waiting on others to depart.) Does it make sense for the ACC to schedule big tournaments in Dallas, the home of SMU and a lot of sports facilities? (To be determined.)

"We have built into our budget projections more money for travel," Muir says. "We'll figure out how to deploy those resources—if they need an extra day, provide that extra day; whether there is greater use of charters; whether we are flying commercial—but let's make sure the kids are comfortable, especially for these longer flights."

So let us all learn the location of Clemson (easy: Exit I-85 in the northwest corner of South Carolina onto Highway 76 and follow the 12 miles of orange paw prints painted on the highway). Let us enjoy the delicacy of boiled peanuts at Doak Campbell Stadium at Florida State. Let us stroll down the Ohio River toward Louisville, Ky., where Cardinal is not a color but a bird.

The ACC has a history of geographic sleight of hand. Boston College is in Chestnut Hill, Mass., not Boston; the University of Miami is in Coral Gables, Fla., not Miami; and Wake Forest University is 107 miles from Wake Forest, N.C. So why not? Stanford and Cal will join the Atlantic Coast Conference.

Until September, the fact that Leland Stanford grew up near Albany, N.Y., didn't seem that important. Turns out he was about halfway between Syracuse and Boston College. ■

IVAN MAISEL, '81, *is an author and sportswriter who has covered college athletics for more than four decades. Email him at stanford.magazine@stanford.edu.*

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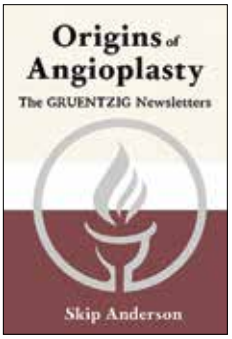


Origins of Angioplasty: The Gruentzig Newsletters

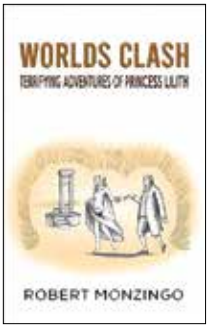
By Skip Anderson, MSEE '75

This book contains all 23 original newsletters sent out by Andreas Gruentzig, inventor of angioplasty, from his center at Emory University in Atlanta, 1983-92. The author, one of Gruentzig's trainees and a participant in these historic events, has provided insightful commentaries. Readers can witness the growth of a revolutionary new medical procedure from infancy to maturity. At: TheEditorialStudio@gmail.com.

Speaking To My Madness: How I Searched For Myself In Schizophrenia

By Roberta Payne, '67

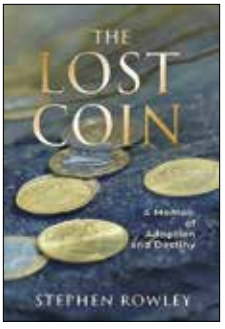
This personal account of the author's winning journey through alcoholism, schizophrenia, and cancer weaves its way across a Colorado ranch, Stanford, Harvard, Italy, two mental institutions, Iowa, and New Orleans. Dr. Payne describes teaching three languages, friendship with a renowned psychiatrist, and reunion after 45 years with her beloved sister in Buenos Aires.



Worlds Clash: Terrifying Adventures of Princess Lilith

By Robert Monzingo, '60

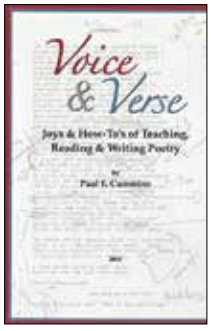
This work is a tour of world history conducted by Lilith, the alluringly beautiful Princess of Darkness. Her mission is to persuade intelligent men to follow self-destructive paths, resulting in as much pain, suffering and death as possible. Since a little reason would avoid such tragedies, it is tempting to think that lessons in rational thought would result in a better world. Such thinking is too optimistic unless accompanied by a liberal dose of humor.



The Lost Coin: A Memoir of Adoption and Destiny

By Stephen Rowley, PhD '84, EdS '85

Stephen Rowley takes us on his lifelong journey for meaning and identity, searching for his birth parents, becoming a college radical, losing a power struggle with a Silicon Valley school board, adopting a son of his own, and experiencing transcendence in a dream, compliments of the Dalai Lama. These trials ultimately led him to reinvent himself as a psychotherapist and writer in later life. Yet, it is through a Zen kōan that he comes closer to true self-understanding.



Voice & Verse: Joys and How To's of Teaching, Reading & Writing Poetry

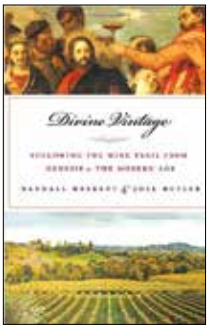
By Paul F. Cummins, '59

I want to communicate the joys and discoveries I've made in almost 60 years of teaching poetry, from kindergarten to graduate school. I hope that this book will open a few doors, suggest new projects and adventure-filled lessons, and perhaps introduce some of the strange and inspiring poets I have met along the way.

Under A Sky Of Smoke

By Juliette Fleming AvRuskin, Edited by Anne Fleming BS/MS '92

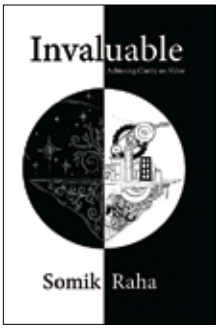
Leoni lived a normal life in Austria until the Nazi takeover. After the Anschluss, things get worse until Leoni and her family find themselves on a train to Auschwitz-Birkenau. In the camp, she will encounter hatred and suffering like never before. She meets other prisoners: a girl named Aaliyah and an old school friend. The three of them look after each other as best they can. But there is still no promise that any of them will ever make it out of Auschwitz.



Divine Vintage: Following The Wine Trail From Genesis to The Modern Age

By Randall Heskett & Joel Butler, '72

The word "Divine" in this study has a double meaning; "divine" and "of or pertaining to the vine." The book reveals how biblical writings about wine frame both the sacred and important roles of wine in Western Culture, echoing the advance of wine from the Fertile Crescent with important societal consequences. For signed hardcopy, contact joelbutlermw@gmail.com



Invaluable: Achieving Clarity on Value

By Somik Raha, PhD '10

Invaluable fills an important gap in decision-making: achieving clarity on our values and integrating them into our decisions consciously. *Invaluable* offers a holistic framework to aid its discovery, testing and succinct communication. This homage to values is brought out through stories, philosophy, poetry, citizen science and embedded podcasts.

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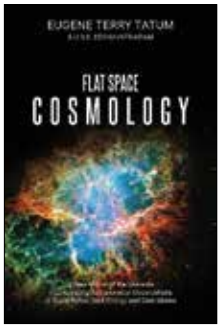
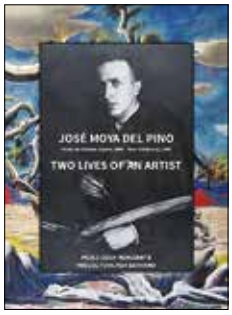


Flat Space Cosmology: A New Model of the Universe

By Eugene Terry Tatum, '78, and U.V.S. Seshavatharam

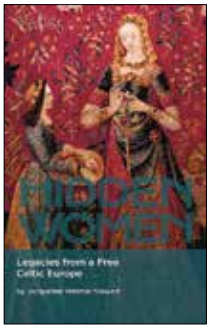
This compilation, based entirely upon recent peer-reviewed scientific journal publications, encapsulates how the Flat Space Cosmology model has become the primary competitor to the inflationary standard model of cosmology. New ideas concerning black holes, dark energy and dark matter are presented and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



José Moya del Pino: Two Lives of an Artist

By Paola Coda-Nunziante, '85

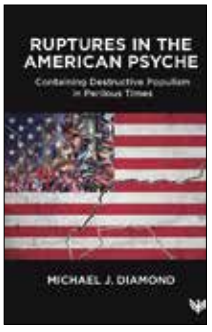
A richly illustrated in-depth look at the fascinating life of a Spanish artist, sent by the King of Spain on a cultural mission to the Americas but then abandoned by his homeland, who reinvented himself in the U.S. as a muralist, painter, portraitist and teacher. Moya's most seen work is in Coit Tower in San Francisco; he also painted murals for the Golden Gate International Exposition of 1939 and the WPA.



Hidden Women: Legacies from a Free Celtic Europe

By Jacqueline Widmar Stewart, SLS '76

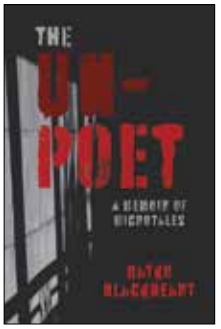
The 5th Hidden Women book takes readers on an historic journey on ancient migration routes and through pre-Christian archaeological sites in Celtic lands spanning Europe—back to times and places when women were honored as equals, scientists, warriors and gateways to future generations. The story of the author's own family also involves dictator takeovers, but shines like a beacon for beleaguered women as well. Lost freedom and equality can be regained.



Ruptures In The American Psyche: Containing Destructive Populism in Perilous Times

By Michael J. Diamond, Ph.D '71

An esteemed psychoanalyst brings a social-historical, psychoanalytic, and cultural lens to recognize unconscious group dynamics and fantasies giving rise to truth-denying populism, authoritarianism and malignant cultism manifest in current political discourse. Methods are proposed that help contain the nation's destructive, extremist forces while managing democracy's inherent tensions.



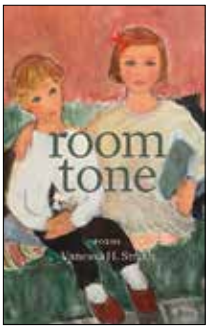
The Un-Poet A Memoir of Microtales

By Ratko Blackheart, '68

Narrative, lined pieces with a beginning, a middle, and an end. **Unique in the history of writing.**

"There is nothing more difficult to take in hand, more perilous to conduct, or more uncertain in its outcome than to take the lead in introducing a new order of things." —Nicolo Machiavelli

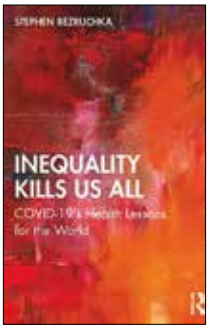
50 percent profits benefit Doctors Without Borders



Room Tone

By Vanessa H. Smith, '80

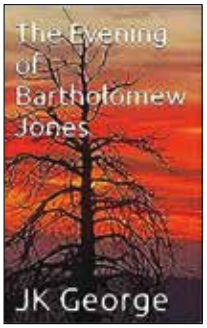
Room Tone is about people, place, circumstance, chaos, beginnings and mortality—framed through the lens of portraits—a look, an atmosphere, California, days and months of the year, trees in nature, and the names for all those things. Smith is a filmmaker and painter and chose the title, *Room Tone*, because it is just that—the way a room—its sound and silence, percolates, becomes, and interests us all.
Pre-order October 2023 and released February 2024, Finishing Line Press. VanessaHSmithPictures.com



Inequality Kills Us All: COVID-19's Health Lessons for the World

By Stephen Bezruchka, MD '73

"Stephen Bezruchka, one of the subject's wisest scholars, documents how COVID-19 is merely a sped-up version of decades of festering health inequality. This superb book will convince anyone other than ideologues that something is brutally wrong with American health." —Robert Sapolsky neuroscientist, Stanford.



The Evening of Bartholomew Jones

By JK George, '65

After his wife's death, Bart Jones, 68 years old, witty, and self-reliant, has lost all ambition and his adult children try to become his parents. With a therapist, Bart reviews his strange legal past and struggles with the defensive humor and lack of empathy that long protected him from his clients' hurt and pain. Gradually he regains his spirit and finds romance, but must decide, at great cost, whether to save his rival in love.

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Killer Filler and the Festoon Pandemic

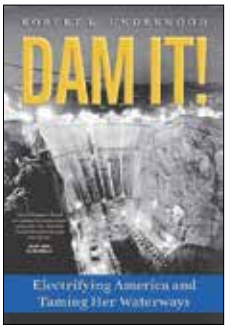
By Lopa Y. Gupta, M.D., Post-Doctoral Fellowship '91, Faculty '94-'95

Dr. Lopa Gupta is a trailblazer and world leader in eyelid and festoon surgery. This book was written to raise awareness of the direct link between hyaluronic acid fillers and festoons. It is a summation of how she created her game-changing festoon surgery, MIDFACE, a minimally invasive, no-scalpel festoon procedure that uses laser and radio wave technology to get rid of festoons with excellent long-term results.

S.P.E.A.R. Solves the World

By Ellie Bloomfield MD, '68

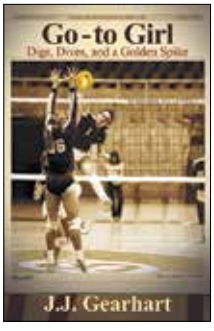
Geopolitical insights abound in this witty action adventure novel, with dangerous foreign missions and quirky, endearing characters. It all starts when Damien Burns reveals his powers of "supersuasion." Then brilliant President Elaine Wabikwe Reynolds rolls out high tech alternatives to war, plausible enough to solve the world's real problems, if the right people read this book.



Dam It!: Electrifying America and Taming Her Waterways

By Robert L. Underwood, BS '65, MS '66, PhD '68

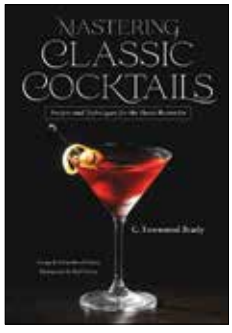
Edison's light bulb radically altered life. In the ensuing race to electrify America, dams powered our country and became symbols of Americans' resourcefulness and mastery over nature. What a story! Eccentric inventors, financial wheeling and dealing, political intrigue, amazing engineering feats, inspiring personal stories … it's all here. Clean and renewable, hydropower remains vital today.



Go-to Girl: Digs, Dives, and a Golden Spike

By J.J. Gearhart, '83

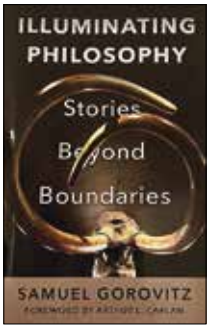
Go-to Girl contrasts the magical culture of 1980's Stanford University with the rigors of inter-collegiate volleyball and pre-medical studies. J.J. Gearhart hopes Title IX funds will support her dreams to play Olympic volleyball and to cure her mother's mysterious auto-immune illness. She learns that college life is not about finding herself but about creating a self, full of purpose and joy.



Mastering Classic Cocktails: Recipes and Techniques for the Home Bartender

By C. Townsend Brady, '66, photography by Rod Searcey '84

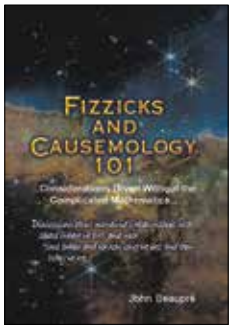
The perfect choice for those who want to expand their cocktail repertoire. And a great gift for that host who always offers you a Gin & Tonic when what you really want is a Boulevardier.
*BEST GIFT BOOK, Independent Book Pub Assn
*STARRED REVIEW, Kirkus Book Reviews



Illuminating Philosophy: Stories Beyond Boundaries

By Samuel Gorovitz, Ph.D. '63

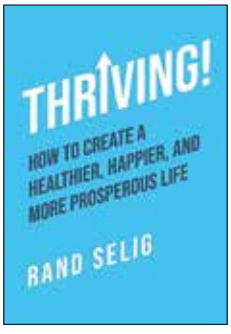
Talks with stars and strangers, ICU's to national interviews. Searing, funny, shocking, inspiring stories, many regarding Stanford, helping us see as others and rethink our views. Revealing links among all domains, springs of creativity, nature of good judgment, paths to justice—illuminating human character, hard choices, social structures, the power of imagination, accounting for what can't be counted, and bogus boundaries distorting thinking.



Fizzicks and Causemology 101

By John Beaupré, '63

There is so much to be scientifically explained when asking: Where are we (Homo sapiens) really? When are we and for how long will we remain? And then, why are we? What is our purpose? Modern physics and cosmology are full of complicated math and exotic data and theories that are difficult to understand. Mr. Beaupré attempts to explain some of the where, when, why and what in language that is easy to understand.



Thriving! How To Create A Healthier, Happier, And More Prosperous Life

By Rand Selig, MBA '76

The goal of this captivating book is to help adults in all stages of life sort through life's complexities and discover their path to thriving every day. As a reader, you will recognize the power you have to make choices and pick up ideas about how to change your life, leading to enhanced vitality, a sense of purpose and meaning, and to even reach your own potential. www.randselig.com

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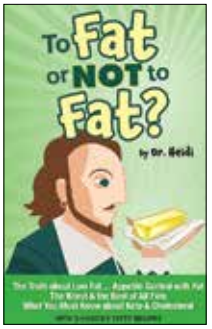
To the Brink

By Matt Charles Stadnik, '14

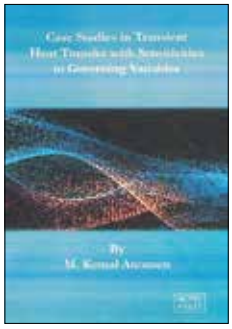
Modern military thriller meets hard science fiction in this harrowing narrative where nations face off across the planet and up in space. Climate change provokes domestic strife, while international conflict between the global powers takes the world to the brink of all-out nuclear warfare.



To Fat or Not to Fat?

By Heidi Dulay, MS '82
Nutrition Consultant. Doctor of Education, Harvard

TRUTH about fat in food. Lard to prevent heart attacks? Butter to melt hunger and sugar cravings? Pasture-raised animal fat in place of (toxic) vegetable oils? Fatty burgers for anxiety? DOES IT WORK? Carb cravings gone; 150 lbs lost; heartburn, hot flashes history; appetite controlled; anxiety down; meds reduced. So say Dr Heidi's happy clients. At amazon.com (See also To Beef or Not to Beef?)



