THE DAY WE CLOSED THE BAY
Inside the nation’s first decision to lock down.

Faculty Tackle COVID-19

Remembering Donald Kennedy

Cory Booker on Race and the Police—28 Years Ago
When you’re not sure of your next move, who do you turn to for advice?

These are unprecedented times, filled with change and challenge. For many, it’s given us pause to reexamine priorities and goals. Whether taking a closer look at your investment portfolio, initiating a succession planning strategy or even more immediately, ensuring the long-term stability, security and well-being of those closest to you — we are here with custom solutions designed to meet your unique needs.

Contact Tim McCarthy | 626.463.2545
whittiertrust.com
The War Rooms
How Stanford alumni and scholars are combating the pandemic.

This Is Not a Drill
Fully one-third of the Bay Area’s county public health officers are alums. They’re in the fight of their—and our—lives.

Rapid Response
Patients need testing and treatment. Society needs solutions. Stanford researchers have mobilized across disciplinary lines.

‘Impossible Not to Love’
Students had an open invitation to bend Donald Kennedy’s ear—if they were willing to run the Dish at 6 a.m. A remembrance of the biologist, FDA commissioner, Science editor and avid campus birder who served as Stanford’s eighth president.

Some Reassembly Required
What if you’re in the midst of living your life and realize something just doesn’t fit right? You can fix that, say leading thinkers who help adults reinvent themselves.
ALL RIGHT NOW
17 Next year at Stanford
18 It’s rods and cones! It’s fast-twitch muscle fibers!
19 COVID-19 in infographics
20 The 1918 flu on campus

DEPARTMENTS
4 Dialogue
6 Editor’s Note: Wise words
8 President’s Column: Toward equity
10 1,000 Words: Black Lives Matter
54 Biblio File: Father and son
57 Farewells
63 Classifieds

POSTSCRIPT
Cory Booker’s 1992 Daily column on racial justice
PAGE 64

NEW AT STANFORDMAG.ORG
International students amid the pandemic
Personal essays by Black alumni
Voices from virtual graduation
To Roble, from your resident fellow
Quarantine videos with Olympian Jessica Mendoza, ’02, MA ’03, photographer Art Streiber, ’84, and magician Andrew Evans, MS ’13

Digital
STANFORDALUMNI | @STANFORDMAG | #STANFORDALUMNI

15 Meet Amber Moore
Once upon a time, a young girl dreamed of seeing the world. Now, she’s a grad student whose research on the placenta keeps taking her places.

24 This Is How It Ends
After 3.66 years on campus, graduating senior Melina Walling pines for just five more minutes.

26 What’s Funny Now?
The Late Late Show writer Olivia Harewood, ’09, wants to make sure we don’t lose our sense of humor.
It’s easy to see why you should choose GEICO.

With great rates to save you money, access to a licensed agent anytime 24/7, and a 97% customer satisfaction rating, there are a lot of great reasons why GEICO is the easy choice for your insurance needs. Plus, Stanford alumni may be eligible for an additional discount on their auto insurance.

NEED MORE CONVINCING?

Customers rate GEICO 4.5 out of 5

Get a fast, no-obligation quote and find out for yourself.
While your article covered important health and environmental issues related to the impact of beef consumption, there is another issue—animal and human welfare. Feedlots regularly confine livestock to areas with virtually no space to move, meatpacking facilities require employees to work under unsanitary and stressful conditions, and communities and wildlife near feedlots and meatpacking facilities are often sickened by toxic runoff and air pollutants. Similar arguments can be made for the poultry, swine and dairy industries. I’m hopeful that the growth in plant-based meat consumption will help wean us off our addiction to meat and create a healthier, more environmentally sustainable and more compassionate world.

Steven Breyer, ’86
Medina, Washington

Let’s see. The typical burger shown on the cover, which looks delicious, has lettuce, tomato, cheese, pickle, onion, sesame bun and, of course, special sauce—who cares if the other thing is beef, plant based, grass fed, lab grown or imaginary? I doubt if many people could tell what the patty is—or maybe even if it is there, say, on a blind tasting!

As for me, I’d love the sandwich with or without “the beef”!

Merritt Kimball, ’49, MA ’50, EdD ’65
San Jose, California

In reading the article’s “bite-size history” of the hamburger, I was disappointed to see that Frances Moore Lappe’s 1971 *Diet for a Small Planet* had been overlooked. Published 30 years before *Fast Food Nation* and nearly 50 years before the popularity of Impossible Burgers, *Diet for a Small Planet* stands as one of the most influential books on the subject of beef, the environment, the human diet and ending hunger on the planet.

Laura DeVirgilio Owen, ’71
Pacific Palisades, California

We won’t eat the bugs. We won’t live in the pods. We won’t join the hive.

Andrei Popovici, ’95
Saratoga, California

A Farm Farewell
We remember Donald Kennedy, Stanford’s eighth president, on page 42.

I was a freshman taking Donald Kennedy’s Introduction to Biology class. It was Big Game Week. Kennedy was teaching something about how the cell burns energy, and on the blackboard he calculated how many calories would be required by a certain number of busy paramecia. He wrote the solution with large figures and letters: xxx, xxx Cal. Someone
I was surprised to learn that Kennedy was only 88 when he died. That means he was only 30 when he was my favorite prof. How could one so young have known so much?

Allyson Johnson, ’66
Los Altos, California

I enjoyed his human biology lectures, but as university president he miserably failed the humanities (those great currents of thoughts in history) in favor of the social sciences. And then there was the indirect cost scandal, for which Kennedy—at the helm—was responsible.

John Rosin, ’79
San Francisco, California

I was amused by the article about the Repair Café. I too hate to throw out what (used to be) perfectly good appliances and devices, and always have a home workbench full of dismantled equipment.

Roger L. Kohn, MS ’65, PhD ’68
Manhattan Beach, California

I started reading the magazine but I was distracted by the news of the virus and was only through with the first pages before I put it down to read the rest later. I thought, I have a lot of time to read it now that I am almost always home.

I was surprised to learn that Kennedy was only 88 when he died. That means he was only 30 when he was my favorite prof. How could one so young have known so much?

Allyson Johnson, ’66
Los Altos, California

I enjoyed his human biology lectures, but as university president he miserably failed the humanities (those great currents of thoughts in history) in favor of the social sciences. And then there was the indirect cost scandal, for which Kennedy—at the helm—was responsible.

John Rosin, ’79
San Francisco, California

I was amused by the article about the Repair Café. I too hate to throw out what (used to be) perfectly good appliances and devices, and always have a home workbench full of dismantled equipment.

Roger L. Kohn, MS ’65, PhD ’68
Manhattan Beach, California

I started reading the magazine but I was distracted by the news of the virus and was only through with the first pages before I put it down to read the rest later. I thought, I have a lot of time to read it now that I am almost always home.
Beginnings and Endings
And the words that move us to make change.

In April, the man who welcomed me to Stanford and the woman who welcomed me to the Law School died within a week of each other.

I have many fond memories of Don Kennedy, but perhaps my favorite was the time he popped in unannounced to the Office of the Dean of Humanities and Sciences, where I worked throughout my undergraduate years. The administrative assistants all gasped in surprise. The unfailingly down-to-earth university president smiled, shrugged and said, simply, “I needed to talk to the dean!” Our tribute to him appears on page 42.

I have equally fond memories of law professor Barbara Babcock, who, even in the midst of medical leave for cancer treatment, made sure she gave her traditional greeting to my first-year class. It was a story about how her father, an Arkansas country lawyer, was duly impressed by his first glimpse of Yale Law School when he dropped off his daughter in 1960. “Barb, honey, you’ve made it,” he told her. “And you don’t have to do another damn thing.” Ever the consummate storyteller, Babcock then turned to her anxious audience. “You’ve made it,” she told us. “You will graduate, assuming you pay attention. And you don’t have to do another damn thing.” A remembrance of Babcock appears in our Farewells section.

Babcock’s point was not that we should rest on our laurels—this is a woman who was a passionate criminal defense attorney, a mentor to generations of female faculty, a civil servant and a biographer—but that we should worry less about external benchmarks and more about how we wished to serve the world. She would, I think, be proud of how the Stanford community is coming together in this time of uncertainty and crisis, from alumni making key public health decisions in the Bay Area (page 32) to faculty working frantically to develop the tools we need to survive the pandemic (page 38) to the English department holding dance parties over Zoom (page 19).

And there was no one better than Don Kennedy at sending graduates out into the world ready to change it. The president who championed public service—the Haas Center is one of his many legacies—ended each of his commencement speeches with the same quote from Adlai Stevenson: “Your days are short here; this is the last of your springs. . . . You will go away with old, good friends. And don’t forget when you leave why you came.”

