BODY COUNT

How Michael Snyder’s self-monitoring project could transform human health

WHO WRITES THE NEWS

A bumper crop of young journalists

THE STORYTELLER

N. Scott Momaday at 87
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34 The Measures of a Man
Geneticist Michael Snyder tracks his heart on his sleeve and his liver on his laptop. Here’s why he has gathered more than two petabytes of data on his biology (so far), and why he thinks we all should.

42 Grounded
It’s been 52 years since N. Scott Momaday, MA ’60, PhD ’63, won the Pulitzer Prize for fiction for *A House Made of Dawn*. Over time, he has tuned in to the lessons that language can teach us about caring for the earth.

48 Read All About It
Journalism is a dead-end career? Try telling that to the young alums making names for themselves at the nation’s most influential news outlets, from the *Wall Street Journal* to the *Atlantic*. Several share what it’s been like to buck the trend.
Meet Safia Elhillo
A slam poet explores migration and belonging through teaching and writing.

The Bowser Effect
From A Different World to her latest dramedy, Run the World, Yvette Lee Bowser, ‘87, has been bringing “enviable female friendships” to the screen—and into the TV industry—for more than three decades.

Hot Wings
Commercial airlines used to cross the Atlantic faster than the speed of sound. But since the early 2000s, they’ve been caught in the subsonic slow lane. Norris Tie, MBA ’19, is determined to change that. Quietly.

Digital
NEW AT STANFORDMAG.ORG
Our holiday book guide
Advice: Should I have kids?
Video of Stegner poetry fellow Safia Elhillo at alu.ms/safiaelhillo

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FROM THE ANNALS OF COLORING
A sketchy history PAGE 20
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It’s All Right Now

In September’s Postscript, Alison Ozawa Sanders, ’96, recounted how she slept through the first day of class and was sure it was a sign she didn’t belong at Stanford.

I am sure that many of us who brought “different” personal qualifications to Stanford felt the same angst described by Alison Ozawa Sanders. As a freshman admittee off the waiting list, I learned during Orientation that my SAT score was probably 200 points below those of my classmates. Adequately chagrined, I tried hard, paid attention and never had any grade problems. There were times when I even excelled. The lesson is that standardized tests don’t measure determination and effort.

Fred Leeson, ’71
Portland, Oregon

The Only Constant
A pair of stories in our September issue discussed changes being made to the undergraduate residential system as well as the first-year core curriculum.

Since graduating, I have never felt very connected to Stanford but I never understood why not. The article helped me understand the impact that the Draw had on my Stanford experience. Of my 12 quarters, I was in campus housing for only four. I was in a freshman dorm, and then through the Draw was in another dorm for one quarter before I went overseas my sophomore year. I was never able to get back into campus housing. The neighborhood concept is a great idea and would have made a big difference for me.

Thanks for making the change.

Drew Currie, ’74
Durango, Colorado

There was no common frosh curriculum for those of us arriving around 1970 and over the next decade or so, until the Western Culture curriculum was introduced in the 1980s. We were left to our own devices to choose how to broaden our minds—although not necessarily ending up with any “shared vocabulary and experience” other than what we happened to share with others along the way.

Kay Virginia Gustafson Webster, ’74, JD ’77
Agoura Hills, California

That such momentous changes in the Stanford experience are set forth in the somewhat off-hand form of an alumni magazine leads me to call for a more detailed evolution and evaluation. That such bold changes appear in part to stem from the constraints of the pandemic also leads me to believe that necessity is the mother of invention.

Leon G. Campbell, ’60, MA ’65
Woodside, California

How sad to see that at Stanford the humanities have finally been thrown under the bus, what with the new freshman course called COLLEGE, an acronym for Civic, Liberal and Global Education. The very title, smacking as it does of duty and boredom, makes me cringe. Think of all the great writers and thinkers of the past whose ideas and imaginative fictions would literally open and transform the world of Stanford freshmen, given half a chance.

Marjorie Perloff
Sadie Dernham Patek Professor of Humanities, Emerita
Pacific Palisades, California

Equalizer or Enabler?
A September feature discussed the pros and cons of implementing a universal basic income.

Human beings get greater satisfaction from earning a reward than just being given that same reward. For decades, we have been designing human beings out of workplace environments. We need to begin designing human beings back into the workplace environment in a way that provides meaningful work and income adequate to provide a comfortable life.

Bill Nilli, ’54, MBA ’59
Gilroy, California

UBI seems to be an effort to achieve socialistic values without threatening free markets and private enterprise. Another concept that would complement that effort is a reduction in the standard workweek from five days or 40 hours to something like four days or 32 hours.

Richard Luhring, MS ’70
Concord, California

I got to my Econ 1 section 15 minutes early. I sat in the very middle of the first row—and promptly fell asleep. I woke up about 15 minutes into the class, having drooled. Very embarrassing.

Tom De Paul, ’84

I am sure that many of us who brought “different” personal qualifications to Stanford felt the same angst described by Alison Ozawa Sanders. As a freshman admittee off the waiting list, I learned during Orientation that my SAT score was probably 200 points below those of my classmates. Adequately chagrined, I tried hard, paid attention and never had any grade problems. There were times when I even excelled. The lesson is that standardized tests don’t measure determination and effort.
Socialism and economic freedom are incompatible. Sweden figured this out when it abandoned socialism and returned to capitalism. Political freedom requires economic freedom. We are losing both.

David Paslin, '62
Oakland, California

UBI would be better supported with a major addition: Require one to either have an income-earning job or participate in an activity that contributes to society.

Richard Park, '58, MD '62
Sparks, Nevada

Former Stockton mayor Michael Tubbs, '12, MA '12, and Stanford assistant professor Juliana Bidadanure propose that the federal government implement a UBI with the government issuing a monthly check not only to the poor, but to every person in America. That means 85 percent of the country's population will receive trillions of dollars annually in government checks only to return much of the money at tax time. Why abandon the key components (i.e., a privately funded community-based approach) of Tubbs's successful pilot? If the Stockton program brings lasting positive results, the coalition of other interested mayors can adopt his model. The rest of the country will notice, and even if a taxpayer-funded UBI never happens, Tubbs and other city leaders will have improved many lives.

Mark Van Brussel, '73
Poway, California

Oh, Boy

In September, the 1,000 Words photo depicted Alex Massialas, '16, in a bronze-medal bout, accompanied by facts on Cardinal achievements at the Summer Games.

How wonderful to read about the success of Stanford athletes in Tokyo and the interesting statistics—and somehow the one male medal winner of 26 medal winners was featured in the accompanying photo. It is a dramatic image, and congratulations to Alex Massialas for his medal, but with 25 female athletes (many of whom won gold), it struck me that gender inequality shows up in subtle and pervasive ways.

Leslie Kleinheksel Coote, '88
Victoria, Australia

I find it incredibly ironic and not the least bit shameful that you featured a large photograph of Olympic fencer Alex Massialas and lauded his bronze medal in men’s team foil at this summer’s Tokyo Olympics, when it was the varsity fencing program (on which Massialas fenced) that the Stanford athletics department tried so intently to cut.

Meagan Levitan, '87
San Francisco, California

It’s Complicated

The September President’s Column outlined plans for a new school focused on sustainability.

Years ago, I was looking over the latest books on environmental science when I became aware of a man standing next to me. He looked at me and said, “There is only one problem—the human population.” The challenge for Stanford’s new school, at least for now, is going to be holding its aim on that rapidly moving target.

Edwin R. Lewis, '56, Engr. '60, PhD '62
Bainbridge Island, Washington

We will not innovate or spend our way out of the climate crisis. Each of us will need to contribute toward conserving resources. The new Stanford school should focus on analysis of economic choices, such as whether electric cars truly are more environmentally friendly.

Stella Yang, MA '88
Tustin, California

Clarification

In an interview for the September issue, senior Nick Hakes credited Navy Adm. William McRaven as the inspiration for one of his habits: “If you can’t do the small things right, you’re not going to do the big things right. That’s why every morning when I get up, I make my bed.”
Plane Sight
How stories about alumni take flight.

SENIOR WRITER Sam Scott was musing: When has technology actually regressed? He wasn’t asking the commonplace question “When has technology damaged society?” but, rather, when have we retreated from an innovation that was in commercial use?

And he realized: supersonic flight. The Concorde used to fly from London to New York in 3 1/2 hours. Today’s published flight time on a standard jet: eight hours.

It’s the kind of question that keeps undergraduates talking late at night in the hallway. It’s also the kind of question that spurs magazine stories. Surely there are Stanford alums and authors who are doing remarkable things, we hope you’ll drop us a line. It’s the kind of question that keeps under-graduates talking late at night in the hallway.

Other stories take shape automatically. Digital art director Michele McCammon was enjoying Dear White People on Netflix when she learned that its executive producer, Yvette Lee Bowser, was a member of the Class of ’87. It took about a nanosecond for us to realize the pioneering writer-producer should be the subject of an alumni profile (page 22). Same goes for N. Scott Momaday, MA ’60, PhD ’63—when has technology damaged society?—I was reviewing a list of prominent alumni authors and discovered we’d never profiled him, although he did publish a piece in the magazine back in 1975, when he was teaching at Stanford. On page 42, you can read about his life and work before and since.

We try to keep tabs on as many alumni as we can. But there are 236,449 of us and counting. So when you come across Stanford friends and colleagues who are doing remarkable things, we hope you’ll drop us a line. It’s OK if they aren’t breaking the sound barrier—or any barrier, for that matter. We just want to know who’s making you proud.

Email Kathy at kathyz@stanford.edu.
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Renewing Our Community
A fall quarter devoted to reconnecting after 18 months apart.

AFTER POSTPONING last year’s Reunion due to the pandemic, it was wonderful to host alumni for both 2020 and 2021 Reunions on campus in October. More than 6,000 alumni joined us for a celebration that was both fun and deeply meaningful, despite some raindrops. The campus really lights up when our alumni come back to Stanford, and I hope all who attended enjoyed the opportunity to reunite with old friends, reminisce about their college years and everything that has happened since, and learn about the exciting new directions the university is taking.

The joyful reconnections at Reunion were a highlight within a fall quarter that has been all about renewing our bonds with one another. After being dispersed far and wide for many months, our students, faculty and staff are finally together on campus this fall. For me, it has been energizing and inspiring to have our campus filled with many more members of our community, and it has been wonderful to settle into the routines of a more normal academic year.

Though the pandemic is still with us—and with it, masking, testing, and other health and safety protocols—we believe we are well positioned to support our community’s health through this academic year. The protocols we have in place have allowed us to pursue as normal a fall as possible: Our students are attending in-person classes, our researchers are filling the labs and libraries, and our athletic fields and performance spaces are once again alive with competition and the arts.

Our students have also returned to the residences, where we’re focused on strengthening the bonds of community through our new residential model, ResX. With our largest-ever undergraduate student body on campus this fall, ResX offers each student a neighborhood home base that reinforces belonging and provides a smaller community within the broader Stanford experience. ResX preserves the best of our traditions while prioritizing well-being, equity, and inclusion, as well as academic and intellectual enrichment.

As we reconnect in person, we’re also applying lessons learned from a year of remote work and learning. The experience of moving our campus activities online has opened new ways of broadening access to Stanford’s resources in health care, education, scientific research and the arts. For example, before the pandemic, Stanford Medicine provided around 2,800 telemedicine visits a month; at the height of the pandemic, it was providing 60,000 a month. Likewise, the audience for scientific conferences grew by hundreds, even thousands, because attendees could log on from home. We’re embracing these opportunities to broaden our reach and connect Stanford with people from across our region and around the world.

We’ve also learned a great deal about remote work and its benefits. While we’re delighted to bring our community back together in person, we also want to maintain the elements of remote work that were successful over the past many months. This fall, we’re experimenting with a more flexible work model for members of our staff, including hybrid work options. We believe we can strike a balance that retains the benefits of remote work and promotes the well-being of our employees while supporting our operations as a residential university.

As we come back together, it’s with renewed appreciation for the remarkable people who make up our Stanford community. Now that we’re together on campus once again, we’re focused on rebuilding a community that reflects the perseverance and innovative spirit that they have displayed over the past year and a half. As we look to the future, the talent and creativity within our community give me great hope for all that we can achieve.
For everything now, and everything that’s next.

For generations, Stanford Medicine—made up of Stanford Children’s Health, Stanford School of Medicine, and Stanford Health Care—has leveraged its combined power, precision, and innovation to keep our communities safe and healthy. Thank you, Bay Area, for placing your trust in Stanford Medicine.

We are here for you.
Forget-Me-Nots
The finishing touch for *Apart-Together* came quite by accident. Art and art history lecturer Lauren Toomer, MFA ’15, was invited to create a visual element for Stanford Medicine’s COVID-19 Remembrance Project. She had settled on a sculpture made of wood from the campus environs. Intertwining branches would emerge from three stumps representing the university, the School of Medicine and Stanford Health Care. But in the process of playing around with her materials, Toomer ended up constructing little flowers. That’s when it clicked: Instead of using flags to represent lives lost to COVID-19, as had been the plan, she would invite community members to paint 600 wooden petals in memory of the then 600,000 people in the United States who had died in the pandemic. The flowers and Toomer’s sculpture were placed in front of the *Angel of Grief* statue and dedicated in a ceremony that included musical performances on October 6. Toomer hopes each petal will act as a reminder that, behind the numbers, there were unique people.

PHOTOGRAPH BY ERIN ATTIKISSON
Leadership Journey Workbook: Self-Reflections and Actions for Growth
By Suzanne Taylor, ’85, MBA ’90
Where are you going as a leader, and how are you going to get there? Research from Stanford’s Graduate School of Business shows that a journey mindset is a resilient and effective way to picture your path. This workbook offers research-backed frameworks and tools to help you grow as a leader and make a bigger impact. You’ll gain insights, expanded skills, and a roadmap for your leadership growth.

Charlemagne, the Story of a French Cat
By Elisabeth Barbou Baylor
Published posthumously by her sons, this children’s book recounts the adventures of a cat named Charlemagne, who lives in a small village in France. Charlemagne is captivated by the pigeons that frequent the steeple of the local church, but this daring cat soon learns that rash decisions can have unwelcome consequences. The story is presented first in narrative form and then in verse. It is animated by the author’s 22 original illustrations. Available on Amazon.

The Last Tea Bowl Thief
By Jonelle Buelow Patrick, ’80
An American grad student and a Tokyo shopkeeper have nothing in common, until they discover that both their futures depend on finding a tea bowl that was stolen centuries ago. The long-buried secrets they uncover force them to choose between pursuing their own dreams or righting the terrible wrong at the heart of the tea bowl’s mystery. Editor’s Pick for Best Mystery on Amazon.

Tuscany in the Age of Empire
By Brian Brege, BA ’07, MA ’07, PhD ’14
A new history explores how one of Renaissance Italy’s leading cities maintained its influence in an era of global trade and empire. The Grand Duchy of Tuscany was not an imperial power, but it harbored global ambitions. After attempting colonization and commercial expansion, Tuscany followed a different path to participate in Europe’s new age of empire without establishing one of its own.

Second Chance Against the Third Reich
By Kent Hinckley, ’65
Historical fiction: Prior to D-Day, a U.S. colonel, suffering from shell shock (PTSD) in World War I, goes behind enemy lines to rescue his estranged daughter chased by a Gestapo general who is obsessed with his capture.

Creative Acts for Curious People
By Sarah Stein Greenberg
Executive Director of the Stanford d.school
A new book by Sarah Stein Greenberg. It’s a highly visual resource featuring work from a huge community of designers and faculty. Sarah shares more than 80 assignments from the d.school’s history contributed by some of the world’s more inventive and creative minds. Each assignment is accompanied by delightful illustrations from Michael Hirshon. Order at http://dschoolbooks.com.

Quantitative Cell Physiology: Measurements and Models
By Stephen M. Baylor, MD ’71
This experimentally-grounded textbook explores the function of nerve, muscle, and secretory cells at the cellular level. The laws of diffusion, electricity, and mass action are explained and applied to elucidate how cells establish a membrane potential, achieve osmotic balance, generate action potentials, initiate secretion, and control muscle contraction. The book is appropriate for self-study or for use in a course for advanced undergraduates or early graduate students. Available on Amazon.

The Silver Waves of Summer
Editor and contributor: David M. Olsen
Certificate Program in Novel Writing Stanford Continuing Studies
“In assembling a variety of literary tales, short mysteries, and crime noir, Olsen handpicked these stories not only for their often bestselling and award-winning authors, but also for their suspense quotient and deft ability to thrill in a few pages. Olsen has masterfully gathered an established crew of writers to maximum effect.” —Kirkus Reviews
Sidewalk Strategies a Practical Guide for Organizers and Activists
By Larry Tramutola, ’70
Nelson Mandela, Cesar Chavez, and Dolores Huerta have one thing in common: they’re organizers who committed their lives to improve their communities. In this easy-to-read book Tramutola provides practical lessons on how organizers build power against significant odds. Today, as Trump and his supporters wreak havoc on political institutions from school boards to Congress, this book is a must read.

Win from Within: Build Organizational Culture for Competitive Advantage
By James Heskett, MBA ’58, PHD ’60 with foreword by John Kotter
HBS professor emeritus, James Heskett, shows how leadership can bring about an effective organizational culture within a surprisingly short time span. It offers a groundbreaking playbook for developing and deploying culture—demonstrating its role as a foundation for strategic success—and its measurable impact on the bottom line.

From The Village Of Lucca
By Bernard P. Lahde, ’72
This rich and sweeping mystery about two heroic women has been honored in international competitions and praised by readers and writers alike: “Beautifully written … should be an epic motion picture!”, “The writing is downright gorgeous”, “Reads like a classic!”, “Accolades! Accolades!” Find this JP Roarke (pen name) work at Austinmacauley.com

We Are Akan: Our People and Our Kingdom in the Rainforest—Ghana, 1807
By Dorothy Brown Soper, ’63
In a richly illustrated story middle grade readers join Kwarne, Kwaku, and Baako, two royals and a slave, who strive to become leaders in the Akan culture of the Asante Kingdom. Adventures abound at home, in the capital city, and on a mission to the coast when two boys are threatened with sale to the Atlantic slave trade. www.dorothybrownsoper.com

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.

End Of The Gods
By Bill Fernandez, ’53, ’55
1819: The Hawaiian king is dead. Hawaii is on the verge of Civil War between followers of the traditional religion led by Ku and those conspiring to end the centuries of obedience to the gods of death for breach of kapu. Hero Kalani Tana (Splintered Paddle and Conquest novels) returns to the islands from China and joins the conspiracy. Meanwhile, six thousand miles away, Christians set sail on a mission to bring Jesus to the savages.