Case Studies in Transient Heat Transfer with Sensitivities to Governing Variables

By M. Kemal Atesmen, MSME '66

Every heat transfer problem has to satisfy the first law of thermodynamics. This book deals with fascinating and challenging part of heat transfer called the unsteady state or transient heat transfer. There are twenty-four different problems solved from our everyday lives. Examples: How electromagnetic waves coming from our Sun affect our Earth daily and seasonally?

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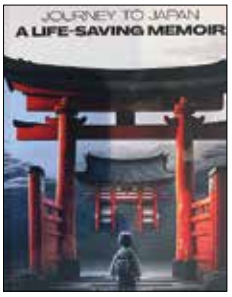
Exploring Existence

By Gary Hansen, SAA Life Membership

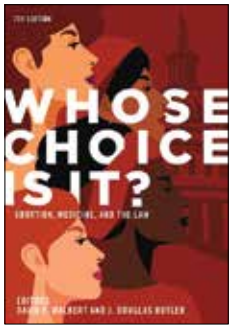
"This is what philosophers have tried to do since time immemorial but has recently been abandoned by most as a hopeless task. In this context, this treatise is delightfully quixotic. I commend the author for a truly heroic effort. There is something here for anyone pondering the Big Questions." —John Vilett, Berkeley, CA. USA itsinmybook.com



Journey to Japan: A Life-Saving Memoir

By Sarah Deschamps, MA '89

This is a true story. It takes you on a rollercoaster ride of adventure, belonging, saving our daughter's life, and ultimately being triumphant in a foreign land. Find it on Amazon.com, or through the website: Sarahdeschamps.com



Whose Choice Is It?: Abortion, Medicine, And The Law

Editors David F. Walbert, '67 and J. Douglas Butler

The one source of information for all aspects of reproductive health and abortion in the U.S. and worldwide. It addresses ancient, present and future abortion and contraceptive practices, as well as legal, medical, political and moral issues. U.S. Senator Ed Markey says "*Whose Choice Is It?* provides the medical, legal, moral and historical information needed to guide us to the future." No other source provides the comprehensive information that this book does.

The Artistic Eye

By Michael F Marmor, MD (Stanford Professor) and James G Ravin, MD

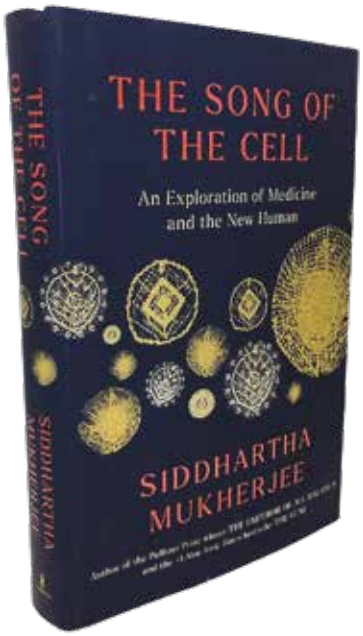
Art is a cultural enterprise, but the eye is not a camera and images are processed in ways that affect perception. Understanding the eye brings insight into how art is created and viewed. This book highlights masterpieces (with 250 color illustrations) while deepening the reader's appreciation of art and giving new meaning to the term *artistic eye*.

SONG OF THE SCIENTIST

Physician Siddhartha Mukherjee's books cross the boundaries of cells, disciplines, and nations to help us all make sense of life. BY TRACIE WHITE

Begin at the beginning, inside a cell. That's where the mystery starts. Float around in the protoplasm for a while, inspecting the nucleus, looking for broken cogs, rusty machinery. Squeeze through the membrane pores and inspect the surface proteins there. Cells tell stories if you look closely enough. If you know how to read them.

"Cells speak to me, especially blood cells," says Siddhartha Mukherjee, '93, the Pulitzer Prize–winning physician-author. He's seated at a microscope in his Columbia University oncology lab on a snowy winter morning, peering inside white blood cells—immune cells designed to fight off infections—in a smear of bone marrow on a glass slide. Cancer can hijack these cells, destroying the body's ability to fight infection. He describes these mornings in his latest book, *The Song of the Cell*.



"On Monday, I arrive much earlier than my patients, when the morning light is still aslant across the black slate of the lab benches. I close the shutters and peer through the microscope at blood smears," he writes. "The slides are like previews of books, or movie trailers. The cells will begin to reveal the stories of the patients even before I see them in person."

Mukherjee, both a hematologist and an oncologist, transforms the stories hidden within our cells into massive, bestselling books that explore what it means to be human in a world where cells define all life. His three best-known titles journey first through the history of cancer, then genes, and finally cells, building metaphors and asking weighty questions about the foundations of science and where it is headed. Then he takes what he learns from his explorations in writing and returns to the laboratory with new ideas for treating patients. Those explorations, in turn, feed his work with four biotech start-ups he co-founded—three in the United States and one in India—that are developing therapies for leukemias and other blood cancers.

"Sid thinks big and sees big," says Atul Gawande, '87, himself the author of four best-selling books on medicine, a surgeon, and a friend of Mukherjee's. "He's able to see the entire landscape of cancer, the gene, and then the cell, and then on and on. He's driven by understanding at the molecular level what our lives are like as an organism, and even at the societal level. That's how he makes sense of the world."

From the microscope room, Mukherjee walks down a hall, past the lab's work benches, into his office. The phone rings. It's his wife, the sculptor Sarah Sze, calling from across town,

Photography by Bill Wadman

where she's installing an exhibit at the Guggenheim Museum, to remind him to pick up one of their daughters after school—they have two, ages 13 and 18. (In 2016, *Vogue* magazine ran a photo of Mukherjee and Sze in her New York studio under the headline "Meet the Most Brilliant Couple in Town.") The pair were recruited together to Columbia in 2009, where Mukherjee is an assistant professor of medicine and Sze is a professor of visual arts.

Mukherjee apologizes for his messy office, but it's not messy, really, just a reflection of the many different directions his mind spins. Leaning back in his chair, he surveys the books and papers scattered across his desk, which is next to an overfilled bookshelf. History, medicine, science, literature—he quotes from across disciplines not only in his writing but also in his daily conversations. He has a particular fondness for the playwright Anton Chekhov, who, he likes to point out, was also a physician. "I read all the time," he says. He reads in bed, at the kitchen table, in his lab, on planes. That's how he writes, as well—whenever he gets a free moment. He nods toward what he calls "his famous red writing bed." It's a cot, now faded orange, covered with an old quilt.

Mukherjee's books, beginning with *The Emperor of All Maladies*, which tells a history of cancer and won the 2011 Pulitzer Prize for general nonfiction, are talked about in the scientific community "with some kind of awe," says Irving Weissman, a Stanford professor of pathology and of developmental biology who is renowned for his stem cell research. *The Gene*, Mukherjee's 2016 best-seller, charts the discovery of the basic unit of heredity, from Gregor Mendel's wrinkled peas to the genetic engineering tool CRISPR. And *The Song of the Cell*, published in 2022, is a 496-page crash course in cellular biology—one that helps readers understand the significance of medicine's cellular therapies and the promise they hold for treating anything, or maybe everything, that ails us.

What's special about Mukherjee, Weissman says, is that he thinks deeply about the world of science and medicine and can translate that to the public. "Being creative in two fields and having the desire to try to help people with your creativity—well, I think that encapsulates Sid."

LIFE'S WORK

Mukherjee was fascinated with cells early on. But then he was interested in so many things. Born in Delhi in 1970, he trained as a singer of Indian classical music, learned languages easily, and explored everything from science to poetry to art to philosophy. He remembers a biology teacher who talked about the big unanswered questions in the field, like how do your cells take on different functions, since they all contain the same DNA? How do they form an organism?

As an undergraduate at Stanford, he worked in the lab of Nobel laureate Paul Berg, famous for his recombinant DNA research that led to gene splicing and helped launch the biotech industry. He liked how Berg's career brokered the worlds inside and outside the lab. "Paul was one of the global leaders in what is now the field of the ethics of genetics," Mukherjee says. "I was very interested in ethics." After graduating, he moved to England to attend Oxford University on a Rhodes scholarship, where he lived the life of a scientist, immersed in the world of immune cells, T-cells, and cell surface proteins. His PhD in immunology provided some of the keys to unlocking future therapies. To truly understand medical science, though, he believed he needed to learn from patients as well, so he moved to Boston, where he enrolled in medical school at Harvard.

During an oncology fellowship at the Dana-Farber Cancer Institute in Boston, Mukherjee faced daily life-or-death decisions about patient treatments. That's when he started keeping a journal, trying to make sense of so much suffering. *The Emperor of All Maladies* draws from those experiences—"an epic story that he seems compelled to tell, the way a passionate young priest might attempt a biography of Satan," wrote Jonathan Weiner in a *New York Times* review of the book.

"[As] I emerged from the strange desolation of those two fellowship years, the questions about the larger story of cancer emerged with urgency," Mukherjee wrote in the book's prologue. "How old is cancer? What are the roots of our battle against this disease? Or, as patients often asked me: Where are we in the 'war' on cancer? How did we get here? Is there an end? Can this war even be won?" Mukherjee spent five years reading scientific papers and history books, and interviewing physicians, scientists, and patients. Among his chapters are the stories of Atossa, the Persian queen whose Greek slave cut off her cancerous breast, and the primitive radiation and chemotherapy treatments of the early 20th century.

"I was thinking, 'Who is going to read 600 pages on cancer?'" Sze recalls. "'It sounds like a real downer.'" She admits now that she couldn't have been more wrong.

The book begins on May 21, 2004, just after Mukherjee's patient Carla Reed was admitted to the cancer ward on the 14th floor of Massachusetts General Hospital. The 30-year-old kindergarten teacher and mother of three from Ipswich, Mass., was diagnosed as having acute lymphoblastic leukemia (ALL). ALL grows out of the bone marrow, where it produces white blood cells that don't look normal under a microscope. Reed's were broken cells, unable to fight off infections. And they would multiply quickly, crowding out the healthy blood-forming cells needed for life. "Leukemia is cancer of the white blood cells—cancer in one of its most explosive, violent incarnations," Mukherjee wrote. "Its pace, its acuity, its breathtaking, inexorable arc of growth forces rapid, often drastic decisions; it is terrifying to experience, terrifying to observe, and terrifying to treat."

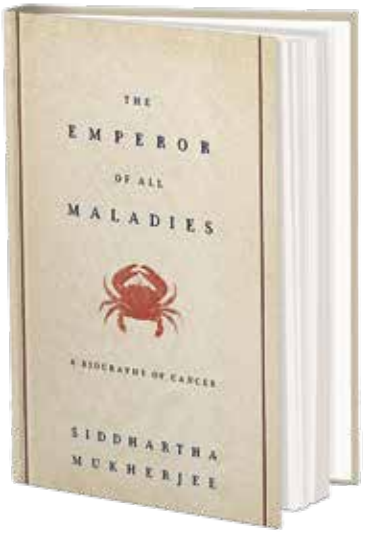
'Sid thinks big and sees big. He's able to see the entire landscape of cancer, the gene, and then the cell, and then on and on.'

That first day in the hospital, Mukherjee told Reed her chances of survival were 30 percent and that chemotherapy would begin immediately. He would infuse toxic chemicals into her body repeatedly over the coming months. She slept poorly, her hair fell

out, she couldn't eat. Treatment after treatment, lying on a table, she told Mukherjee she often wondered whether she would ever wake up.

"Walking across the hospital in the morning to draw yet another bone marrow biopsy, with the wintry light crosshatching the rooms, I felt a certain dread descend on me," Mukherjee wrote, "a heaviness that bordered on sympathy but never quite achieved it." It wasn't the first time he'd realized the need to create space for himself, separate from his patients. In 2002, he'd attended an exhibition at the Museum of Fine Arts, Boston, where he met the artist. They fell in love, and after their wedding in 2004, Sze remembers her new husband being overcome by worry for his patients. But she also remembers how, even then, he continued to think on a grand scale. Late one night, she joined him for dinner at the hospital cafeteria.

"Everyone was in scrubs, looking worn out," Sze remembers. "We were having something like mac and cheese, I don't know, it was all looking very grim. He told me: 'There are two things I want to do. I either want to write a book about cancer or start a hospital in India.' I thought, 'Great, sweetheart, there goes your beeper.'"

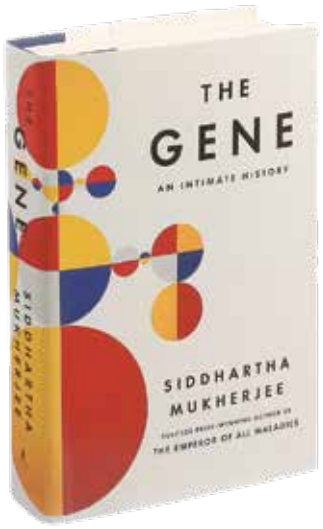


Reed would fully recover, rejoining the life of her family. For Mukherjee, watching such transformations were among the most "sublime moments of my clinical life." He set out to recapture that feeling again and again.

FAMILY STORIES

The Gene elevated public discussion about genetic research, just as *The Emperor* had done for cancer. "First the idea of the gene had to be invented. Then the physical entity, present in each cell of our bodies, in every

living thing, had to be discovered," wrote James Gleick in a *New York Times* review. "The story of this invention and this discovery has been told, piecemeal, in different ways, but never before with the scope and grandeur that Siddhartha Mukherjee brings to his new history."



In the story, Mukherjee writes of family distress and mental illness as he explores the intersections of biological inheritance and historical trauma, of genetics versus the environment. "Madness has been among the Mukherjees for generations," he writes. In Delhi, he and his older sister grew up in a home that included their paternal grandmother and an uncle, her adult son, who had schizophrenia. Another of his uncles had bipolar disorder. Mental illness was seen as a family affliction. In the book, he recalls his grandmother, Priyabala, with reverence. "She weathered the buffets of heredity with something more than resilience: a grace that we, as her descendants, can only hope to emulate." He dedicated *The Gene* to his grandmother and to Carrie Buck, a young woman forcibly sterilized in 1927 under Virginia's eugenics law.

A few years later, Mukherjee turned his writerly attentions from the gene to the cell. It happened during the COVID-19 pandemic, when he was immersed in broken cells and surrounded by sickness, the ambulance sirens a constant wail outside his New York office window. He was desperate for a world of cohesion and symmetry, so he wrote about the need for balance within cells. He probed how human health depends on cellular connection, much like it does on human connection. And that brought to mind how much he had missed his family during his first year at Stanford, a story he tells in *The Song of the Cell*.

Through exchanging letters with his dad, he learned more about the migration journey he'd taken. Sibeswar, known as Shibu, had fled his home in East Bengal (now Bangladesh) with his mother and four brothers just before the partition of India in 1947. The upheaval was one of the most violent in world history. "Partition was the big story [that] loomed on our lives for a long time," Mukherjee says. "It was such a traumatic event." Through the letters, Mukherjee began to understand how hard his father had worked to build a new sense of belonging in Delhi. In the winter of Mukherjee's frosh year, Shibu sent him a plane ticket home to India, knowing his son would need comforting. "My father was there, as he would be year after year, when I returned, with a white shawl draped around himself, and an extra one to wrap around me," Mukherjee writes. "Coming back. Belonging."

'My primary interest is human therapy. I like to make medicines. It's the most exciting thing you could ever do.'

The Song of the Cell follows the history of scientific inquiry that eventually discovered life was built out of the microscopic units we call cells. Mukherjee's narration keeps readers swimming through protoplasm, the living part of a cell, with its nucleus, cytoplasm, and organelles. Mukherjee discusses the ethical debates that have surrounded novel technologies such as in vitro fertilization, stem cell transplants, and gene cloning. And he explores the concerns surrounding modern-day advances in genetic manipulation, urging caution in the new world of CRISPR, a powerful gene-editing technique that he and other scientists use in their labs but that also could be used in the creation of designer babies.

"He's very artful in telling stories that make you feel the humanity behind the science stories," says Tyler Johnson, a Stanford clinical assistant professor of medicine in oncology and a science writer. "He's able to demystify the inner workings of DNA and cellular metabolism in a way that is faithful to the science but comprehensible to people who are not scientists."

MAKING THERAPIES

Mukherjee, dressed in a blue plaid suit and a black collarless shirt, with a gold ring on each hand, gets up out of his chair and strides through his office door, headed down the hall to the heart of his lab, the benchwork rooms with beakers and centrifuges and jeans-clad scientists growing cancer cells and creating therapies.

Mukherjee's lab studies the biology of blood development in premalignant and malignant diseases such as myelodysplasia, which often advances to acute myelogenous leukemia (AML), a cancer characterized by an overproduction of immature blood cells that take over the bone marrow and pour into the bloodstream. About half a dozen projects in the lab aim to fight these diseases by using new gene-editing approaches such as base editing, which helps scientists more precisely target small, cancer-linked mutations. Most of the projects are focused on improving treatments for AML, the deadliest form of leukemia.

Abdullah Mahmood Ali, an assistant professor of medical sciences at Columbia who collaborates with Mukherjee, updates him on the progress of an experimental therapy to treat AML—a variation on bone marrow transplants that protects healthy cells from the toxicity of treatments that can kill not only cancerous cells but also healthy ones. Using CRISPR, the scientists took blood stem cells from a bone marrow donor and tweaked the cell surface proteins, which communicate with other cells, to make them "invisible" to targeted immunotherapy. Think of it as an invisibility cloak, Ali explains. The therapy is undergoing human testing at Vor Bio in Boston, a biotech start-up that Mukherjee founded.

"My primary interest is human therapy," Mukherjee says. "I like to make medicines. It's the most exciting thing you could ever do." When he's in the clinic, Mukherjee treats the "sickest of the sick"—patients who have undergone chemotherapy and bone marrow transplants and still relapsed, says Azra Raza, a physician-scientist who researches blood

cancers at Columbia. He then brings his motivation to cure them into the lab. "Someone like Sid comes around once in a generation," Raza says. "He has an incredible mass of information in his head. He thinks quantum leaps ahead of other people."