The last time Kennedy spoke those words from the Stanford Stadium stage, he conferred a degree on a student who was particularly special to him: Cory Booker, ’91, MA ’92, now a U.S. senator from New Jersey. During his time on campus, Booker was a senior class president, football player, Bridge peer counselor—and an incisive columnist for the Stanford Daily. As he observed this June, his 1992 column on police treatment of Black men in the United States could have been written today. You’ll find it reprinted on our back page.

Email Kathy at kathyz@stanford.edu.
They say a picture is worth a thousand words, but pictures don’t begin to tell the story.

Bridge the gap between seeing and understanding with Stanford scholars.

Stanford TRAVEL/STUDY
President’s Column
MARC TESSIER-LAVIGNE

Meeting the Moment
The university community is working to address urgent imperatives in our country and world.

As I write in early June, widespread protests for racial justice have erupted across the country following the death of George Floyd. These events come amid a pandemic that has upended daily life and disproportionately harmed Black people due to ongoing, systemic barriers to health access in the United States. As we look ahead to our long-term recovery, Stanford faculty, students and staff have been seeking solutions to these challenges and exploring how the university can shape the world that emerges from these crises.

First, we have reaffirmed our commitment to supporting Stanford’s Black community. Among our initial steps, we announced that the university is establishing a Community Board on Public Safety to address issues involving safety and quality of life on campus. The Board will work with community members, university leadership and the chief of police to develop shared expectations for public safety policies that are consistent with Stanford’s values and that foster a greater sense of physical and psychological safety, especially among students of color and other marginalized communities.

At the same time, the IDEAL (Inclusion, Diversity, Equity and Access in a Learning Environment) initiative, created under our Long-Range Vision, launched a virtual forum for the campus community to hold discussions about equity, inclusion and racial justice. The IDEAL team is also providing guidance to equip our staff, managers and leaders to tackle these issues.

We are committed to strengthening our contributions through research as well. Stanford Impact Labs, our accelerator focused on social problems, is funding research into issues like pretrial incarceration, the police-community divide, and childhood poverty and inequality. This is just a small slice of the significant research underway at Stanford to address systemic inequities.

As we focus our attention on improving racial justice, our researchers continue to search for solutions to our other current crisis: the coronavirus pandemic. With support from Stanford’s Innovative Medicines Accelerator, Stanford researchers are exploring potentially life-saving drugs, developing diagnostic and antibody tests, and studying the spread of COVID-19 in our region.

Our researchers are responding to other social issues created by the pandemic, as well. Under the Transforming Education initiative of our Long-Range Vision, researchers are using this period of intense experimentation with online learning to develop new models that will offer more equitable remote education, now and in the future. Stanford Impact Labs is also supporting several projects related to COVID-19, including lending evidence-based support to help communities address food insecurity and housing during the pandemic.

As we address immediate issues related to COVID-19 and racial injustice, we are also focused on a third major challenge: the long-term threat from climate change. While there is work underway in climate and sustainability studies across Stanford’s schools and institutes, it has become clear that we can amplify our contributions by aligning people and resources more effectively. In May, we announced that we will be forming a school that brings together Stanford’s existing strengths in climate and sustainability, along with two new structures: a Sustainability Neighborhood, which will infuse sustainability into education, and the Stanford Accelerator for Global Impact in Sustainability, which will advance sustainability solutions through external partnerships and scale them for the world.

We have lived through a difficult spring, and there are no quick solutions to the health, economic and civic problems that we face. This is the time to commit to the work of researching new treatments, developing accessible modes of remote learning, and creating more equitable and just institutions. By pursuing innovative, long-term solutions to these challenges, we have the opportunity to create a world that is safer and more equitable for all.
Designed to adapt. Ready for your emergency.

We continue serving our community’s adults and children. As one of the most advanced trauma centers in the world, we are uniquely equipped to handle all cases at all times, even in unprecedented circumstances.

No one anticipated COVID-19, but our systems have allowed us to adapt while maintaining the highest standards for safety.

Our new infection control procedures include digital technology for triaging your condition, allowing for separate spaces for COVID-19 patients. Emergency teams use fresh personal protective equipment (PPE) as well as extra air filtering and cleaning methods to sterilize your exam room before and after your visit.

We are ready for your emergency.

stanfordhealthcare.org/emergencyready

Marc and Laura Andreessen Emergency Department
1199 Welch Road • Stanford, CA 94304

Pediatric Emergency Department
900 Quarry Road Extension • Palo Alto, CA 94304
Amid worldwide activism against police brutality and racial injustice in early June, documentary film graduate student Adrian Burrell gathered just over 100 students and community members on the Quad for a solidarity ceremony. Black participants assembled in a socially distanced arrangement in front of Memorial Church to demonstrate unity, Burrell says. “We wanted to show we’re on the same page.” Allies lined the edge of the Quad. “That’s how we needed them to show up for us,” Burrell says, adding that he was glad to see that hard conversations as well as efforts to dream and build together had started happening among students. The ceremony “was a symbolic moment for the Black Stanford community and for the wider diaspora. We’re here, we’re together and we should start reimagining what our systems will look like. Because our current systems aren’t working.”

PHOTOGRAPH BY NIKK LA
**Saving My Sanity: A Book of Non-Academic Poetry**
By Paul Tsuda, '88
Collection of non-academic poems for readers to enjoy without the restrictions that come from following all the academic rules of poetry writing. Dealing with everyday life and struggles, the author finds solace and sanity in writing and the written word. Includes poems about life at Stanford in the '70s and '80s.

**Tatiana and the Russian Wolves**
By Stephen Evans Jordan, '65
A family saga that follows the Russian Revolution’s reverberations into the 1980s as Alexander Romanovsky confronts his mother’s shadowy past in Russia to her suicide in San Francisco. His psychological journey involves three themes: the plight of Russian émigrés; the devastating impact of suicide for loved ones left behind; and family secrets—the painful discovery and hopeful reconciliation.

**DEADLY Kin**
By Marion Moore Hill, '61
*Deadly Kin*, third in the Deadly Past series of mysteries, based on events in the lives of Founding Fathers (and one Founding Mother). Set in current-day Boston, *KIN* revolves around the iconic Adamses (John, Abigail, Samuel). Hill also writes the Scrappy Librarian Mysteries series. See www.marionmoorehill.net.

**Primer of Ecological Restoration**
By Karen D. Holl, '89
This book provides a concise and comprehensive introduction to the science and practice of ecological restoration for students, practitioners, and anyone who has an interest in this field. It covers ecological, social, and political aspects of how to restore damaged ecosystems to help combat the environmental challenges of our times. islandpress.org/restoration-primer

**The Career Handbook for Working Professionals**
By Rebecca Zucker, MBA ’94
A comprehensive, self-directed guide that will assist any job seeker through the career transition process. Applies to professionals at all levels and from all sectors. Includes useful tools for every step of the job search – from networking to negotiation and has everything you need to take the next step in your career. https://nextsteppartners.com/career-tools/

**Retrospective: Or How I Caught Poison Oak**
By Jo DeEds, ’59, MA ’61
A quasi-fictitious memoir about university days, an encounter with the public school system, and pre-debutante misadventures, told with ironic humor (sometimes known as “adult perspective”) and scattered with anachronisms too good to resist.

**Second Lives, Second Chances**
By Donald R. Laub, MD, chief of plastic surgery Stanford University School of Medicine 1968-1980
Dr. Laub has been at the forefront of some of the most groundbreaking work that shaped plastic surgery into what it is today. He was a pioneer in gender change surgery, led humanitarian surgical trips to developing countries, and helped children with devastating facial disfigurements. “It’s really more of an educational book about plastic surgery and how my experiences in international work helped shape the specialty,” says the author.

**Summer Cowboy**
By Jo DeEds, '59, MA '61
Arne's home town of East Fork is a hub of equestrian activity, diverse values, and conflicting expectations. Working summers as a wrangler and guide for his mentor's high Sierra pack station, Arne finds serenity in the mountains. But weather there can be dangerously unpredictable, testing Arne to his limits as he undertakes a nearly impossible task in the face of a treacherous early snowstorm.
A SPECIAL ADVERTISING SUPPLEMENT FEATURING BOOKS BY STANFORD ALUMNI

Walking The Farm
By Tom DeMund, ’57
This unique book describes 18 themed walks exploring the Stanford campus plus 20 local hikes from the foothills to the Bay. Each chapter has lots of Stanford history, many color photos, and a map showing the suggested walking route. It makes an excellent gift to give to fellow Stanford alumni. Buy it at the Stanford Bookstore or online via www.stanfordbookstore.com.