Investing in a New Climate
By Scott Schwartz, MLA ’25
Investing in a New Climate: A Sustainable Approach to Investing in a New Climate is not about doom and gloom, but about adapting to change. To survive—and succeed—we must adapt. We must learn how to invest, live, and plan within the realm of reasonable extrapolation of a changing global climate.

The Legend of Ranger, the Reindeer Who Couldn’t Fly
By Alan B. Salisbury, MS ’64, PhD ’73
This delightful award-winning, critically acclaimed, inspirational tale will make a wonderful addition to your family holiday traditions. ALL profits benefit kids with cancer. www.thelegendofranger.com
**Hearts and Minds: Reclaiming the Soul of Science and Medicine**  
By Walter Alexander, Wallace Stegner Fiction Fellow '66-'67  
Our great scientific revolution has delivered, along with technological/medical miracles, a worldview limited to impersonal forces/particles and chance-guided evolution. *Hearts and Minds* (heartsmindsoul.com) explores dramatic evidence from medicine, quantum physics, open-systems biology, consciousness studies, and epistemology showing that science, without losing its rigor, must include a broader range of phenomena.

**Thank God I Got Polio: A Life of Adventure and the Adventure of Life**  
By Wayne Raffesberger, '73  
A young boy suddenly collapses after contracting polio. After months in a polio ward, he goes home in a wheelchair. Despite being told he may never walk again, a conscious decision is made to surmount his physical and emotional challenges by living a life of adventure. With loving medical care, persistence, and courage, he succeeds. A story that will break your heart, and then put it back together again.

**Sisyphus Reclining**  
By Page Wellcome, '54  
This book is the journal of an around-the-world trip which the author and his wife took for almost all of the years 1988-1989, going all of the way around the world with only one advance reservation for the first night of their east-to-west journey. The book tells of things they did, people they met, and the mechanics of traveling this far with no support, other than mutual trust and affection for each other. Outskirtspress.com.

**The Harder I Fall, The Higher I Bounce**  
By Max James, MBA '71  
The Chronicle of Max's life is nothing short of entertaining. After his time as a rescue pilot in Vietnam, his entrepreneurial journey went from good to bad to earning the title "King of Kiosks" by *Fortune*. "This is a fascinating book and should be on the reading list of every young aspiring entrepreneur..." —Harry Pearce, Vice Chairman of General Motors (Retired)

**Life After Lockdown: Resetting Perceptions of Autism**  
By Ruth Prystash, '79, Rebecca Silva, René DeLoss, & Carol Burmeister  
This collaboration by over 40 experts, including individuals with autism, provides advice, wisdom, and inspiration for autistic and non-autistic readers in navigating a post-pandemic world. The book addresses anxiety, social stress, and a return to typical life. Has the lockdown actually benefited people on the spectrum and is it time for a reset of society's expectations for the autistic community?

**Resurrection SHOCK: Did the Disciples Get It Right?**  
By Lane Sanford Webster, '80  
Did the life of Jesus of Nazareth end with his death like every other normal human being? Or did he come back to life to walk and talk and eat and show his scars? Witness reports and profiles, accounts of secular figures, along with striking archaeological discoveries kick in to help you assess nine key lines of historical evidence for the resurrection of Jesus.

**The Rock Shall Dance**  
By Peter Saxton Schroeder, MBA '70  
This memoir looks at controversial events—from 1960s anti-war protests at Stanford University to 1980s spiritual quests in India. Peter Schroeder has lived both traditional and divergent lifestyles. With additional degrees from Princeton and UNM, he worked in nuclear weapons testing and later managed companies in five countries. Unorthodox pursuits include hopping freight trains across America, impersonating a priest, slacking as a surfer dude in Hawaii, and battling bone-marrow cancer.

**The Prosecution Never Rests: Strange But True Stories of Courtroom Drama**  
By Albert Charles Bender, JD '66  
Drawing upon his long career, a retired prosecution attorney provides the reader with a rare glimpse into the mysterious world of the criminal justice system. This fascinating book contains 41 short stories, some of which are shocking, even alarming, and depict rather bizarre behavior by defendants, judges, and other lawyers. The reader will be surprised, entertained, and even informed by these stories.
WWW.POLITICALDISAPPOiNTEE.COM

By Paul Kollmer-Dorsey (Stanford Law School, ’88)

Nick Cravit, a middle-aged bureaucrat fed up with abusive political appointees, finds an on-line avatar to fight back for him. Young ambitious Tina Pettit, dismissed from the President’s Transition Team, teams up with Nick to launch a website exposing “political disappointees” in the Executive Branch, starting with the new commissioners at Nick’s agency. Lady Liberty’s blog shakes up the Commission, the White House, Nick’s marriage and Tina’s life. “House of Cards meets Mr. Smith Goes to Washington.” —Faye Samuels.

October Surprise

By Barbara Honegger, ’69

The shocking deep story of the Iran side of the Iran-Contra scandal—the 1980 Reagan-Bush Sr. Campaign’s secret negotiations with the Ayatollah Khomeini’s Islamic regime to delay the release of the American hostages ensuring President Carter’s defeat—by an Insider ‘Who Was There’. This is the pioneering first book on this subject critical to a true understanding of recent American history subsequently confirmed by formerly classified documents. Available on Amazon.com.

Writing As A Performing Art

By Thomas E. Cronin, ’62, ’64, ’69

An invaluable motivational pep-talk and entertaining briefing for nonfiction writers. Newspaper editors have called it “absolutely marvelous” and “incredibly valuable.” A Lincoln biographer says he has never come across a better boot camp for cultivating the Inner Editor. Published by Abuzz Press.com.

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THE STANFORD SINGULARITY

By Alex Harwood, ’73

Numerous well-known figures have indicated that the greatest threat to Americans and our way of life is artificial intelligence. When the young woman who was the creative force behind the software disappears along with her boss, it soon becomes clear there is also a malevolent entity at work. But is the danger from humans or something else? In this science fiction novel, as a software singularity drastically changes American life, an elite team must work to counteract a mysterious hostile force.

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I Can’t Always See My Path ... But I Keep On Walking

By Richard Keith Turner, ’60

Beautiful color images of nature, elegant prose. “It’s a treasure, the photography stunning, the words insightful, the experience deeply moving.” —Dewitt Jones, 20 years a photojournalist with National Geographic. www.rturnerphotography.com

October Surprise

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The shocking deep story of the Iran side of the Iran-Contra scandal—the 1980 Reagan-Bush Sr. Campaign’s secret negotiations with the Ayatollah Khomeini’s Islamic regime to delay the release of the American hostages ensuring President Carter’s defeat—by an Insider ‘Who Was There’. This is the pioneering first book on this subject critical to a true understanding of recent American history subsequently confirmed by formerly classified documents. Available on Amazon.com.

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One of the pleasures of poetry for me is just the noises that the language makes. If I wanted to make sense, I would learn to write prose. But I’m trying to make sounds. So I write poems.”
“I have a very casual relationship to place. I think it’s because I spent so long longing for a deeper relationship to a place that I felt like was never going to be accessible to me.

“It took me so long to get to my own ideas about how English is so not sacred, and you’re allowed to break it and fill it with new things. Where it fails, you can supplement it with another language. Grammar is not sacred, and you can modify it to suit you.

“I grew up all over. I lived in a bunch of countries before my family moved to the U.S. The longest I’ve lived anywhere was when I moved to D.C. in 2000, and I lived there until I graduated from high school in 2009. I still have not hit 10 years anywhere.

“I hope that we’ll all just storm the gates and make columns and make books and crowd the world of poetry with all of these different voices so that we can finally release ourselves from the idea that there’s one to three ways to be a whatever, a Black poet, Muslim poets, a Sudanese poet.”

“I came of age a little bit before the YouTube of it all and the Button Poetry of it all, so the poems were really ephemeral. I’d go to an open mic or a slam or something and hear someone do a really incredible poem and then be like, I really better f***ing pay attention because I might never hear this poem again. [Slam], I think, was a very safe place for me to come of age.

“I hope that we’ll all just storm the gates and make columns and make books and crowd the world of poetry with all of these different voices so that we can finally release ourselves from the idea that there’s one to three ways to be a whatever, a Black poet, Muslim poets, a Sudanese poet.”

—Ray Levy Uyeda

GROWING UP IN WASHINGTON, D.C., Safia Elhillo relished the area’s robust spoken word and slam poetry scene. “That, I think, is where my relationship to poetry really started to form, because it felt like there were real people I could pin the idea to,” she says. Poetry wasn’t just some esoteric or unknowable craft; it was an embodied practice.

In high school, Elhillo joined the D.C. Youth Slam Team, and later became one of its coaches. Then she formed Slam NYU, a nationally ranked collegiate team, while pursuing her undergraduate degree at New York University. In 2017, Elhillo published her first full-length poetry collection, *The January Children*, a meditation on displacement and home. (The title refers to the British colonial practice in occupied Sudan in which children were assigned birth years by height and given the birthday of January 1.) Her novel in verse, *Home Is Not a Country*, was published this past March, and Elhillo is now at work on a second collection of poetry. Much of her work explores themes of familial and place-based belonging, as well as migration and ancestry.

As a 2019–21 recipient of the Wallace Stegner Fellowship, Elhillo currently teaches poetry in Stanford’s creative writing department. Through teaching, she’s approaching poetry anew, rediscovering what attracted her to the form. “I love teaching because it’s so not about me. It’s nice to just step outside of [myself] a little bit,” Elhillo says. “Being around young people who are getting newly excited about poetry really keeps me from getting jaded.”
Rain Check
An atmospheric river was no match for alumni ready to reunite at last.

OVER THE FOUR DAYS of Reunion weekend in October, Mother Nature deposited 3.21 inches of rain on the Stanford campus. Although she took down a number of tree limbs, for the most part she refrained from raining on alums’ parade—or, rather, their parties, panels, barbecues, tours and Classes Without Quizzes. Thank goodness, since half of the attendees—those who graduated in years ending in 0 or 5—had their return to the Farm delayed a year due to the pandemic. They were joined by the “1s and 6s” for a double reunion, where they hopped among 446 events, from Dinner on the Quad to a women’s water polo minireunion to the 50th anniversary of Stanford’s Asian American theme house, Okada, and the People’s Teahouse. And the hugs—among those who wore a green sticker indicating comfort with closeness—have never been so tight.
ONCE THE JURISDICTION of preschoolers forced to sit in restaurant booths, coloring has become an Instagram-worthy adult hobby. Some 12 million adult coloring books were sold in the United States in 2015. And that was long before we hit peak anxiety during months of social distancing. Coloring has been touted as a way to recapture childhood, an inexpensive stress buster, even a formal mindfulness practice. And assistant professor of art history Emanuele Lugli gets all of that. “Everything that has precise borders and contours and where the rules are extremely clear and easy to follow—something you can do without any critical faculty involved—is by definition relaxing,” he says.

Lugli, who teaches late medieval and early modern art, says maps were the first meaningful instance of coloring, providing clear definition and boundaries in times of contested borders. Still, he says, as a skill, coloring generally has been less valued than drawing. Coloring pictures for children, created in Victorian England, were “part of a particular educational principle that education is about learning how to behave in society,” he says. The 1879 Little Folks Painting Book, often described as the first coloring book, instructed children on appropriate behavior, from the importance of waking up on time to the final message: “never be discontented, never wish for anything you cannot have.”

So, literally and figuratively, stay within the lines. When Lugli wrote about this history for Slate in 2020, he was inundated with messages from angry (even threatening) readers. But Lugli says he had no intention of disparaging anyone’s nature scenes. He, too, has enjoyed coloring. It can build motor skills. It may be soothing. But as presented, he does not believe it’s building much artistry. If you’re looking to work your creative muscles, Lugli recommends filling in spaces with patterns rather than solid color, or using the outlines provided as mere suggestion. (Go ahead, add some purple—nay, Jazzberry Jam—Crayola cupcakes here. Something tells us the Tree is an outside-the-box thinker.) Or take Lugli’s suggestion to rip up this page and reassemble it into a collage. And please send us a photo.
Young at Art

A new building in East Palo Alto takes its cues from the youth it is designed to serve.

ABOUT 50 YEARS AGO, John Goldman was a lifeguard and a swimming instructor at Ravenswood pool in East Palo Alto. Nearby, Marcia Goldman taught kids with disabilities to swim. That early connection to the community spurred their commitment in recent decades to improving the lives of EPA's youth, most recently as the benefactors of EPACENTER, a 25,000-square-foot arts hub designed by and for the youth it serves.

Through the John & Marcia Goldman Foundation, in 2009 the couple began exploring possibilities for the building but deliberately refrained from spelling out its particulars. “We wanted these young people to steer the course of what was going to happen,” says John Goldman, MBA ’75. “We flipped the traditional philanthropy model upside down.” A youth advisory council was formed to take the project forward. Among its members was Keitlan Wallace, a dancer who joined the planning as a high school junior. “I wanted to see a way for us young adults to dream bigger,” she recalls. “You know how in high school they talk about college and jobs, but they don’t really ask us ‘What do you want to do?’ I asked EPACENTER to give us computers, music studios and education for producing music.”

As it turned out, that was the resounding consensus: The center should provide a home for arts including music, dance, visual arts, and computer- and makerspace-based creation. Over time, the youth advisers picked the name, distilled the programming, selected the architect and even insisted on LEED Platinum building standards. Wallace, now 20, remembers weighing in on everything from the center’s mission to its rooms and resources to the vibe of the decor and outdoor space to the desired traits of its staff members.

“Being able to express yourself in a creative way in a safe environment—there are so many benefits to that all the way around,” says council member Staci Edwards. Now a student at the University of San Francisco, Edwards still lives in EPA and expects to teach both guitar and upright bass at EPACENTER, which gradually began opening this fall. “I didn’t think it would happen in my lifetime—a project like this is so big,” she says. “Have you seen the building? It’s beautiful. It’s like something you would see in an affluent neighborhood. I’ve never been inside a building that’s so colorful and so unique and so community-oriented.”

THE TICKER

Guido Imbens, a professor at the Graduate School of Business and in the department of economics, is one of three winners of the 2021 Nobel Memorial Prize in Economic Sciences for developing tools that help economists draw precise conclusions from complex, seemingly chaotic real-life situations. Associate professor of neurology Michelle Monje, MD ’04, PhD ’04, was awarded a 2021 MacArthur Fellowship, aka genius grant, for her work to understand healthy brain development and to create therapies for lethal brain tumors.

A few days earlier, her husband, Karl Deisseroth, MD ’00, PhD ’98, a professor of bioengineering and of psychiatry and behavioral sciences, and a giant in the field of optogenetics, received the Lasker Award, which recognizes visionaries whose insight and perseverance have led to dramatic advances with practical medical potential. And elsewhere in “power couples” news, Sterling K. Brown, ’98, won an Emmy for narration in a CNN miniseries on Abraham Lincoln, and NBC greenlighted The Endgame, starring his wife, Ryan Michelle Bathe, ’98.
IN 1998, Carla Banks Waddles wrote a $50 check she knew would bounce just to attend an event where TV writer and producer Yvette Lee Bowser would be honored. Waddles, then an aspiring TV writer, summoned the courage to approach Bowser, which led to a phone call and advice on which internships Waddles should pursue. Waddles ended up an intern—and later, a staff writer—for Bowser on NBC's For Your Love. (She went on to write for NBC's Good Girls and BET's Hit the Floor.) She says Bowser's willingness to share what she knows is part of what makes her such an influential force in Hollywood. "She looks out for people who have been with her," Waddles says. "She keeps people in her family. I think that impact does have a ripple effect."

Becoming close to Bowser, '87, indeed has its perks—and an occasional peril: Anecdotes from your life may end up on-screen. "Just know your name will be changed to protect the guilty," Bowser says, laughing.

For 34 years, friendships—specifically what she calls "envious female friendships"—have been Bowser's storytelling north star. She was the first African American woman to develop her own prime-time series—the iconic '90s sitcom Living Single. In the years since, she has put her stamp on hundreds of episodes of TV, from the UPN series Half & Half to the satirical Netflix series Dear White People to her latest dramedy, Run the World.

Bowser grew up in Los Angeles with a French-German-Irish mother and a Japanese stepfather. "I spent a lot of my childhood trying not to be seen because I didn't come from means," she says. "Storytelling was a way for me to articulate my feelings and for me to project into the world what it was that I wanted to see and how I want it to be seen." During her years at Stanford, her time in the Ujamaa ethnic theme house and at the Black Community Services Center shaped her political consciousness as a biracial woman. "We had a super close group of African American students," she says. "We had our own little mini campus that was very culturally rich." She also learned that she deserved to be at the table with people from more affluent backgrounds. "Stanford gives you that information that not everyone gets if you only stay on your block," she says. "You can be king of your block. But go out in the world. You figure out how to navigate different kinds of people, different kinds of situations. You really start to have an appreciation for yourself and where you’ve come from. So there’s no shame in my game now."

She was the first in her family to graduate from college. After, Bowser landed a job as an apprentice writer for A Different World, a spin-off of The Cosby Show. Starring Lisa Bonet, the sitcom centered on the lives of students at Hillman College, a fictional historically Black college. Bowser's first role was unglamorous: She took notes and lunch orders, ran errands, and sometimes helped the art department. But the show, she says, nurtured Black and female creative staff. By the end of her five-year tenure, she had contributed as a writer on every episode, authored 25 of them, and become a producer. She used her experience at Stanford to inform the storytelling, which didn’t shy away from tough topics, including racism, sexual assault and the HIV/AIDS epidemic.

At the beginning, Bowser says, she didn’t consider her work important “with a capital I.” To her, it was personal creative expression. But on A Different World, she says, “I learned very quickly that my art could be my activism, or at least part of it. And that could be my value to society at large.”

After leaving the show, though, Bowser says, she experienced the dark side of Hollywood, including misogyny, sexual harassment and racism. “I felt isolated, unmotivated and unappreciated. I was just like, ‘This can’t be what the rest of Hollywood is, because if it is, then I won’t be here for long, because I’m not going to suffer these fools.’” She recalls having
to fight to protect depictions of Black people on-screen. “Sometimes I would be told, ‘Oh, that’s a little too Black.’ I’m like, ‘Wow, what you just said is a lot racist.’ I didn’t say those things in the room, but I just thought—I have to go create an environment where I can say something or someone else can pitch something that is Black.”