RETURNING HOME

It's late afternoon, and the light in Mukherjee's office begins to fade. But Mukherjee is still thinking and talking and making plans. He talks about the art scene in New York City, visiting museums on weekends. He admits, a bit sheepishly, that he also has artistic talents. In fact, some of his obsessive doodling of molecules appears in his books. He grins. Sure, he's obsessive about his work, but he loves his life outside the office. He and Sze throw elaborate dinner parties in their Manhattan apartment, for which he cooks. Sze describes how, when her husband likes a dish at a restaurant, he dissects it, smelling it, tasting it, talking to the chef if he can't figure out how it was made—and then re-creates it at home. "It's a good metaphor for how he looks at life," Sze says. "He's always kind of sniffing out good ideas. Always on the prowl for things to be cracked open and solved."

The family travels every year to New Delhi. Mukherjee's father and grandmother have passed, but his mother still lives in the home where he grew up. He also makes regular trips to Bengaluru, where his start-up Immuneel Therapeutics treats leukemia patients who have relapsed with chimeric antigen receptor T-cell (CAR-T) therapy, an approach that uses the body's own immune system to ambush cancer cells. CAR-T therapies have been available in the United States for about a decade, treating certain blood cancers—though not AML—at a cost of around $400,000 per patient, but weren't available in India. The first clinical trial at Immuneel plans to include up to 24 pediatric and adult patients.

"This is the first child that we treated," Mukherjee says. He's looking at a photo of a 9-year-old boy in India attached to an IV bag. "This is me opening his therapy line," Mukherjee says proudly. "He was very, very sick, close to dying." One year out from his CAR-T therapy, his cancer was in remission.

Again, Mukherjee's cell phone starts ringing. When he hangs up, he's strangely still. The constantly moving fingers, combing through his hair, twiddling pens, touching items on his desk, riffling papers, doodling, suddenly cease moving.

"I just heard about a friend who is dying," he says. (Author and historian Patrick French died the next day in London.) Slouching low in his chair, Mukherjee discards his shoes, and rests his stockinged feet on the quilt-covered writing bed. He's a great compartmentalizer, he says. That's how he does so many things. But sometimes worlds collide, like this moment in this lab where he makes medicines and learns about a friend he can't save. He looks at his feet resting on the cot, then touches the quilt, lovingly.

"It's hand-blocked," he says. "It's special, from India, a work of art." ■

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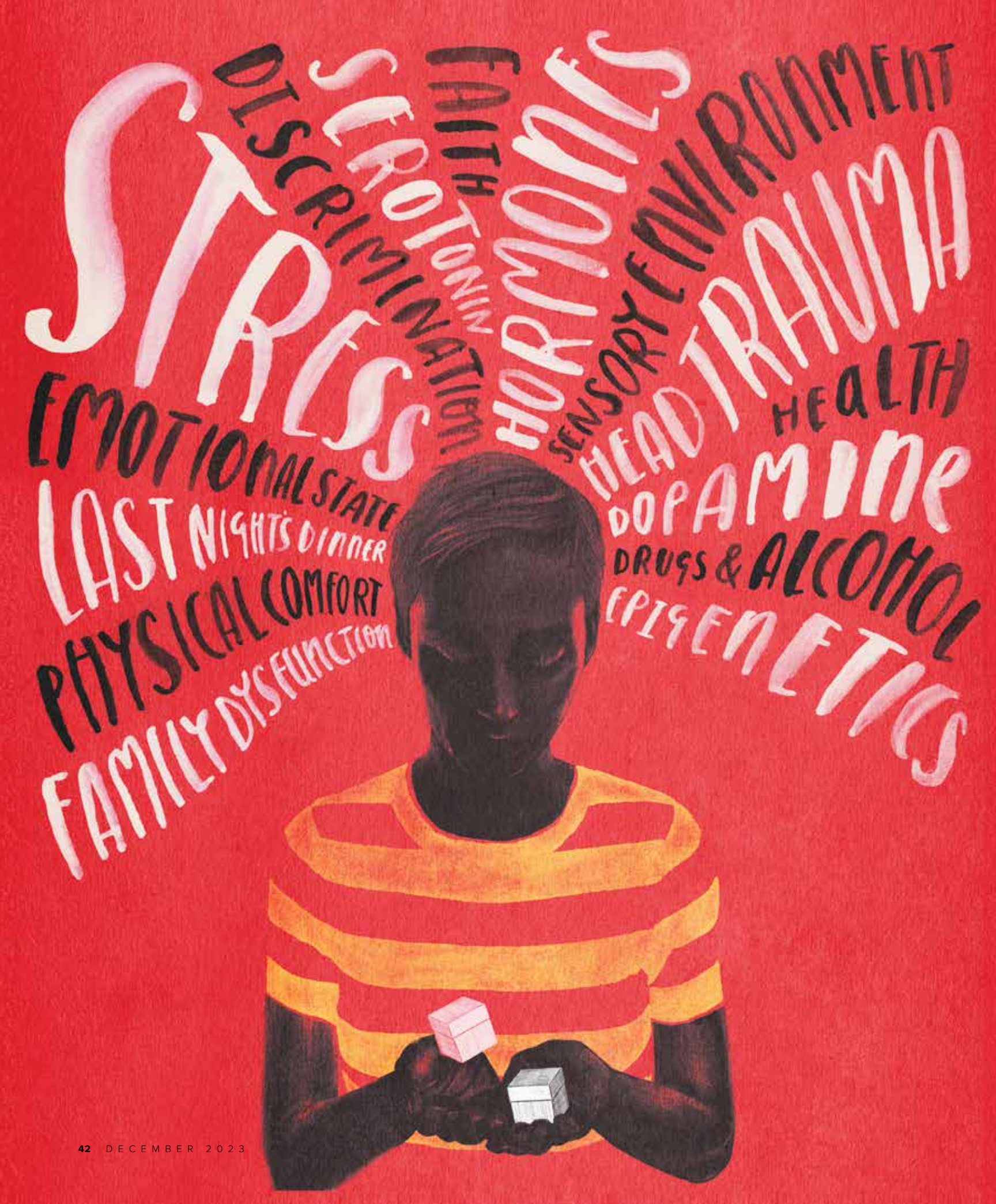

STRESS
DISCRIMINATION
SEROTONIN
FAITH
HORMONES
SENSORY ENVIRONMENT
DEAD TRAUMA
HEALTH
EMOTIONAL STATE
LAST NIGHT'S DINNER
DOPAMINE
PHYSICAL COMFORT
DRUGS & ALCOHOL
FAMILY DYSFUNCTION
EPIGENETICS

AS IF YOU HAD A CHOICE

From your DNA to what you ate this morning, a lifetime of factors is determining your every move. None of those elements, says Robert Sapolsky, is free will.

BY SAM SCOTT

OVER THE PAST DECADE, Robert Sapolsky—a Stanford professor of biology, of neurology, and of neurosurgery, as well as a bestselling author of popular science books—has added another line to his CV: witness in murder trials. The hours waiting outside courtrooms are long, the pay beside the point. But the role allows Sapolsky to act in service of a core belief, one rooted in an epiphany he had as a 13-year-old and reinforced by everything he has learned since: that the defendants in the trials in which he testifies—"a world of people who were lost before pre-K"—can't be fairly judged by the court's normal standards of premeditation and intent. A life of trauma, he explains to the jury, has invariably left one part of the brain atrophied and another part enlarged. To ask, for example, why such a person, acting initially in self-defense, would continue hitting their aggressor after knocking him unconscious is to ignore neurological reality. "Saying 'Why didn't he pick the right choice?' is absurd," he says. "Because there was no choice at that moment."

Sapolsky, a soft-voiced man with a face framed by long ringlets and a bushy beard, now mostly gray, doesn't obviously radiate star power. He has the gentle mien of a guy you might expect to see sporting Tevas and a tote bag at the farmers market. But he is an uncommonly magnetic speaker, a master at drawing an audience in with Socratic questions, unexpected connections, and sardonic quips, all dotted with data and cinched with seamless segues. On Stanford's official YouTube channel, home to some 4,000 videos, low-fi recordings of Sapolsky lectures account for half of the 10 most viewed videos, including one, "Introduction to Human Behavioral Biology," that has been watched nearly 17 million times since 2011 despite A camera that can't decide whether to zoom in or out. Only Steve Jobs's 2005 Commencement address has more views. "I watched this video when I was in high school and it was the reason why I decided to take AP biology," a recent comment reads. "Today I'm almost done with medical school. Dr. Sapolsky, I owe you more than you know!"

"He annoys the hell out of me because he's the best lecturer at the university," says law professor Hank Greely, '74, director of the Center for Law and the Biosciences and of the Program in Neuroscience and Society, who has known Sapolsky since the mid-aughts. "He makes me and many others jealous."

Sapolsky's rhetorical powers, however, reliably meet their limits in court. Jurors nod in understanding as he explains why damaged brains make horrible decisions (a substantial percentage of people incarcerated for violent crime have a history of concussive head trauma to the prefrontal cortex). Then the jurors generally proceed as if he'd never been there. In 11 of the 13 cases in which he has testified, the defendant has been found guilty of all charges, including

ILLUSTRATION BY PETER STRAIN

premeditated murder. Which is all to say Sapolsky is not expecting a chorus of hosannas when people get hold of the broader thesis at the center of his new book, *Determined: A Science of Life Without Free Will*. Sapolsky isn't simply advancing familiar liberal tendencies to show leniency to the less fortunate with a dash of neuroscience to push things along. He is advocating for something even he concedes sounds crazy: that none of us should face retribution for our actions—or be unduly celebrated for our heroics—because we are no more responsible for what we do than a defendant with a damaged prefrontal cortex. Yes, Sapolsky would agree, we can do what we want, but we can't choose what it is we want to do. We are not the ultimate captains of our own ships. We have no free will. "We are nothing more or less than the cumulative biological and environmental luck, over which we had no control, that has brought us to any moment," he writes. "There's not a single crack of daylight to shoehorn in free will."

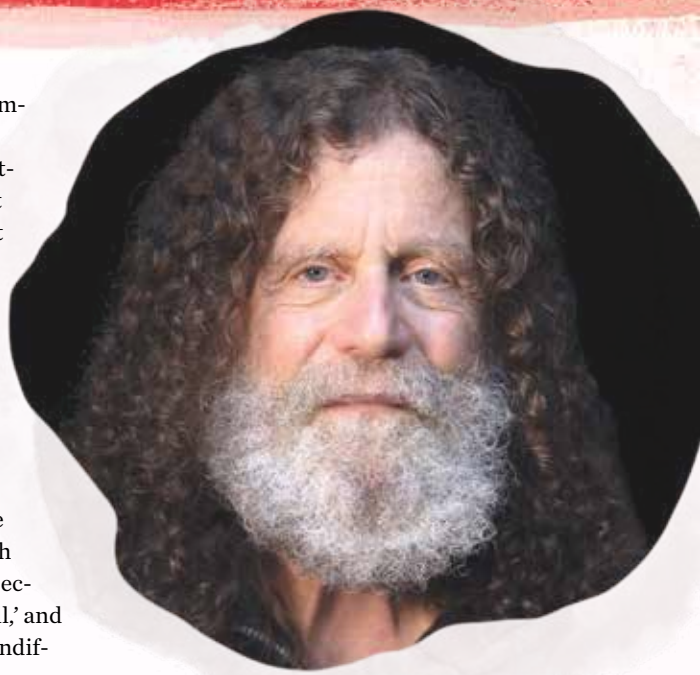
That may sound like a load of poppycock to those of us out in the real world flexing our freedom on the daily. The sense of our own ability to author our lives can seem too evident to doubt. But questions about the existence of free will can render newcomers to the debate a little like Wile E. Coyote after he runs off a cliff: It's all good until you look down. The idea of free will has challenged thinkers of all stripes for millennia, including the fourth-century theologian St. Augustine, who worked to reconcile an omniscient God—who surely knows the future—with human freedom. If God knows the future, how can we do anything but manifest that knowledge? With the dawn of the Enlightenment and the rise of Newtonian physics, another dilemma took center stage. In a universe governed by the laws of science, where every action follows from action, where cause begets cause, how can our choices be anything but another domino in an endless line of necessary consequences? If we are just matter, mustn't we behave as such? Where's the free will in that?

For Sapolsky, the answer has seemed obvious since he was 13. He'd grown up in an Orthodox Jewish home, complete with two refrigerators and two kitchen sinks to keep kosher. But his own religious beliefs came crashing down after he read biblical commentary on a passage in Leviticus that restricts a disabled man from the priesthood. Sapolsky wore leg braces for part of his childhood, and this stricture sent him searching for explanation from a rabbi, who answered by analogy: Much like you wouldn't sacrifice a lamb with a blemish on its lip, you wouldn't present God with a priest likewise blemished. The answer struck Sapolsky as unfathomably unfair, precipitating a crisis in his young mind. "One night at 2 o'clock I suddenly woke up and said, 'Oh, I get it. There's no such thing as God,' and then I paused a few seconds, and I said, 'and there's no free will,' and I paused, and I said, 'and this is a vast, indifferent, empty universe,'" he says. "And suddenly everything fell into place."

Born of religious angst, this realization began a lifelong interest. As undergrads at Harvard, he and a friend ran a lecture series in their dorm called "The Ethics of Free Will and Determinism," where they'd entice academic stars such as Noam Chomsky and B.F. Skinner to speak, then spend hours arguing about what they had heard. Some of the notes he consulted while writing his book date back to this era. "That's how long all of this stuff has been percolating," he says.

In *Determined*, Sapolsky takes readers on a tour of their own biology, arguing that what appears to be a decision in any particular instant is shaped not just by events in the moment but also by what was happening seconds, hours, days, weeks, years, and even millennia before. His examination of free will begins as many do, with the experiments of Benjamin Libet, a neurophysiologist at UCSF. In the early '80s, Libet measured the brain signals of participants who performed a simple task—pushing a button or flexing a wrist—noting on a timer the moment that they made the decision to do so. Their brain signals showed that the people had committed to the act a small but significant amount of time before they *believed* they had decided to act.

Those findings prompted headlines announcing the end of free will, but Sapolsky acknowledges that the results don't say much about deeper, more involved decision-making. Free will survives Libet, he says, as it does any single experiment. But Libet's work is just a small part of the case Sapolsky builds in his book. Our decisions, big and small, are boxed in by the hormones in our blood and the receptors in our brains at the moment of an action, our emotional state in the hours before, our sleep the night before, the development of our prefrontal cortex in adolescence, our stress and fear levels as children, the fetal environment we developed in, the genes we were born with, and the culture we descend from. Communities that trace back to pastoralists, such as shepherds, vulnerable to having their livelihoods rustled away, often have "cultures of honor," in which relatively minor violations are more likely to meet violent responses than in communities whose ancestors didn't face the same dread. "Put all the scientific results together from all the relevant scientific disciplines, and there's no room for free will," he writes.



CHRISTOPHER MICHEL

Sapolsky is a curious messenger for the notion that free will is an illusion, if only because his early life reads like a Choose Your Own Adventure book. Born in 1957 and raised in long-ago, pre-hip Brooklyn, he developed an early fascination with primates. By 9 or so, while his classmates were lamenting the hapless Mets, he was wearing his parents down with constant visits to the mountain gorilla exhibit at the American Museum of Natural History in Manhattan. By 12, he was writing fan letters to some of the world's leading primatologists. By high school, he'd cajoled administrators into

letting him to do a self-paced study of Swahili. Nearly as soon as he graduated from Harvard, he was living in the Serengeti alongside a troop of baboons, a species with sufficient free time and social insecurity to spend their days literally making each other sick with misery. Those beginnings launched him as a leading field and lab researcher in the health effects of stress, and later, as a pioneer in gene therapy, which in turn gave grist to a critically acclaimed writing career. His 2017 book, *Behave: The Biology of Humans at Our Best and Worst*, was dubbed "science book of the year" by a *New York Times* critic. That's a lot of carpe diem for someone who doesn't believe he has any free will.

But Sapolsky isn't saying we can't do what we want; he's saying we can't choose what it is we want. There was no end of forces pushing him down his outwardly unlikely path to the Serengeti—not least a baked-in propensity to do things to the nth degree. But while he wanted to study Swahili and to live with baboons, he didn't *choose* to want those things. His desires arose unbidden from an unknown chain of causes. If it were possible for a do-over of the moments when he decided both—with everything down to the atom in the same place—there could only be one outcome: the same one. We don't stand outside that chain of causality, nudging which way the dominoes fall. It's not a new idea. "A man can do what he wills, but he cannot will what he wills" is a notion ascribed to the 19th-century German philosopher Arthur Schopenhauer. "You can't successfully wish for what you're going to wish for," Sapolsky says. "You can't think of what you're going to think of next, you can't will yourself to have more willpower, and you can't make yourself feel things [that] you don't feel."

To be sure, "hard determinists" like Sapolsky are a distinct minority. John Martin Fischer, '75, MA '75, a philosophy professor at UC Riverside and leading contributor to the philosophy of free will and moral responsibility, believes Sapolsky doesn't adequately consider the possibility that determinism is consistent with freedom and responsibility. "Assuming determinism," he says, Sapolsky "leaps too quickly to the conclusion that we lack free will." In fact, a 2020 survey of more than 1,700 English-speaking philosophers found that just 11 percent believed in no free will. The majority were, like Fischer, compatibilists, who believe that a causally determined universe can be compatible with free will. It's an eternal debate that can shift on what you mean by free will, according to Alfred Mele, a professor of philosophy at Florida State University who for four years headed the Big Questions in Free Will project, a $4.4 million initiative funded by the John Templeton Foundation, a philanthropic organization that supports scholarship in the sciences, theology, and philosophy. In one "modest" version, Mele says, free will is "having the ability to make—and act on the basis of—rational, informed decisions when you're not being subject to undue force." Under that definition, Mele absolutely believes in free will.