HOW THE best INVEST: Make Confident Decisions Like the Investing Superstars
By Mallika Paulraj, ’97
The Superinvestor Framework outlined in this book takes you through an easy to master, systematic approach to investment decision making. You will learn: how the best investors in the world think, investing habits that work for your personality type, intuitive understanding of portfolio construction, and how to say yes or no to investment opportunities with confidence.

Setting A Plot: The Impact of Geography on Culture, Myth, and Storytelling
By Brandon Spars, ’90
A sourcebook for storytellers as well as teachers and students in the classroom. Epics and myths from India, Indonesia, Australia, and Tibet form the basis for an engaging analysis of how the different geographies of those respective places inspire needs, values, and concerns that shape the respective plots. brandonspars.com

Aging A-Z: Concepts Toward Emancipatory Gerontology
By Carroll L. Estes, ’59, with Nicholas B. DiCarlo
“Monumental in scope, painstaking in detail, penetrating in depth, accessible in style, this is the book to refer to for anyone interested in what aging means for society, and how much more it could mean if radically new policies were introduced by governments.” —Alan Walker, University of Sheffield
http://tinyurl.com/yb6u8lx

CITY OF GOLD
By Will Hobbs, ’69
City of Gold is an historical novel/Western from HarperCollins set in the heyday of Colorado’s mining towns. A tale of two brothers in pursuit of their stolen mules, an odyssey in three weeks for readers ages 10-110. Largely set in Telluride, features the Tomboy and Smuggler-Union Mines, notorious marshal Jim Clark, Robbers Roost, Butch Cassidy, and the Sundance Kid. For an interview with photos on City of Gold and each of the author’s 20 novels, visit WillHobbsAuthor.com

By Elaine Kayama, ’76
From the moment Kayama was hired at agri-business giant Cargill, Inc. she began fighting to wedge through doors the women’s movement opened. As men and women examined and redefined their roles, Kayama, fresh out of Stanford, navigated farmyard sales calls, meetings at strip clubs, and a new life in the Midwest.

Franklin Delano Roosevelt: Preserver of Spirit and Hope
By Barbara Bennett Peterson, PhD, MA ’65
An outstanding representative of the First Men, America’s Presidents book series published by Nova Science Publishers (see novapublishers.com and click series; FDR book cost $45). The life and policies of FDR show us a way forward in this time of crisis through New Deal legislation and presidential leadership that is decisive and inclusive.
Profiting and Protecting from the Greatest Market Threats, Cartel Interventions & Fake Economic News
By David F. Durham, JD ’74
Analysis of Market Crashes, of Cartel Interventions, and of Accurate Economic News. Sources are the basis for recommendations for Key Assets and Strategies. Deepcaster’s Subscribers profited by 110%, 55%, 62%, 53%, 45% and 75% in 2020 alone. Subscribe for one year or more by 08/15/2020 to receive a PDF copy of Deepcaster’s book. Deepcaster.com

Conflict—The Unexpected Gift: Making the Most of Disputes in Life and Work
By Jack Hamilton, PhD ’69
Interpersonal conflicts permeate our lives. This book’s toolkit offers practical steps and real life accounts to demonstrate how to talk through and resolve such conflicts. Learn how to give up invalid assumptions you’ve made that have led to disputes with people, and to build more viable relationships with them. www.conflictresolution-thebook.com

The Williams Brothers: Missouri to California By Horseback In 1843—A Great-Great Grandson’s Perspective
By Timothy Lemucchi, BA ’59 MA ’60
The author’s great, great grandfather and his three brothers rode horses from Cape Girardeau, Missouri to Sutter’s Fort in California in 1843. A daily journal describes their life on the trail from May to November 1843—dangerous hazards, encounters with Indians and life in early California. Available on Amazon.

An Ace Minus One
By Timothy M. Morrisroe, MS ’88
Fleeing the law, young Jack Elliot finds himself in France as World War I rages around him. After volunteering to fly a flimsy wood and canvas fighter, he must survive his jousts with German aces and down five to attain the heroic “Ace” status. Set over the battlefields of Europe and the deserts of North Africa, An Ace Minus One is authentic in its depictions of the characters and perils of early aviation.

Contrails: Airline Flying in Eastern Europe Before the ‘Wall’ Came Down
By Bill Siren, ’62
This historic fiction novel follows a Contrails World Airways pilot as he performs flying duties around Eastern and Western Europe before the fall of the Wall. Combining humor, travel, romance, and personal disintegration, the book gives insight into the world of an international airline pilot.

Fergus Falls
By Joseph Berman, ’83
Alas, potentially endearing tales from the Mushroom Capital of America are subsumed by the hallucinations of the mayor, the kidnapping of an FBI agent, an astounding quest for frequent flyer miles by a 12-year-old boy, and some mysterious manifestations of the town’s agricultural product. The investigating falls to columnist Evelyn Kopak, the only woman brave enough to stare into cursed microwave ovens and date the man who sells them. Absurd fiction for absurd times.

The Collected Poems of Paul Cummins
By Paul Cummins, ’59
An assortment of the visionary educator and social justice advocate’s finest and most imaginative poems. Published by Griffith Moon, the collection demonstrates that Cummins is not only a supporter and educator of verse, but also a genuine, inspiring poet himself. The volume includes sonnets, prose poems and odes, as well as various metered and stanzaic poems, all exhibiting Cummins’ clear and inspiring voice and uncommon accessibility.

Cultivating Lifelong Faith
By Gabriela Banks, BA ’85, MA ’92, PhD ’98
Ignite your faith with these inspiring true stories. Come behind the scenes to see how God becomes real to Silicon Valley teens and adults on mission trips. As volunteers disconnect from pressures at school and work to share God’s love, they encounter His presence in new ways and impact families in King City, CA. Discover how you too can encounter God, transform your faith, and impact others.

TO PURCHASE A BOOK, PLEASE VISIT PUBLISHER’S WEBSITE, SEARCH AMAZON.COM, OR VISIT YOUR LOCAL BOOKSTORE.
WHO WE ARE

Meet Amber Moore
A reproductive immunologist follows her curiosity.

“I’m fascinated by pregnancy. It’s beautiful and scary. It requires so many things to go right.”
Growing up, Amber Moore dreamed of seeing the world. So in middle school, she began storing money in a rain forest–print papier-mâché box she called the Amber’s Going to Africa Savings Fund. Raised in San Diego by a single mom who worked as an animal-care attendant, Moore loved animals early on, but it would be years before she’d envision herself as a scientist. Yet research would become her ticket around the globe.

The first in her family to attend university, Moore says she probably used her middle school savings on a plane ticket to Bryn Mawr College, where she double-majored in anthropology and chemistry. But soon she was studying traditional medicine in Swaziland, HIV in Japan, and transplant immunology at the National Cancer Institute, part of the National Institutes of Health in Maryland.

Now a Stanford doctoral student in immunology, Moore investigates how challenges to the maternal immune system affect development of the placenta; her hope is to reduce pregnancy complications. The finishing touches to her research are on hold because of the novel coronavirus outbreak. So in April, she stepped up to help analyze data in a makeshift lab at the Palo Alto Sheraton as part of the COVID-19 antibody testing in Santa Clara County.

"In high school, my favorite teacher told me I could travel through science. At first, I didn’t know what he meant. Now, going to conferences, I’ve been to Paris, Australia, Argentina. So I keep joking that the placenta has been taking me places.

"To me, the placenta is a fascinating organ because it comes from the baby, and it’s there to be the all-in-one organ for nine months. It establishes and maintains the tolerance that needs to occur between mom and baby in order for the pregnancy to be successful. I like to compare it to an organ transplant. You’re putting this foreign material in [a recipient’s] body, and it sometimes rejects it, even though [the] body really needs it to survive. When you’re pregnant, you have this semiforeign fetus growing inside of you, but your body doesn’t reject it.

"Being raised by a black woman, you learn pretty early on how much harder you have to work. Dealing with racism, sexism, discrimination—it takes a toll, because it doesn’t magically disappear when you get on Stanford’s campus. One of the ways I respond is that I mentor. I try to show [other students of color] that I’m here, so you can be here, too, and give them the support and resources they need.

"From an immunological perspective, I am interested in what distinguishes healthy pregnancies from those with complications. Pregnancy complications can be attributed to genetic or endocrine abnormalities and infection, but many still remain [unexplained]. We hope to tease out some of the immunology behind [those] complications.

"Day in and day out, when you’re [a biosciences student] pipetting one liquid into another, you can kind of lose sight of why you’re doing this. But [helping with COVID-19 antibody testing] is a prime example of why I’m studying immunology. This work helps serve this larger purpose and can have a global impact."
EACH AUTUMN, 7,000 undergrads and 9,400 graduate students begin a new academic year on the Farm. They sit elbow-to-elbow in lecture halls, hunch together over lab microscopes, sing in a cappella groups and go to parties. University life—especially the residential education central to the undergraduate experience—is not built for physical distancing.