She was determined that Living Single be a supportive environment for women and people of color. The sitcom, centered on six successful Black friends living in a Brooklyn brownstone, debuted in 1993 and ran for five seasons. It became one of the most popular African American sitcoms of its era and, in its final season, was nominated for six NAACP Image Awards and won three, including Outstanding Comedy Series. Recognition is nice, Bowser says, but she has a larger goal. “I think something that’s been important to me is just getting to have love and family while pursuing success. “[Bowser] dispelled that, you know what I’m saying? That is something that has always been an inspiration to me as somebody who’s been ambitious in my career, who also wants love and marriage and family.”

Bowser, who, with her husband, Kyle, has two sons (Evan and Drew, a sophomore who plays baseball for Stanford), walks the talk when it comes to supporting working parents. “I just remember how she looked out for me,” Waddles says. “She gave me an office with a lock on it so I could nurse in privacy.” Bowser says being in a position to take such actions is one of the most rewarding parts of her career. “It’s been interesting to inadvertently inspire others just by being,” she says. “And then to really pick up that baton and run with it, and pass it on as many times as I can and in as many ways as I can.”

“It’s been interesting to inadvertently inspire others just by being. And then to pick up that baton and run with it, and pass it on as many times as I can and in as many ways as I can.”

In recent years, people, including Living Single actors Queen Latifah and Kim Coles, have pointed out the similarities between Living Single and the hit NBC sitcom Friends, which debuted a year later and features six single white friends living in Manhattan. “We’re getting to a place where we’re not afraid to embrace ourselves and accept our place in the culture at large,” Bowser says. For those keeping score, Run the World takes a moment in the script to acknowledge its similarities to Sex and the City while, as a Variety reviewer said, developing “its own distinct mood and vibe that’s nothing like its predecessor.”

But Bowser says the most meaningful recognition she receives is one-on-one, from people who say that her work makes them feel seen and heard. In the end, it all comes down to shared humanity and, well, friendship. “For people to really just see you as an individual, to know your heart, and embrace that and respect and treasure that, is everything. I am not my career. I’m a human, and I have a special place in the world— as everyone else— but I’ve certainly received a great deal of validation through my career because it is a very public endeavor. I try to make sure that the people I know who don’t work in jobs that are so in the spotlight know how important they are, as professionals and as people. I think it’s very important for us to all be reciprocal in loving on and celebrating each other.”

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The first time Norris Tie heard a plane break the sound barrier, he was working as an engineer at a spacecraft manufacturer in the Mojave Desert. "It sounded like a bomb went off," he says. "I kind of jumped out of my seat."

Older hands at the office were unfazed. It was probably just an F-18 from nearby Edwards Air Force Base, for generations the center of American supersonic test flights. But for Tie, MBA ’19, the sudden crack was like an exclamation point.

Ever since he was a kid enduring 12-hour flights to see family in China, Tie had been fascinated by commercial aviation’s stall in speed. In a world where technological advancements come fast and furious, why were airliners stuck in the same subsonic slow lane they’d been in since the ’60s? Even before studying aerospace engineering at UCLA, Tie became fixated on finding ways to fly faster.

Noise was always an obvious obstacle. Since the ’70s, civil supersonic flight over land generally has been outlawed precisely because of the roar that startled him at his desk. (The famous Concorde jet made only transatlantic journeys.) But by that moment in 2016, NASA was pushing forward on plans for an experimental jet capable of breaking the sound barrier with more whimper than bang. The boom in the desert was just visceral confirmation to Tie that this quest for quiet speed was where his future lay.

Five years later, Tie is focused on bringing the promise of a muted sonic boom to marketplace. With Tim MacDonald, MA ’15, PhD ’20, Tie is co-founder of Exosonic, a fledgling start-up developing a 70-seat commercial airliner designed to fly at 1.8 times the speed of sound with a fraction of the noise of a normal supersonic jet. The real hook? New York to Los Angeles in three hours, at business-class prices.

It’s a tall order, with a thicket of technical, financial, regulatory and environmental challenges that have already defeated more established rivals. In May, Aerion Supersonic, a Nevada-based company with similar dreams, abruptly shut down, citing the challenges of securing capital. Even in best-case scenarios, Exosonic won’t have an airliner ready until well into the next decade. This

### PURSUITS

Hot Wings
The race to reclaim supersonic flight.

BY SAM SCOTT
spring, the company began wind tunnel tests using a 3 percent scale model. But Tie, the company’s CEO, has faith in a “crawl-walk-run” strategy that calls for executing smaller supersonic projects while pursuing the larger prize. Over the past two years, Exosonic has received more than $2 million in contracts from the U.S. Air Force to start design on several supersonic vehicles including an executive transport jet and drones capable of mock air battles with human pilots. That’s peanuts compared with its multibillion-dollar aspirations but indicative, Tie says, of how they’re earning revenue as they move forward.

“I just admire his audacity,” says George Parker, MBA ’62, PhD ’67, professor emeritus of finance at the Graduate School of Business and a former board member of Continental Airlines. “Even among ambitious people, building a new supersonic airliner is ambitious squared.” The two met soon after Tie arrived as a student at the GSB, by which time Tie had already recruited MacDonald, then a doctoral student in aeronautics and astronautics and the creator of a software suite for designing unconventional aircraft. “I thought, ‘OK, this is an exciting project,’” recalls MacDonald, now Exosonic’s chief technology officer. “This is a way that we might really be able to push things forward in aviation.”

A casual observer would be forgiven for thinking the race to supersonic travel had been won decades ago. Indeed, from 1976 to 2003, the rich and reimbursed could rip across the Atlantic in less than 3 ½ hours on the Concorde, a needle-nosed Franco-British collaboration capable of flying 1,350 mph. But the Concorde was a star-crossed bird—a fuel-thirsty extravagance birthed just as the oil shortages of the ’70s were making airlines leery of waste. And long before its maiden flight, headwinds had built against supersonic noise pollution.

Contrary to common perception, a supersonic jet doesn’t create a single boom; it drapes its din over a span of earth tens of miles wide the entire time it’s flying. And it’s grating. In 1964, the Federal Aviation Administration used Air Force fighters and bombers to subject Oklahoma City to eight booms a day for six months—Easter excepted—to gauge the effects on people and property. In the end, the Air Force and the FAA received more than 15,000 complaints. The response
contributed to the United States’ decision to drop its own plans for a supersonic airliner. In the end, only 14 Concordes reached operation, an elite fleet consigned to crisscrossing the empty vastness of the Atlantic. By 2003, even they were grounded, done in by several factors, not least the high costs of maintaining more than a dozen highly specialized vehicles. Nothing has taken their place in the nearly two decades since.

“It’s one of those few times that humanity, we actually regressed,” says Juan Alonso, a Stanford professor of aeronautics and astronautics whose research interests include supersonics. “We have fewer capabilities than we had before. We’re not used to that as a species.”

Exosonic is one of several outfits pushing to become Concorde’s supersonic successors. Earlier this year, Boom Supersonic, a Denver start-up, announced a deal to provide 15 supersonic jets to United Airlines for commercial use by 2029. The company was founded in 2014 by Blake Scholl, a Silicon Valley veteran and an aviation buff who likewise couldn’t understand the supersonic void. Early in his endeavor, he consulted with Alonso, who encouraged him that his vision was technically feasible.

Early next year, in the Mojave, Boom expects to launch XB-1, an experimental precursor to its eventual airliner. Bill Shoemaker, ‘89, PhD ’94, a former Navy pilot with a doctorate in aeronautics and astronautics, will likely be at the controls. During his three years as Boom’s chief test pilot, his job has largely been as in-house skeptic, he says, pushing back on engineering assumptions. By first flight, he’ll have a different mindset. “What’s left is a sense of purpose and sense of responsibility to the team to make sure you do it right.”

Vast improvements in materials, propulsion systems, computer modeling and other factors should make Boom’s planes far more efficient than the Concorde and quieter at low speeds, especially at take-off, he says. But like its predecessor, Boom’s boom means it will be limited to going supersonic overseas.

Exosonic, though, is after something more radical, a boom so quiet that its planes can fly anywhere. The result, Tie says, would open a vast number of markets, driving ticket prices down from Concorde’s stratospheric levels. Exosonic wants to take flight routes presently lasting four to 11 hours and cut them in half.

Since Concorde’s inception, scientists have known that a quiet sonic boom was possible in theory. Yet the computational power to realize the idea took decades to develop. As a jet surpasses the speed of sound—roughly 660 mph at normal cruising altitude—the plane begins to fly into its own noise. It’s traveling too slow to get out of the way. The resulting buildup of pressure on the plane’s leading edges—its nose, wings, tail, inlets and so forth—unleashes as shockwaves, which coalesce in the air to form the explosive bang-bang of a sonic boom. (Technically, a supersonic plane produces two booms: one associated with its nose, the other with its tail.) Shockwaves are unavoidable at supersonic speeds, but tweaking a plane’s geometry can manipulate them to keep them from combining forces. Done properly, the result is a gentle thump.

Or that’s the expectation. NASA will soon bring the idea into the real world. Next year, it will begin flying the X-59, an experimental single-person jet with an elongated nose, like the proboscis of a mutant mosquito. (It’s the project Tie joined as an aeronautical engineer after hearing the boom in the desert and before attending the GSB.) The ultimate point of the project is to gather data to guide possible changes to the nation’s nearly 50-year supersonic ban. If the computations hold, the streaking plane’s boom will sound more like a car door slamming 20 feet down the street. With the Concorde, it was like the door was being slammed with you inside the vehicle.

Alonso, who worked on quiet supersonics at NASA headquarters from 2006 to 2008, has every confidence that the jet will nail its lines. It’s less certain, he says, how the public will react once the plane begins flying over population centers in 2024, the 60th anniversary of the Oklahoma experiment.

Not everyone is delighted by the prospect of supersonic’s return. Some skeptics doubt that the business model of low-capacity, high-cost planes can survive any better now than it did in Concorde’s era. Developments like in-flight Wi-Fi may even have reduced the importance of cutting flight times for business passengers. And environmentalists see the threat of an already highly polluting industry expanding its carbon footprint through high-altitude soot emissions, condensation trails and a voracious appetite for jet fuel.

Supersonic flight is five to seven times more fuel intensive than subsonic alternatives, says Dan Rutherford, MS ’00, PhD ’06, program director with the International Council on Clean Transportation. And while both Boom and Exosonic have announced intentions to make their planes fly on low-carbon sustainable aviation fuel, Rutherford says such fuels are so costly that market forces could easily compel the airlines that buy their planes toward cheaper, more polluting alternatives.

“I just honestly don’t think the economics will ever work on that,” he says. “If it’s too expensive, I think they’ll default back to the current jet fuel.”

Tie acknowledges the challenge of solving the environmental obstacles. It’s something he and his team will keep working on. But the subsonic era can’t last forever, he says, and he likes Exosonic’s chances of helping end it. At 29, he’s already been focused on flying faster for more than half his life.

“He’s got tenacity,” Parker says. “He will probably fail, but he may not. And if he doesn’t, he’ll be historic.”

Sam Scott is the senior writer at Stanford. Email him at scott3@stanford.edu.
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Capitol Letters

Politics and power haven’t changed much since Allen Drury wrote his midcentury masterpiece Advise and Consent. But trust has.

BY IVAN MAISEL

I am old enough to remember when the United States Senate took pride in living up to the nickname the World’s Greatest Deliberative Body. I am old enough to remember Republican liberals and Democratic conservatives, old enough to remember when political discord in Washington ended at the close of the workday. Debate by day, détente by night.

That is not the Senate that we have in 2021. That is not the Senate we have had for a couple of decades. The Senate is supposed to be the legislative branch where no one acts rashly; it has become the branch where no one acts, period.

There has developed a biennial ritual in Washington in which departing senators, freed from the shackles of campaigning, deplore the lack of compromise and implore their soon-to-be-former colleagues to restore comity, as if the Senate were a painting that could use some sprucing. Last December, it was Lamar Alexander’s turn.

“You may say the Senate isn’t solving some big problems, and you would be right,” said the Tennessee Republican on the Senate floor. “We’re not even voting on some big problems…. Lately, the Senate has been like joining the Grand Ole Opry and not being allowed to sing. It’s a real waste of talent.”

The following week, Tom Udall, a Democrat from New Mexico, made much the same case. “The Senate is broken, and it’s not working for the American people,” Udall said. “We are becoming better and better political warriors. We’re good at landing a punch, at exposing the hypocrisy and riling each other up, but we’re not fostering our better angels.”

The constant bickering and the obstinacy in refusing to perform its basic functions have left this former Senate intern nostalgic for a time when government legislated. I took myself back to a time when the Senate engine ran on all cylinders. I read Advise and Consent.

The 1959 novel by Allen Drury, ’39, portrayed the nomination of a controversial liberal to the office of secretary of state, and depicted the fierce and, as it turned out, deadly struggle within the Senate to confirm him. What started out as a political page-turner became a cultural phenomenon.

Advise and Consent debuted on the New York Times bestseller list in August 1959 and didn’t leave until July 1961, a stay that fell two weeks short of two years. It rose to the top against novels we now consider classics: Exodus, Lady Chatterley’s Lover, Doctor Zhivago. One contemporary review compared Advise and Consent’s storytelling to that of Gone with the Wind; Herman Wouk, one of the bestselling novelists of the latter half of the 20th century, mentioned Drury’s name in the same breath as that shrewd observer of Victorian England, Anthony Trollope. Drury won the Pulitzer Prize for fiction in 1960.

I expected a great story, and I got it. What I didn’t expect, didn’t know until I got nearly halfway through the novel, is that throughout a long, prolific career as a newspaperman turned novelist, Drury carried a torch for his alma mater, one that he infused into his fiction from the beginning. One of the main characters in Advise and Consent is Brigham Anderson, at 37 years of age already in his second term and already the senior senator from Utah. The backstory constructed for Brig Anderson included Drury’s thinly disguised love letter to Stanford.

“To him the Farm gave what it gives to all who are lucky enough to do their most serious growing up in that beautiful place: a certain common sense approach to life, a certain equipment, much more important than anything noted in the grade averages, for decent constructive citizenship; an undying love for San Francisco and the Peninsula; a realization that of all the springs on earth none is quite as sweet as the long, lingering, all-enveloping hypnosis of spring in the Santa Clara Valley; above all, a clear perspective and a far view, of men, of issues, and of life.”
I don’t know about you, but I want to go to school there. The Anderson character is a World War II veteran, a husband, a father and a legislator who, despite his relative youth, already has gained the respect of his older, crustier colleagues. The majority leader gives Anderson’s subcommittee the task of vetting the State nominee, a government veteran whose conciliatory stance toward the Soviets may be more than Senate conservatives can stomach.

In the opening scene, in which the president discusses the nomination with the majority leader, Drury made a point to which he returned over and over throughout a 656-page novel that, in the front of the book, lists 39 major characters.

“A series of names and faces flashed across Bob Munson’s mind—the Minority, good men recall how the Senate worked made it necessary to separate the who of Drury’s Senate from the how. It is the how that is worth mourning.

Drury described American government as “an ever-shifting, ever-changing, ever-new and ever-the-same bargaining between men’s ideals and their ambitions; a very down-to-earth bargaining, in most cases, and yet a bargaining in which the ambitions, in ways that seemed surprising and frequently were quite inadvertent, more often than not wound up serving the purposes of the ideals.”

His senators went to Washington to get things done and they did them, albeit not always prettily. In Drury’s Washington, the senators might thrust and parry on Capitol Hill during daylight, but at night they donned tuxedos and downed cocktails. The common ground may have been easier to find—these

Throughout a long, prolific career as a newspaperman turned novelist, Drury carried a torch for his alma mater, one that he infused into his fiction from the beginning.

and true, good friends and good enemies, and brothers in the bond,” Drury wrote.

Munson, the majority leader, is sifting through the Senate roster, looking for votes. Drury chose not to identify the parties in his novel as Democratic and Republican. In a 1961 memorandum he prepared upon presenting his Advise and Consent papers to the Hoover Institution, Drury said he referred simply to the Majority and the Minority to avoid, as he put it, “unnecessary cluttering by automatic prejudices.”

In today’s Senate, where prejudices are automatic, and few, if any, senators cross party lines to vote, the way that Munson and others legislate in Advise and Consent seems like an anthropological footnote from an extinct culture. By one definition, it most certainly is. Drury’s Senate includes one woman—a rarely heard Kansan—and an Asian American man who represents Hawaii. It’s the 1950s. In the Senate of the 117th Congress, sworn in last January, are two openly LGBTQ members, 11 people of color and 24 women.

That’s the problem with nostalgia. You remember only the good stuff. My desire to were white men with shared values—but they worked to establish it.

“They were very effective, and they got along with each other,” David Brady, a political science professor emeritus and a senior fellow at the Hoover Institution, says of the Senate of that time. “They lived there. They lived together. They knew each other. They drank together. The fact that liberals and conservatives were within the same party helped facilitate that. There was a lot of conservative coalition voting, joint voting between Democrats in the South and Republicans in the North. But they got legislation done.”

Drury, who worked for 15 years as a Washington correspondent for the United Press, the Washington Evening Star and the New York Times, among others, made the nomination battle come to life in a way that seemed revolutionary in those pre-CNN times. In one hearing, one senator interrogates the nominee for seven pages, with volleys as riveting as any ever produced by Federer and Nadal. Drury believed the process of governing would be sufficiently riveting to hold the attention of his readers.

“A & C,” as Drury referred to it, stemmed from “a desire to show people that this was how their government worked, that it had great strengths and great weaknesses, and that although the weaknesses sometimes seemed to predominate the strengths usually won out. I also wanted to show that their legislators are very human people as subject to the ills and uncertainties of human flesh as all the rest of us.”

About that human flesh, a spoiler alert: In the course of the battle over the nomination, Anderson’s wartime tryst with another serviceman, which had occurred more than a decade earlier, is discovered and weaponized.

A chaste photo of the men surfaces; senators on both sides of the nomination must decide whether the future of the nation at the height of the Cold War justifies blackmail. Both sides know the photograph is going to destroy the target, both discuss how it must be torn up and thrown away, and both know they are going to send it along anyway.

“They’re making calculations between power and morality, and most of the time they choose power,” Brady says. That may sound like Washington today, and it may sound like Washington since the dawn of the republic. But Brady discerns a major difference in today and Drury’s Washington: the lack of trust in modern political discourse.