It's more ambiguous if you think free will requires what Mele calls deep openness—that, all things the same, a decision could have gone another way; we could have turned left instead of right or traveled the road not taken. But even with this more "ambitious" version of free will, the jury is still out, he says. "Scientists most definitely have not proved that free will—even ambitious free will—is an illusion," Mele wrote in his 2014 book *Free: Why Science Hasn't Disproved Free Will*. While he agrees there are tremendous influences on our decisions, "the question really is, do all those influences add up to something that gives us no real choice at all?" he says. "I still haven't seen an argument, a science-based argument, or any argument, that shows that's the case—that the influences are so great we have no elbow room at all."

Sapolsky, on the other hand, sees not the slightest wiggle room for even a modest version of free will. Our decisions are the consequences of a "seamless string of influences" extending back through time. "Why did that moment just occur?" he asks. 'Because of what came before it"—a cycle repeating forever into the past. If we "freely" choose to do something but there was never a possibility of choosing something else, we're not free. And if we're not free, Sapolsky says, there is no more reason to castigate a killer than to punish a broken machine. Killers

should receive medical and psychological treatment to address the larger issues that caused the problem; if someone presents a danger, they should be kept safely away from others, he says, offering the model of a medical quarantine or a product recall, where the focus is on avoiding future harm. "Keep dangerous people from damaging others," he writes, "but do so as straightforwardly and nonjudgmentally as keeping a car with faulty brakes off the road." If you accept that behavior is the inevitable result of biology and environment, rather than of something as mysterious as morality, you can focus on the serious work to change those concrete causes without the distraction of retribution.

It's a perspective that attracts plenty of skepticism. Stephen Morse, a professor of law and of psychology and law in psychiatry at the University of Pennsylvania, has, over the years, criticized those making similar arguments as having "brain overclaim syndrome," whereby scientists and those in their sway make connections too confidently between neurology and questions of the law. "Brains do not commit crimes; people commit crimes," he writes. And as a practical matter, Sapolsky's ideas are unlikely to be implemented. Even someone like Greely—who regards Sapolsky's opinions as occupying "a thoroughly respectable position in the debate"—doubts the fullness of his vision could ever go anywhere. "He's rowing up Niagara Falls," he says. "Retributivism is, I think, deeply ingrained in American culture."

Sapolsky knows he's asking for the incredible. It's a mindset even he fails to fulfill far more often than he achieves. But he thinks it's the only intellectually honest response. He was once asked to work on the case of a white supremacist who, a month after attempting to burn down a mosque, invaded a synagogue and shot four people, killing one. Sapolsky had family members who died in Nazi camps during World War II; as a kid, he held a measuring tape for hours as his architect father worked to rebuild their synagogue, heavily damaged by arson; when his wife put on a production of *Cabaret*, he struggled to hand out costumes emblazoned with swastikas; from childhood, he has fantasized about capturing Hitler before the dictator could "escape" by suicide. The request to help an antisemitic killer, in other words, chilled him to the core. "Like thousands of ancestors were turning over in their graves," he says, "and thousands of moral reflexes were running over in my stomach. But, you know, if you really believe this, you gotta do that." To his great relief, the defendant plea-bargained before trial. "I'm a flaming hypocrite," Sapolsky says. "No one says this is going to be easy."

But we have moved beyond blame before, Sapolsky writes in *Determined*. Centuries ago, epileptic seizures could get you burned as a witch. With the Enlightenment, the punishment became less severe, but the perception of fault persisted. Seizures were

viewed as the result of masturbation, unseemly sex, or reading too many books and not spending sufficient time in nature. But in 1808, a person who fatally injured another while having a seizure was, for the first time, acquitted. Society had developed the sense that it wasn't him—it was his illness. Far more recently, psychiatrists have changed thinking about disorders such as schizophrenia, which, as recently as the 1960s, was blamed on "schizophrenogenic" mothering. Today, in an era in which science has charted the genetic aspects of the disorder, that kind of thinking would make you a laughingstock. One day, our successors may think the same of how we've treated killers and kidnappers.

There is another question, never mind the people we refer to as criminals. How would the rest of us fare in a world with no presumption of free will, where praise and punishment wither away? Perhaps not so well. A frequently cited 2008 paper by psychologists Kathleen Vohs and Jonathan Schooler found that participants who read deterministic texts before participating in a game were more likely to cheat. A study by another research team, at Florida State University, gave participants the opportunity to "punish" someone who had rebuffed them earlier by giving them spicy salsa on a tortilla chip that they had to eat. Those who'd read arguments against free will slapped on nearly double the amount of salsa as those who had read something endorsing free will. And this with someone with a low tolerance for spicy food, or so the participants had been told. True or not, free will might be an illusion worth having. "What will our society do if it finds itself without the concept of free will?" Vohs and another researcher later wrote. "It may well reinvent it."

Sapolsky, though, sees another side to moving past free will: that people who are born into and spend their lives in poverty, or who were otherwise dealt a difficult hand in life, will be relieved of the stigma of their position. He doesn't expect *Determined* to sweep aside belief in free will. The pull toward attribution and judgment is too great for any one book to undo. He'll be satisfied with challenging readers to seriously reconsider their sense that they deserve their good fortune any more than others deserve their bad luck. It's a fight he'll continue, though likely no longer in the courtroom. The last time he was due to testify, the prosecutor objected on grounds that Sapolsky didn't believe in free will. The judge dismissed him. "My sneaking suspicion," Sapolsky says, "is I have done my last trial." ■

OPINE ON FREE WILL
ALU.MS/FREEWILL

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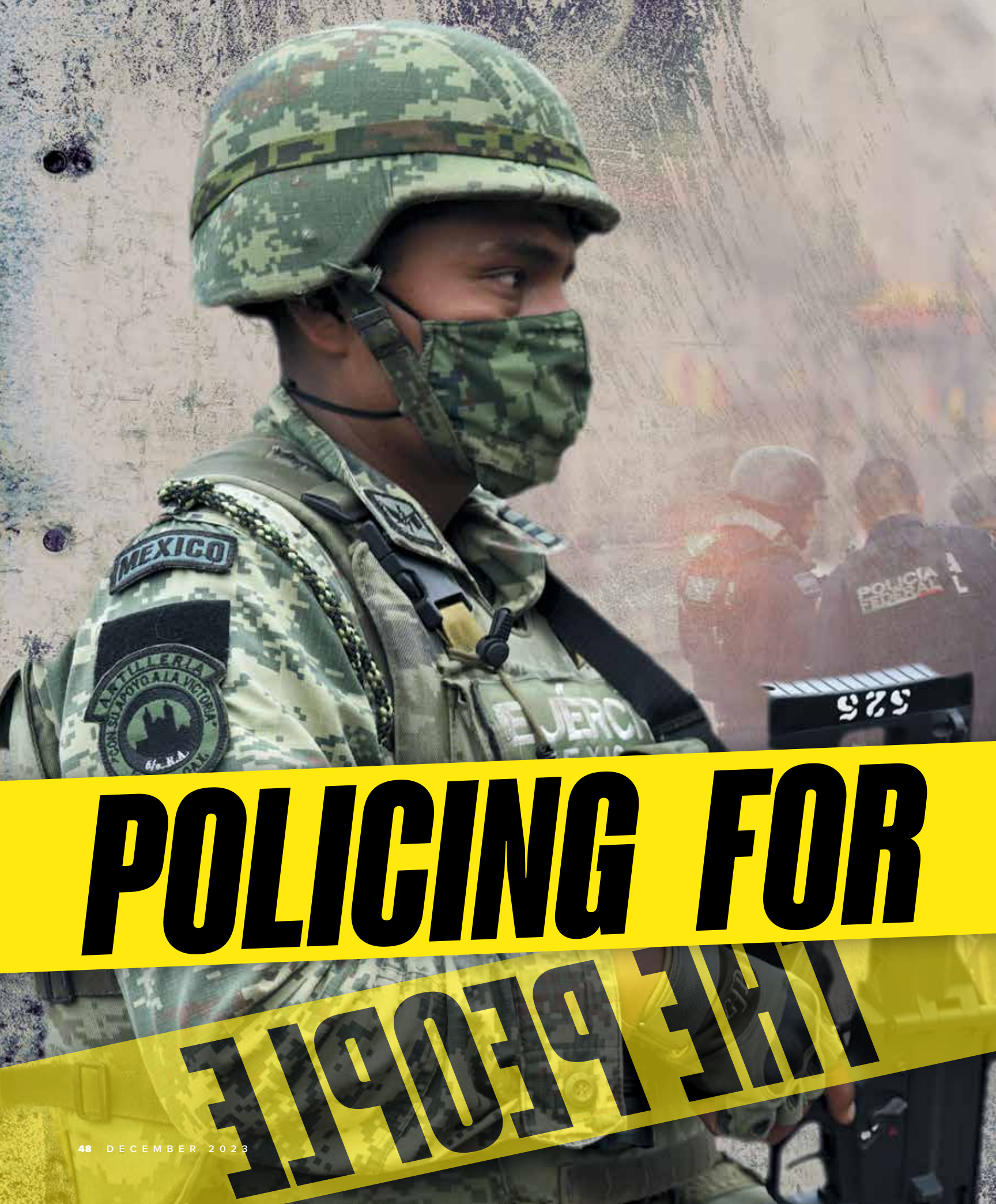


POLICING FOR THE PEOPLE

Beatriz Magaloni can tell you which criminal justice reforms make communities safer in Mexico and beyond.

THE PEOPLE

BY KEEGAN HAMILTON

PHOTOS: JUAN JOSÉ ESTRADA SERAFÍN (2)

On a Friday evening in 1996, three friends went out dancing in Mexico City: a 30-year-old mother of five named Claudia Rodriguez, one

of her girlfriends, and the married man her friend was seeing, Juan Cabrera. After drinking heavily, Cabrera propositioned Rodriguez. A married woman herself, she wasn't interested. The two women decided to leave—but Cabrera wouldn't take no for an answer.

He trailed Rodriguez and her friend as they headed home, calling them names while also trying to talk them both into joining him at a hotel room. As they approached a metro station, Cabrera took hold of Rodriguez by the arms and shoved her against a railing, ripping her blouse. She recalled him saying: "No woman has ever gotten away from me."

Rodriguez had been robbed a few weeks earlier, and she'd started carrying a .22-caliber pistol to protect herself. As Cabrera tried to force himself on her, she pulled the gun from her purse and fired a single bullet, which struck him in the abdomen. Cabrera was hospitalized, but he later died from his injuries—leading to Rodriguez's arrest, a murder charge, and the possibility of a 15-year prison sentence.

Beatriz Magaloni, now a political science professor at Stanford, had studied law in Mexico before moving into academia. When her sister, a prominent human rights lawyer in Mexico, called to ask whether she'd work on the case pro bono, she didn't hesitate. "Nobody was defending her," she recalls. The sisters began working to establish that Rodriguez had acted in self-defense and should be freed. Through analyzing the trajectory of the bullet and gathering other forensic evidence, they would show that Cabrera was in the act of assaulting Rodriguez when he was shot. "We spent almost an entire year working on it relentlessly," Magaloni says.

Back in the late '90s, Mexico still relied on *averiguación previa*, or preliminary inquiry, where the version of events put forward by police and prosecutors would nearly always be rubber-stamped by the court. The judge who decided that Rodriguez should stand trial ruled that she could have done more to avoid Cabrera's attack. Because she was sober and he was drunk, the judge wrote, the killing was avoidable: "It's logical that the deceased wasn't able to defend himself and that she took advantage of him."

Thanks in part to the sisters' efforts, however, the murder charge against Rodriguez was ultimately dropped. While the case was pending trial—Rodriguez was in custody for a year—Magaloni would visit her client and "observe a little bit of life in prison." She noticed that most of the incarcerated people were poor and couldn't afford a lawyer or a bribe to avoid petty charges. "It was really heartbreaking," she says. "That close contact with the criminal justice system and how it works really inspired a lot of my work later on."

In recent years, Magaloni has studied how efforts to reform Mexico's judicial system—to improve fairness and ensure due process—produced mixed results. Even though the courts were overhauled in the 2010s under legislation passed in 2008, she found that the use of torture by authorities to elicit false confessions remained prevalent, and those most often victimized were impoverished defendants accused of theft and other petty crimes. Meanwhile, impunity rates for lawbreakers remained sky-high, with just 1.1 percent of crimes reported, investigated, and resolved, according to Mexico's national statistics agency.

Over the course of her career, Magaloni's field work has taken her from Mexican communities wracked by cartel violence to the favelas of Rio de Janeiro. The rigor of her scholarship—which connects policing, poverty, and the rule of law—has made her into one of the world's foremost criminologists. Now, with her work receiving global recognition, she's striving to translate academic research into positive changes in communities across Latin America. It's a drive that traces back to her time defending Rodriguez.

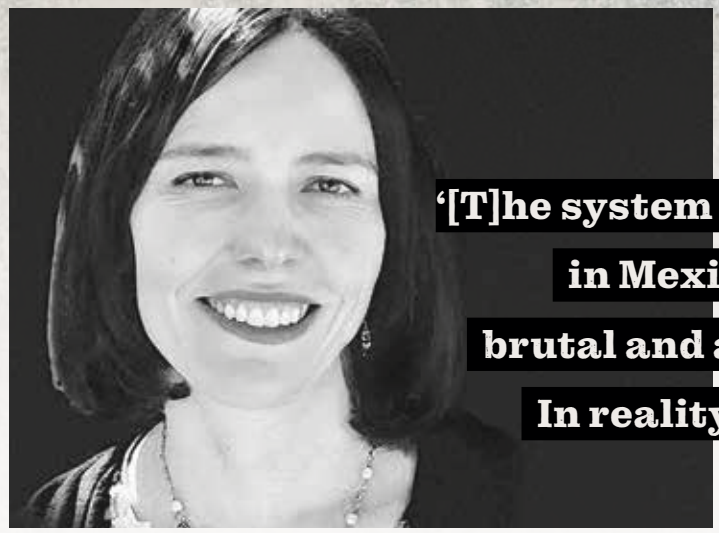
"I was preoccupied and determined to try to make a difference, especially as it relates to criminal justice, because the system as it has operated in Mexico has been incredibly brutal and authoritarian," she says. "In reality, it has punished poor people."

Magaloni was raised in Mexico City, the daughter of an engineer father and a stay-at-home mother. She and her sister attended law school together at the prestigious Instituto Tecnológico Autónomo de México, commonly known as ITAM. Their pro bono work soon opened their eyes to the way criminal proceedings worked in Mexico. As recently as the late '90s, court reporters used manual typewriters, and Magaloni recalls how the cacophonous clanking made it difficult to follow the proceedings. Worse, she says, was the way that the defendants were treated: held behind bars in the courtroom, sometimes in a cell covered by sheets of plastic, as was the case for Rodriguez.

"I remember in one of the hearings, we were asking questions and [Rodriguez] couldn't hear," Magaloni says. "So, my sister took her pen and started to, you know, just to perforate the plastic with holes so that she could hear."

While the case finished up, Magaloni worked on her PhD in political science at Duke University, winning a Gabriel A. Almond Award in 1998 for best dissertation in comparative politics. She focused on Mexico's Institutional Revolutionary Party (or PRI, for its initials in Spanish), which held uninterrupted power in the country for 71 years, from 1929 to 2000. The system was known as "the perfect dictatorship" because it provided a veneer of democracy while keeping the same autocrats in power, similar to modern regimes in Venezuela, Russia, and a handful of other countries that maintain a grip while still allowing citizens to go to the polls.

Mexico is a federation of states, just like its neighbor to the north, but it differs from the U.S. system in several ways: Its presidential elections are held every six years, and leaders are limited to a single term. Under the PRI, the outgoing president and party leadership would select their preferred successor and ensure the outcome of the election, a tradition dubbed *El Dedazo*, or putting down a heavy finger to tip the scales. While other political



‘[T]he system as it has operated in Mexico has been incredibly brutal and authoritarian. In reality, it has punished poor people.’

parties could win governorships and seats in Congress, the PRI dominated.

Magaloni’s dissertation dissected the political strategy of the PRI machine. She looked at how challenger parties strategized to undermine the regime, and how such upstarts were subdued through counter-messaging, including shifting the political agenda away from key issues “even at the risk of abandoning the center,” she wrote.

Didi Kuo, a fellow at Stanford’s Freeman Spogli Institute for International Studies (FSI) and one of Magaloni’s colleagues, says Magaloni’s work on authoritarianism broke new ground. “It really pioneered the idea that in single-party democracies, those leaders have different strategies for retaining power,” Kuo says. “Even though you might be nominally democratic, you can wield power in ways that preclude democratic fairness.” Like other colleagues, Kuo has been struck by Magaloni’s combination of fearlessness in fieldwork and rigorousness when crunching data. “She is not afraid to go to some of the most dangerous and understudied places to understand the truth,” Kuo says. “That may sound cheesy, but she’s an incredibly sophisticated methodologist.”

Magaloni joined the faculty at UCLA as an adjunct professor in 2000, the same year that Mexico underwent a seismic political shift. That summer, the PRI lost the presidency, ushering in a new era of democracy. Magaloni was present at the National Electoral Institute as the results rolled in and Vicente Fox from the National Action Party was pronounced the country’s next leader.

Like many other Mexicans, Magaloni was optimistic that the transition away from “the perfect dictatorship” would put the nation on a path toward a better future, rooting out corruption and improving security. “There was a lot of hope on my part at the beginning,” she says. “And then things turned really sour.” Her research has shown that torture by state security forces remains pervasive, and one of the primary tactics used to combat the cartels—targeting their leadership—has in some ways backfired, causing the country’s murder rate to spike.

After Magaloni joined Stanford in 2001 as an assistant professor, she set about studying how the end of PRI rule in Mexico had disrupted long-standing alliances between corrupt officials and organized crime groups. The cartels had previously carved up territory and smuggling routes into “plazas,” a system that allowed a few of them to maintain control. “It was easier, in a way, to contain violence—the government used to negotiate with the cartels for the division of the territories,” Magaloni says. “There was this sort of implicit pact that the government had with the cartels, but then, with the drug war, that broke apart.”