So as the university wrapped up a virtual spring quarter, its leaders focused on figuring out how to provide a Stanford education amid a pandemic that could be exacerbated by the very activities that make college formative.

In a June 3 letter to students, President Marc Tessier-Lavigne outlined an initial plan for 2020–21, citing three main considerations:

• A plan that can withstand an increase in COVID-19 cases
• Physical distancing
• Sufficient residential space for students to quarantine as needed

HOUSING
All undergrads will have private sleeping spaces, which will reduce undergrad housing capacity by about half. Stanford plans to bring undergraduates to campus in cohorts, designated by class year or using another rubric, over a four-quarter year through summer 2021. Absent special circumstances, undergrads will be on campus for two quarters—including autumn for frosh and transfers and spring for graduating seniors—and complete a third quarter remotely.

Because graduate students live primarily in apartment-style residences, their housing will not be substantially altered.

TEACHING AND RESEARCH
Fall quarter will start one week early, on September 14 (with possible exceptions for certain degree programs in business, education, law and medicine), enabling classes to end and most undergraduates to depart before Thanksgiving. Finals will be held online the following week.

Many classes—especially those with more than 50 students—will be held online, both to serve remote students and because Stanford lacks enough classrooms to provide 6 feet of distance between each person. “We have a beautiful campus with spaces that haven’t necessarily been used for formal classroom teaching,” says vice provost for graduate education Stacey Bent, PhD ’92.

“A lot of creative thinking is going on.”

Critical in 2020–21 are continuing a return to research and strengthening online learning, administrators say. Graduate research is highly varied, ranging from computational to field to library and archival research, says Bent, who is co-chairing the Research Continuity Policy Committee with vice provost and dean of research Kathryn Moler, ’88, PhD ’95. In his letter, Tessier-Lavigne emphasized that online teaching will evolve beyond the springtime priority of ensuring that students could finish the year. Stanford has hired 50 grad-student teaching fellows to help faculty improve online courses. “We are also looking at ways to better replicate other features of in-person teaching,” Tessier-Lavigne said, “such as small group interactions, academic support and peer-to-peer learning.”

THE 2020–21 BUDGET
The Board of Trustees, anticipating revenue $620 million less than pre-pandemic projections and ongoing market volatility, approved a 2020–21 budget that includes a 10 percent cut in payout from endowment funds (except for those that support student financial aid, payout from which will increase 3 percent) as well as a rare withdrawal of up to $150 million from unrestricted endowment. The trustees also approved a 9 percent overall increase in financial aid spending, including funds to fully cover tuition for undergraduates whose families earn less than $150,000 per year (up from $125,000) and expanded support for doctoral students.

As plans for 2020–21 continue to take shape, STANFORD will provide updates online and in print.
Superpowers, Diagnosed

What it takes to breathe underwater, harness your inner nanobots or leap tall buildings in a single bound.

LET'S SAY YOU'RE A DASHING MILLIONAIRE with a masked-vigilante secret identity and you've compiled a super-nerdy dossier of your most powerful friends and enemies. You'd probably turn to someone like Stanford hospitalist Errol Ozdalga to help you explain to the public what makes them tick—as Batman (or, at least, his ordinary human publisher) did to help promote the superhero's recent book, Anatomy of a Metahuman. Ozdalga, who revealed the results of his physical exams on YouTube, breaks down some superpowers for STANFORD.

SUPER-SPY SEEING
Superman, who can see what's happening on distant planets, probably has way more cones in the back of his eye than the average human, says Ozdalga. Plus, he may be able to extend the shape of his eyeball so that the light hits farther back, allowing him to focus on something really far away.

TOUGH STUFF
Maybe Doomsday is invincible because he's got a hard outer layer with a super amount of keratin, the protein that makes up your skin, hair and nails. Doomsday's shell probably also contains chitin, a structural polymer found in the exoskeleton of the aptly named ironclad beetle.

'ROID RANGE
Supervillain Bane owes his superior strength and focus to injections of venom, which Ozdalga says is probably a combination of anabolic steroids and the stimulant Ritalin. (Don't try this at home.)

AQUATIC BREATHING
While air is 21 percent oxygen, water is only 1 percent. Lungs, unlike, say, the gills of a fish, can't process enough water to oxygenate Aquaman. Most likely, says Ozdalga, the king of Atlantis exchanges oxygen throughout his skin, like a bullfrog.

TECHNOPATHY
You'd never need to program your Roomba again if you had AI-powered nanobots coursing through your veins like Justice League's Cyborg. “These nanites connect with Cyborg’s cells, and not only are they functioning to improve his body at the molecular level, they’re learning at the same time,” says Ozdalga.

SUPersonic speed
Whether you’re a sprinter or a marathoner depends on how many fast-twitch vs. slow-twitch muscle fibers you have. Speedy heroes like Superman? More fast-twitch—“like, a hundred times more,” Ozdalga says. And you guessed it—those fibers enable him to leap tall buildings in a single bound.
Best Practices in Pictures

Science-savvy graphic designers show us what we need to know about COVID-19.

WHAT DO YOU DO WHEN a failure to read the fine print could mean the difference between life and death? To Ryan Brewster—third-year med student by day, graphic designer by night—the solution is obvious. You harness the power of design to turn complicated and constantly changing medical guidelines on COVID-19 into easy-to-understand infographics. And you do it free of charge.

Brewster is the founder of COVID Creatives, a group of science-versed artists and graphic designers (including two other Stanford medical students) who have assembled, Avengers-style, to develop communications for health-care providers around the world. Their posters, charts and other materials fall into two categories: provider-facing instructions and patient-facing information.

For medical workers, an efficient visual summary of a 50-page document describing how to don personal protective equipment while minimizing contamination—or how to reuse disposable masks—helps them do their jobs while safeguarding their health. And for patients, who are often exposed to contradictory and confusing news sources, a straightforward explanation of practices like mask wearing and social distancing can lead to behavior changes that help protect their communities. Both doctor and patient materials are designed with minimal text in order to reach a polyglot population.

Brewster says that the high-stakes nature of the work makes it painstaking, but the COVID Creatives are fueled by their clients’ gratitude. “The adage that a picture is worth a thousand words couldn’t be more true here,” he says. “This is where design matters most.”

—Melina Walling, ’20

Everybody Dance Now

How Zoom became the English department’s jam.

They don’t remember what they cooked. That was beside the point. But Ato Quayson and Grace Toleque do remember dancing to the Caribbean band Kassav’ for two hours that Saturday night in March, first while chopping onions, then while dinner got cold.

Dance is the preferred form of exercise for Toleque, the program officer for Stanford’s Institute for Diversity in the Arts. And she and husband Quayson, an English professor, love throwing parties. “So we’re chatting and saying what a shame it is that in this era of social distancing and lockdown, we can’t dance with our friends,” says Quayson.

Which led Quayson to email his colleagues: Join us for dance parties on Zoom. Leave video off if you prefer.

Eight to 10 members of the English department join the virtual gatherings, three times a week at 8 a.m. Regulars include Professor Shelley Fisher Fishkin, who says, “I always find that I work better after I dance that day.”

FROM LEFT: COVID CREATIVES; MICHELE MCCAMMON
TIME CAPSULE

What Happened Last Time

During the 1918 flu epidemic, a dozen students died.

VEN BEFORE THE PANDEMIC swept across campus in the fall of 1918, Stanford was a place transformed. America’s entry into World War I a year earlier had set off a rush of student enlistment. Virtually all male undergrads who remained did so as uniformed privates in the Student Army Training Corps, the U.S. War Department’s effort to harness colleges to the nation’s fight.

For Stanford’s new soldier-scholars, long days were now bookended by the blare of the trumpet: reveille at 6 a.m. and taps at 10 p.m., with precious little freedom in between.

“Fraternity life is smashed completely,” lamented Charles Sullivan, a member of Delta Tau Delta, who was struggling in his first week as a grunt. With Army boots yet to be issued, his feet were no match for double-time marches in dress shoes, he wrote his fiancée. Blisters were soon the least of his worries.

 Hours after Sullivan penned his letter, his temperature spiked near 104, he fell out of ranks, and he was stretchered from his barracks in Encina Hall. The next day—October 9, 1918—the Daily gave its first accounting of a wave of illness crashing across campus. More than 100 students, it said, were under doctors’ care.