“We’re assuming bad motives on people’s parts,” he says. In Advise and Consent, the senators are “tolerant of the differences, precisely because differences are not based on, ‘You’re evil and I’m good.’ Differences are based on, ‘We both want the same good for the country. We have different ways of going about it.’ That is in the book, and that’s important. That’s gone.”

Hinging the plot of Advise and Consent on the shame attached to a gay relationship may seem quaint at best. The homophobia is a reflection of the era, as are the pay phones and (kids, ask your grandparents) the afternoon newspapers. The story remains a cracking yarn. If nothing else, how the photograph surfaced is a masterstroke of fiction, a series of disconnected events that, when assembled, create a scandal and a tragedy. The principals, Drury wrote, became “linked together in one of those ironic little arrangements devised by fate far more often than logical human beings like to admit.” If you remember that President Bill Clinton’s impeachment
depended upon a blue dress that didn’t make it to the cleaners, then Drury’s Jenga tower of a plot seems realistic.

Advise and Consent became a play in 1960 and ran for 212 performances on Broadway. By the time the film began production, official Washington fell over itself to cooperate with director Otto Preminger. Advise and Consent became the first movie to use the Capitol as a set, including the rotunda and the same hearing room where the Army-McCarthy hearings took place. The film attracted a deep roster of Hollywood heavyweights—Henry Fonda, Charles Laughton, Walter Pidgeon, Peter Lawford, Gene Tierney and Betty White.

Drury capitalized upon the wild success of his debut novel with five more based on the same characters. To say that none reached the heights of Advise and Consent is like criticizing Charlotte Brontë for never having written an equal to Jane Eyre. A few years after the publication of Advise and Consent, Drury left Washington and returned to the Bay Area he loved so dearly. Late in life, Drury wrote a trilogy that began with a prewar class at “the University” and concluded at the end of the century. He never identified the school by name, but you don’t have to be a literary detective to unmask it. In the second of the series, titled Into What Far Harbor?, Drury wrote, “Far down Palm Drive he could see the dusty summer green of the Oval, the bright mosaic front of the Memorial Church, the gentle outlines of the Coast Range rising beyond.”

Hmmm, give me a second…

Drury died in 1998 on his 80th birthday, two weeks after completing the final novel in the series and the 20th of his career. Few writers in the modern age have made so successful a transition from political journalist to novelist.

Advise and Consent concludes with a plane flight to Geneva by a new president, the majority leader, the minority leader and the new secretary of state. Drury described them as “old friends from the Senate carrying their country’s hopes.” Nostalgia, it seems, is a powerful seducer.

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THE MEASURES OF A MAN

SENSORS, SAMPLES, SEQUENCING, SCANS.
MEET THE WORLD’S MOST QUANTIFIED HUMAN,
AND SEE WHY HE THINKS HIS APPROACH CAN FIX
WHAT AILS OUR HEALTH CARE SYSTEM.
YOU

look in the bathroom mirror. There’s you—groggy, disheveled, bleary-eyed—and there’s you: numeric, quantified, displayed along the glass’s margins in rows of illuminated data. Stats from your smartwatch appear: time spent in deep sleep, REM and light sleep; skin temperature and emotional arousal as gauged by sweat gland activity; blood pressure and oxygenation; and, of course, the hustle and bustle of your heart. A chip beneath your skin transmits info on glucose, cortisol, ketones, cholesterol and inflammation levels. You prick your fingertip, put it on a sensor, and more biometrics scroll along the glass, all in blue, none in red to flag an anomaly.

This is the future that Michael Snyder, director of the Center for Genomics and Personalized Medicine and chair of the department of genetics, wants for everyone on Earth. He’s already cobbled it together for himself. Each morning, he straps on four smartwatches and an Exposometer to measure levels of airborne particles. He has a continuous glucose monitor for his blood sugar and an Oura ring to track his sleep.

His smartphone maps his locations and quantifies his movements, and his smart scale measures his weight, body-mass index, body fat, body water, muscle mass and bone mass. He has also compiled a decade of lab data—on his genome (the sum of his genetic code), his epigenome (the markers regulating gene expression), his transcriptome (RNA transcripts of expressed genes), his blood proteome (the proteins in his blood), his urine metabolome (the molecular by-products of metabolism), his blood and urine lipidome (the fat contained therein), and his microbiome (the microbial organisms living in his mouth, sinuses, skin and gut). In essence, he has defined his Snyderome. The ever-more-exhaustive portrait he has been composing of himself includes immune profiling, hormone measurements, and 12 whole-body MRIs over the past five years, which show his physical structure in minute detail. The data from his body alone amounts to two petabytes— the storage capacity of 2,000 top-of-the-line iPhones or 31,250,000,000 Apollo 11 moon-landing computers. “And, you know, I’m only going to add to that,” Snyder says. At 66, he plans on squirelling away data to the grave and almost certainly enabling it to be gathered afterward.

Of course, Snyder has set his sights on quantifying more than his own self. He is using himself as a test subject to iron out the bugs for a larger study he has been running on more than 100 people for the past 8 1/2 years. In gathering more data on his biology than any other known human, he has predicted his own diabetes, detected its emergence and calibrated his lifestyle to mitigate it. On a plane from Germany to Norway to visit his wife’s family, he saw his blood oxygen drop far more than it usually does when he flies. This, combined with an accelerated heart rate and a recent stint in rural Massachusetts, made him wise to a Lyme disease infection. And for those in his study, his lab has discerned the earliest evidence of numerous ailments. Snyder believes that this big-data approach to health, built on longitudinal measurements (those taken regularly over long periods of time), will allow individuals to know the unique biometric signatures of their own health and detect changes the moment they occur. “Medicine is broken in a lot of different ways,” Snyder says. “It’s very focused on treating people when they’re ill—very reactive, very costly. We should be focused on keeping people healthy, but we have to understand what it means to be healthy.”

What Snyder wants everyone—patient and doctor—to grasp is that the biometric signature of health can look different from person to person. The current system, which evaluates whether someone is healthy according to norms averaged from the larger population, fails to account for how much variation exists among humans. The solution he envisions will require better smart wearables, better testing and better algorithms to crunch the vast data from a variety of “omes.” It will require start-ups to innovate technologies and make them accessible. And it will demand an overhaul of health care so that people can be alerted when their biometrics change and a doctor can investigate what has gone awry. “In the future it can all be done just like driving a car,” Snyder says. “Your car has lots of sensors that make it run smoothly, and most of the time you just jump in and drive it. That’s the way health monitoring will be. It’ll happen in the background and then, when problems come up, it will warn you, long before symptoms.”

COMPARING APPLE-OMES AND ORANGE-OMES

As a geneticist, Snyder’s early contribution to the field was as a professor working on the yeast genome at Yale between 1986 and 2009. During that period, the evolving field of
genetics research was busy defining single genes. “It was kind of one gene, one PhD,” he says. “Where I first made a mark was in saying that this doesn’t make sense.” He wanted to move away from the reductionist approach and instead integrate information into the larger biological whole. To do this would require seeing how genes worked in conjunction with each other to influence biological traits. Eventually, he found a way to study all 6,000 yeast genes at once.

Increasingly, Snyder wondered why the same systems approach wasn’t taken with health. When he joined Stanford’s faculty in 2009, he went for a medical checkup. “They gave me back my usual 10 or 15 measurements,” he recalls. “I wasn’t even sure how useful some of those things were.” He found himself thinking how ridiculous it was not to profile people more deeply. “That became the goal—to apply the same ideas from systems biology to systems medicine, if you will.” He and his team set up his lab to analyze metabolic by-products, sequence DNA and deploy RNA-Seq, a technique Snyder invented at Yale that is now used worldwide to sequence RNA and show not only which genes are being actively expressed but also to what degree. “We weren’t sure which technologies would be most powerful and what we might learn from them,” he says, “but the only way to know for sure was to get started.”

Thus began Snyder’s new vocation as a guinea pig. He sequenced his own genome in 2010 and identified variants that predisposed him to type 2 diabetes. The lab tested his biomarkers frequently, especially when he had a cold, which allowed them to detect a sudden rise in his blood glucose a year later, after a viral respiratory infection. In fact, after each subsequent viral infection (frequent, given that he had small children), he saw dramatic changes in the transcription of his genes. He then took a good look at his epigenome (the markers controlling gene expression). If individual genes were likened to book chapters, the epigenome (epi- meaning “above”) would be those sticky neon index tabs marking individual lines for quick reference. The invisible hand of each viral infection had affected were the genes responsible for regulating metabolism.

In 2012, Snyder published “Personal Omics Profiling Reveals Dynamic Molecular and Medical Phenotypes” in Cell about the onset of his diabetes, attracting significant media attention to his self-measuring project. “I didn’t know that I’d be interesting,” he says. “It turns out everybody’s interesting.” In fact, in the trial he has been running on more than a hundred people since 2013, 49 participants have discovered a health problem—early signs of lymphoma, diabetes, heart issues—from a variety of monitoring approaches, including genome sequencing, blood panels and wearable sensors.

Studies such as the one Snyder did on himself—known as N-of-1 trials, in which N refers to the number of participants—were rare, at least in scientific journals. The norm has long been to include numerous participants in trials to determine mean and median values for health metrics. Snyder’s view is that N-of-1 trials can explore each individual as a system of biological data points related to their genome and environment. Underpinning this idea is how much variation the human genome contains. The oft-mentioned fact that two average human genomes are 99.9 percent similar risks obscuring that 0.1 percent of the genome’s 6 billion base pairs “represents a substantial amount of DNA,” Snyder writes in his 2016 book, Genomics and Personalized Medicine. Already, hundreds of millions of genetic variants have been found in humans. “If a martian were to land on Earth and look to people, they’d say we’re all the same,” he says. “People have two arms and two legs and two eyes. At some gross level, we’re all the same, but at other levels we’re really quite different. Our behaviors are different. Our health risks are very, very different. The way we age is very different. On one hand, you might say, ‘Well, that’s just the difference between

Ome Sweet Ome

With the publication of his 2012 paper on the Snyderome, Snyder found himself courted by

‘I didn’t know that I’d be interesting. It turns out everybody’s interesting.’
That means that if your normal, healthy baseline is 94.6, and you walked into a physician’s office today and they measured you at 98.6, they’ll tell you you’re healthy. But you’re off by 4 degrees, and I guarantee you’re not healthy.” There are many such examples, Snyder points out—cases in which one person’s healthy measurements can differ dramatically from another’s, or in which a single metric can spike from the bottom to the top of the “normal” range. Since medicine views both measurements as healthy, the changes are often ignored. Absolute values, Snyder believes, are far less useful than deviations. “Understanding your healthy baseline is important for everyone, so you can detect those shifts,” he says. “That’s how you find problems.”

If measuring oneself in ever-greater detail seems increasingly possible, it’s because of the plummeting cost not only of tech but also of medical testing. Whereas sequencing the first whole human genome required more than 10 years, nearly 3,000 scientists and $2.7 billion, sequencing a genome now takes a day and a few hundred bucks. Snyder sees testing moving in the same direction, no longer demanding visits to doctors and hospital labs but done on the fly by mail or via Amazon, which already sells tests for STIs, food sensitivity, metabolism, allergies, thyroid function and more. “The Theranos concept was right, but it was obviously poorly executed,” he says, referring to the former company that claimed it could perform rapid, automated testing with tiny amounts of blood. “We’ll have home tests, like for pregnancy, and they’ll get back half a dozen measurements. That’ll happen in the not-too-distant future, and you’ll get a more detailed panel if you prick your finger and mail that off to a testing lab, like a Quest. They’ll give you back maybe 200 measurements.” Snyder says. “It’s going to be a matter of measuring people with reasonably high frequency. People’s blood measurements are done in a physician’s office right now, usually once every few years when you’re healthy. I think that can be moved up to once a week for some measurements, and wearables, of course, will measure 24/7.” Similarly, Snyder believes that with 1 in 10 Americans having diabetes and 1 in 3 being prediabetic, continuous glucose monitoring with a sensor under the skin would enable people to adjust their diets accordingly. In 2018, he published a paper showing that there are different glucotypes based on which foods cause people’s blood glucose to spike. (Caveat lector—cornflakes and milk caused glucose to surge into the prediabetic range in 80 percent of study participants.) “I think food monitoring will become more commonplace,” Snyder says. “It’s very complicated to do it now, but it will be done much more efficiently and easily in the future.”

Part of the challenge facing a big-data vision for health care is a belief common among medical professionals that patients shouldn’t know everything—for instance, that a detailed analysis of their genome could give them undue reason to fear problems that may never arise. “Usually, the general principle in medicine is not to do measurements or tests unless we really know what we’re going to do with the answer, so open-ended testing is kind of rare,” says Atul Butte, professor and director of the Bakar Computational Health Sciences Institute at UCSF and chief data scientist for the University of California Health System. “It’s amazing to see how much Mike’s work has influenced others to measure more things on more people at more time points and even longitudinally to see if we can detect signs of disease earlier.”

Just as Snyder encourages everyone to understand their genetic information, he advocates broader data gathering with magnetic resonance imaging, which doesn’t use radiation but rather polarizes the water molecules in the human body to create precise images of its makeup. “In today’s world, any physician will tell you don’t do a whole-body MRI, and that’s the wrong view in my opinion,” Snyder says. Doctors prefer not to do such scans because they will inevitably turn up evidence of nodules—abnormal
grows distinctly along different pathways—and this will result in unnecessary panic and expense. “If you make multiple measurements longitudinally—one now, one in three months or six months—you can see if any nodules are growing,” he says. Snyder so deeply believes in the importance of doing such MRIs that he co-founded Q.bio, a company focused on deep profiling that has developed a whole-body MRI scanner. Its goal is to build a platform that “can comprehensively measure and analyze changes in the human body—not limited to a single type of information, but any information that could be collected about a body,” says Jeffrey Kaditz, co-founder, CEO and CTO, who approached Snyder in 2016. “When I had done research about who in the world had been studying biochemical changes in people within the context of their genetics, [Snyder] was the pioneer in that field,” Kaditz recalls. Once fully up and running, Q.bio intends to cheaply perform comprehensive physicals—combining MRI and molecular data—to facilitate in-depth health monitoring.

For Snyder, combining omes allows people to discover their risks and monitor them carefully, as he did with diabetes. This approach is valuable even with specific diseases, such as COVID-19, he says, since DNA analysis can show which people are most likely to develop severe COVID. Snyder’s lab has also been looking at data from participants’ Fitbits and Apple Watches to determine if asymptomatic COVID could be detected, and in 10 out of 14 cases, the health data showed noticeable deviations. In fact, Snyder’s family speculated that he might deliberately contract COVID just to see how it changed his biomarkers. (He refrained.) But for a person’s broader, lifelong well-being, frequent measurements could alert them to problems long before they become serious. “We’ll have people living much better, healthier lives,” he says, “and save a lot of money in the process.”

THE OME STRETCH
Snyder’s lab—among the biggest at Stanford, with sometimes more than 100 people at work—has broken so much new ground that it’s easy to forget that his vision for medicine is a largely unexplored frontier. For instance, only two years ago, the lab found that people aged distinctly along different pathways, such as metabolic, immune, hepatic (liver) and renal (kidney). Whereas someone who is primarily a metabolic ager might have rising blood sugar, an immune ager might have elevated inflammation. And whereas one person might primarily age in one pathway, another—say, Snyder—could be aging in all of them.

‘WE’LL HAVE PEOPLE LIVING MUCH BETTER, HEALTHIER LIVES, AND SAVE A LOT OF MONEY IN THE PROCESS.’

Many challenges face Snyder’s vision of longitudinal health monitoring. For instance, the microbiome is still incompletely understood and “not very clinically actionable,” he says. As for the other omes, the cost of assessment remains prohibitive for most people. “The technology is not yet there,” he points out. This is as true of wearable devices and rapid testing as it is of the information processing necessary to sieve, condense and store so much data. “We will have to distill it into the more valuable components because it’s very expensive to store two petabytes of data,” he says.

And where there’s talk of data, there are worries about privacy. Snyder believes this concern is overblown because the data can be encrypted and safely stored. “Everybody has a credit card, and that has incredibly personal information, stuff that’s probably just as sensitive—maybe even more sensitive—than your health data.” People use their cards for pharmacy purchases and a host of other activities that they want to keep private, but do so out of convenience. “Nobody wants to walk around with bags of cash,” he says. He believes the health benefits of measuring oneself outweigh the risks. A future like that depicted in the 1997 film Gattaca, in which people’s careers and opportunities and social statuses are determined by their genetics, strikes him as unlikely. He acknowledges that in some cases people who have genetic disease risks might want to choose their careers or lifestyles accordingly, such as those with hypertrophic cardiomyopathy, a common cause of sudden death in young athletes. But Snyder isn’t concerned about the possibility that businesses or institutions would use genetic informa-

Eric Topol, a professor of molecular medicine at Scripps Research and the founder and director of Scripps Research Translational Institute, agrees that medical care is ready for a shake-up. “You get your blood pressure taken at one visit while you’re in the contrived situation of visiting a doctor at a medical facility”—and that’s after you’ve navigated the parking lot and languished in the waiting room for an hour, he points out. “The whole idea of being able to get lots of measurements in the real world passively and accurately is upending medicine, but it’s not accepted easily because it challenges the control nature of physicians and the paternalism.” Yet Topol doesn’t see
mainstream health care adopting the new approach anytime soon. “There’s no real traction out there—not yet. But it’s inevitable. It’s probably a number of years off.”

Snyder has been working on what he sees as the key to larger adoption of an “omics” approach to medicine: scaling it. “Academics are really good about proof of principle and discovery,” he says. “The way you scale things for the planet is to form a company.” So far, he has been involved in launching 13—for genome sequencing, metabolic profiling, glucose monitoring, smart watches and more. One of the start-ups, Personalis (Atul Butte is among the co-founders), sequences cancer DNA to support the development of personalized cancer vaccines that will help an individual’s immune system target their specific type of cancer. Just as with health, it turns out, disease often looks different from individual to individual.

On the long road to his envisioned future, Snyder keeps measuring. His exposimeter has helped him study the air he breathes—an increasing concern in an age of rampant wildfires. He has catalogued particles from thousands of plant species (he correlated his mild allergies with eucalyptus exposure, whereas he previously thought the cause was pine) and thousands of artificial compounds. “Certain carcinogens are everywhere,” he says. “Pesticides are everywhere.” For a while, he also wore a Geiger counter to detect gamma radiation, which, as expected, gave higher readings on airline flights and in the hills of Montana. Once, in a coffee shop, it began buzzing louder than ever before. “Clearly, somebody in there was undergoing some sort of radiation treatment,” he says.