Magaloni’s research documented the spillover effects of cartel warfare on the local population, notably an increase in extortion. To do it, she and her team used a creative survey strategy. As Magaloni explained on Stanford Engineering’s *The Future of Everything* podcast, rather than directly asking participants whether they had been squeezed for money by the cartel—a question they would be reluctant to answer—researchers presented them with options: “‘Among these several things, how many have you done?’”

“Then you have a control and a treatment group, and so you can compare the difference between one and the other,” she said. “And we found that there had been a systematic increase in extortion by members of the cartel against the population, and that this extortion concentrated more in places where you have competition among cartels. So, basically, what happened is that there was a fragmentation of criminal organizations in Mexico, and that, as a result, the population started to suffer.”

That fragmentation accelerated in 2006 following another election, when Felipe Calderón became president of Mexico. One of his first moves in office was to dispatch 6,500 federal troops to fight the cartels in his home state of Michoacán. By 2011, the military campaign had expanded nationwide, with more than 45,000 soldiers deployed. As Magaloni’s paper notes, Calderón prioritized the elimination of cartel kingpins. In March 2009, the Mexican government released a list of the 37 most wanted drug lords. Less than two years later, 20 had been killed or captured—twice the number taken out during the two previous administrations.

Using national data, Magaloni and her colleagues compiled municipal-level crime statistics for the decade preceding Calderón’s presidency. To find the big picture in the sea of data, they couldn’t simply compare one municipality where a cartel boss was killed to one with no such incident, since such events are relatively rare and there are far too many variables. Instead, the researchers used

ALBERTO DÍAZ-CAYEROS

‘Without local police who work alongside communities, I don’t see how we can ever solve the problem of violence.’

“synthetic control” methods, constructing from the data “control” municipalities with homicide trends similar to those that had been “treated” by having a kingpin or lieutenants killed or captured. Their analysis accounted for factors such as the types of security forces involved and ripple effects in adjacent areas. The “beheading of criminal organizations,” they found, paradoxically led to rising homicide rates, exacerbating violence that spilled over into neighboring municipalities.

“The arrest causes members of the criminal organization to start fighting each other for control of the leadership,” Magaloni explains. “And also it encourages other cartels to try to invade territory when they see that their rival has been weakened. There is a vacuum that these criminal organizations leave and that the state is not able to fill, because police in Mexico are infamously inefficient and they are also very corrupt.”

In 2010, Magaloni founded the Poverty, Violence, and Governance Lab within the Center on Democracy, Development and the Rule of Law at FSI, and her research has looked at the long-term effects of the Calderón era.

While Calderón deployed the military to combat the cartels, in 2008 Mexico’s Congress approved constitutional reforms to change the court system and address some of the issues Magaloni encountered in Rodriguez’s case. Like other Latin American nations based on the Spanish colonialist legal system, Mexico still used an inquisitorial process, in which the court is actively involved in investigating the facts of a case; it’s not a neutral arbiter of justice. The 2008 reforms introduced oral trials, gave judges more independence and oversight, and eliminated the in-court caging of defendants.

But as Magaloni’s work has shown, the reforms had unintended consequences. While there are now mechanisms for due process, she found evidence to show an increase in the use of torture by authorities and a continued reliance on the fabrication of evidence. In a paper published in *American Political Science Review* in 2020, Magaloni and postdoctoral researcher Luis Rodriguez wrote that their findings paint “a grim picture of the survival of authoritarian policing practices in democracies.” Police and prosecutors, Magaloni says, “never invested in developing the capacity to investigate.”

After analyzing surveys of nearly 60,000 prisoners compiled by the national statistics agency, Magaloni and her colleagues grouped prisoners’ experiences with torture into two buckets. One was brute force, which included incidents of beatings with punches, kicks, or a blunt instrument. The other was institutionalized torture, which “requires a dedicated space, equipment, or training to be carried out effectively.” The latter category included incidents in which someone was crushed with a heavy object, electrocuted, waterboarded, burned, or stabbed. The results showed what she calls “a massive increase” in institutionalized police brutality during the Calderón era, especially in cases where the military was involved in arrests. Jurisdictions that embraced due process reforms, however, saw torture by authorities decline in the long run.

Earl Anthony Wayne, MA ’73, the U.S. ambassador to Mexico from 2011 to 2015, recalls how the 2008 reforms “got terribly bogged down in rivalries between the states and the federal government and opposition from the judges and the prosecutors and others who were already in the system and didn’t want to change it.” Under Calderón, Wayne says, Mexico and the United States cooperated broadly on security issues, including through an agreement known as the Merida Initiative, which provided $3.3 billion in security aid from 2008 to 2021. A portion of that money has gone toward reforming Mexico’s justice system. “We tried to train people on how to collect evidence, how to present that evidence in a way that could be used in court,” Wayne says. “We trained a lot of forensic experts, and we still do that today. There were elements of progress, but it was just a massive task.”

Under Calderón, there were also concerns about corruption. Wayne was among the witnesses called by federal prosecutors in Brooklyn to testify against Calderón’s top security official, who was convicted of taking massive cartel bribes and now faces life in prison.

Despite the problems with drug war militarization identified by Magaloni and others, it has largely remained the status quo. Under the current president, Andrés Manuel López Obrador, the government is more reliant than ever on the military to take on the cartels. “Today I believe there are more human rights abuses,” Magaloni says. “There is more violence.” Although Mexico saw a slight drop in homicides in 2022, the total number of killings topped 30,000 for the fifth consecutive year. The murder rate remains more than double what it was in 2008, before the military was deployed to fight the cartels.

But Magaloni doesn’t believe hope is lost. She points to the northern city of Monterrey, where “little by little there has

KARL PETERSON/THE SWEDISH NATIONAL COUNCIL FOR CRIME PREVENTION

been professionalization of the police," as one example of how change can be achieved at the local level. But it requires investment, she says, in the form of better pay and training. "Without local police who work alongside communities," she says, "I don't see how we can ever solve the problem of violence."

Magaloni's spouse, Alberto Díaz-Cayeros, joined the Freeman Spogli Institute in 2013 as a senior fellow, studying federalism, poverty, and violence in Latin America, and the couple have three children together. He describes Magaloni's approach as "mixed method," combining "hard core" methodological research and sophisticated statistical analyses with the relevant field work to put the findings in context. He remembers a one-year span—in 2016 or 2017—in which she traveled to Brazil 10 times for research.

Magaloni has demonstrated that new approaches and technologies can have a huge impact. In Rio de Janeiro, she helped persuade police to try an experiment wearing body cameras. Although the officers were reluctant at first, they ultimately agreed to participate—and the results were clear: Both the police who wore body cameras and the citizens they encountered were less likely to engage in violence. Officer-involved shootings and other violent incidents declined by 40 percent.

"She demonstrates with creative empirical techniques how specific police reforms and rule of law and governance practices can improve the lives of common citizens," says Erik Jensen, director of the Rule of Law program and a lecturer at Stanford Law School. "And then she goes a step further to connect her research to programmatic interventions."

Last fall, Magaloni received the Stockholm Prize in Criminology, one of the world's most prestigious academic awards in the social sciences. Her research, the award committee found, had produced "important evidence that police organizations are vulnerable to populist demands for harsh police methods that violate the rule of law and which, in the long run, increase violence in society."

During her acceptance speech at the award ceremony in Sweden, Magaloni recalled the Rodriguez case as a turning point in her life. "The experience really made me understand how the system works," she said. "How politicized it was, how little independence judges had in Mexico." She's come a long way since taking Rodriguez's case, and so has reform in Mexico, but in some ways, she still sees history repeating itself.

"There is this tension, always, with respect to criminal justice," she says. "On the one hand, there is this attempt to reform, but on the other, there is this popular support for harsh punishment, especially when people are afraid of crime." ■

KEEGAN HAMILTON *is the criminal justice editor at the* Los Angeles Times *and previously reported on organized crime in Latin America as a correspondent for* Vice News. *Email him at stanford.magazine@stanford.edu.*

REVIEW

The Paradox of Survival

REVIEWER
NESTOR WALTERS
'22, MS '24, is studying applied mathematics and researching the resilience of Antarctic ice shelves to tsunami waves. Before Stanford, he served in the U.S. Navy for 10 years, including five as a Navy SEAL. Email him at stanford.magazine @stanford.edu.

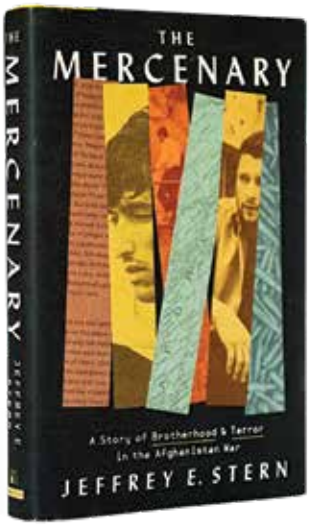
IMAGINE A BOY in a place—a small town near a European city, the campus of an American university, or the outskirts of Kabul. He watches his classmates aspire to hold public positions or inherit family businesses, or his peers chart careers in law or finance; or, in a city swarming with Taliban, he walks the dusty streets, hungry and longing for a life he's seen through a contraband satellite dish hidden in his fatherless family's dried-up vineyard.

The first of these boys was me. And while I hesitate to compare myself with a wartime journalist who coordinated massive postwar evacuation operations or a street-raised taxi driver who became a millionaire arms dealer, then a refugee, and then a business owner, I think we have things in common, and I believe that the whole reason to tell and retell a story is to find these commonalities and the ways we relate to them.

In *The Mercenary: A Story of Brotherhood and Terror in the Afghanistan War*, journalist Jeff Stern, MA '12, the second of these boys, traces his friendship with the third, Aimal, aka Alex, Stern's driver, translator, guide, and protector. They drift apart, and Aimal grows in ways that Stern learns about only when his friend, who left behind unimaginable wealth to evade both a warlord and the Taliban, ends up in a Canadian jail.

We were all there, in Afghanistan, in the summer of 2009. Me trudging through powdery sand and muddy riverbeds, following the Marines whose blood it was my job to keep pumping to their vital organs; Stern reporting on the country's presidential election; and Aimal becoming what he would soon have to flee. We all watched a friend die from a bullet; we were marked by the tangled flesh of what should have been a body. We distressed our mothers and, in our anger, strained relationships with our caring friends and co-workers. At the core of the story, I feel this conflict: Between the belief that you are worth more than the world tells you and the hard truth that whenever you strive to show it, the people you love most are left churning in the wake.

We must tell these stories—not because it is the best thing to do, the right thing, or even a good thing, but because it is all we have. And I believe that whatever animates the void and makes us anything more than atoms tumbling over one another works also through selfish people, lost people, and broken people, to unfold the universe into everything it will become. But we, selfish, lost, and broken, cannot see all that. All we can imagine is a place and a boy. ■



Alex *was* this country to me. He was the most important thing in it, and he was keeping me safe, and I thought nothing would ever happen to us so long as we stayed together. It didn't occur to me that it might be different for him.

—Jeffrey E. Stern, MA '12, in *The Mercenary: A Story of Brotherhood and Terror in the Afghanistan War,* PublicAffairs

CLOCKWISE FROM TOP: JOEL JOHNSON; JONAH VAN BEMMELEN; ERIN ATTKISSON

WE RECOMMEND

Reading Past Your Bedtime

Once We Were Home
Jennifer Rosner, PhD '98; Flatiron Books. Decades after four Jewish children were taken from their families during World War II, each must decide where they belong. Based on a true story.

The Hundred Loves of Juliet
Evelyn (Hsu) Skye, '01; Del Rey. Seeking reincarnations of his beloved, an immortal Romeo finds sweet sorrow on infinite loop.

The Last Applicant
Rebecca Hanover, '01; Lake Union Publishing. An admissions director is wooed and pursued by the unglued Stealth Bomber of helicopter moms.

The Shamshine Blind
Paz Pardo, '08; Atria Books. Weaponized, emotion-altering chemicals cloak the world in a fog of false feelings. Dark, rollicking, and set in the Bay Area.

This Is Salvaged: Stories
Vauhini Vara, '04; W.W. Norton. Brisk, vivid vignettes of the roles we inhabit and how we connect—the human experience, distilled.

ERIN ATTKISSON (BOOKS); NARVIKK/GETTY IMAGES (BACKGROUND)

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Farewells

FACULTY/STAFF

Tze Leung Lai, of Stanford, May 21, at 77, of a stroke. He was the Ray Lyman Wilbur Professor, a scholar of theoretical statistics and mathematics, and a professor in and former chair of the statistics department. He contributed groundbreaking work to the field of sequential statistical analysis, stochastic approximation and recursive estimation, and Markov decision processes. Renowned for collaborating outside his field, he held courtesy appointments in the School of Medicine, School of Engineering, and Woods Institute for the Environment. He founded the Financial and Risk Modeling Institute, published more than 300 articles, and supervised nearly 80 PhD theses and seven postdoctoral trainees. Survivors: his wife, Letitia; sons, Peter, '02, MS '04, and David, '08; two grandchildren; and sister.

Perry Lee McCarty, of Stanford, June 4, at 91. He was the Silas H. Palmer Professor in civil engineering, emeritus, and former chair of the department of civil engineering. He pioneered the field of environmental biotechnology and helped discover anaerobic bacteria that could break down environmental contaminants. His work helped guide new strategies for cleaning up industrial contamination and minimizing groundwater pollution worldwide. He helped establish the EPA's Western Region Hazardous Substance Research Center and won the Tyler Prize for Environmental Achievement in 1992, the Clarke Prize from the National Water Research Institute in 1997, and the Stockholm Water Prize in 2007. Survivors: his wife of 70 years, Martha; children, Kathleen Geist, Perry, '76, Cara, '78, and Susan; six grandchildren, including Christopher, '09; great-grandchild; and two sisters.

Henry "Hank" Whipple Parker, of Hanover, N.H., July 7, at 99. He was a professor emeritus of civil and environmental engineering. He served in the military during World War II and the Korean War. A master of logistics and large-scale construction projects, he was recruited to Stanford to provide graduate education for thousands of engineers completing the interstate highway system and dam projects in the Western states. He had an influential 15-year career in the construction industry and, in 1988, co-authored *Productivity Improvement in Construction*, considered a classic in the field of construction theory and practice. He was predeceased by his wife of 69 years, Pauline. Survivors: his children, Martha, '78, David, '81, MS '88, Jeffrey, MS '86, and Judith; five grandchildren, including Niall, '13, Anne, '14, and Ellie, '16; and two great-grandchildren.

Lyman "Van" P. Van Slyke, of Stanford, May 13, at 94. He served in the Navy during the Korean War. He was a professor emeritus of history and a pioneering scholar of 20th century Chinese history, focusing on the conquest of power by the Chinese Communist Party between 1920 and 1950. He established the International Inter-University Program for Chinese Language Studies and served as its executive director for 34 years. He was a guide on more than 35 Stanford Travel/Study trips to Asia, which led to what he considered his most significant work: his book *Yangtze: Nature, History, and the River*. He was predeceased by his wife, Barbara. Survivors: his children, Peter, John, and Elizabeth; four grandchildren; and four great-grandchildren.

Eugene Francis "Buddy" Teevens III, of Hanover, N.H., September 12, at 66, from injuries sustained in a bicycle accident. He played quarterback at Dartmouth before becoming a coach, leading teams at the University of Maine, Tulane, and Stanford (from 2002 to 2004). He spent 23 years as head coach at Dartmouth, where he was the winningest football coach in the school's history. To increase safety, he removed live tackling in practices and led the development of the Mobile Virtual Player, a robotic tackling dummy that has been used by other collegiate and professional teams. His teams have won or shared five Ivy League championships, and he is one of three Ivy Leaguers to win a conference crown as a player and a head coach. Survivors: his wife, Kirsten; children, Lindsay and Buddy Jr.; and four grandchildren.

1940s

Antony Curtis Gualtieri, '47 (biological sciences), MD '52, of Capitola, Calif., June 3, at 99. He served in the Army during World War II. He completed medical training at Stanford, Santa Clara University, and Washington University in St. Louis. He opened a practice in Los Gatos, Calif., and later practiced as a plastic surgeon for 17 years. After closing his practice, he served as a chief medical consultant for the Board of Medical Quality Assurance in Sacramento, Calif. He was mayor of Capitola, Calif., for two terms and also served on the city council and as city treasurer. Survivors: his wife of 42 years, Kathryn; daughter, Anna; stepchildren, Kathleen Levine and Bill Kaiser; six grandchildren; and sister.

Frances Cooper Coakley Beals, '49 (art), of Edgefield, S.C., June 30, at 95. She studied textile design at the Lowell Technological Institute and earned a master's degree in elementary education from the University of South Carolina. She

Health Care Economist Who Founded His Field

COURTESY STANFORD INSTITUTE FOR ECONOMIC POLICY RESEARCH (SIEPR)

Lauded for his field-defining accomplishments—including a groundbreaking book on the economics of health care—Victor Fuchs also was known for his jokes. "Our colleague Nate Rosenberg travels so often that the department decided to give him a chair—row 12D," he'd deadpan in a stand-up routine for fellow professors. In his 90s, he'd say, "My doctor told me don't worry, it's all in your body." Or he'd employ statisticians' humor: "I used to say I was doing well, age-adjusted. But now the sample size is too small for me to comment."

Victor R. Fuchs, an emeritus professor of health research and policy and of economics who was often referred to as the dean of health care economists, died September 16 at his home on the Stanford campus. He was 99.

Fuchs came to Stanford in 1974. He'd negotiated a then-rare joint appointment to both the department of health research and policy in the School of Medicine and the department of economics in the School of Humanities and Sciences. That same year saw the publication of Fuchs's *Who Shall Live? Health, Economics and Social Choice*, a cost-benefit analysis of the quality of medical care in the United States; it has never been out of print. A third edition of the book, co-authored by Karen Eggleston, director of Stanford's Asia Health Policy Program, was published in September.