Spanish influenza—the deadliest pandemic of the 20th century—had come to Stanford. The disease had risen to military doctors’ attention that spring at an Army base in Kansas, but its true horror was about to unleash in a second, more virulent wave. October would be its deadly peak, and Stanford would not be spared.

Few chapters in the university’s past are as alien to us now as the fall of 1918. The school’s about-face into a glorified boot camp was so complete that schoolwork was openly sublimated to war preparation, and male students risked reprimand for something as slight as not making their bed with their pillowcase opening to the correct side. Women had curfews tightened in response to the presence of troops near campus.

And yet, viewed now from our own time of plague, the era appears newly familiar, a kindred moment of social distancing, deep anxiety mixed with devil-may-care attitudes, and, of course, the awkwardness of life in face masks.

“Just tonight the campus has suddenly blossomed forth in white gauze masks,” Hope Snedden, Class of 1922, wrote in a letter to her father on October 24, as a university mandate kicked in. “And you can’t imagine the ludicrous appearance of a tall S.A.T.C. man sneaking into the library with one of them on, with the look of a highwayman. And you can’t recognize your friends by their eyes.”

The pandemic wasn’t Stanford’s first fight against contagion. In 1903, a typhoid outbreak that was traced to a local dairy killed nine students. Professor Ray Lyman Wilbur, Class of 1896, MA ’97, MD ’99, the campus physician, began rising at 4:30 a.m. to ensure that no milk left the offending farm; a shotgun was at the ready should anyone doubt his seriousness.

Fifteen years later, Wilbur was Stanford’s president, and guards were stopping people, not milk. The Daily reported quarantines between campus and Palo Alto, as well as Camp Fremont, the vast Army base that had sprouted in the Foothills in preparation for the war.

Wilbur mandated nightly temperature checks for all students. Those measuring above
MEN IN BARRACKS ARE QUARANTINED—EPIDEMIC REPORTED NOT SERIOUS

Ten DON'TS For Those Who Do Not Want Influenza

Don't attend public gatherings, mass meetings and church services.
Don't ride in crowded cars—walk instead.
Don't live in overcrowded houses.
Don't close all the windows. Influenza didn't fly in.
Don't visit your friend who has influenza or just the grippe.
Don't shake hands.
Don't put your hands in your mouth.
Don't work too hard. Keep in good condition.
Don't wear too few clothes.
Don't eat too little of wholesome and properly selected food.

Influenza Again Invades Campus

Jolly-Ups Postponed Till Next Quarter—Another Stanford Man Dies
99.3 were isolated. The Daily offered tips like “Don’t shake hands” and “Don’t ride in crowded cars.” Fraternity houses became infirmaries. Students volunteered as nurses both on campus and at the understaffed base, where hundreds more influenza victims suffered.

Then as now, not everyone took things so seriously. Early in October, the Daily quoted a campus Navy official dismissing the wave of illness as the common flu. And even as deaths began to mount, some people still found room to joke. On October 16, the newspaper ran adjacent front-page stories that could hardly have clashed more. One announced the death of a second Stanford student due to the epidemic, the other feigned outrage that those with the illness supposedly received better food. “If it is necessary to get the Spanish influenza before you can get a good chicken dinner in the vicinity of the University, things have got to be changed, or else let’s get the influenza!”

Sullivan, Class of 1919, survived after spending two nights packed in ice and a week convalescing at Camp Fremont. He returned to campus to find junior Lorenz Hansen, a dear fraternity brother, at death’s door, and an eerie hush in so many places he’d made joyous memories. “I wonder if the place ever again will resume a normal status,” he wrote. “Nothing like it has ever hit this university in its entire history.”

He asked his fiancée to drape his fraternity pin with a black sash in mourning for Hansen and implored her to disinfect her mask three times a day.

Still, life then appears not to have been interrupted quite as much as ours now. Unable to get leave to serve as Hansen’s pallbearer, Sullivan seemed relieved. “Such things break me all up and leave me sick for a day,” he wrote. Instead he ditched his uniform for corduroys, slipped past quarantine, and got a haircut in Palo Alto, still open for business. The same day, October 21, the Daily announced four more student deaths.

By early November, though, officials felt the worst had passed, and the campus mask requirement was lifted. On November 11, celebrations broke out at the news of the armistice ending World War I. And by Thanksgiving, Big Game football returned, ending rugby’s 13-year reign as Stanford’s marquee sport.

To many, the plague had already been vanquished. “The attack of the epidemic was met like the attack of the foe,” the Stanford Illustrated Review, the alumni publication, wrote in its November issue. “Keep cool; stand ready; aim low; go about your duties!”
Yet illness on campus continued, albeit in smaller numbers. The last recorded death was that of Henry Lewin Cannon, a 47-year-old associate professor of English history who succumbed on January 5, 1919. Thereafter, the term Spanish influenza mostly drops from the Daily’s archives.

A comprehensive list of victims is hard to come by. The Stanford Illustrated Review identifies 10 dead undergrads in an honor roll that November. The president’s annual report, published the following year, indicates 12 students died—10 men and two women—but leaves them unnamed. Besides Cannon, at least one other nonstudent member of the campus community died: Charlie Meyers, the longtime campus barber, cigar purveyor, lender of last resort and much-sought student counsel.

Fourteen dead, almost all of them students. On its face, it’s a jarring total. Adjusted for the size of the student body, it’s shocking. Stanford then had 1,322 undergrads, less than one-fifth the present number.

Rather than horror at the tally, there seems to have been a sense that Stanford got off lightly. “I think the influenza is on the wane here. There are only 109 S.A.T.C. men in the hospital,” Snedden wrote near the peak of the epidemic. “We have only one girl & eight men die.”

Perhaps in that pre-antibiotics era, with war raging and accidents common (another Daily headline that October told of a young alumnus lost in a shipwreck), death was a more familiar presence. And certainly, the toll elsewhere may have made Stanford’s seem small. Nearly 150 died at Camp Fremont, 3,000 in San Francisco, 675,000 in the United States, and likely more than 50 million across the world.

But each death was still an explosion of grief to those close to it. A week after Hansen’s death, his only sibling, a sister, died too. A few months later, a brief appeared on the front page of the Daily. Hansen’s parents were appealing for the return of any of their son’s papers, final mementos of a life ended far too soon.

---

**SAM SCOTT**, formerly a senior writer at Stanford, is now based in Ann Arbor, Mich. Email him at stanford.magazine@stanford.edu.
This Is How It Ends
Wrapping up senior year with a mix of nostalgia, grief and gratitude.

BY MELINA WALLING

The Night Before I Left Stanford, I stayed up until 3 a.m. I was with people I wanted to lose sleep for, but having packed to be away for a few weeks, I thought it prudent to get at least a couple hours of shut-eye before my 8:30 flight.

If I had known that would be my last day as an undergrad on campus, I would have pulled an all-nighter.

I love sleep. No matter the difficulties I face during the day, I find solace in wrapping myself in warm blankets and closing my eyes. I sleep long and deep. Freshman year, when my roommate had a knee injury that woke her in the middle of the night, she somehow managed to wake me up so I could find our RA—but as soon as I did, I fell right back into a slumber so powerful that I had to be informed in the morning that five paramedics had been in our room.

I’ve only stayed up all night once in my life. It was for an 18-hour puzzle hunt freshman year, a contest between FloMo, where I lived, and Roble. Our team of five drove all over the Bay Area, finding clues everywhere from the Taco Bell in Pacifica to the Pixar studio in Emeryville.

It struck me that night how lucky I was to be part of a community that made me yearn for the power to eschew sleep entirely. Everything around me—the opportunities, events, classes and, most important, people—made me resent the very essential human activity that I cherished most.

Others have described, perhaps better than I can, the process of grief that many college seniors have gone through this spring. To me, it has felt a lot like sleep deprivation—an oscillation between numbness and longing, an emotional teeter-totter that leaves me in tears more often than I’d care to admit.

Now, in lockdown at home in Wayne, Pa., I’m readjusting to my bed. I sleep more restlessly than I did at school—chalk it up to missing my cushy mattress topper, which I bought for my dorm room as a bewildered young shopper, or to the endless stream of activities at Stanford, which left me absolutely drained by the time my head hit the pillow each night.

This has left me with a lot of time to think. I have mulled over seemingly insignificant details of Stanford life that I now miss so much—the collection of succulents on my windowsill, the carefully arranged postcards and posters on my dorm wall. I have even romanticized things I used to complain about—the way the duct tape on my bike handles used to leave my hands slightly sticky after each ride, the taste of honeydew melon mingled with leftover tomato sauce on a rushed plate in the dining hall.