More often, though, Snyder takes his measurements of others intentionally. He participated in analyzing the data from the astronaut twin study, in which Mark Kelly stayed on Earth while his twin, Scott Kelly, spent a year on the International Space Station. Snyder is also preparing an extensive analysis of two men during an 80-day crossing of Antarctica. And he has recruited 1,000 Pac-12 athletes to detect COVID-19 with wearables. Meanwhile, others have also been busy doing their own measurements—of Snyder, given that he has made his data available to the larger public. At a conference, a scientist approached him and broke the ice by saying that he believed Snyder’s metabolic dysregulation was in part caused by defective mitochondria.

Most days, however, the ever-expanding data set that is Michael Snyder goes about his work on campus with little fanfare. To manage his diabetes, he recently switched from running to weight lifting, since muscle mass is known to regulate glucose levels. A whole-body MRI has since confirmed that he has gained 10 pounds of muscle. He continues to track his daily metrics closely to see how he is influenced by the air he breathes, the food he eats, the pathogens he encounters and the many other elements that make up his days. “That’s the power of the quantified self,” he says. “Nobody can track you better than you.”

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N. Scott Momaday, whose writing sparked a renaissance in Indigenous literature, turns his attention to the earth.

as a child, N. Scott Momaday loved the story of the arrowmaker. It’s the first he remembers, and his father loved telling it. It goes like this. One night the arrowmaker and his wife were alone in their tepee as he made arrows in the firelight. One by one, he straightened them in his teeth and then fitted them in his bow, drawing back the string to check that they were true. As he glanced up, he saw between two of the tepee’s hides a figure in the darkness, staring in. He told his wife not to be afraid and said, “Let us talk easily, as of ordinary things.” In Momaday’s essay “The Arrowmaker,” he shares the story: The man straightened the next arrow in his teeth and fitted it to the bow. The arrowmaker then, as if talking to his wife, said, “I know that you are there on the outside, for I can feel your eyes upon me. If you are a Kiowa, you will understand what I am saying, and you will speak your name.” When there was no answer, the arrowmaker continued sighting along the arrow, pointing it here and there until his gaze fell upon the shadowy figure. The story ends with, “The arrow went straight to the enemy’s heart.”
The Way to Rainy Mountain fossilized the Kiowas onto the land. On the day of the sun dance prohibited by law, Momaday writes in The Names, Mammedaty—first a Peyote priest and later a Christian—would, after the arrival of missionaries, take the name of John, becoming John Mammedaty. His son, Huan-to, was Alfred Mammedaty, though he would later simplify his last name to Momaday. “One of the great romances in history” is how Momaday characterizes the meeting of his parents, Al and Natachee. “My mother was born in Kentucky,” he says. “She had an ancestor who was Cherokee, and that fascinated her, so she started thinking of herself as a Native American, and she went to Haskell College in Kansas, which is a Native American college.” In The Names, Momaday writes that her “act of the imagination” was “among the most important events of my mother’s early life.” At Haskell, her roommate, Lela Ware, was a Kiowa woman, who, as Momaday tells it, invited her to the reservation, saying, “I’m going to introduce you to the man you’re going to marry.” Natachee accompanied Lela to Oklahoma in 1929. There, Natachee’s first glimpse of her future husband, Al, and his younger brother was of the two of them playing marbles in bib overalls. “She said they were the best-looking men she’d ever seen,” Momaday recalls. The

‘It’s a remarkable story about language, and it represents how we can be saved by language,” says Momaday, the author of 18 books and the first Native American to win a Pulitzer Prize. As a Kiowa child, born in 1934 in Oklahoma, he experienced the story as a thrilling adventure. But as he grew up, he also developed a keen sense of its deeper message. “We live in the element of language,” says Momaday, MA ’60, PhD ’63. “There is probably nothing more powerful in our lives. We have all kinds of disciplines, like science, which investigates the mysteries of the world, but it is of no use to us without language.”

Over his nearly nine decades, language has connected him to the land that holds a central place in Indigenous traditions. In fact, in many ways, to read Momaday is to read the land. It is to encounter the earth alive with wind and sunlight, with plants and animals, and to know all of it—each aspect of the world—by name. It is also to renew a reverence for beauty and a feeling of hope. In this sense, Momaday—who has published fiction, poetry, essays, plays and folklore as well as a memoir and works for children—is an author of prayers. “In Native American communities, we pray to the land. It is deserving of our religious and spiritual investment,” Momaday says. Even his Pulitizer Prize–winning book, House Made of Dawn, is named from a verse in the winter healing ceremony, Kléjê Hatál or Navajo Night Chant. House Made of Dawn’s prologue begins with the Jemez Pueblo word that denotes the starting of a story: “Dypaloh. There was a house made of dawn. It was made of pollen and of rain, and the land was very old and everlasting.”

Published in 1968, House Made of Dawn—what the scholar and critic of Native American literature James H. Cox calls “the single most influential piece of literature by an Indigenous writer in the United States”—inspired a number of other Indigenous authors whose work has collectively become known as the Native American Renaissance. Reissued in 2018 for its 50th anniversary, Momaday’s novel was republished again this year in yet another edition. In 2020, Momaday released two books of poetry, The Death of Sitting Bear: New and Selected Poems and Earth Keeper: Reflections on the American Land, which gives voice to his concern that humans are losing their connection to the earth. Over more than half a century of writing, his relationship with the land has shaped every aspect of his life and the many histories leading up to it.

In The Names, Mammedaty appoints his son, Huan-to, to the Kiowa land. “There was a house made of dawn. It was made of pollen and of rain, and the land was very old and everlasting.”

Published in 1968, House Made of Dawn—what the scholar and critic of Native American literature James H. Cox calls “the single most influential piece of literature by an Indigenous writer in the United States”—inspired a number of other Indigenous authors whose work has collectively become known as the Native American Renaissance. Reissued in 2018 for its 50th anniversary, Momaday’s novel was republished again this year in yet another edition. In 2020, Momaday released two books of poetry, The Death of Sitting Bear: New and Selected Poems and Earth Keeper: Reflections on the American Land, which gives voice to his concern that humans are losing their connection to the earth. Over more than half a century of writing, his relationship with the land has shaped every aspect of his life and the many histories leading up to it.

Al and Natachee Momaday
Looking for work during the Great Depression, Momaday’s parents left Oklahoma after he was born and took jobs as teachers, first on Naabehbó Bináhásdzó (Navajo Nation) and then the Ndé Nation (San Carlos Apache Reservation). When World War II started, his father, a visual artist, was hired as a draftsman for an oil company in Hobbs, N.M., and his mother, a writer, worked at the Army airfield in the provost marshal’s office. “They were gainfully employed in the service of the war effort,” Momaday says, “and I was just a kid loose on the planet.” In the local cinema, he watched war reels—often images of battles against Germans and Japanese—and he befriended Billy Don Johnson, a white boy and crucial ally in a school of white kids who, thinking Momaday looked Japanese, wanted to fight him. “If it hadn’t been for Billy Don Johnson,” he recalls, “I’d have been beaten up regularly.” Near the airbase, Johnson’s father had a farm, where the two boys often played at war. “We dug trenches and slithered like vipers through the brittle brush, dragging our toy rifles across the minefields,” Momaday writes in *The Names*.

After the war, his parents took jobs at Walatowa (Jemez Pueblo Reservation) in New Mexico, where Momaday lived until he was 17, spending days on his horse, Pecos, and exploring the land. Throughout his adolescence there, he witnessed the Pueblos’ connection with the earth. “There was one man whose designated position was watcher of the sun,” he recalls. “He declared by looking at the position of the sun on the calendar upon which is based the life of all things.” Another powerful impression was his father. “There was a man whose designated position was watcher of the sun,” he recalls. “He declared by watching the position of the sun on the horizon when it was time to plant and to harvest and to celebrate. They were terribly aware of the vitality of the earth with the calendar upon which is based the life of all things.” Another powerful impression was of young men returning to the reservation from the war. “They died of exposure, alcoholism. They killed each other,” he recalls. “It was a terrible generational experience. They lived violent lives, and many of them couldn’t recover. They died in various ways, but others managed to get themselves back into the traditional world.”

Bridging worldviews—a frequent theme in Momaday’s writing—was a daily reality. “I have spent most of my life in two worlds, the Native traditional and the modern,” he says. “I had a great deal of help in spanning that divide. My parents, of course, were teachers, and my mother had a real command of the English language, and she passed on that knowledge and love to me.” Momaday and his parents were among the few people at Walatowa fluent in English, the language used in classrooms there. “In school, that made a real difference,” he says. “In some ways, I had an advantage that most of my peers did not.” At the same time, he saw the toll that living away from his culture took on his father. “I have great admiration for how he conducted himself and overcame great disadvantages,” Momaday says. He recalls how his father missed being surrounded by Kiowa culture and traditions. “He would sit out on the porch and he would sing to himself in a very low voice in Kiowa.”

Around the age of 12, Momaday decided he wanted to be a writer. His mother had already introduced him to poetry and guided his readings, and for his senior year of high school, his parents sent him to a military academy in Virginia to prepare him for college. Afterward, he did undergraduate studies at the University of New Mexico, publishing his first poem in a literary review—to this day the high point of his literary quest, he notes. “I could then say, ‘I am a writer.’”

The following year, Momaday taught middle and high school on the Haisndayin homelands (Jicarilla Apache Reservation). During that time, the poet and literary critic Yvor Winters chose him for a Stegner fellowship to study creative writing at Stanford. Momaday recalls feeling out of place surrounded by students who had attended Ivy League universities. “That was pretty stiff competition, so I was full of self-doubt,” he says. “My first year there, I wanted to give up a couple of times.” But with the support of his professors, he persisted, and he stayed on to complete a doctorate.

Momaday was born the following year in the Lawton Indian Hospital. (His first name is for the Basque province in Spain from which his mother had ancestors, though he goes by Scott, his mother’s maiden name.)

‘We have all kinds of disciplines, like science, which investigates the mysteries of the world, but it is of no use to us without language.’

When Momaday earned the fellowship to Stanford, he knew very little about the traditional forms of English poetry, he says. “I was writing out of my knowledge of oral tradition.” By the time Momaday left the Farm, he wanted a break. “I got tired of writing poetry after four straight years of it.” He took a teaching job at UC Santa Barbara and then tried his hand at a novel. Momaday’s memories of growing up on the Jemez Pueblo Reservation returned—the young men pulled from traditional lives and sent back from the war with physical and emotional wounds. A year after the publication of *House Made of Dawn*, Momaday was stunned to learn that it had received a Pulitzer Prize.

In telling the story of Abel, a young Native American man recently returned from World War II, *House Made of Dawn* introduced a large readership to the struggles of veterans on reservations. The book starts with Abel running in the landscape: “There were many colors on the hills, and the plain was bright with different colored clays and sands. Red and blue and spotted horses grazed in the plain, and there was a dark wilderness on the mountains beyond. The land was still and strong. It was beautiful all around.” The novel’s ending—after Abel has endured violence and prison and years of alcoholism—returns to that scene, after the death of his grandfather, when Abel sees other Native American men running in the winter cold. He follows them. “He could see the dark hills at dawn. He was running and under his breath he began to sing. There was no sound, and he had no voice; he had only the words of a song.” Momaday describes this moment as Abel trying to return to the traditional
world—both in the land that is so central to Native American cultures but also in the words of the song. “When you lose your voice, that’s a terrible disability. Language is so important,” Momaday says. “So, when he has nothing but the words of the song, that is his redemption, that is the one thing that can sustain him. He has a song. Without that, he would be really destitute.”

Cox, the author of three books on Native American literature and co-editor of The Oxford Handbook of Indigenous American Literature, points out that one striking aspect of Momaday’s novel is how he takes some of the strategies of modernism and indigenizes them. “That still remains what people celebrate about Momaday,” he says. Whereas modernist literature often used multiple voices and perspectives to convey a sense of alienation, Momaday employed the same techniques within an Indigenous worldview. “So, while his protagonist, Abel, is in fact alienated like so many modernist protagonists,” Cox says, “there’s an Indigenous world there that is vibrant and strong and coherent, and if Abel can find his way back to it, he will also find his way back to the land and ceremony.”

In 1983, literary critic Kenneth Lincoln published Native American Renaissance, a book in which he credits Momaday with blazing the path for a generation of Native American writers such as Leslie Marmon Silko, Joy Harjo and Louise Erdrich. “It wasn’t so much that later Native writers imitated him,” says Mark McGurl, a Stanford professor of English and the author of The Program Era: Postwar Fiction and the Rise of Creative Writing, which talks extensively about Momaday’s contribution to American literature. “It’s more that he blew open the doors that led to the amazingly diverse and impressive array of works of Native American fiction we can read today.”

Over the years following House Made of Dawn, Momaday traveled widely, even once circumnavigating the globe, channeling a love of movement he says he inherited from his Kiowa ancestors. “The sense of nomadism is very strong in me.” He published a second novel as well as poetry and nonfiction, but he also worked as a visual artist. “My father was a painter, and I was not interested in becoming a painter as a child, but I did watch him and I learned a lot by osmosis about painting,” he recalls.

In 1974, Momaday spent six months in the Soviet Union, the first person from the United States to teach American literature there. “I overcame the loneliness by sketching, and that developed into painting and printmaking.” Today, he lives in Santa Fe, a city to which he has repeatedly been drawn, loving that so many cultures—Latin, Anglo and Native American—have contributed to it, and that it is a center for the arts.

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At 87, Momaday is a widower with three daughters (a fourth predeceased him) and eight grandchildren (one of whom, Dylan Scott Momaday-Leight, is a first-year student at Stanford). After decades teaching at universities, including Stanford, he retired in 2003. “I can give most of my time now to writing,” he says. “It’s a luxury.” He is currently working on a new book about the Kiowa’s journey to the Great Plains. Increasingly, his words express his concern for the planet. In his most recent book, Earth Keeper, he states, “I am an elder, and I keep the earth.” He later writes, “Ours is a damaged world. We humans have done the damage, and we must be held to account.”

Language and ceremony are crucial to human well-being, he believes, and people must harness language to reconnect with the land. “We can save the earth, I think, by investing in language and looking for the spirit of the earth and expressing it,” he says. “Giving up your body and soul to the earth and celebrating it with language and song and poetry—or what is the equivalent of poetry in the oral tradition—that’s extremely important.” (The creative, transformative aspect of words, Cox says, is present throughout Momaday’s writing. “He always has that sense of the power of words and language in mind when he’s writing, a sense that comes from oral societies, that comes from oral traditions.”)

Often, throughout his career, Momaday has told the story of the arrowmaker, which left him thrilled as a child while instilling him with a sense of language’s power. Once, at Stanford, he gave a talk about the arrowmaker, and afterward, a professor approached and asked why the presence outside the tepee was assumed to be an enemy rather than just someone who didn’t speak Kiowa. “You have to take the story on its own terms,” Momaday recalls saying. “The storyteller tells us that it’s an enemy. You don’t quibble with that. That’s not the literary experience.” Today, Momaday is the storyteller who sees a new and more threatening enemy in the harm being done to the earth and who passes down a message—the words that end his essay on the arrowmaker: “Language does indeed represent the only chance for survival.”

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Each year, the Stanford Medicine Alumni Association presents three awards to distinguished alumni for exceptional service to Stanford Medicine and outstanding lifetime contributions to medicine and the biomedical sciences.

RISE Award
Presented annually for exceptional dedication to nurturing Stanford Medicine and the alumni community through acts of leadership, volunteerism, mentoring, or teaching

Odette A. Harris, MD ’96, Resident ’03, MPH
Professor of Neurosurgery; Director, Brain Injury; Vice Chair, Diversity, Department of Neurosurgery, Stanford University School of Medicine

Arthur Kornberg and Paul Berg Lifetime Achievement Award in Biomedical Sciences
Presented annually in recognition of outstanding achievements in research in medicine and the biosciences

Michael J. Chamberlin, PhD ’63
Professor Emeritus of Biochemistry and Molecular Biology, University of California, Berkeley

Stephen P. Goff, PhD ’78
Higgins Professor of Biochemistry, Professor of Biochemistry and Molecular Biophysics, Professor of Microbiology and Immunology, Columbia University Medical Center

J. E. Wallace Sterling Lifetime Achievement Award in Medicine
Presented annually to a Stanford Medicine physician graduate in recognition of exceptional lifetime achievement in medicine

Karl Deisseroth, PhD ’98, MD ’00
D.H. Chen Professor of Bioengineering and of Psychiatry and Behavioral Sciences, Stanford University School of Medicine

D. Craig Miller, MD ’72
Thelma and Henry Doelger Professor of Cardiovascular Surgery, Emeritus, Stanford University School of Medicine
What a data deep dive, a Pulitzer and a bouncy ball can teach us about journalism’s rekindling.
On the morning of June 11, 2021, Jackie Botts’s mother turned to her husband and said she thought their daughter would win a Pulitzer Prize that day. Never mind that Jackie was just three years out of Stanford’s journalism program. Never mind that she’d been an intern on the project her mother considered a shoo-in. While her mother was tuning into the live webcast of the Pulitzer announcements, Botts was in a virtual training session at CalMatters, where she was now a Report for America corps member, unaware that the prizes were even being awarded.

Botts, ’16, MA ’18, had started on the project that will forever adorn her résumé as a master’s student in a Stanford course called Becoming a Watchdog: Law, Order, and Algorithms. A Reuters data editor had worked with the class, teaching students to go through court documents to find lawsuits filed against police officers for excessive force. Afterward, Botts started an internship with Reuters, where she did both broad data collection and substantive writing. As her internship got extended twice, she worked on a four-part series about how the Supreme Court’s continual refinement of a legal doctrine made it harder to hold police accountable for excessive force.

And so, when the 2021 Pulitzer Prize for Explanatory Reporting went to five Reuters reporters “[f]or an exhaustive examination, powered by a pioneering data analysis of U.S. federal court cases, of the obscure legal doctrine of ‘qualified immunity’ and how it shields police who use excessive force from prosecution,” Botts suddenly held the most prestigious prize in her field.

“My mother texted me,” says Botts. “I think I cursed a lot. I ran into the kitchen where my housemates were and cursed a lot out of confusion and excitement.” Then, she treated herself to a coffee, bought a small bouncy ball, and bounced it around her neighborhood in Oakland, trying to make sense of it all.

WAIT—ISN’T THIS A DYING TRADE?