In the 1960s, at the National Bureau of Economics Research, Fuchs expressed an interest in pursuing questions of health economics, but the bureau's then-president, Arthur Burns, was skeptical. In a letter to Quigg Newton, president of the Commonwealth Fund, after a chance meeting, Fuchs shared his ideas and requested funding. He received it—"a very substantial amount," he told historian Claudia Goldin in a March 2002 interview for the NBER. "I showed Arthur the check, and he withdrew all his objections."

Some considered it taboo, even indecent, to introduce economic realism to the medical setting, but "Vic made people understand that resources all come out of the same pot," says Ezekiel Emanuel, a bioethicist, oncologist, and co-director of the Healthcare Transformation Institute at the University of Pennsylvania, whose collaborations with Fuchs include a 2005 proposal for a voucher plan for universal health coverage. "He defined health economics as a field. He engineered a change in perception and set the agenda to find ways to solve a new problem." Fuchs's work, says professor of medicine Sara Singer, "shaped the thinking of hundreds, maybe thousands of leading academics."

Fuchs was predeceased by his wife, Beverly, in 2007. He is survived by his children, Nancy Fuchs Kreimer, Fred, Ken, and Paula; 10 grandchildren; and six great-grandchildren.

—John Roemer

taught at several schools, spending 12 years as a science teacher at St. Mary's School in Aiken, S.C. She was a scout leader, taught swimming, volunteered at Episcopal churches, and was an officer in the local Les Dames Des Fleurs Garden Club service organization. She was an avid photographer who documented her family's many adventures, including many international eco-tours with her husband. Survivors: her husband of 70 years, Richard; children, Rodney, Karen Kjerengtroen, Cindy Gilbert, and Neil; 10 grandchildren; and nine great-grandchildren.

Frances H. Lynn-Into, '49 (biological sciences), of Youngstown, Ohio, June 27, at 95. She earned a master of nursing from Yale. She worked at the Center for the Study of Psychotic Disorder at NYU for 10 years as part of a multidisciplinary team researching the biochemistry of schizophrenia and mood-altering pharmaceuticals. She earned a master's degree in psychiatric nursing from NYU's school of education. She later researched medical malpractice cases at her father's former law firm. She was a fierce skeet shooting competitor, loved the Metropolitan Museum of Art and Metropolitan Opera, and participated in community organizations like the Junior League and Visiting Nurses Association. She was predeceased by her husband, Albert Norman Into.

1950s

Mildred Edith Welch Clough, '50 (psychology), of Redwood City, July 28, at 94, of sepsis. She was a counselor at Woodside High School, where she founded the Scholarship Center. She also helped found the Middle College program at Cañada College. She volunteered at the San Mateo Genealogical Society, actively researched genealogy during retirement, and traveled widely. She and her husband were big fans of Stanford football, and they attended home games for many years. She was predeceased by her husband, Donald, '49; and daughter Robin Wasson. Survivors: her daughters Karyne Dyer, Susan, Kimberly Blackwolf, Katrina Barlow, and Barbara Zimmerman.

Marian Lynette Baker Peck, '50 (physics), of Hollywood, Calif., June 8, at 93, of congestive heart failure, dementia, and chronic kidney disease. After graduation, she performed mind-numbing aircraft design equations using a desk calculator and decided to devote herself to a more interesting pursuit. She earned a master's degree in math from USC and spent most of her career at Litton Data Systems as a computer programmer and software designer. She volunteered for many organizations and became knowledgeable about edible and medicinal native plants. She loved sewing, cooking, writing, copper enameling, and silversmithing. She was predeceased by her husband, John; and daughter Alison. Survivors: her daughter Celia Davis; and two grandsons.

Mary Allerton Kilbourne Matossian, '51, PhD '55 (history), of Portola Valley, Calif., July 9, at 93. She contributed to the *Stanford Daily*. She earned a master's degree in Near Eastern history from the American University of Beirut in Lebanon and taught history at the University of Maryland for 31 years. A pioneer of Armenian, women's, and interdisciplinary studies, she authored a groundbreaking 1962 study, *The Impact of Soviet Policies in Armenia*, which stood for two decades as the primary Anglophone source on Soviet social reforms in Armenian life. Her research on the Salem witch trials was reported widely. She was predeceased by her ex-husband, Garo. Survivors: her children, Lou Ann, Michele, '82, Viken, and Mark; and nine grandchildren.

Shirley Winthrop Strode Teitsworth, '52 (biological sciences), of Bakersfield, Calif., August 9, 2022, at 91. She loved hosting social gatherings at her home, from informal patio parties to elegant dinners. She was an enthusiastic attendee and occasional participant in productions at the Bakersfield Community Theater. She enjoyed playing tennis and golf and was a skilled horseback rider. She and her husband Charles skied in the winter and spent warm months in the mountains of Colorado, fishing the Owens River, exploring historical sites, and watching horse races in Del Mar. She was predeceased by her second husband, Charles Manuel. Survivors: her sons, Flint and Stephen Teitsworth, '79; and stepdaughters, Peggy Howard and Linda Hill.

Beverly Audine Carlson, '53 (history), MA '54, PhD '60 (education), of Ferndale, Calif., April 25, at 92, after a skiing accident. She was a violinist in Stanford's Symphony Orchestra. For 30 years, she worked at Ferndale High School, where she taught U.S. history, civics, French, and chorus and coached girls' softball. She sang with and directed the Ferndale Community Choir, which was invited to sing at Carnegie Hall. After retiring, she painted houses for 30 years and earned her contractor's license at age 75, climbing ladders into her 80s. She created prize-winning crewel embroidery, played golf, and rode a motorcycle. She was a member and lay reader of Our Savior's Lutheran Church. Survivors include her cousins and their children.

Ray Eldon Hiebert, '54 (English), of Carmel, Calif., August 5, at 91, of heart failure. He served in the Army and edited the *Signal Corps* newspaper. He was the founding dean of the University of Maryland College of Journalism. During a 55-year career that took him to 70 countries, he taught and mentored students and worked with reporters

He Taught AI the Facts of Life

MARY SHEPHERD

In the 1980s, a computer program diagnosed Doug Lenat's Chevy with measles. He loved telling the story because it illustrated a weak point in early AI: computers' lack of common sense. Lenat dedicated 40 years of his life to changing that, trying to build an AI system that could reason like a human.

Douglas Bruce Lenat, PhD '76, a former computer science professor at Stanford and an AI researcher who founded the Cyc project and Cycorp, died on August 31 of bile duct cancer. He was 72.

Lenat saw the potential for AI to democratize knowledge, with expert information available to anyone with the click of a button. "He wanted to do good in the world," says longtime Cyc researcher Karen Pittman.

In 1984, Lenat left Stanford to join the Microelectronics and Computer Technology Corporation as head of AI research. It was there that he founded Cyc (short for *encyclopedia*), an ongoing AI project to encompass the entirety of human knowledge in a single system. With a team of philosophers, linguists, and computer scientists, Lenat began to build Cyc's knowledge base, entering fact after fact and programming the system to generalize in new, efficient ways.

"It was considered incredibly courageous, gutsy," says Ramanathan Guha, PhD '92, a Google Fellow and software engineer who worked on Cyc in its early years. "Lots and lots of new ideas came out of that." Most people's lives have been touched by techniques rooted in Cyc, he says, including reasoning at scale, representing context, and organizing hierarchies. The CIA, Goldman Sachs, and the Cleveland Clinic, among others, have asked Cyc to help them find better ways to forestall terrorism, detect insider trading, and streamline databases.

Although many recent incarnations of AI learn by consuming massive amounts of digital data, Lenat defended Cycorp's dogged pursuit of logical reasoning and symbolic representation. In a recent paper, he made a case for incorporating a commonsense engine like Cyc into large language models, arguing that it could make AI systems like ChatGPT more trustworthy and predictable.

Every week, Lenat gathered with friends to strategize through board games or online games, with one stipulation: "He would never be the villain. He would always be a good guy," says his wife, Mary Shepherd, who's also an AI researcher. "If there was not a character where he could be a good person, he would not play the game, because he never, ever wanted to be a bad person. Even in a game."

In addition to Shepherd, he is survived by his first wife, Merle Baruch; daughter, Nicole; two grandchildren; and a brother.

—Kali Shiloh

overseas seeking to establish and protect journalism. He was the author, co-author, or editor of more than 25 books, including *Mass Media: An Introduction to Modern Communication*, one of the first textbooks to deal comprehensively with all forms of media. Survivors: his wife of 37 years, Sheila; children, Emily Townsend, David, Steven, and Douglas; six grandchildren; two great-grandchildren; and sister.

Hart Isaacs Jr., ’54 (chemistry), MD ’58, of Del Mar, Calif., June 7, at 91. During his six-decade career as a specialist in anatomic and pediatric pathology, he spent more than 25 years at Los Angeles Children’s Hospital and was affiliated with UC San Diego Medical Center. He was a professor at USC and UC San Diego and wrote several authoritative works on child pathology. He had a passion for sailing, bonsai, automobiles, and music. He was predeceased by his wife, Patricia Ann Levi, and daughter Diana. Survivors: his children Dorothy, Charles, Craig, and Donna; 12 grandchildren; and six great-grandchildren.

Eugene Darrell Sharp, ’54, MS ’56, PhD ’62 (electrical engineering), of Palo Alto, June 10, at 91, of congestive heart failure. After earning his master’s degree, he served at Griffiss SAC Air Force base in Rome, N.Y., before moving to Palo Alto with his wife and first son. He worked for SRI, TRGWest, and Grainger and then became a founding member of TCI (Telecommunications Incorporated), where he designed radio communications antennae and served as vice president of technology. His company installed antennae for Voice of America as well as numerous military applications around the world. He was predeceased by his son James, ’81. Survivors: his wife of 66 years, Nancy (Clark ’53, MA ’54); sons Ken, Doug, and Andrew; and two grandchildren.

John Christian Blom, ’55 (history), of Reno, Nev., June 18, at 90, of dementia. He contributed to the *Chaparral* humor magazine. He worked in ocean transportation for more than 30 years, owned a car wash, and was a partner in preschools from 1990 to 2023. He was a collector of southwestern Native American pottery and co-authored books on the subject. His garden was one of his greatest loves. Christmas was so important to him that he started putting up his lighted villages six weeks before the holiday. He was predeceased by his son, Christian; and granddaughter, Lise MacPhee, ’19. Survivors: his wife of 65 years, Brenda; children, May, Pamela MacPhee, ’86, and Heidi; six grandchildren; and two great-grandchildren.

Diane Patricia Henny Ham, ’55 (geography), of Pleasant Hill, Calif., June 19, at 89. She contributed to the *Stanford Daily*. She was a real estate agent for 40 years and worked at several firms, including Stoodley & Tefs and Diablo Realty. She was an active member of the Martinez Horsemen’s Association and would drop her son off at school on horseback. She was also an avid reader and consumer of news and a lifelong Democrat. She had a radiant smile, keen wit, and passion for travel and adventure. She was predeceased by her daughters, Kim Slicker and Jody. Survivors: her son, Eben; and three granddaughters.

Peter Conklin Reynolds, ’55 (economics), MBA ’57, of Thousand Oaks, Calif., August 21, 2022, at 89. He was a member of Sigma Alpha Epsilon and played football and baseball. He served in the Army. He worked at Lockheed Martin for 40 years, first helping to manage financial operations for the missile and space division, later reorganizing and managing Lockheed’s diverse banking, credit, and treasury operations. In retirement, he became an accomplished film developer and photographer specializing in black and white photography. Survivors: his wife, Kathryn (Snyder ’55, MA ’56); children, Carol Edwards, Eric, David, and Paul; and eight grandchildren.

Donald Otis Wells, ’55, MS ’56, PhD ’63 (physics), of Annapolis Valley, Nova Scotia, Canada, July 2, at 90. He played trombone in the LSJU Marching Band and was on the wrestling team. He became a professor at and later vice president of the University of Manitoba in Canada and led the school’s cyclotron program. He helped start the Manitoba Marlins Swim Club. He served as president of Mount Allison University and the University of Regina and helped create The Valley Hospice. He was predeceased by his wife Eileen. Survivors: his wife Audrey Sanson-Wells; children, Eric, ’78, Valana, ’79, MS ’81, PhD ’85, Vanessa, ’81, Vanita, ’82, MS ’84, Barrett, ’86, MS ’90, PhD ’92, and Barton, ’88; seven grandchildren; two great-grandchildren; and sister.

Joan Carole Rydman Sandberg Westgate, ’55 (history), MA ’56 (education), of Napa, Calif., July 24, at 89, of a stroke. She was a teacher in Los Angeles before starting a family. She enjoyed experimenting with new cuisines and loved to travel. She was among the first to visit China when it opened to Westerners and was a member of the Women’s International Group for Peace and Freedom. She was a master gardener who grew legendary roses and almost finished her degree in landscape design from UC Berkeley. She was predeceased by her ex-husband, Charles Sandberg, ’55; and her second husband, Ed Westgate, ’33. Survivors: children, Kristen Jaeger, Stephanie, ’84, Eric, and Derrik Sandberg; 10 grandchildren; and seven great-grandchildren.

John William Hendricks, ’56 (economics), of McMinnville, Ore., May 22, at 89, of heart failure. He was a member of Sigma Chi and the basketball team. He worked for Kaiser Aluminum, Agro Industries, and Operating Engineers Local #3, all in the San Francisco Bay Area. He was predeceased by his daughter, Jennifer. Survivors: his wife, Danni; son, Christopher; stepchildren, Catherine and Alexander Aragon; six grandchildren; and great-grandson.

Myron Paul Hollister, ’56, MS ’57 (mechanical engineering), of Palo Alto, July 23, at 90, of dementia. He was a member of Kappa Alpha and the track and field team. He served in the Army for six years. After the Army, he worked for Lockheed Martin in the spacecraft thermodynamics department, later overseeing systems employing heat pipes and space radiators. He was a Boy Scout leader, an election poll worker, and a family man who loved tennis, riding his bike, and all things Stanford. Survivors: his wife of 54 years, Linda Wheaton Hollister; children, Cortney, Lisa, Eric, and Margery; and six grandchildren.

John Irving Maurer, ’56 (psychology), MD ’60, of Murphys, Calif., June 21, at 88. He played the horn in the LSJU Marching Band. He served in the military as a psychiatrist and later at a clinic in San Francisco’s Haight-Ashbury. He co-wrote “Management of ‘Bad Trips’ in an Evolving Drug Scene,” which was published in the *Journal of the American Medical Association*. He became the director of the mental health center at Emmanuel Hospital in Turlock, Calif., and maintained a private psychiatric practice. He mentored young psychiatrists on the Navajo Reservation in Chinle, Ariz. He was predeceased by his former wife, Linda Collins, ’61, and son, Paul. Survivors: his wife of 24 years, Oma Gaye; daughters, Kathryn and Karen; stepson, Rick Minyard; two grandsons; and stepgranddaughter.

Lawrence Atkins Wright, ’56 (mechanical engineering), of Saint Petersburg, Fla., June 11, at 89. He was a member of Theta Delta Chi and was on the crew team. He provided engineering services for new cranes for many of the world’s busiest ports. An avid sailor, he spent his life sailing in the San Francisco Bay, Tomales Bay, and the Pacific Ocean. He enjoyed camping, hiking, playing bridge, and cruising the delta in his 32-foot Nordic Tug. He was predeceased by his son, Gary. Survivors: his daughters, Dana Wright McCoy, Sarah Wright Killingsworth, and Lynda Wright Velanovich; eight grandchildren; great-grandchild; and two siblings.

Richard Lee Haserot, ’57 (chemical engineering), of San Marino, Calif., November 21, 2022, at 87. He was a member of Alpha Sigma Phi. He was an officer in the Navy, earned an MBA at Pepperdine University, and worked at NASA Jet Propulsion Laboratory, then in the defense industry for many years. He lived for 58 years in San Marino, where he was active in many civic organizations. His main passions were family, sailing, and travel. Survivors: his wife of 63 years, Ellen (Bernstrauch, ’59, MA ’60); children, Craig, Grant, and Karen, ’88; and four grandchildren.

Mary Kathryn Bronson Paterson, ’57 (history), of Reno and Sparks, Nev., July 6, at 88, of lung cancer. She loved reading, playing bridge, traveling the world, and Stanford, but none more than being a grandmother. Survivors: her daughters, Mary Davis, Lori, and Diane Jones; five grandchildren; and brother.

James Wesley Sides, ’57 (biological sciences), PhD ’66 (geology), of Houston, May 26, at 88, of a stroke. He worked for Amoco Oil and British Petroleum and eventually purchased the Keystone Development Corporation. His work took him and his family to Houston, New Orleans, Chicago, Argentina, Wilmette, and back to Houston. He loved sudoku, long-sleeved patterned shirts, classic country music, summer months in Crested Butte, Colo., weekly hikes studying the geology of mountains, volunteering at MD Anderson and SEARCH Homeless Services, family genealogy, playing tennis and golf, and international travel. Survivors: his wife, Delrena; children, Jim, Barrett, Delrena, and Edward; four grandchildren; and siblings.

Henry “Hanko” Granville Viets, ’57 (mechanical engineering), of Surfside, Calif., June 26, at 87. He was a member of Kappa Alpha. He spent three years as a lieutenant junior grade in the Navy, serving as chief engineer on the destroyer USS *Cunningham*. Later he had a successful career as president of Viets Engineering Company in Long Beach, Calif. He loved traveling, boating, computing, and retelling tales of misadventures with his Stanford buddies. Above all, he loved and was loved by his family. He was predeceased by his wife, Sally.