Memories like these remind me that nostalgia can be dangerous. Stanford was not a perfect experience. I was not happy there all the time, or even half the time. In reflecting on my undergraduate years, I do not want to perpetuate the ideas that can make Stanford a difficult place to attend college. Duck Syndrome—the feeling that we should remain serene on the surface while paddling furiously underneath to stay afloat—is real and damaging.

But in order to make myself feel more whole—to find the solace that feels like a good night’s sleep—I find myself returning to all the fantastic things I did get to experience during my 3.66 years. I learned how to use an audio kit and interviewed a cave diver, a muralist and an entomologist. I photographed elephant seals in Año Nuevo State Park. I ate pie at the pumpkin festival in Half Moon Bay. I introduced a show live on KZSU. I rock climbed for the first time. I met a master falconer and held a red-tailed hawk. I spent the night inside Monterey Bay Aquarium on a dorm trip. I spent a quarter abroad in Italy; a three-week Overseas Seminar in South Africa; and a summer in Arizona, where I worked for the Bill Lane Center for the American West. I played intramural volleyball one quarter; badly. I attended master classes by award-winning authors Alice Walker and Neil Gaiman. I drove over the Golden Gate Bridge.

Looking back, it’s hard to believe I slept at all.

Along with my fellow members of the Class of 2020, I had a lot of dreams for my final quarter. In my imagination, it is perfect: a whirlwind of classes, parties, late nights spent talking and hugging, with traditions and ceremonies to tie it all up in a bow.

Perhaps the hardest part of leaving it behind is realizing that all those days and nights we spent staying awake, we were living a dream. And these extraordinary circumstances woke us like a blaring alarm clock, a glass of cold water to the face. Just like that, we were
severed from the world we had created for ourselves, with no chance to say goodbye.

I have never been a morning person, but this time, more than ever, I really wanted five more minutes.

Still, in replaying my memories—in stepping back and realizing how much joy and wonder I found in the time that I did have—I find myself filled with gratitude. I am grateful for the ways that our professors and administrators have recognized how painful this feels, communicated with us to learn about our diverse circumstances, and made whatever adjustments they could. I am grateful for our dining hall staff, custodians, and maintenance crews who made it possible for me to live my life the way that I have. I am grateful for the physical spaces I was lucky enough to inhabit, and that I hope I will be able to return to someday.

Most of all, I am grateful for this community—this ambitious, unfailing, insomniac community—for staying up with me.

Melina Walling, ’20, is an editorial intern at Stanford. Email her at stanford.magazine@stanford.edu.
SPOTLIGHT

What’s Funny Now?

Comedian Olivia Harewood takes on our ‘social insanities.’

By Melinda Sacks

During her first week of work as a writer on The Late Late Show, Olivia Harewood stood in front of British actor and comic James Corden, making her first pitch to the star of the CBS talk show. The sketch she wrote would feature Corden as an astronaut and a song about melon, sung to the tune of “Nothing Compares 2 U” by Prince. Harewood changed the lyrics to “Nothing compares to honeydew”—which cracked up the other two writers in the room.

“I didn’t know if I should sing the song or not, but I decided to pretend to be comfortable and just go for it,” says Harewood, ’09. “James chuckled, but probably more at the absurdity of me as a new hire than at the actual idea. He told me, ‘Maybe less about the honeydew melon.’”

That sketch never made it to the stage: It was pitched to guest star Brad Pitt, but he declined to participate.

Harewood grins and shrugs. “To get that far on your second day? Not so bad.”

The job at The Late Late Show is a coup for Harewood, who has been writing jokes and performing in comedy shows since she graduated from Stanford. It is the kind of steady, big-studio creative work that many comedians dream of but few realize. When she landed the gig last summer, little did she know that she’d soon be trying to make people laugh amid a global pandemic.

In mid-March, instead of brainstorming and telling jokes over bagels with her colleagues in the writing room, Harewood began working from the Hollywood apartment she shares with her husband, Sterling, and her dog, Zuzu. She tailored her material for the show’s quarantine setting: Corden’s garage. At times, she and her co-workers joined the show via Zoom to play a role in a sketch or participate in a game. (For the #GettyMuseumChallenge, some of them dressed up as characters from classic paintings.)

People often ask how comedians stay funny during sad times. Harewood believes it’s
at our low points that comedy is most compelling and important. “I was probably doing the densest period of stand-up shows of my career when there was a mass shooting almost every day,” she says. “The world is very weird. Sometimes in the midst of everyone feeling really shocked and anxious, we are able to be strangely present and really listen to each other. And maybe comedy provides some relief.”

From a young age, Harewood was obsessed with *I Love Lucy* and liked to “wild out,” entertaining her family with jokes and full-on productions of plays. Her little brother, John, took on supporting roles. Their parents and guests made up the audience. “We were very much indulged,” she admits.

Yet Harewood resisted the entertainment industry after watching her parents endure the constant stress of working in an unpredictable field. Her father, Dorian, is an Emmy-nominated actor known for *Roots: The Next Generations* and *Full Metal Jacket*. Her mother, Nancy, played roles in *Star Trek: The Next Generation* and *Remington Steele*.

“Acting seemed terrible,” Harewood says. “It always looked like a very unfair profession. I thought, ‘I’m going to be a doctor. I want authority over my life.’”

When she got to Stanford and dove into her human biology classes, Harewood realized medicine wasn’t the right choice. But in cultural anthropology—ultimately her major—she thrived. The door to performing opened when a friend dragged her to Dan Klein’s sketch comedy course. Before Harewood knew it, she says, “I was a goner.”

“The clearest memory I have of Olivia is from her first comedy class,” says Klein, ’90, a longtime Stanford lecturer in theater and performance studies. The students from that class formed Robber Barons, a campus sketch comedy group that lives on today. “Olivia had a combination of being self-assured but in an easy way. Her take on the world is so funny, and her ability to laugh at herself is something that makes her relatable to all of us.”

Klein remembers a sketch that Harewood wrote and performed in which she played a student in a Stanford art class. The skit started with class members facing the audience as they painted. One by one, they turned around their paintings, revealing breathtaking masterworks. “She turned hers around and it was a naked stick figure,” recalls Klein. “The look on her face as she revealed it and saw where she stood among her peers—her face tapped into everyone’s insecurity.” It still makes Klein laugh.

“I take on innocuous things that relate to some widespread social insanity,” Harewood explains. “I find the things that fascinate or bother me. It won’t come as a shock to anyone that comedians are often very anxious and sensitive people who feel a lot of things deeply. Those are the components of our material.”

After graduation, Harewood headed to Los Angeles, where she moved back in with her parents and waited tables. Once she had developed enough stand-up material, she made a tape to submit to a Ventura, Calif., comedy contest. When she got the call that she’d made the finals, she began the next phase of her education.

“The guy asked me if I had a college agent, and I said, ‘What’s that?’”

Harewood decided to give touring colleges and performing at corporate events a try. It wasn’t all standing ovations.

“I learned why you’re supposed to get paid a lot for corporate shows—because they are terrible,” Harewood says, describing a giant ballroom setting with round tables where everyone is talking over you. “I had to get through it because you have to do your time, but in the middle I was like, Oh, I am bombing. All these people are looking at me, and they aren’t laughing. Then I was, like, in that moment, a little bit happy because I figured, This is as bad as it will get.”

Harewood soon joined the improv cast at Upright Citizens Brigade on Sunset Boulevard. She appeared on *The Misadventures of Awkward Black Girl*, written by and starring Issa Rae, ’07, and then interviewed for another not-to-be-named late show before a female writer she knew recommended her to *The Late Late Show*.

“I was flabbergasted those first few days that I got to just sit and write jokes,” says Harewood. “There wasn’t someone telling me to stop and go file. I’m still in shock that I get to do this.”

Then there is her other dream—to join the ranks of just four women of color who have hosted late-night shows of their own.

Actor Amin El Gamal, ’08, has watched Harewood’s career since the two were undergraduates together. “She is 100 percent the person you want in your living room,” he says. “She’s warm and funny, and she doesn’t assault you with the truth the way some comedians do. She has this endearing and smart presence, so she’s in a position to make real change in the way people look at the world.”

In all her writing, Harewood says, she depends on two basics—harnessing “raw feelings” and sneaking in political humor when she can. She draws on personal details of her life, including that her mom is Caucasian and her dad is Black, to let her audiences get to know her. She has a way of taking the mundane and weaving it into something funny. Take osteoporosis.

“My mom is an older white woman, and I would see her take calcium, so I ended up writing about it. Why does [the disease] always happen to women? I’m assuming it happens to women and not to men because, as women, we don’t want to be rude and leave a skeleton behind when we die.”

**Melinda Sacks,** ’74, is a senior writer at Stanford. Email her at msacks@stanford.edu.
0% Intro APR* for balance transfers!