Newsrooms have been closing and downsizing across the country for more than a decade, as a business model that relied on advertising went bust and online upstarts proved tough competition for eyeballs. In the newspaper sector alone, the Pew Research Center noted in June 2020 that “financial fortunes and [the] subscriber base have been in decline since the mid-2000s.” Since 2004, about 1,800 newspapers have closed in the United States, according to a 2020 report by University of North Carolina researchers.

The trend accelerated during the pandemic. The number of people working as reporters, editors, photographers, or film and video editors and operators in the newspaper industry in 2020 was down 12 percent from the year before and 57 percent from 2004, according to the Bureau of Labor
Statistics. A third of large U.S. newspapers had layoffs in 2020. When the Stanford Alumni Association conducted its 2020 Alumni Careers Survey for alumni under age 65, it found that 18 percent of graduates worked in technology, whereas 1 percent were writers and editors.

Not only are jobs scarce, but those who land them often soon discover the downsides: low salaries and minimal benefits relative to education level, long and unpredictable hours, job instability, a lack of diversity in newsrooms—particularly in the leadership ranks—and, in recent years, a rise in misinformation and political headwinds against fact-based reporting.

And yet a number of recent graduates have charged ahead in the embattled field with no small amount of ingenuity and gumption. Botts, now at CalMatters, is finding her way forward at a nonprofit journalism venture devoted to explaining how the California state capitol works. Others have become leading voices explaining COVID-19 to the nation; framing the country’s conservative debates; or foregrounding Native voices in politics. Several have bridged the chasm between storytelling and technological skills like coding and data mining, modernizing the way reporting is done.

“What I’ve found is that journalism is attracting two types of students now: People who want to tell stories, and people who want to hold institutions accountable,” says Jay Hamilton, communication department chair and director of the master’s program in journalism. “The set of skills that a person can [use to] tell a story is different, and holding people accountable you can do at a younger age.”

IN THE NARRATIVE

Aliyah Chavez, ’18, MA ’19, an anchor and producer at Indian Country Today, has already made journalism history. Not long after her arrival at the nonprofit news enterprise that covers the Indigenous world, Chavez wrote a feature that became the first story the Associated Press circulated from a Native American publication about Indian Country.” The Columbia Journalism Review noted that month.

Growing up in Kewa Pueblo, N.M., Chavez didn’t think about journalism as a career. But the attraction was clear by the end of her freshman year, she says, after she took a course taught by lecturer Janine Zacharia, a former Washington Post journalist. “It was so exhilarating,” Chavez says. “That was the first time the light bulb turned on to me.”

Through Stanford’s Rebele Journalism Internship Program, which provides students with stipends for internships with qualifying news organizations, she spent the summer of 2018 at a community newspaper in Phoenix. The next summer, she used another Rebele fellowship to work at Indian Country Today.

Chavez quickly carved a niche for herself in politics. Using what she learned at Stanford, she created a database of every Native American candidate running for office in 2020. “At first, I was just going to create a list,” Chavez says. “Then I thought, ‘Wait, I could create a whole database.’” Soon, politicians were citing the database in their speeches, and political organizers were using it to get out the vote. Advocates put the numbers in their election literature, and journalists referred to it in their coverage.

“That ended up turning into a way bigger project,” Chavez says.

During her reporting on the primaries and the general election, campaigns took a strong interest in Indian Country Today, recognizing it as a credible news source that could reach Indigenous communities. Not long after President Joe Biden took office, the White House started an initiative whereby reporters from outside the D.C. area could ask questions at press conferences via video. Chavez was the second reporter invited to do so.

Later that day, she tweeted: “Native journalists in the White House. Let’s do it again someday!”

THE FOURTH ESTATE

On January 6, Marianne LeVine was working on the third floor of the U.S. Capitol, in the press gallery on the Senate side, when she heard an announcement to stay away from the windows. Shortly thereafter, she heard
reports of rioters breaching the House side. She and a colleague locked the doors, blocked the entrance with a couch and turned off the lights. For about an hour, they didn’t know what was going on. Finally, someone evacuated them to another Senate building.

“You feel a great weight of responsibility when you’re in [that] situation. I have to cover the news, regardless of if I’m stressed or scared,” says LeVine, ’13, MA ’13, who writes about Congress at Politico. She and her colleague stayed into the night, until the Senate rejected objections to the Arizona and Pennsylvania election results, making it home about an hour, they didn’t know what was going on. Finally, someone evacuated them to another Senate building.

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“mainstay in the ecosystem of conservative thought.” It operates independently from the newsroom, with which it has at times butted heads. Yet it was editorial writing that notched the Journal’s first two Pulitzer Prizes, in 1947 and 1953, with additional awards coming in the 1980s, 2000s and 2010s. In recent years, several alumni have been making their mark on the section: Elliot Kaufman, ’18, serves as letters editor; Jason Willick, ’15, is an editorial page writer; and Allysia Finley, ’09, is an editorial page editor who sits on the editorial board. Willick joined the Journal in 2017 from the American Interest, a D.C.-based foreign policy magazine, and now writes some of the paper’s unsigned editorials on law, foreign policy and media regulation.

“My favorite bylined piece I wrote,” Willick says, “described the discovery of a new John Locke manuscript in Maryland while trying to convey the relevance of Locke’s thought today.” In the 2019 piece, Willick made the claim that Locke is “falling out of fashion,” with progressives losing interest in the Western canon and conservatives criticizing Locke for being overly disconnected from tradition and focused on individual autonomy. “He was a giant of American liberal democracy standing against totalitarian rivals. Today he is metaphorically in exile,” Willick wrote. The piece unexpectedly became an online hit, rising to the most popular reads list and garnering more than 200 comments.

Meanwhile, Kaufman, the newest addition, combs through 200 to 300 letters received by the paper each day, selecting the ones he believes shed light on an important topic in a novel way. “My first day at the Journal, the team showed me how to use the software,” Kaufman says. “My second day, I was given an article [to edit] by the secretary general of NATO. Not bad considering my father had warned me to be ready to get coffee for senior colleagues.”

SO HOW WOULD YOU DESCRIPT THIS TO A FOURTH GRADER?

If you’ve been reading long-form explainers about COVID-19, you’ve probably been reading the Atlantic and the lucid revelations of Katherine Wu, ’13, MS ’14. Wu arrived at Stanford with writerly ambitions. But by her sophomore year, a burgeoning love of science (and pragmatic concerns about making a living) had steered her in a new direction. Out with the English major; in with hum bio.

She soon seemed well on her way toward a career in research. After leaving Stanford, Wu began a doctorate at Harvard studying the bacteria behind tuberculosis. But she maintained a fascination with sharing science with the public. In 2018, she paused her PhD for three months to use an American Association for the Advancement of Science fellowship at Smithsonian magazine, and quickly found herself in the enviable quandary of having two loves to pursue.

After defending her thesis later that year, she set off for jobs at the TV series Nova and then Undark magazine. She arrived at the New York Times in June 2020, landing her scientist’s eye to its relentless COVID-19 coverage while still finding time to tell engaging (and sometimes gross) tales you never knew you wanted to know. (Exhibit A: “Why Are Pandas Covering Themselves with Horse Manure?”) In less than a year, she got a call from the Atlantic, a preeminent source of long-form writing about the pandemic, with an offer of her dream job.

As Wu puts it, she’s gone from breaking news to breaking down news, a privilege to go deeper that she says comes with a sense of responsibility. “I like giving people something useful and something that actually makes them think about their situation in a different way,” she says. “That is a very difficult thing to do consistently.”

In the article “A Better Name for Booster Shots,” she takes a ubiquitous term and reveals the deep confusion about what booster shot means, even among experts.
It’s a look under the hood of language that illustrates how much the pandemic still defies easy consensus.

“I was always a person who was bored easily,” she says. “That’s part of what drew me to science—the excitement of finding new things and always challenging myself—and I feel like that’s amplified many times over now that I’m a journalist.”

**KEEP ON KEEPING ON**

In 2020, Stanford’s master’s program in journalism saw its largest number of applications in more than a decade. Hamilton, its director, posits several reasons: “The moment, social justice, holding people accountable, the economy, and our focus—we probably have the most data journalists in the country.”

While Stanford does not have an undergraduate journalism major, students can major in communication and choose the journalism pathway—one of several informal tracks the department offers—to take a cluster of related courses. There’s a good deal of cross-pollination as well; undergrads can take graduate-level courses or follow up their bachelor’s degree with a master’s in journalism. The university is also home to the influential John S. Knight Journalism Fellowships, which support diverse midcareer journalists from around the world who are creating solutions to the field’s most urgent problems.

Campus journalists and professors alike report seeing increased attention in the field from undergrads. Daily editors say freshmen flocked to the paper during the pandemic, even when they had to report remotely about a campus on which they’d never stepped foot. Some 255 students joined the paper in the fall of 2020, down only slightly from 283 in fall 2019 when the on-campus population was typical. And interest spiked this fall to 411 applications. (The Daily accepts everyone who applies, according to chief operating officer Eleni Aneziris, ’20, MA ’21.)

“I can tell you 104 is packed. We have to turn people away, there’s so much interest,” says Zacharia, who teaches Communication 104W: Reporting, Writing and Understanding the News. “People take 104 and they get enchanted with it. I want to teach Comm 104 to everybody at the university. To me, how we’re going to restore respect for credible fact-based news is an urgent national priority. And the way we’re going to do that is for people to understand how real journalism is done.”

Still, pursuing journalism professionally hasn’t necessarily been an easy choice. Many alumni had moments of reflection—even hesitation—about entering a changing and unstable field. Politico’s LeVine hadn’t come to Stanford expecting to go into journalism. But she loved writing, had an interest in policy and politics, and was intrigued by the idea of always getting to talk to people and keep learning. While in the master’s program, she covered East Palo Alto City Council meetings and explored socioeconomic and housing issues. And yet upon graduation, she worried about finding a path forward. “I was definitely really nervous about what the prospects were. It didn’t feel like a really steady industry,” she says. Even after securing an internship at the Los Angeles Times, she didn’t know what was next. “I had no idea where I was going to land. There’s just not as much opportunity.”

Her colleague Ruairí Alfredo Arrieta-Kenna, ’18, an assistant editor at Politico Magazine, had similar concerns. “I didn’t have connections in the industry or familial wealth to fall back on. But being a Stanford student, I had advantages many others don’t,” he says. “I was able to do my first professional journalism internship while studying at Stanford in Washington [SIW], and I later could afford to live in Washington on the low pay of my first full-time journalism job by moonlighting as an RA at SIW. Because the university affords these kinds of opportunities—as well as others, like the Rebele internship program, which I didn’t do but know others who did—journalism becomes a much more accessible career path, which is a good thing for people like me and the industry at large.”

Hannah Knowles, ’19, who spent her undergraduate years alternating between the Daily and summer internships, realized at some point, despite concerns, that this had to be her profession. “Every summer, I loved what I was doing, but it was depressing. There were layoffs, and people would tell you, ‘Don’t do this,’” says Knowles, a general assignment reporter at the Washington Post who has covered Northern California’s Dixie Fire, vaccine and mask mandates, and the trial over Ahmaud Arbery’s killing. “So every summer, I would come back and say, ‘I have to figure something else out.’ But by the end of the year, I just did the same thing, 24/7, at the paper. At a certain point, if you keep doing something, that’s something you should do.”

Botts, for her part, earned her undergraduate degree in earth systems and wended her way to journalism via science writing. Upon graduation, she tried out reporting at the Santa Barbara Independent and loved the work. She remembers turning out the financial implications of choosing journalism. “I sort of jumped into it heart first,” she says. “My parents were always telling me to find a career that’s meaningful.”

Bay Area writer Brian Eule, ’01, Stanford senior writer Sam Scott and senior editor Jill Patton, ’03, MA ’04, contributed to this story. Email them at stanford.magazine@stanford.edu.
Even in the best outcomes, drinking often exacts a heavy toll, from hazy heads to cringe-worthy karaoke memories. And at its worst, the consequences can be truly catastrophic. So why do humans keep bellying up to the bar thousands of years after the first hangover? The question is at the center of Edward Slingerland’s erudite, entertaining and edgy defense of (mostly) moderate drinking, *Drunk: How We Sipped, Danced, and Stumbled Our Way to Civilization*.

Evolution isn’t stupid, he writes. Serious booze has been flowing in human society for around 9,000 years, ever since the advent of agriculture and large-scale fermentation. That’s plenty of time for genetic and cultural adaptations to have put an end to the shenanigans if alcohol were a net drain on humanity. That they haven’t even come close suggests booze has given more than it has taken, at least historically.

Indeed, for Slingerland, ’91, PhD ’98, a professor at the University of British Columbia, intoxicants—alcohol chief among them—are foundational to civilization. We are at base selfish, suspicious primates evolved to cooperate with relatives and certain tribe members, he writes, and yet we live in vast societies, packed cities and ordered nations with a level of cooperation verging on antlike. Intoxication provided the chemical key for our ancestors to come together into a more social, trusting and collaborative world. “We could not have civilization without intoxication,” he declares.

The book samples poetry, history, pharmacology, social science and literature to show drinking’s dividends throughout history. Moderate drinking enables creativity, culture, bonding, stress reduction and pleasurable escape now as much as ever, Slingerland writes. It’s why the number of patents fell in the first years of Prohibition, Google engineers have a whiskey room, and *office party* isn’t necessarily an oxymoron. It’s enough to make you raise a glass to booze itself.

At least until the book’s final section, where he turns to the “dark side of Dionysus,” always there but only darker in modern times. For most of drinking history, people got tipsy on low-alcohol beer and wine in public settings, where they could reap the social benefits protected by social norms against over-indulgence. The arrival of liquor and drinking at home—distillation and isolation—threatens to unsettle alcohol’s delicate balance between usefulness and harm. Here, Slingerland takes a tack even a teetotaler would like. He favors raising the drinking age for hard alcohol and, via taxes, its cost. Or, even better, avoiding it entirely. “We are apes built to drink, but not 100-proof vodka,” he writes. “Beware liquor and don’t drink alone.”

Why bond over a toxic, organ-destroying, mind-numbing chemical when a rousing game of Parcheesi might suffice? Without an answer to *this* question, we have no way to intelligently weigh arguments for or against replacing after-work pub sessions with escape room competitions or laser tag outings.

We Recommend

Perspectives

Our First Civil War: Patriots and Loyalists in the American Revolution
H.W. Brands, ’75; Doubleday. Turns out, being forced to choose sides in the name of country is a very American experience.

Gitty and Kvetch
Caroline Kusin Pritchard, ’10, MA ’14; Atheneum Books for Young Readers. Everyone needs a friend like Kvetch, whose Yiddishisms add levity to a dreary day in this gorgeously illustrated children’s book.

Vera
Carol Edgarian, ’84; Scribner. Moxie and street smarts help a 15-year-old find a foothold in the rubble of 1906 San Francisco.

Beth A. Bechky, MA ’92, PhD ’99; Princeton U. Press. A fascinating look at the scientists who solve mysteries by investigating all that’s left behind.

Creative Acts for Curious People: How to Think, Create, and Lead in Unconventional Ways
Sarah Stein Greenberg, MBA ’06; Ten Speed Press. Rev up your ingenuity with this treasure map of the mind from the executive director of Stanford’s d.school.
What appears to be a movie backdrop straight out of science fiction is—how can it be?—100% real.

You want to learn more about the stunning scenes that surround you. And you will, with a Stanford scholar guiding you every step of the way.

Experience the extraordinary with Stanford Travel/Study.

Stanford TRAVEL/STUDY

alumni.stanford.edu/goto/travelstudy
FACULTY
Van Austin Harvey, of Palo Alto, July 11, at 95. He was George Edwin Burnell Professor of Religious Studies, emeritus. He was a pioneer in the secular study of religion and helped transform the department of religious studies by making it more interdisciplinary and broadening it to include Jewish and Buddhist studies. His book Ludwig Feuerbach and the Interpretation of Religion was awarded the American Academy of Religion Award for Excellence in 1996, and he also held NEH and Guggenheim fellowships and a visiting fellowship at Cambridge. Survivors: his wife, Margaret; and sons, Jonathan and Christopher.

1940s
George Warren Hellyer Jr., ’43 (political science), LLB ’49, of Calistoga, Calif., June 17, at 99. He was a member of Phi Beta Kappa and served in the Navy during World War II. After making partner at a San Francisco law firm, he sought a new course and found it on the Greek island of Corfu, where he spent the next 10 years studying ceramics. After meeting his future husband, he returned to the San Francisco area. In Calistoga, he bought 50 acres of farmland and undertook a new career as a vintner and a new mode of artwork in acrylic paint. Survivors: his husband, Ira Yeager.

Naomi Thropp Gadd, ’44 (social science/social thought), of Scottsdale, Ariz., August 22, at 98. She served as president of Kappa Alpha Theta. She raised her children in Visalia, Calif., where she supported her wider community through the PTA and Tulare County Panhellenic. She was an avid golfer and played until age 89. She was predeceased by her husband, Peter, ’43, and son, Peter, ’72. Survivors: her daughter, LuAnne Kittle; four grandchildren; and three great-grandsons.

Catherine Ellen Jones Cramer, ’47 (economics), of Santa Barbara, Calif., July 31, 2020, at 95, of heart failure. Through volunteer work, she contributed to her communities in New York City, Williamsburg, Va., Iowa, Missouri and Paris. In California, she organized the Orange County Philharmonic Symphony for Youth concerts. In Texas, she was founding director of the Scurry County Museum and helped it meet national accreditation standards. She also enjoyed horseback riding until age 85. Survivors: her daughters, Carol Cramer Bullard and Holly; and two grandchildren, Barbara Jean “Bobbie” Levy Greenberg, ’47, of San Francisco, June 16, 2020, at 94. She was a prolific painter in the impressionist style and an avid traveler and adventurer. She loved experiencing the world with her husband of 71 years, John, who died six months after she passed. Survivors: her children, Tom, Janie Friend and Steve; four grandchildren; and three great-grandchildren.

Bernice “Beez” Glendenning Jones, ’47 (economics and political science), of Cupertino, Calif., June 12, at 95. She was a leader of the Women’s Vocational Committee. She served her community as a volunteer for the YMCA and Cupertino Historical Society and Museum and supporter of open space initiatives. As a third-generation alumna whose grandfather was in the first graduating class of 1892, she was a lifelong Stanford football fan.