Alfred George Ferris, ’58 (economics), JD ’63, of San Diego, July 20, at 86, of complications from Parkinson’s disease. He participated in student government. He formed a private practice in 1968 and served as an arbitrator and mediator in hundreds of disputes and was a member of the National Panel of Arbitrators of the American Arbitration Association. He was a former vice chair of the International Society of Primerus Law Firms; served on many local boards; and volunteered at

charter schools, the San Diego Public Library, and biotech firms. He was a dedicated San Diego Padres fan. He was predeceased by his wife of 53 years, Jean (Schwartz, '61, MA '62). Survivors: his daughters, Kerry Ferris-Wenerdahl and Gillian Ferris-Kohl; and grandchild.

Margaret Lorraine Mix Gould, '59, MA '60 (education), of Los Altos Hills, May 7, at 85. She was a Stanford Dollie, performed in Gaieties, participated in student government, and was a cheerleader. She was the class correspondent for the Class of '59 for more than 36 years. She worked as an accountant and business manager for an oil and gas drilling company, a building development company, and a private family vineyard. She was executive director for a family foundation with worldwide charitable programs. Survivors: her children, Sue Brown, Sheri Blaisdell, '84, Karin Spicer, and Rick, '90, MBA '95; 14 grandchildren, including Amy Esguerra, '08, Jack Blaisdell, '18, Matthew Blaisdell, '20, and Kayley Gould, '23; and five great-grandchildren.

Kenneth Lee Pierce, '59 (geology), of Bozeman, Mont., July 9, 2021, at 83, of Parkinson's disease. He was a member of Phi Sigma Kappa and the LSJU Marching Band. With a PhD in geology from Yale, he began his U.S. Geological Survey career mapping river terraces in Kentucky. He later joined a team of geologists mapping Yellowstone National Park. His landmark study on the dynamics of the northern Yellowstone ice complex received the Kirk Bryan Award from the Geological Society of America. Over 25 years, he refined the once-controversial Yellowstone Hotspot hypothesis. He later joined the faculty of Montana State University. Survivors: his wife of 61 years, Linda; children, Andrew, Daniel, PhD, '94, and Jennifer; and six grandchildren.

James Robert Wilson, '59 (geochemistry), of Boulder, Colo., in 2020, of ALS. He earned a master's degree and PhD in geology from Harvard and spent most of his career with Merrill Lynch and UBS Financial Services. He enjoyed many years of golf, tennis, swimming, photography, traveling, and winters in Mexico. Survivors: his wife, Lawrie Diack Wilson; children, Sam, Crofton, Chris, Meg, Margarita, Jon, and Dani; three grandchildren; and sister.

1960s

Gregory Cromwell Knapp, '60 (psychology), of Scottsdale, Ariz., August 3, at 85, of multiple cancers. He was a member of Alpha Tau Omega and a first lieutenant in the Air Force. As an exchange student at Keio University in Japan, he was a member of the national champion judo team. He worked as a film stuntman, screenwriter, and producer. He started his career in Japan, doing voiceover recordings, writing advertising copy, and directing English dubbing of feature films, documentaries, and cartoons. He wrote the book *Stranglehold* as well as scripts for several Japanese and American productions. He later developed, wrote, and produced film and TV specials for Mellodan Productions in Burbank, Calif. Survivors: his wife of 54 years, Marsha; and son, Holden.

Edwin Solon "Ted" Harwood, '62 (sociology), of Needham, Mass., June 7, 2021, at 82, after a short illness. He served in the Army for three years, and earned a doctorate in sociology from the University of Chicago. He taught sociology for more than 20 years and later developed a communications and writing consulting practice. Survivors: his partner, Alice Schwartz; children, Bryna, Alexander, and Abigail; three grandchildren; and sister.

Bonnie Corinne Larson Lindquist, '62 (mathematics), of Webster, Minn., April 27, at 82. After raising her children, she embarked on a 30-year career as a grocery buyer for Fairway Foods, then Holiday Companies, and finally Nash-Finch. She was a longtime member of Christiania Lutheran Church, where she served as congregational president, vice-president, secretary, altar guild member, and Sunday school teacher. She was a lifetime member of the Experimental Aircraft Association and enjoyed sewing, quilting, and reading. She was predeceased by her first husband, John; and stepgrandchild Rachel Hansen. Survivors: her husband, Donald Eide; children, Jahna, Jerrod, and Brandt; stepchildren, Jodi Hansen, Sarah Schwerin, and Abraham Wolfe; three grandchildren; 10 stepgrandchildren; and sister.

David Russell Edwards, '63 (economics), MBA '69, of Tacoma, Wash., February 14, 2020, at 78. He was a member of Sigma Nu and Beta Chi. He served in the Navy and spent his career at Weyerhaeuser Company. He loved open spaces, whether around the family cabin and wheat fields of Walla Walla, the wildness of Washington's ocean coast, or the serenity of Puget Sound. Survivors: his wife, Pat Shuman; children, Caleb Page, Kelly and Brooke; five grandchildren; and two siblings.

Eric Sheldon Jacobson, '63 (chemistry), of Lottsburg, Va., August 4, at 81. He earned an MD and a PhD in physiological chemistry and became a diplomate of the American Board of Internal Medicine in both infectious disease and internal medicine. For nearly three decades, he was a researcher and attending physician in infectious disease at the Richmond Veterans Affairs Medical Center and the Medical College of Virginia. His program of research in cryptococcal genetics was nationally recognized. He was a Sea Scout in his youth and once considered becoming a naval architect. He loved classical music and played viola in the Richmond Philharmonic. Survivors: his wife of 53 years, Christiane; children Lisa, Melanie Jacobson Schuster, and Leif; three grandchildren; and two siblings.

Scott C. Lambert Jr., '63 (English), of San Francisco, August 16, at 82, of cancer. He earned a master's in English and French literature from UCLA and a PhD in English literature from UCSD. He spent his career at Standard Oil Company of California (now Chevron), where he became an expert on oil and gas exploration in the Middle East. He was a perennial student and had a library with 1,500 works. After studying abroad at Stanford's French campus, he spent two weeks of every year in France. He began studying German in his 70s, collected unique automobiles, and enjoyed sailing and playing the piano. Survivors: his wife of 35 years, Laura; and daughters, Sophie and Leslie.

Julien Robert Ransone, '63 (economics), of Dallas, July 21, at 82. He was a member of Kappa Sigma. He earned an MBA from Wharton and served in the Air Defense Artillery branch of the Army. He worked in the oil and gas industry at Atlantic Richfield, Dorchester Gas Corporation, Petrus Oil Company, and its successor Bridge Oil. He founded Wellspring Partners, an energy acquisitions and divestments advisory firm, and was instrumental in founding energy industry-related groups with an emphasis on education, deal-making, and networking. He held leadership and board positions at the Texas Energy Council, Texas Energy Update, and the Independent Petroleum Association of America. Survivors: his wife of 45 years, Patti; daughters, Emily and Meridith; three grandchildren; and brother.

Robert Nicholas Brooks, '64 (humanities), of Altadena, Calif., April 24, at 80, of colon cancer. He served in the Army treating wounded soldiers returning from Vietnam. After earning his MD at USC, he started a private practice in psychiatry and then a medical practice focused on AIDS patients, emphasizing alternative treatment in addition to traditional medicine. After retiring, he taught English as a second language and worked for 20 years as an academic coordinator for an afterschool program in Los Angeles. He spent the last two years of his life making computer art. Survivors: his former wife, Nancy Shinno; and daughter, Tomoko Brooks Price.

Corrie Lynne Oborn Player, '64 (English), MA '65 (education), of Cedar City, Utah, July 24, at 80. She wrote permit applications, and taught university-level writing and speech for more than 50 years. Her projects centered on issues like waste management and geological hazard investigations. She was a volunteer lobbyist on behalf of rural, western communities at a regional and national level, holding a variety of elected and appointed offices in Alaska, California, Utah, and Oklahoma. She was a National Foster Parents Association regional president and helped raise more than 40 foster children, adopting three of them. Survivors: her husband of 58 years, Gary, '64; children, Dolly Roy, Sherri Brower, Gary, Roch, Eric, Linda Carpenter, Micah, Brian Prestcott, and Nathan; 40 grandchildren; 10 great-grandchildren; and two siblings.

John Alexander Casey, '67 (history), of Port Edwards, Wis., June 6, at 78, after an illness. After graduating from the University of Michigan Law School, he became a partner at Quarles & Brady in Milwaukee, practicing in business, utility, and shareholder litigation. He was the president of the Alexander Charitable Foundation. He enjoyed the outdoors, trap shooting, boating, fishing, hunting, and playing golf. He was a member of the Up River Gun Club and the Gitchee Gumee Fishing Club. He was a fan of the Green Bay Packers, the Wisconsin Badgers, and the Milwaukee Brewers. He was predeceased by his daughter Megan. Survivors: his wife, Cornelia; children Crystal Rietveld, Gwenevere McIntosh, Elizabeth Callahan, Jessica, Caitlin, and Kyle; 10 grandchildren; and two sisters.

Sidney Jay Weiss, '68 (psychology), MD '73, of Mission Viejo, Calif., July 9, at 77. He was a member of the Ram's Head Theatrical Society and a staff member at Stanford Sierra Camp. He was a board-certified ophthalmologist and a clinical professor at UCLA's Jules Stein Eye Institute. He specialized in pediatric ophthalmology and strabismus, serving the people of Orange County, Calif. Survivors: his wife, Debbie; and children, Sarah and David.

1970s

Joshua Genge Greenwood, '71 (English), of Petersburg, Va., December 25, 2022, at 74, of a heart attack. After teaching English at St. Christopher's School, he founded Greenwood Ironworks, becoming a nationally known master blacksmith and colonial buildings authority. He pioneered functional hand-crafted art in iron, teaching master classes around the country and designing web-based instructional videos. He established two nature sanctuaries and hydropower sites, one on the Appomattox River, the other planned for Agua Zarcas, Costa Rica. In 2022 the Capital Region Land Conservancy acquired his Appomattox River site, the future Greenwood Park, for archeological

and environmental study. Survivors: his wife, Ingrid; her children, Christine, Thomas, and Babette; and his six siblings, including Douglas, '79, MBA '89.
Tatiana Marie "Tania" Granoff, '73 (history), of Los Altos, July 12, at 71. During her career in student services at Stanford, she worked in student accounting, undergraduate advising, undergraduate admissions, and the Dean of Students office. She served multiple times as PTA president at her children's elementary and middle schools. She spent 17 years as the librarian at Santa Rita Elementary School in Los Altos. She made thoughtful book recommendations to family and friends, was active in several book clubs, and served as the librarian at Congregation Etz Chayim. Survivors: her husband of 47 years, Robert Olson, '72, MS '73; children, Aaron Olson and Elspeth Olson, '08; two granddaughters; and three siblings.
Charity Scott, '73 (humanities), of Atlanta, March 18, at 71. After attending Harvard Law School, she practiced in Baltimore and Atlanta before finding her true passion: teaching. She was a professor at the Georgia State University College of Law and was the founding director of its Center for Law, Health, and Society, which consistently ranks among the top 10 programs nationally. She co-founded the Health Law Partnership with the Children's Hospital of Atlanta and the Atlanta Legal Aid Society. She was a well-loved and accomplished teacher who brought improvisational comedy and meditation to legal education. Survivors: her husband of 45 years, Evans Harrell, '72; children, Peter Harrell and Constance Shreckengost; two grandchildren; and brother.

BUSINESS
Donald Orville Nichols, MBA '63, of Kissimmee, Fla., February 28, 2022, at 83. He had a degree in electrical engineering, briefly taught statistics at the University of Louisville, and spent 30 years at General Electric. He worked in purchasing and later electronic commerce, where he was instrumental in the implementation of Electronic Data Interchange. He traveled for work and enjoyed trips around the world. After retiring, he found a second career at Disney World, holding various positions, including 17 years as Ranger Don at the Wilderness Lodge. He never missed his daughters' swim meets and became a USA Swimming certified judge. Survivors: his wife of 58 years, Jane; daughters, Meg McCabe and Beth Cavalieri; and four granddaughters.
Jeremy Guy A. Davis, MBA '66, MA '68 (economics), of Sydney, June 13, at 80, of aortic dissection. After graduation, he joined the Boston Consulting Group, ultimately serving as vice president and managing partner and helping to open new offices in Paris and Menlo Park. In 1980, he became dean of the Australian Graduate School of Management at the University of New South Wales in Sydney. He was involved in venture capital, chaired Australian government advisory boards, and was a director and life patron of Sydney's baroque opera company, Pinchgut Opera Ltd. He was a member in the Order of Australia and a fellow of the Royal Society of New South Wales. Survivors: his wife of 52 years, Jessica; and daughter, Rachel.
David Lindsay Elder, MBA '72, of Atherton, Calif., April 12, at 75, of Lewy body dementia. He served in the Army. He helped start the Stanford Concert Network, bringing acts like Aretha Franklin and Van Morrison to campus. After graduating, he managed bands and opened a recording studio called the Music Annex. He then spent more than 30 years in commercial real estate and specialty finance. In the 1990s, he co-founded and was CEO of Atherton Capital, a specialty finance firm. During retirement, he enjoyed playing golf and serving on the local Boy Scouts of America board. Survivors: his wife, Karlene; children, Lorri Elder Dyner, '96, MBA '05, and Benjamin; and five grandchildren.

EDUCATION
Bernard Thomas Hofmann, MA '57, of Lincoln, Calif., December 22, 2022, at 93, after a short illness. He served in the Air Force during the Korean War. He taught world history for 35 years at Washington High School in Fremont, Calif. He and his wife loved traveling the world to visit the ancient sites he covered in his teaching. In high school, he was inducted into the Bellarmine Athletic Hall of Fame for track. He represented the Air Force as a runner in the post-World War II Pan-Asian games. He loved playing golf and camping and was a lifelong Catholic. Survivors: his wife of 65 years, Connie; children, Wendel, Barbara Evans, Jennifer Kaufman, and Casey Kopp; 10 grandchildren; and two great-grandchildren.

ENGINEERING
Roy Ellis Lave Jr., PhD '65 (industrial engineering), of Los Altos, June 22, at 87, of lung cancer. He was an industrial engineering associate professor at Stanford before founding management consulting firm Systan Inc. In Los Altos, he served as mayor and council member and helped found the city's community foundation. During his time on the council, the city purchased the property for Redwood Grove, land for Heritage Oaks Park, and the Hillview property on which the Los Altos Community Center sits. He helped found the Los Altos Rotary AIDS Project. In 2021, he and his wife were named Los Altans of the Year by the *Los Altos Town Crier*. Survivors: his wife, Penny; children, Julia and Reynolds; and three grandchildren.
Douglas Duane Speers, MS '68 (civil engineering), of Seattle, July 29, 2022, at 87, after a long illness. He was chief of hydrologic engineering for the Corps of Engineers in Portland, Ore. Survivors: his wife of 59 years, Alice; children, Paul and Kathleen; granddaughter; and sister.
Douglas Kent Rytting, MS '71 (electrical engineering), of Reno, Nev., February 3, at 81. He worked for Hewlett Packard and then, for 37 years, led research teams establishing network analyzers as crucial measurement tools in radio frequency and microwave electronics. He traveled as an IEEE distinguished lecturer after he retired. He was a member of the Church of Jesus Christ of Latter-day Saints and served as a bishop, stake

Leading Agricultural Economist Kept a Farmer's Perspective

Cary Fowler used to telephone Walter Falcon every weekend like clockwork to discuss world affairs and ask for his views and insights. "He was just one of the wisest people I've ever met," says Fowler, special envoy for global food security at the U.S. State Department. They'd talk about current events—climate change, trade issues, and the impact of the war in Ukraine on wheat prices. "He had so much experience, and not just in academics—his travels, his work abroad, growing up on a farm. A lot of agricultural economists never had the experience of being a farmer, having that feeling in your belly of what their lives are like."

Walter P. Falcon, emeritus professor of economics, former deputy director of the Center on Food Security and the Environment, and former director of the Freeman Spogli Institute for International Studies, died of kidney disease on August 2 at his family farm in Marion, Iowa. He was 86.

In 1972, Falcon, a global authority on food security and the economics of agriculture, came to Stanford from Harvard to direct the Food Research Institute and became a sought-after consultant to governments and food-related organizations around the world. In 1992, the government of Indonesia awarded him its highest medal of merit, the Bintang Jasa Utama ("First Star"), for his 25 years of assistance with the country's development efforts. Falcon wrote or co-authored more than 60 papers, addressing topics such as El Niño's effects on Indonesian agriculture, agricultural policy reform in Mexico, the volatility of food prices, and biofuels. In retirement, he continued to publish and to advise on agricultural matters.

Falcon was the antithesis of the ivory tower scholar, says Roz Naylor, PhD '89, a professor at the Stanford Doerr School of Sustainability and a longtime friend of Falcon's who collaborated with him on multiple papers and field projects. "He derived many of his economic insights and policy recommendations from conversations with farmers all around the world," she says. "He needed to travel to the field and see firsthand how the crops, farmers, and communities were faring. He was a farmer at heart and a world leader in food policy analysis in practice."

"People say he could walk the halls of academia but still be very down to earth and have a cup of coffee with a local farmer out in the cornfield," says his son Andrew Falcon, '90, who took his father's classes as an undergraduate. "He was a world expert, but also very humble and a great tease. He liked to go to barbecues, go to games, and drink a Manhattan."

Falcon was predeceased by his son Phillip. In addition to Andrew, Falcon is survived by his wife, Laura; daughter, Lesley Falcon-Harney, '81; and two grandchildren.

—Tracie White

CHUCK PAINTER/STANFORD NEWS SERVICE

high councilor, and area president of the Quorum of the Seventy, among other callings. He enjoyed dad jokes, music, nature, and tinkering with electronics. Survivors: his wife of 57 years, Sharon; children, Sherry Olson, Julie Moore, Jeff, and Michael; and 15 grandchildren.