AlumniCreditCards.org

Earn up to 3% cash back on every purchase with the Stanford Alumni Rewards Visa® Credit Card.

*Move higher-rate balances to your new Stanford Alumni Rewards Credit Card within the first 60 days and you’ll enjoy an intro 0% APR for 6 months. After that, the APR will be the same as the current purchase rate of 9.99% – 18.00% APR. APR = Annual Percentage Rate. Rate for six months on balances transferred from another financial institution within the first 60 days of account opening. The Annual Percentage Rate may vary after the account is opened based on credit worthiness. Offer valid for a new rewards credit card opened between 4/22/2020 and 8/31/2020. Offer subject to membership eligibility and credit approval.

Federally Insured by NCUA
They could see it coming in January.
At the Stanford Clinical Virology Laboratory, medical director Benjamin Pinsky started developing a test for COVID-19.
Meanwhile, public health officer Sara Cody, '85, confirmed Santa Clara County’s first case.
By mid-March, Cody and her counterparts in the five counties that ring most of the Bay—a collaborative group that includes Erica Pan, '92—would conclude that the exponential spread of COVID-19 in the region made shelter-in-place orders imperative. And by then, Pinsky’s test had been FDA-approved for two weeks. He was onto his next COVID-19 research project, as were hundreds of his Stanford colleagues.
What happened in the labs and on the conference calls as the Bay Area braced for COVID-19.

By Deni Ellis Béchard

Illustrations by Ellen Weinstein

Here we bring you inside the (virtual) room where the Bay Area lockdown decision was made, and into the labs where Stanford researchers are devoting themselves to testing, treatment and policy questions. There’s a point of intersection, by the way, in which scholars conduct studies that help local public health officers decide when and how to open back up.

If you’re anything like us, this pandemic has you pondering some big questions about history, economics, inequality, education, and our relationships with one another and with Mother Nature. Fortunately, Stanford scholars are pondering those, too, and we plan to share some of their findings with you in the coming months. In the meantime, stay safe and well. —Kathy Zonana, ’93, JD ’96
Bay Area public health officers had prepared all their lives for the possibility of a pandemic. That didn’t make their decisions any easier.

Since New Year’s, Sara Cody, the public health officer of Santa Clara County, had been watching the news coming out of China—the cluster of pneumonia cases linked to a wholesale seafood market in Wuhan. As infections were confirmed across Asia, Europe and North America, her unease grew. “What I remember most about January and February and even into early March,” says Cody, ’85, “was just this really unsettled feeling that we couldn’t see what was going on.”

Cody, who has held her post since 2013 and spent the preceding 15 years as deputy public health officer, had been preparing her entire adult life for the possibility of a pandemic: After earning her MD at Yale and completing an internal medicine residency at Stanford, she trained as an epidemic intelligence service officer with the Centers for Disease Control and Prevention. And yet she had never felt so concerned. With a population of 1,922,200, Santa Clara is the sixth-largest county in California and contains San Jose, the 10th-largest city in the United States. It is also the heart of Silicon Valley, home to many of the world’s tech giants, and—like other Bay Area counties—a point of frequent travel between China and the United States. “We didn’t have testing at the beginning,” Cody recalls. “Right up through February 26, the only way we could test was to get permission from the CDC and send a sample back to Atlanta. We were just in this really, really, really uncomfortable place.”

Though Santa Clara confirmed its first COVID-19 infection on January 31—in a man recently returned from Wuhan—Cody didn’t know whether the virus was spreading undetected in the community, since the CDC tested only after documented exposure. In February, as cases increased, she issued a recommendation to avoid crowds. By early March, she had placed restrictions on gatherings of more than 1,000 people. “On Friday, March 13,” she recalls, “it felt impossible that I would actually be standing up there saying that you couldn’t have a gathering of any kind if it was greater than 100, and I even got a little bit choked up during the press conference because it just really hit me what that meant. Over the course of the next 48 hours, I got to the place along with colleagues from around the Bay Area that actually that was far, far from sufficient and we were going to be in trouble.”

That Sunday, March 15, marked the tipping point when Bay Area recommendations and restrictions gave way to shelter-in-place orders—the first in the United States. The decision, announced the following day, would catapult Cody into the national spotlight and lead to controversies over the scope of the orders and their economic fallout. But the shelter-in-place decision wasn’t the work of Cody alone; rather, public health officials from six Bay Area counties and the city of Berkeley made it together. And though outlying counties followed suit, not all of their public health officers agreed on the path forward. They would have to address the needs and inclinations of people who, though living within the same region, have dramatic variation in population density, occupations, resources and culture. And they would have to do so while readying their health-care systems and most vulnerable citizens for a highly contagious and potentially lethal disease.

The Ides of March

“The actual shelter-in-place decision was made very quickly in a very short period of time,” says Erica Pan, ’92, interim public health officer of Alameda County.
County, which is home to more than 1.6 million people and covers most of the East Bay. “It’s hard for people to remember now, with what I call COVID time,” she adds, searching her memory back to March 15, that Sunday unlike any she had experienced.

Over two decades, Pan had forged ties in Bay Area public health, directing units involved with bioterrorism, infectious diseases and emergency response. “Many of us have worked on planning for this exact scenario,” she says, having previously joined forces to ready the Bay for avian flu, H1N1 and Ebola. “A lot of the players are still the same, so we have really strong, collaborative relationships.”

March 15 began with an 8 a.m. conference call among Cody and the health officers of San Mateo and San Francisco counties to sync up policies on mass gatherings so as not to confuse the public. St. Patrick’s festivities were two days away and likely to facilitate the spread of COVID-19. “Santa Clara County had more cases than anywhere else in the Bay Area and the state at that point,” Cody says. “We’d had our first death on Monday.” She also now had data no other county possessed—from a small study carried out as soon as testing was available locally. “We tested a subset of people with influenza-like illness. If their swab was in the lab and they had tested negative for flu, then we used some of our limited testing capacity to test those swabs for coronavirus. We found that 11 percent of them were positive.”

At that point, Santa Clara had only 253 identified cases and less testing than Italy had had at that juncture, and yet in less than three weeks Italy had gone from a similar number of cases to more than 24,000 infections and 1,800 deaths. “We were comparing what we looked like and what Italy looked like [on the infection curve].” Cody says, “and realizing that we actually were not that far behind.”

The calls the morning of the 15th soon included three more Bay Area counties—Alameda, Contra Costa and Marin—as well as the city of Berkeley, which has its own health department. Pan recalls hearing Cody describe the speed at which COVID cases in Santa Clara were doubling: approximately every three days. “We’d already tried to do various mitigation measures that weren’t necessarily slowing it down,” Pan says, “and we needed to do something dramatic. It was really important to do it together. It would be much harder for any one of us to do it alone. We’ve seen data around how fast you can have exponential rise and how much of a difference it can make to intervene in a really fast and critical way.”

All day, the already exhausted health officers hashed out details, determining the scope of essential services like water, food, sanitation, transportation and health care, the wording of press releases and whether there was time to make the order effective the following midnight. They had lawyers outline the order and spoke with local elected officials.

March 15 began with an 8 a.m. conference call among Cody and the health officers of San Mateo and San Francisco counties to sync up policies on mass gatherings so as not to confuse the public. St. Patrick’s festivities were two days away and likely to facilitate the spread of COVID-19. “Santa Clara County had more cases than anywhere else in the Bay Area and the state at that point,” Cody says. “We’d had our first death on Monday.” She also now had data no other county possessed—from a small study carried out as soon as testing was available locally. “We tested a subset of people with influenza-like illness. If their swab was in the lab and they had tested negative for flu, then we used some of our limited testing capacity to test those swabs for coronavirus. We found that 11 percent of them were positive.”

March 15 began with an 8 a.m. conference call among Cody and the health officers of San Mateo and San Francisco counties to sync up policies on mass gatherings so as not to confuse the public. St. Patrick’s festivities were two days away and likely to facilitate the spread of COVID-19. “Santa Clara County had more cases than anywhere else in the Bay Area and the state at that point,” Cody says. “We’d had our first death on Monday.” She also now had data no other county possessed—from a small study carried out as soon as testing was available locally. “We tested a subset of people with influenza-like illness. If their swab was in the lab and they had tested negative for flu, then we used some of our limited testing capacity to test those swabs for coronavirus. We found that 11 percent of them were positive.”

At that point, Santa Clara had only 253 identified cases and less testing than Italy had had at that juncture, and yet in less than three weeks Italy had gone from a similar number of cases to more than 24,000 infections and 1,800 deaths. “We were comparing what we looked like and what Italy looked like [on the infection curve].” Cody says, “and realizing that we actually were not that far behind.”