She was predeceased by her husband, Samuel. Survivors: her children, Glen, ’76, Claire Becker and Roy, and eight grandchildren, including Grace, ’12, Betty Yvonne Santi Stewart, ’47 (economics), of Merced, Calif., June 22, at 96. She was a member of Delta Delta Delta and the women’s tennis team. During World War II, she was a Red Cross nurse volunteer on campus. She helped turn the family dairy and ice business into the Delta-Sierra Beverage Company. She served her community as a PTA president and supporter of Merced’s educational, medical and cultural institutions. She was predeceased by her husband of 72 years, Donald, ’45. Survivors: her children, Melinda Stewart Wilbur, ’71, Jana Cezar, Donald Jr., Andrea Sofranek and Robert; 15 grandchildren, including Annamarie Sofranek, ’22; four great-grandchildren; and sister, Joan Santi Baakkonen, ’52.

Horace Byington Wulf Jr., ’47 (industrial engineering), MS ’48 (mechanical engineering), of Sacramento, Calif., May 30, at 95. He was a member of Phi Kappa Psi. He worked initially at Campbell Soup and then for 15 years at Aerojet. When he was laid off during an economic downturn, he realized his dream of opening Wulf’s French Restaurant, which he ran for 20 years. In retirement, he enjoyed skiing, sailing and traveling. He was predeceased by his first wife, Helen, ’48; children,

Farewells

Emergency Medicine Doctor Pioneered Health Care in the Wild

Paul Auerbach excelled at responding to medical emergencies of a particular order. One of the founders of what became known as wilderness medicine, Auerbach was an authority on how to treat everything from snake bites, bear attacks and extreme altitude sickness to mushroom poisoning and lightning strikes.

Paul Stuart Auerbach, MS ’89, the Redlich Family Professor, emeritus, died on June 23 of brain cancer at his Los Altos home. He was 70.

A born adventurer and a lover of the outdoors, Auerbach built a career on responding to moments when adventure and disaster collide—often life-threatening situations for which he found many physicians ill-prepared. Nearly 40 years ago, fresh out of his medical residency, Auerbach co-edited Management of Wilderness and Environmental Emergencies, a reference guide he later updated and republished as Auerbach’s Wilderness Medicine—still the definitive textbook in its field, expanded to include sections on cave rescue, avalanches and volcanic eruptions.

“There’s no way to have read the textbook on every organism, every reptile, every aquatic animal and every environmental disaster,” says Andrea Blomkains, Auerbach’s colleague and chair of the department of emergency medicine at Stanford. “But you can train people to handle situations that needed help,” Danny says. In addition to Danny, Auerbach is survived by his wife, Sherry; children Lauren and Brian; mother, Leona; and two siblings. —Carly Stern

FACULTY
Van Austin Harvey, of Palo Alto, July 11, at 95. He was George Edwin Burnell Professor of Religious Studies, emeritus. He was a pioneer in the secular study of religion and helped transform the department of religious studies by making it more interdisciplinary and broadening it to include Jewish and Buddhist studies. His book Ludwig Feuerbach and the Interpretation of Religion was awarded the American Academy of Religion Award for Excellence in 1996, and he also held NEH and Guggenheim fellowships and a visiting fellowship at Cambridge. Survivors: his wife, Margaret; and sons, Jonathan and Christopher.

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John and Ann; and stepson, Mike Babinoff. Survivors: his wife, Nina Babinoff.

Wayne Clifford Erickson, '49 (industrial engineering), of Kirkland, Wash., August 20, at 94. He was a member of the intercollegiate film and baseball teams and Zeta Psi. He served as a Navy pilot during World War II. After two decades of work, he entered service with the Lutheran World Federation and spent over a decade delivering humanitarian aid in the Middle East. In retirement, he transported patients in remote areas of Central America as a volunteer pilot for Wings of Hope. Survivors: his wife of 71 years, Frances (Wakeman, '50); and children, Dianne Schultheis, David, Karen Alberto and Richard.

William Arthur Hage, '49 (economics), of San Francisco, June 29, at 97. He served in the Army Air Force during World War II. At Crocker First National Bank, he rose from an investment analyst to head of the state trust investment department. In retirement, he served as arbitrator for the Pacific Stock Exchange, National Association of Securities Dealers and New York Stock Exchange. He also became an active ballroom dancer with the Golden Gate chapter of the National Smooth Dancers. He was predeceased by his wife, Elizabeth. Survivors: his stepdaughter, Yvonne Chester; grandson; and brother.

Barbara Working Milligan, '49 (social science/social thought), of Portola Valley, Calif., April 14, at 93. She was on the Women's Council. She grew up on campus and married in Stanford Memorial Church. After earning her master's degree in psychology from San José State, she worked as a school psychologist for 21 years. She traveled to Bhutan and Greenland and across Russia on the Trans-Siberian Railway, but most loved canoeing and exploring nature with her children and grandchildren. She was predeceased by her husband, Dick. Survivors: their children, Brook, Lyle Wilen and Cathlin; six grandchildren; and brother, John Working.

1950s

Edward Lewis Culin III, '50 (economics), of Oakland, July 2, at 95. He was a member of Zeta Psi and the football team and served as a Navy pilot during the Korean War. He began his 40-year career in the financial sector with Brush, Sloucumb & Co. and retired from Morgan Stanley. He loved fishing, family road trips, Stanford athletics, adventures with Stanford Travel/Study and competing (until age 90) in the San Francisco Olympic Club’s annual fitness competition. He was predeceased by his wife, Arlene, and longtime companion, Alice Bennett. Survivors: his children, Lisa and Edward; and two granddaughters.

Mary Elizabeth Hill Skougard, '50 (communication), of Los Altos, Calif., June 27, at 92. She was a member of Cap & Gown, reporter and editor for the Daily and the first female station manager and infamous on-air personality “Stanford Sadie” for KZSU. She worked in the radio and TV industry in San Francisco and New York City. While raising her children, she continued to write and also represented her neighborhood before the city council. She was an avid bridge player, tennis partner, hiker, skier and family history researcher. Survivors: her husband, John; and two children.

Randy Fordyce, '52 (psychology), of Portola Valley, Calif., where he specialized in film, entertainment law in Washington, D.C., and then in Beverly Hills, Calif., where he specialized in film, entertainment and international law. He also enjoyed sailing, tennis and horseback riding with the Cowboy Lawyers Association. Survivors: his son, Mark; and brother, Ralph, '53.

Joseph Remo Pinotti, '51 (education), MBA '53, of Williamsburg, Va., May 10, at 91. He played freshman football, baseball and rugby and was president of Delta Tau Delta. He served in the Army Medical Corps during the Korean War. His civilian career spanned 40 years, beginning with positions in Italy, Spain and Switzerland with Dow Chemical. He also held board and advisory positions with Williamsburg Community Hospital and the College of William and Mary’s Mason School of Business, but he especially enjoyed researching his family’s Italian roots. Survivors: his wife of 67 years, Beverly (Logan, '53); children, Douglas, Marc and Thomas; and seven grandchildren.

Peter Green Hight, '52 (psychology), of Novato, Calif., June 11, at 90, of pneumonia. He wrestled, sang in the choir and was a member of Kappa Sigma. He served in the Marine Corps. He took an advertising job after college, worked in sales

Entertainment Lawyer Who Championed Independent Filmmakers

In Hollywood, with its reputation for disposable relationships, Shelley Surpin stood out to clients for her fierce, long-term loyalty. “She was someone they could rely on doing her best for them,” remembers her husband, Steve Charnow.

Shelley H. Surpin, ’70, a partner at the entertainment law firm Surpin, Meyersohn & Coghill, died on September 3 in Santa Monica, Calif., of complications following a stroke. She was 72.

A Los Angeles native, Surpin earned a law degree from UC Berkeley School of Law after graduating Phi Beta Kappa from Stanford. She started working at Pollock, Rigrod and Bloom, and went on to partner with Andy Rigrod at Rigrod & Surpin before co-founding Surpin, Meyersohn & Coghill in 1987.

Her foray into film production happened by serendipity. Surpin was advising a writer-director client when he noticed that she was also doing so, adds, “is just incalculable, both as a friend and as a lawyer. I must want her to be remembered for that ability to connect with people with a deep emotional bond.”

In addition to her husband of nearly 40 years, Surpin is survived by her daughter, Martine Charnow, and grandson, Ember Shelley Chiller.

Over the course of her career, Surpin represented large studios and powerful producers, but her heart was in championing independent filmmakers, including Allison Anders, Nicole Holofcener, Gregg Araki and Zal Batmanglij. Surpin was a producer on Kaboom, a 2010 film written and directed by Araki that premiered at the Cannes Film Festival and won the first-ever Queer Palm for its contribution to LGBTIQ+ issues. More recently, she produced writer-director Batmanglij’s Sound of My Voice, which premiered at Sundance in 2011, closed the SXSW Film Festival that same year and was later released by Fox Searchlight Pictures.

“In my 30-year career, I’ve had nine managers, six agents and one lawyer,” Charnow remembers a client of Surpin’s saying. The loss to her clients, Charnow adds, “is just incalculable, both as a friend and as a lawyer. I must want her to be remembered for that ability to connect with people with a deep emotional bond.”

In 2016, Surpin was named one of the 100 Most Powerful Women in Entertainment by Variety and was also named a “Power 100” by Women in Film. She was also named to the 2016 Time 100 list of the most influential people in the world.

Survivors: his wife of 39 years, Josephine; sons, Andrew, Gregg and Robert; stepson, Timothy Dalrymple; granddaughters; and stepgrandson.

Martin Perlberger, ’51 (economics), JD ’54, of Sacramento, Calif., May 2, at 93. After enduring five years in German concentration camps, he enrolled at Stanford, where he was a member of the soccer, sailing and polo teams. He practiced law in Washington, D.C., and then in Beverly Hills, Calif., where he specialized in film, entertainment and international law. He also enjoyed sailing, tennis and horseback riding with the Cowboy Lawyers Association. Survivors: his son, Mark; and brother, Ralph, ’53.

James Sidney Watkinson, ’50 (economics), of Richmond, Va., June 26, at 94. He served in the Army during the Korean War. He spent 36 years in commercial real estate with Thalhimer, eventually serving as chairman and CEO of Cushman & Wakefield/Thalhimer. He held numerous leadership roles for professional, business and civic associations, but his greatest pleasure came from serving the Colonial Williamsburg Foundation for more than 60 years. He was predeceased by his wife of 56 years, Douglas; daughter Kathy Ivins; and son James. Survivors: his companion, Jean Lane; children Sarah and Robert; seven grandchildren; and five great-grandchildren.

John Edwin Whiting, ’50 (biological sciences), of Loganville, Ga., August 20, at 96, of heart failure. He earned his law degree from UC Hastings. During 60 years of legal practice, he was a trial lawyer specializing in insurance defense and malpractice. For more than 25 years, he was the corporate attorney for Joseph Farms, one of the largest dairy operations in California. He was predeceased by his daughter Laura Jones and granddaughter.

Robert Byron Downer, ’51 (sociology), MBA ’53, of Media, Pa., August 30, 2019, at 89. He was a member of Phi Sigma Kappa. After serving in the Army Medical Corps, he undertook a career with Scott Paper and then founded Bio Clinic in 1969. He was a sports fan, especially Stanford sports, and served as Little League association president; he also supported the Media Youth Center and coached numerous youth basketball and baseball teams. He was predeceased by his first wife, Marjorie Blemker Downer, ’53, MA ’54. Survivors: his wife of 39 years, Josephine; sons, Andrew, Gregg and Robert; stepson, Timothy Dalrymple; grandchildren; and stepgrandson.

TOBY MILLER
for Scott Paper in New York, sold radio ads in Portland, Ore., managed brokerage accounts in San Francisco, was a model for print and commercials, and acted on TV and film. He also enjoyed travel, gardening, classical music and hiking. Survivors: his wife, Judy; children, Ellen, Steven and Sarah Montague; and two grandsons.

Harvey Chambers King, '52 (industrial engineering), of Kailua, Hawaii, May 31, at 93. He served in the Marine Corps during World War II. He was a member of Phi Kappa Psi and played freshman basketball and JV football. After relocating to Hawaii, he founded King & Neel Insurance in 1967. He was a mentor to many in both his business and personal life and promoted optimism, honesty and integrity. He especially enjoyed traveling the world with his wife. Survivors: his wife, Mary (Hines), '53; children, Suzanne, '76, Doreen King Stevens, '78, and Don, '83; seven grandchildren; and three great-grandchildren.

Reginald Louis Scott Doggett III, '53 (basic medical sciences), MD '56, of Fair Oaks, Calif., July 6, at 89. He was a yell leader, a member of Phi Gamma Delta and the Alpha Omega Alpha academic medical honor society, and a fellow of the American College of Radiology and the American Society of Therapeutic Radiation Oncology. He also had a passion for traditional jazz. He was predeceased by his former wife, Louise, '52 (industrial engineering), of Menifee, Calif., March 16, at 88, of son's disease. He was a member of Beta Theta Pi, Sigma and ROTC. He served in the Army. In a career lasting 30 years, he led multiple electronics businesses, opened a computer store, served on the board of Digital Power and was vice president of marketing and sales for Phihong USA. In retirement, he rebooted his passion for photography and also served on the board of the Miss California 2020 beauty pageant. He was predeceased by his wife, Alice; children, Kaira, Scott, Linda and Lori; and stepdaughter, Tami Mastain.

James Reginald “Jim” Stockton, '54 (art), of San Francisco, May 6, at 88. He was art director for the Chaparral and a member of the Hammer & Coffin Society, Sigma Alpha Epsilon and the crew team. During his Navy service, he was a cartoonist and illustrator for Stars and Stripes. In his career, he specialized in book design. He also founded and chaired the Stanford Conference on Design and was a core faculty member of the Stanford Professional Publishing Course. He was the proud owner of a classic 356 Porsche coupe, which he drove for nearly 50 years around Europe and up Highway 1 in California. Survivors: his wife of 43 years, Karen Tucker.

Robert George Davis, '57 (mechanical engineering), of Portland, Ore., July 23, at 85, of heart attack. He was a member of Alpha Delta Phi. After serving in the Marine Corps, he began a 60-year career with Trane Technologies, retiring after 34 years as owner and manager of Trane Oregon. He also served as senior warden at Trinity Episcopal Cathedral. Survivors: his wife of 48 years, Betsy; children, Robert, Taylor, David Volonte, Gina Volonte, Mattson, Donald Volonte and Margaret Bur- chiel. He is survived by one great-grandchild. Alice Geary Kilham, '57 (electric engineering), of Ath Falls, Ore., area, where she built and lived in a tiny home that relied on solar and composting energy that was ahead of its time. She also ran the Saddlerock Café, supported environmental causes and was appointed to the Klamath River Basin Compact Commission. She was predeceased by her former husband, Richard. Survivors: her children, Nancy and Edward.

Milton Julius Bonzell, '58, MA '59 (education), of Pine Grove, Calif., July 7, at 84, of stomach cancer. He was a member of Phi Delta Theta. After earning his EdD at the U. of San Francisco, he had a 37-year career as an educator. He served as director, registrar, director of student life, assistant professor, professor, chair of the psychology department, director of the Cal Poly Astronomy Program and director of the Environmental Studies Program, and worked for the IRS before retiring. Survivors: his wife of 23 years, Rinda; children Karen, Mattson, Donald Volonte and Margaret Bur- chiel, '60; grandchildren; and one great-grandchild.

Miriam “Mimi” Wallace Selgren, '59 (sociology), of San Diego, June 10, at 84. Her love of travel began with a postgraduate trip around the world. After earning a teaching certificate from San Diego State, she taught primary school. She was later the executive secretary for the director of Scripps Oceanographic Institute in La Jolla, Calif. She was a lifelong learner with a deep interest in religion and history and also sang in the choir of St. Paul’s Cathedral. She was predeceased by her sons David and Andrew. Survivors: her son Steve; four grandchildren; and former husband, Alan, '60.

Winfield Scott Wilmore, '59 (general engineering), of Diablo, Calif., November 11, 2020, at 83. He was a member of Navy ROTC and Delta Kappa Epsilon. After service in the Marine Corps, he earned his MBA at USC. He began his career in precision toolmaking in Belgium. His innovations in electronic measurement culminated in his career at Lockheed as a member of the THAAD missile team. He also enjoyed travel, tennis and golf. Survivors: his wife of 56 years, Cynthia; children, Laurie, '89, and Gregory, '91, and three grandchildren.

1960s

Marjorie Louise Stovall Koldinger, '60 (political science), of Sacramento, Calif., April 11, at 83, of globlastoma. She was in the first Stanford in Germany group and also studied abroad in Japan. While raising her children, she served her community as a docent at the Sacramento Zoo and Crocker Art Museum, Cub Scout den mother and supporter of environmental causes. She later earned a master’s degree in accounting from Golden Gate U. and worked for the IRS before establishing her own tax business. Survivors: her husband of 57 years, Ralph, '59; sons, Eric and Kurt; three grandchildren; and sister.

Alan Alexander Burns, '61, MS '63, PhD '68 (electrical engineering), of Portola Valley, Calif.,
August 20, 2019, at 79, of progressive supranuclear palsy. He also earned an MBA from Santa Clara U. At SRI International and later at a small research firm, he led projects involving radar, lasers and aviation safety and co-founded the NSF Arctic Antarctic Service Medal and the Defense Nuclear Agency Meritorious Public Service Award. He was also the principal inventor of the FoxTrax hockey puck that could be tracked on screen during TV broadcasts. Survivors: his wife of 42 years, Patricia; children, Adrian and Ian; four grandchildren; and two siblings.

Jon Michael Loreen, ’61 (political science), of Seattle, May 25, at 81. He was a member of Phi Kappa Sigma and crew team captain. After five years of Navy service, he earned his JD from the U. of Washington. After a year as a Snohomish County prosecutor, he co-founded a law firm. He served as a state administrative law judge from 1993 to 2010. He was an avid bicyclist and in 2016 cycled from North Dakota to Washington, D.C. Survivors: his wife of 48 years, Susan; daughters, Kirsten, ’97, and Ingrid Lorehn Rechtin, ’00; five grandchildren; and sister.

Douglas Henderson Lowndes Jr., ’61 (physics), of Port Charlotte, Fla., August 15, at 81. After earning his PhD from the U. of Colorado, he was a professor at the U. of Oregon until 1979. He was then the founding scientific director of the Center for Nanophase Materials Science at Oak Ridge National Lab and, starting in 1986, professor at the U. of Tennessee. He was named the Oak Ridge Scientist of the Year in 1995. He was pre-deceased by his wife, Gayle. Survivors: his partner, Maureen Peters; children, Erik and Katie; and six grandchildren.