Richard Michael Harris, PhD '72 (engineering-economic systems), of Huntingtown, Md., May 23, at 81, of complications from Parkinson's disease. He received his bachelor's and master's degrees from MIT and worked for MITRE from 1972 until his retirement in 1995. He was predeceased by his wife Carole Stallings. Survivors: his wife Anne Whitaker; children, Richard, David, Susan, Catherine, and Paul; and brother.

Phillip Harris Paul, PhD ' 84 (mechanical engineering), of San Francisco, June 18, at 69, of cancer. After graduation, he spent six years as a senior research associate at Stanford, working on laser-based imaging diagnostics. He became the globally recognized expert in planar laser-induced fluorescence imaging in reacting flows. He then spent 10 years as a senior scientist at Sandia National Laboratories. After co-founding Ekisigent, a biotech company specializing in microfluids, he returned to Lawrence Livermore National Laboratories, focusing on problems in national security at the interface of biology, material science, and engineering. Survivors: his wife, Mary Gwynn; mother, Dorothy; and sisters, Marlene Preston and Liz.

HUMANITIES AND SCIENCES

Ernest Daniel Rose, PhD '64 (interdisciplinary), of Santa Rosa, Calif., December 23, 2022, at 96, of complications from abdominal surgery. He was a Navy pilot in World War II. He was a documentary filmmaker and professor of documentary film who worked on nearly 200 films. He was part of UCLA's first class of film students and was later awarded a Mass Media Fellowship by the Ford Foundation. He was a film consultant for the U.N. and was hired by the Department of Justice to appraise the value of footage of JFK's assassination. Starting as a writer, director, cinematographer, and editor, he was active in his field for more than 70 years. Survivors include his children.

John Conrad Ogden, PhD '68 (biological sciences), of St. Petersburg, Fla., June 25, at 82, of pneumonia and a stroke. He was an early leader in the field of behavioral ecology. After a postdoc at the Smithsonian Tropical Research Institute in Panama, he joined FDU's West Indies Lab on St. Croix, where he worked as a marine biologist before becoming the director. He was program director of the NOAA Saturation Diving Facility HYDROLAB and became an aquanaut. As the director of the Florida Institute of Oceanography, he helped establish the Florida Keys National Marine Sanctuary. He published over 70 papers, produced television programs about tropical ecosystems, and helped form the International Society for Reef Studies. Survivors: his wife, Nancy; and children, Eric and Lisa.

Carol Ann Christensen, PhD '74 (psychology), of Palo Alto, July 14, at 77, of MS and a stroke. She was hired as an assistant professor of psychology at Vassar College, where she remained for 43 years. She specialized in the use of behavioral measures and electrical brain mapping to study information processing in the human brain across the age span. She was instrumental in founding undergraduate programs in biopsychology (now neuroscience and behavior) and cognitive psychology (now a department). She retired in 2016 as professor of cognitive science. She was a visiting scientist at Stanford, the Palo Alto VA, the NASA Ames Research Center, and the University of Otago in New Zealand. Survivors include her husband of 51 years, Karl Drake, '69.

Laurie Kraus Lacob, MA '82 (communication), of Woodside, Calif., June 19, at 65, of cancer. She developed and executed research and communications strategies in the venture capital, technology, and university advancement sectors. She devoured books and movies and became involved in the creative aspects and production of two films, released in 2013 and 2020. She adored adventure travel and organized annual trips for her family. She served on the boards of the Ronald McDonald House at Stanford and the Lucile Packard Foundation for Children's Health and supported many organizations through her participation and philanthropy. Survivors: her children, Kirk, '10, Kelly, '12, MBA '20, Kent, and Kayci, '17, MA '21; two grandsons; and sister.

MEDICINE

Patricia Sue Malone Layard, MA '67 (hearing and speech sciences), of Austin, Texas, April 8, 2021, at 78. She loved being outdoors in her gardens, and she created beautiful spaces for family and friends to enjoy. She had a passion for hands-on home improvement projects, and in the late 1980s she took early retirement to work on the historic restoration of an 1890 Victorian home in the San Francisco Bay Area, which she completed almost single-handedly. In Austin, she was an active volunteer with The Settlement Home for Children. Survivors: her husband, Max, MS '65, PhD '69; daughter, Julia Kinsey; grandson; and sister.

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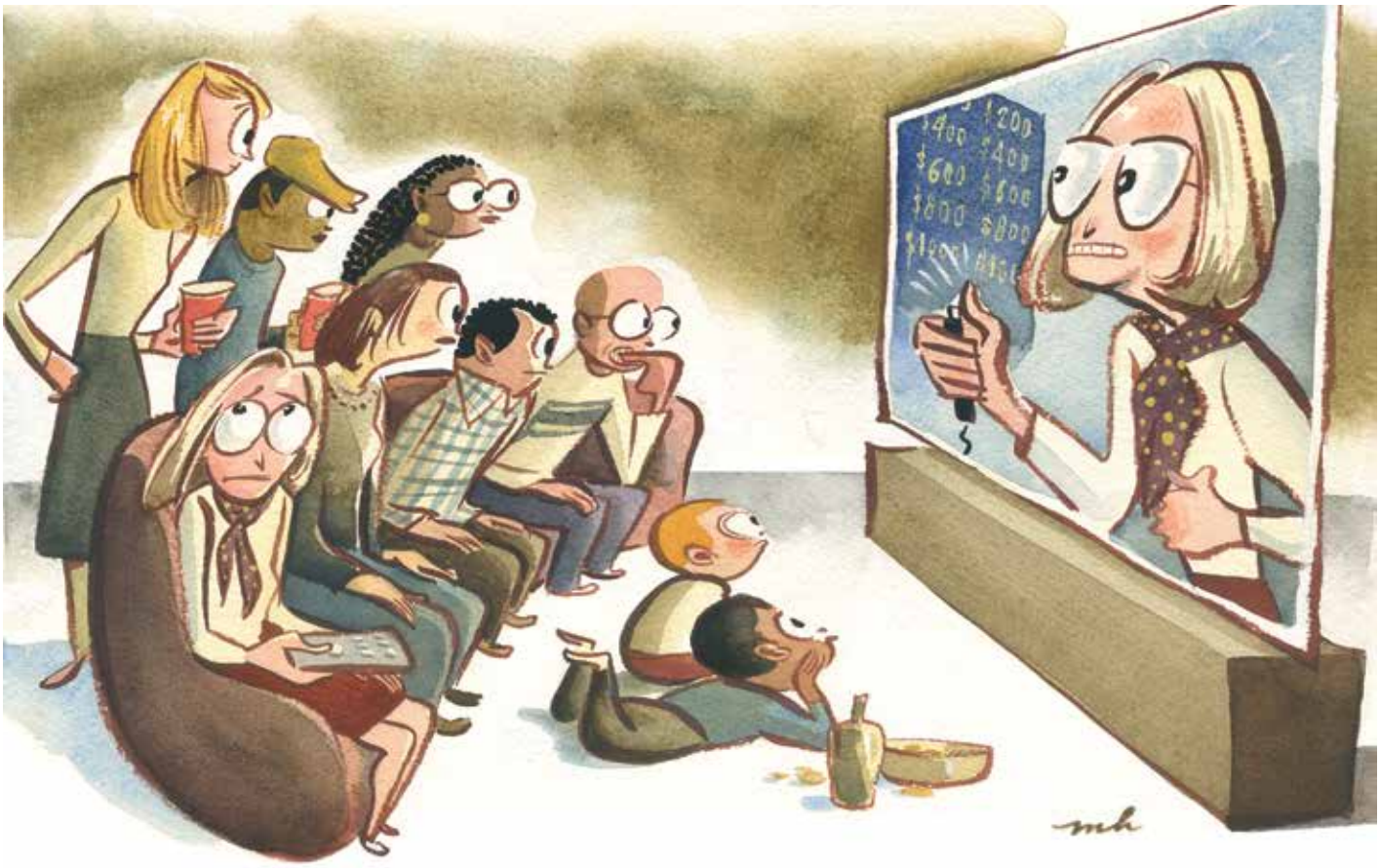

Buzz Skilled

The key to winning on this show: instant reflexes.

SPOILER ALERT: I lost on *Jeopardy!*

In 1984, Weird Al Yankovic recorded a parody song by that name. This past June, he was a $1,000 answer on *Jeopardy!*—and, as one of the three contestants, I was eager to call it out. But a competitor beat me to the buzzer.

My biggest challenge turned out to be buzzer mastery, not knowledge. I was up against a speedy three-day champ. I nailed the $1,000 question in the "S-less Chaps" category and could have swept "Books & Authors," but my competitors buzzed in ahead of me for every question but one. Having scrambled to a momentary second place, I nailed the final question but still lost the game. (The champ missed it, ending his streak.)

Appearing on a game show had never been on my bucket list. But during the pandemic lockdown, my teenage sons and I watched *Jeopardy!* daily, playing along and keeping score. At the end of every episode, the show prompted aspiring contestants to take a test online. In 2022, fighting both COVID and boredom, I took the test, clicked submit, and forgot about it.

Months later, after another test and an audition, I was shocked to get selected. I'd watched many contestants who had not been weaned on video games struggle to buzz in and worried I'd have the same trouble. But once I decided to put myself out there, I genuinely wanted to have fun. I leaned on five of my stylish Stanford soul sisters to help me choose what to wear—we settled on an iris-blue silk blouse and cardigan, more librarian than business casual—and then I focused on amplifying my strengths. When I practiced along with the show, a click-top pen for my buzzer, my husband (Doug Boeschen, '92, MA '93) prompted me to relax my shoulders, to smile, to be myself.

Two months later, I debated throwing a watch party. I would be seeing my episode for the first time, and, knowing the outcome, I felt some regret over my lack of gameplay savvy. But I was able to let that go when so many of my friends and family asked to share the experience and join me in watching the show.

Across the country, my family and childhood friends gathered around TVs. The episode aired hours before I could watch it in California, and texts poured in, many with photos of my supporters celebrating with glasses of wine from my husband's vineyard. In my own small town, at a bar showing *Jeopardy!* on all three of its TVs, a joyous roar went up whenever the buzzer went my way, and the crowd heckled my competitors with good-natured glee. In truth, my victory on *Jeopardy!* was this: the immense encouragement and big-hearted love of those who mean the most to me.

I certainly scored big in the fun category. Did I mention I didn't win? ■

DEBORAH CLAYMON, '92, *is a writer who lives in St. Helena, Calif. Email her at stanford.magazine@stanford.edu.*

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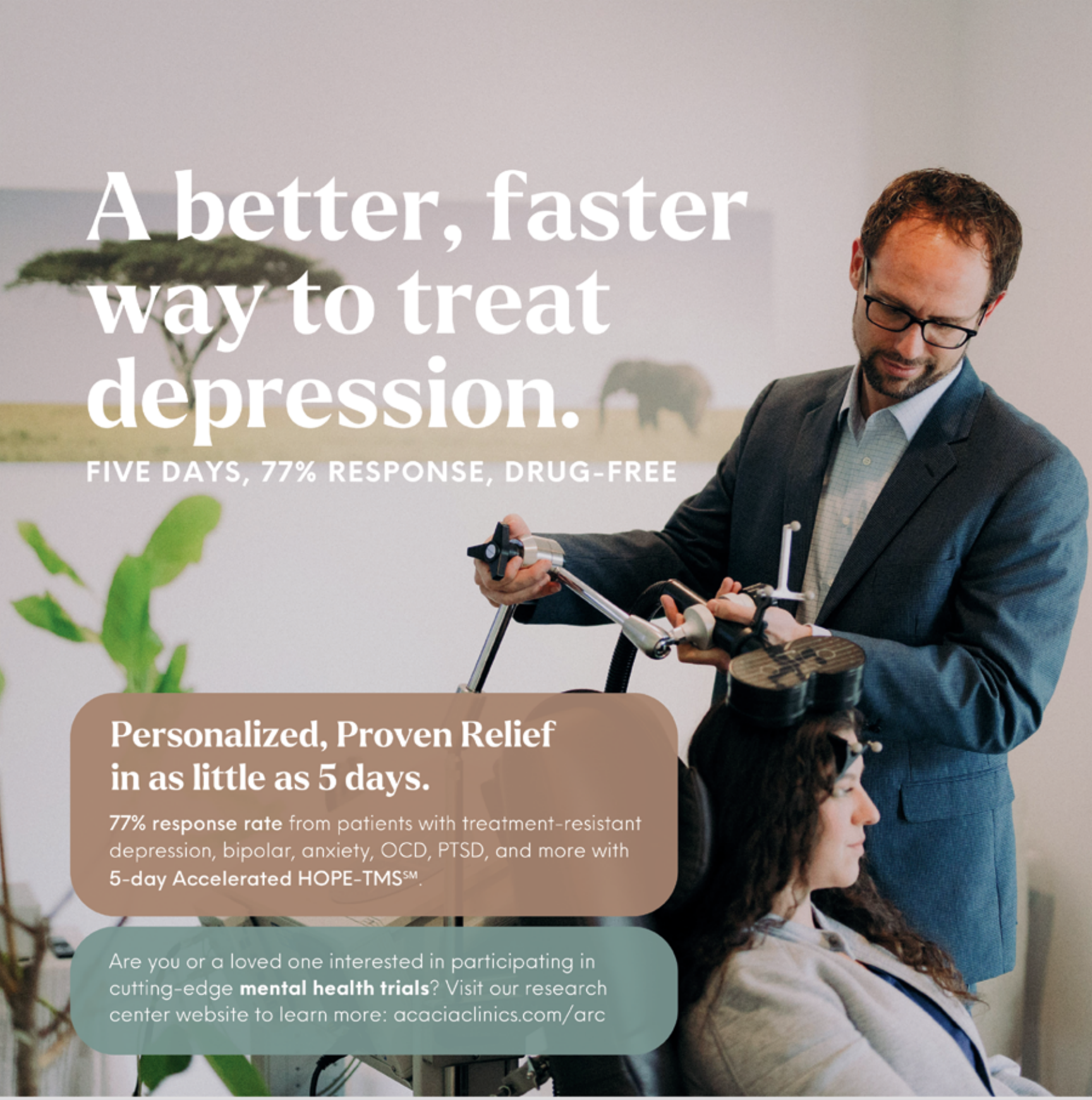

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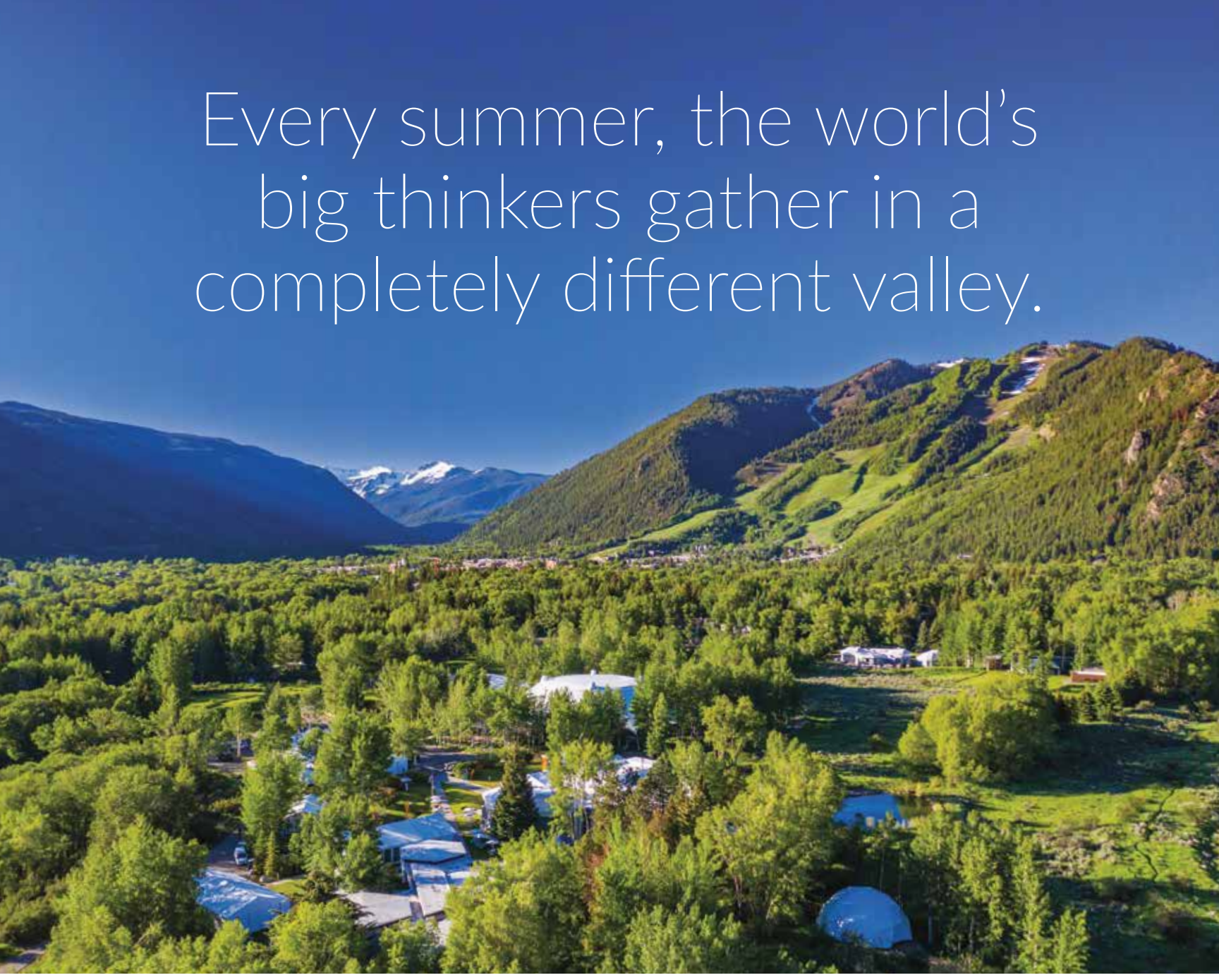

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