Donald Eugene Thompson, ’61 (biological sciences), of Bloomfield Hills, Mich., February 12, at 81, of complications of diabetes. He was a member of the football team and Alpha Delta Phi. After medical school at NYU and training at UCLA, he served as secretary for the American Veterinary Medical Association in Detroit, where he remained in practice. He also served as a state administrative law judge from 1993 to 2010. He was an avid bicyclist and in 2016 cycled from North Dakota to Washington, D.C. Survivors: his wife of 48 years, Susan; daughters, Kirsten, ’97, and Ingrid Lorehn Rechtin, ’00; five grandchildren; and sister.

Francis “Frank” Paine, ’68 (political science), of Center Sandwich, N.H., June 30, at 75, of cancer. He studied overseas in Harlaxton with Stanford in Britain. He later studied Portuguese at the Defense Language Institute and earned his MBA from the U. of Connecticut. Survivors: his wife, Frederica; and sister.

Steven Hudson Dougherty, ’69 (biological sciences), of Santa Barbara, Calif., November 6, 2020, at 74, of glioblastoma. After medical school at UCSF, he completed a general surgery residency at the U. of Minnesota. He spent his medical career as a trauma surgeon and trainer of medical residents at Texas Tech U. Health Sciences Center El Paso. Survivors: his wife of 46 years, Leah; and four children.

Pamela Ruth McDonald, ’69 (English), of Penobscot, Maine, April 16, at 73, of T-cell lymphoma. She began her nonprofit career in Stanford’s development office. After relocating to New Hampshire, she held development positions with Concord Hospital, the National Kidney Foundation and others. She was also director of Christian education and a vestry member for her Episcopal congregations and was commissioned as a diocesan lay preacher. She entered divinity school at age 63, earned her master’s degree and served as chaplain at Compassus Hospice. Survivors: her husband, Christopher Closs; children, Joseph Truesdale IV, ’96, Katharine Truesdale and Benjamin Truesdale; six grandchildren; and brother, Paul McDonald, ’65.

1970s

Martha Hummer Bradley, ’71 (art), of Santa Barbara, Calif., July 21, at 72. She earned a graduate degree from the University of Oregon and taught at the Boys and Girls Club of America. Survivors: her wife, Anne; children, Virginia Gauger, Marcie Eberle and Brad; and six grandchildren.

Susan H. Sterling Monjauze, ’63 (French), of Brooklyn, N.Y., June 13, at 79. She was on the swim team. She raised her children in Paris while working for Pacesetter. She later returned to the Bay Area, where she worked in financial services. She was an avid gardener, opera fan and antique collector and a dedicated volunteer and fund-raiser for Ability Path and Stanford. Survivors: her children, Valerie Casey and Thierry, ’95; and five grandchildren.

Carol Patrice Christ, ’67 (humanities), of Heraklion, Greece, July 14, at 75, of cancer. She earned her PhD in religious studies at Yale and later taught at Columbia, Harvard Divinity School, Pomona College, San Jose State and the California Institute of Integral Studies. As the co-editor and author of eight books, she was a founding figure of the women’s spirituality movement. She also chaired the American Academy of Religion’s women and religion program and was a dedicated environmental activist. Survivors: her cousin.

Tadataka “Tachi” Yamada, ’67 (history), of Seattle, August 3, at 76. He was a member ofBeta Theta Pi. As a student of chemistry and physics, Cali had a profound effect on modern pharmaceuticals. After medical school at NYU and training at UCLA, he spent 13 years as head of gastroenterology and chair of medicine at the U. of Michigan. He then joined Beecham SmithKline to focus on developing new medications and eventually became chairman of GlaxoSmithKline. In 2006, he became president of global health at the Gates Foundation. He later worked for Takeda, co-founded several biotech companies and was a persistent advocate for gene therapies. Survivors: his wife, Leslie.

Ralph Albert Lentz, ’86 (communication), of Redwood City, July 13, at 57, of colon cancer. As a student, he was a teaching assistant for health and fitness, anticipating his later work as a gym owner and certified aerobics instructor. In his career in software sales, he held vice president and C-level positions at companies including CA, Macrovision, SparkPost and Aura Software. He was a founder and longtime board member of the Silicon Valley Executive VP Sales Forum. Survivors: his husband and partner of more than 30 years, Mark; and two brothers.

1990s

Aaron Murdock Hoover, ’99 (mechanical engineering), of Boston, December 30, 2020, at 42, of glioblastoma. He earned his PhD from UC Berkeley. As a professor at Olin College of Engineering, he taught engineering and design and studied how the principles of biological systems could improve robotic locomotion. He was also an avid cyclist, bass player and woodworker. Survivors: his wife, Robin; son, Ryan; mother, Kathy; and sister, Melissa, ’97.

2000s

Anita Anna Idcula, ’03 (communication), MA ’04 (education), of Los Angeles, March 7, at 39. She rowed crew and was a yell leader. She initially worked at Tollin/Robins, followed by Warner Broth-
ers and Nickelodeon. After earning her MBA at UCLA, she joined Mattel as a senior marketing manager. She dedicated years of service to the youth programs at Bel Air Presbyterian Church and also enjoyed reading, pop culture, karaoke, meme creation, live music and traveling the world.

Survivors: her mother, Anne; and two brothers.

**BUSINESS**

Donald John Gonzalves, MS ’59 (civil engineering), MBA ’62, of South Windsor, Conn., January 3, at 89, of a stroke. His career in finance with Ford, Polarnoid, W.R. Grace and Remington enabled him to travel the world, which he continued to do in retirement as a consultant and volunteer in Poland, Russia, Saudi Arabia, Denmark and other countries. He was also an avid tennis player, a board member of the Financial Executive Institute and president of the Stanford Alumni Association of Connecticut. Survivors: his wife of 60 years, Sylvia; children, Edward, Nancy and David; six grandchildren; and brother.

Arthur Lith, MBA ’62, of Sydney, July 25, at 86, of heart failure. He was on the swim and rugby teams. He spent his business career as a software developer. Survivors: his wife, Ilse; and children, Kristina Nogajski and Hendrik.

Richard Warren Venteti, MBA ’77, of Santa Cruz, Calif., May 7, at 70, of a stroke. He spent his finance career as CFO for numerous Silicon Valley companies. He served as treasurer of Save Our Shores and was an avid skier and hiker, but he especially loved camping with his children in Yosemite and traveling and cycling with his wife. Survivors: his wife, Alesa Lightbourne; children, Eric and Bria; stepsons; stepgrandchildren; and two sisters.

**EARTH, ENERGY AND ENVIRONMENTAL SCIENCES**

Peter Graves Dunn, MS ’58 (geology), of Tucson, Ariz., March 3, at 87. He initially worked for the Australian Bureau of Mineral Resources and Mount Isa Mines. Over more than 40 years of exploration, he worked for Bear Creek, Kennecott, Quintana Minerals and Chevron in the U.S., Canada, Mexico, Panama, Chile, Ecuador, the Philippines, China and Mongolia. He was also an avid baseball player and fan of Mozart and Gershwin, but he especially loved going on adventures with his family. Survivors: his wife of 61 years, Sherry, MA ’63; children, Mereth, Chris and Ben; grandchildren; and sister.

**EDUCATION**

Harry B. Gelatt Jr., MA ’51, EdD ’64, of Mountain View, June 3, at 94, of a heart attack. He spent 25 years as a teacher, counselor and guidance director for the Palo Alto Unified School District. He then launched a second career as a consultant, speaker and author on decision-making, future-oriented thinking and educational renewal. He was also an enthusiastic tennis player and fan of Stanford and pro sports. He was predeceased by his first wife, Margaret. Survivors: his wife of 40 years, Carol; sons, Paul and Lee; and four grandchildren.

Robert Lytton Spaulding, MA ’57, PhD ’62, of Marysville, Calif., March 25, at 97, of heart failure. He served in the Navy during World War II. After completing his doctorate, he held faculty and administrative positions in schools of education at the U. of Illinois, Hofstra, Duke, San José State and Syracuse. While at Duke, he directed a project to desegregate the public schools of Durham, N.C. Survivors: his wife, Cheryl, PhD ’87; and children, Carl, Ed, Tom, Chris and Cheney.

Mary Louise Mott, MA ’58, of Fresno, Calif., in December 2020, at 91. She went on to earn her EdD from Louisiana State U. She finished her teaching career in teacher training and education at Fresno State. She enjoyed cycling and Volkssport hiking and had completed 10K walks in all 50 states and many foreign countries. Survivors: her sister, Carry.

Stanley L. Cummings Jr., PhD ’75, of Port Townsend, Wash., July 13, at 76, in a cycling accident. He developed educational programs at Yosemite Institute’s Marin campus and held the top leadership post at the Ocean Institute in Dana Point, Calif., for 20 years. In 2007, he became executive director of the Northwest Maritime Center and the Wooden Boat Foundation in Port Townsend. He supported Quimper Unitarian Universalist Fellowship in numerous roles and enjoyed dancing, hiking, biking, scuba diving and traveling. Survivors: his wife of 31 years, Sigrid; daughters, Jennifer and Tarla; four grandchildren; and two siblings.

**ENGINEERING**

Kenneth Kai-nan Tang, MS ’49 (mechanical engineering), of Pasadena, Calif., July 2, at 94, of heart failure. He served in the Marine Corps. He was co-author of two patents for innovations in engine cooling and thermoelectric temperature control. Survivors: his wife of 70 years, Louise; children, Stephen and Stephanie; three grandchildren; and sister.

Tomoo Ishikawa, MS ’56, PhD ’60 (electrical engineering), of Kodaira, Japan, November 10, 2020, at 88, of heart failure. He spent 28 years in R&D at Hitachi before accepting a teaching position at Musashi Institute of Technology (now Tokyo City University). After being granted emeritus status, he joined Kogasoken as a consultant and technical translator. In retirement, he enjoyed classical music and playing Go. Survivors: his wife, Noriko; and children, Toshio, Tatsu, Teruo, Tetsuo, Tadao and Natsuko.

William Wells “Bill” Cuthbert, MS ’58 (electrical engineering), of Fresno, Calif., December 20, 2015, at 90. He served in World War II and during the Korean conflict. He was chief of instrumentation at Vandenberg Air Force Base and held two patents in radar technology. In retirement, he worked as a ski instructor and enjoyed restoring antique automobiles. Survivors: his wife of 64 years, Lorraine; seven children; 13 grandchildren; and four great-grandchildren.

Elmer H. Luethman, Engr. ’61 (electrical engineering), of Los Gatos, Calif., June 9, at 91. He was an ordained Jesuit and served as dean of sciences at Santa Clara U. After receiving dispensation from Rome, he married, started a family and joined Hewlett-Packard. He later returned to Santa Clara U’s executive development center and was a consultant for Western Management. He was an avid traveler and, once retired, he also enjoyed painting, cooking, playing bocce and teaching English to new Bay Area immigrants. Survivors: his wife of 51 years, Virginia; sons, Mark and Steven; and five grandchildren.

Frank Eugene Tippets, PhD ’62 (mechanical engineering), of Oroville, Calif., July 7, at 93. He served in the Navy. He spent his career with General Electric in research, development, and design engineering for nuclear electric plants and, for the last 25 years, as an engineering manager.

**Computing Pioneer and Burning Man Artist**

Breed helped with the early implementation of APL as a Stanford graduate student and later at IBM, which he joined after finishing his master’s degree. In 1973, he was a co-winner of the Grace Murray Hopper Award from the Association for Computing Machinery. Breed went on to co-found Scientific Time-Sharing Corporation, where in 1972 he and a colleague created one of the world’s first email systems. Five years later, he returned to IBM, where he remained until retiring in 1992.

“He was brilliant and he was humble,” says his sister, Lucinda Breed Lenicheck, ’70, MA ’73. “He was always achieving something that surprised everybody, probably himself included, but later in life, he would simply say, ‘I’m just a programmer,’ just not tooting his own horn ever.”

In retirement, Breed continued his creative use of technology, especially at the annual Burning Man festival, where he was known as Ember. He built Chootick, a 20-foot-tall, rotating, flaming tether-ball-like sculpture, which is one of the event’s oldest art installations. And, in response to concerns over litter and debris scattering into Nevada’s Black Rock Desert during the nine-day festival, he used a mile of orange netting to create the iconic Trash Fence.

Breed was predeceased by his first wife, Donna (Stone, ’61). In addition to his sister, he is survived by his wife, Beverly Radin; daughter, Emily; and brother, Chett, MA ’74.

—Christine Foster
ment, he served on the planning commission and
town council of Coupeville, Wash., and as a volun-
teer firefighter and emergency medical technician.
He was predeceased by his wife, Mary. Survivors:
his children, William, Michael, Steven, Deborah and
Kathryn, and their families.
James Thompson "Tom" Brown Jr., MS '64 (indus-
trial engineering), of Redding, Conn., January 5,
at 86, of aspiration pneumonia. He joined Case &
Company of Stanford, Conn., as a management
consultant and later became president. In 1985, he
founded a management consulting firm special-
izing in serving the food and grocery industries.
He was an avid skier, jogger and tennis player and
traveled with his wife to more than 125 countries.
He was predeceased by his wife of 56 years,
Alice. Survivors: his children, Kathy Sattler and
James Brown III; and two grandchildren.

HUMANITIES AND SCIENCES
Suzanne Broussard Denney-van Dijl, MA '49 (politi-
cal science), of The Hague, Netherlands, June 2, at 95. She loved meeting people from dif-
f erent countries and cultures as she traveled the
world with her husband in the Dutch diplomatic
service. She was predeceased by her husband,
Naboth “Bob” van Dijl, MA '49. Survivors: her chil-
dren, Dirk, Margot, Saskia and Elisabeth; 13 grand-
children; and nine great-grandchildren.

John Louis Sprague, PhD '59 (chemistry), of Wil-
liamiwn town, Mass., July 5, at 91, of complications
from surgery. He served in the Navy during the
Korean War. He authored nine patents and led the
family business, a manufacturer of capacitors and
specialty integrated circuits, as head of research,
president and CEO. He enjoyed scuba diving until
age 85 and world travel, and he headed the North
American chapter of the Confrérie des Chevaliers
du Tastevin. Survivors: his wife of 69 years, Mary-
Jane; children, John Sprague Jr., Bill, Cathy Wolf
and David; 10 grandchildren; and great-grandson.

Daniel August Dresner, MA '73 (biological sci-
ces), of Beverly Shores, Ind., July 10, 2020, at
78. He was a high school science teacher in Sea-
side, Calif. He was also an avid musician, photog-
raper and woodworker. Survivors: his cousins.

Michael Ross Chernick, MS '76 (operations
research), PhD '78 (statistics), of Holland, Pa.,
January 1, at 73. He finished his career in biostats-
istics at the Lankenau Institute for Medical Research.
He published numerous books and articles on sta-
tistics, including both theoretical work and guides
for practitioners. He was a fellow of the American
Statistical Association and served as president of
the Southern California chapter. He also enjoyed
teaching, mentoring, Sudoku and chess. Survivors:
his wife of 32 years, Deborah; sons, Kenneth, Nich-
olas and Daniel; and two siblings.

Gary John Bonitatibus, PhD '85 (psychology), of
New Boston, N.H., July 7, at 62, of pancreatic can-
cer. He taught psychology at Keene State College
and served as department chair. He was also a
helicopter pilot and tender of large dogs, but most
of all loved his family and being involved in his
stepsons’ lives, from attending Boy Scout meet-
ings and chaperoning school field trips to hosting
boys-only “Taco Tuesdays.” Survivors: his wife,
Elaine; stepsons, Elijah Surrell and Gabriel Surrell;
and three siblings.

LAW
Keith Elmer Taylor, JD '54, of Salt Lake City, May
16, at 93. He quit high school to join the Marine
Corps at 17 and later served in the Air Force. In a
legal career that spanned more than 50 years, he
helped grow the firm that is now Parsons Behle &
Latimer. He was an active member of the Church
of Latter-day Saints and believed having religious
faith was important for reaching one’s true poten-
tial. Survivors: his wife, Paula Urrath; former wife,
Marilyn Olsen; former wife, Patricia Jose; children,
Kim, Clark and Greg and Jane Ann; stepchildren,
Phillip, Rudy and Jennelle; and 20 grandchildren.

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Turning the Page
One man of letters remembers another.

MY FATHER GESTURED TO THE pile of books on the coffee table. “Take them away,” he said to my mother in a subdued tone. “I’m done.”

My mother recounted this scene a few weeks after my father, Michael Augustine Olivas (his Americanized name), passed away. She’d known what “I’m done” meant. My father understood that his battle with lung disease was coming to an end. He died about a week after giving up on his favorite pastime, reading.

I found myself wondering about this son of Mexican immigrants who used books to expand his world even as he and my mother confronted economic and other struggles in raising five children through the 1950s and well into the ’70s. Books were a lifeline for my father, offering boundless ideas, art and beauty.

One of his prized possessions was a tattered copy of The Complete Romances of Voltaire, a gift from his father-in-law, Daniel Velasco Flores, the man I am named after. The book was his way of saying: You are now part of the family. This was an act of great moment, my father had told me, because my grandfather was not, at first, very accepting of this handsome, somewhat cocksure young man who had married his eldest daughter. But eventually he came around, and Voltaire served as his unofficial seal of approval.

My father had often said that reading helped him survive his time as a Marine fighting overseas during the Korean War. Twain, Hemingway, Maugham and Cather were my father’s companions while, as a young man not yet out of his teens, he fought in a war he did not fully understand—if there is a way to understand most wars. When he returned home in 1952, he resumed courting his high school sweetheart, got married, worked in a factory, and became a father to five children.

But he and my mother were hungry for something else, something more intellectual. So, in the mid-1960s, they both attended community college and majored in psychology. They became teachers in the Head Start program. My mother eventually opened her own preschool in our predominantly Mexican American community, and my father continued his formal education, which led to a decidedly white-collar job with the Southern California Rapid Transit District. He always took pride in his ability to write reports in clear, precise English. The authors he loved had taught him the importance of thematic clarity and the power of a well-crafted sentence.

I recently received word from a university press that my latest collection of short stories was accepted for publication. That book is dedicated to my father, the man who taught his children the immeasurable pleasure—and importance—of reading widely, voraciously and with an open heart.

Daniel A. Olivas, ’81, is an attorney and the author of 10 books, including the forthcoming How to Date a Flying Mexican: New and Collected Stories. Email him at stanford.magazine@stanford.edu.
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