The calls the morning of the 15th soon included three more Bay Area counties—Alameda, Contra Costa and Marin—as well as the city of Berkeley, which has its own health department. Pan recalls hearing Cody describe the speed at which COVID cases in Santa Clara were doubling: approximately every three days. “We’d already tried to do various mitigation measures that weren’t necessarily slowing it down,” Pan says, “and we needed to do something dramatic. It was really important to do it together. It would be much harder for any one of us to do it alone. We’ve seen data around how fast you can have exponential rise and how much of a difference it can make to intervene in a really fast and critical way.”

All day, the already exhausted health officers hashed out details, determining the scope of essential services like water, food, sanitation, transportation and health care, the wording of press releases and whether there was time to make the order effective the following midnight. They had lawyers outline the order and spoke with local elected officials.

A lot of the work, Cody recalls, involved the health officers’ getting to the same place emotionally so they could convince county leadership.
I remember there was a lot of discussion of ‘You guys are moving too fast,’” she says. “This is impossible. We can never get this done. Let’s stop and think about this and do this right.’ And I remember looking at some basic models of exponential spread and thinking, We actually don’t have that time. We just need to move. Eventually, everyone did get on board.”

MEANWHILE, TO THE NORTH...

Even within the nine counties of the greater Bay Area—the six in the initial shutdown pact and the three that ring the north—the months leading up to March 15 offered different lessons about COVID. Under the guidance of public health officer Bela Matyas, ’81, Solano, one of the outer counties, played a crucial early role in understanding the coronavirus.

Solano County lies along the north shore of Suisun Bay, with Napa to the west and Sacramento to the east. “Solano has distinct personalities in the northern part of the county versus the southern,” Matyas says. “The southern is more liberal, very much in tune with the Bay Area. The northern part is much more in tune with the Central Valley.”

Solano also includes Travis Air Force Base, where, in February, hundreds of passengers were quarantined when the State Department repatriated American citizens from Wuhan. More followed from the Diamond Princess and Grand Princess, cruise ships with coronavirus outbreaks.

Like Pan and Cody, Matyas had spent his career preparing for outbreaks, with three decades in public health and epidemiology. The testing of quarantined people transformed his understanding of COVID-19. “There was a much larger number who were not symptomatic but who were positive for the virus,” he recalls. “That’s important because, until that point, the quarantine approach at the federal level was to look for people with fever, and pretty much everybody else was let through.”

The situation, he realized, was far worse than most people knew. California was the premier port of entry for travelers from China. Thousands arrived daily, and if only symptomatic carriers were being stopped, then many infectious people had returned to their communities. “We were letting large numbers of people through while we thought we were containing it,” Matyas says. “Containment is trying to stop the disease, and mitigation is recognizing that you can’t and trying to reduce the harm it causes. I believe nature has already proved to us that for this disease, containment is impossible.”

On February 26, Solano County diagnosed the first case of community transmission in the United States. The patient first reported symptoms on February 13 but, lacking documented COVID-19 exposure, spent time in two hospitals before the CDC authorized a test. Health workers suddenly scrambled to find everyone who had been in contact with the patient. At one of the hospitals, they numbered 121. Following the CDC guidance then in place—self-isolation of any exposed person for two weeks—“would have resulted in the hospital having to shut down,” Matyas says.

But the test results from the exposed hospital workers shifted Matyas’s perspective on the disease. “Only three became positive,” he says, “and it was really clear by how they interacted with the patient that they had significant droplet transmission unprotected. There was just no evidence whatsoever of airborne transmission.”

People with respiratory infections exhale droplets filled with viral particles. With airborne diseases, after the droplets evaporate, the active virus can travel long distances in the air, as does measles, one of the most infectious diseases known. Droplet-borne viruses, however, remain most contagious while suspended in the droplets and commonly infect nearby people who inhale them or who touch surfaces on which the droplets have fallen.

“We looked at so many people, and we had a very clear understanding of who did become positive,” Matyas says, “and they all had had genuine extensive droplet exposures. That allowed us to convince the CDC to drop the airborne containment requirements.”

Until then, hospitals first had to confirm that a patient had COVID and then put that person into an airborne isolation room. But it was clear to Matyas that there soon wouldn’t be enough rooms in the country. “Instead,” he says, “we assumed everyone who comes in has COVID and [we] used universal droplet precautions with everyone with respiratory disease. Period.”

The strategy worked, with no further cases of COVID among the hospital staff. Given its success, Matyas sees it as part of a portfolio of mitigation strategies—including social distancing, wearing masks and banning large gatherings—that he would have preferred to shelter-in-place orders. Nonetheless, he said, “every one of these decisions was made with the best of intentions under very adverse conditions with very limited information.”

FLATTENING THE CURVE

After shelter-in-place, one thing became clear: California—and the Bay Area in particular—had far fewer infections than projected. In terms of cases per capita, California ranked 32nd in the country at the end of May. Whereas New York topped the
list with 20,000 cases per million, California had only 2,850—despite having had the earliest known U.S. cases. In fact, on April 23, an autopsy report revealed that a 57-year-old woman in San Jose had died of COVID on February 6—the earliest recorded death in the United States. The CDC has since confirmed that the disease was circulating in California as early as mid-January.

Whereas some commentators argue that the Bay Area was relatively unscathed because of less reliance on public transportation and lower population density, George Rutherford, ’74, MA ’75, professor of epidemiology and biostatistics at UCSF, dismisses this. San Francisco County, he points out, has the highest population density in California—18,808 per square mile compared with Los Angeles County’s 2,474—and yet it has had a far lower rate of cases (3,170 per million as opposed to 6,569 per million as of June 10) than L.A. County or, for that matter, many other lower-density areas of the country.

Furthermore, Rutherford explains that the Bay Area has some of the nation’s most racially and ethnically diverse counties (by some estimates, Alameda ranks first and Solano second)—and international travel to match. “There are tons of people here,” he says. “There’s tons of diversity. We have non-stop flights to Asia and Europe. It could have been a disaster here, but it wasn’t, and I think the reason it wasn’t was the seven health officers and the mayors and boards of supervisors. If you look at the original mortality projections, the United States was looking at between 1.7 and 2.2 million deaths, which we could still get to, by the way. That would have been in the absence of doing anything. The Bay Area is 2 percent of the population of the country. Two percent of 2.2 million deaths is 44,000 deaths, and 2 percent of 1.7 million deaths is 34,000. We’ve had 420.”

The speed of the shelter-in-place order, Rutherford argues, was significant. The Bay Area enacted it four days earlier than Los Angeles. Four days, he explains, is long enough for a newly infected person to pass COVID-19 on to several more people, since it takes an average of 5.2 days to start showing symptoms and the person could be contagious 48 hours before that. Moreover, the Bay Area was relatively compliant. “You saw the pictures from Los Angeles the first weekend after the shutdown,” Rutherford says. “Everybody went to the beach. They didn’t get the memo about social distancing.” And according to online reservation site Open Table, restaurant attendance continued in Los Angeles and...
New York well after it had dropped off in San Francisco.

As for Solano and Alameda counties, new cases largely remained flat during shelter-in-place, whereas in Santa Clara County—predicted to be one of the hardest hit in the nation—the curve wasn’t just flattened; it was crushed. “I expected much more transmission in Santa Clara,” says Rutherford, “and the fact that there hasn’t been bespeaks their capacity.”

Now What?

The Bay Area counties extended their mutual shelter-in-place orders into May; then, as reopening began, their paths started to diverge in response to local conditions—and sometimes pressures. “The problem,” says Matyas, “is that the public we are working with as a partner in all of this has demonstrated that it really has grown tired of restrictions on our lives. That pressure by the public is going to have a lot of power in the decisions around what to do going forward.”

Reopening, Pan believes, must be based on each county’s capacities: availability of testing, personal protective equipment, contact tracers (workers who find and inform everyone who has had contact with an infected person) and hospital beds. Though she has been working steadily for months, reopening has proved particularly stressful. “Early on I was running on adrenaline,” she says; now she spends days meeting with heads of schools, hospitals, industry, congregations and long-term care facilities. She evaluates whether contact tracing and quarantining infected people in hotel rooms could interrupt transmission. By some, she is criticized for reopening too slowly or violating civil liberties; by others, for moving too quickly since the virus is still spreading.

“We know about all the social determinants of health,” Pan says, “how important it is for our economy to restart, and all the health impacts when people aren’t working, when they can’t get food and when they have increased stressors.” And yet she also took a key lesson from the 1918 flu. “Cities that shut down quickly and early and that waited it out and didn’t reopen too early actually did much better in the long run as far as not only fatalities but also their economic recovery,” she says. A recent study by Drexel University School of Public Health estimates that in Alameda County alone, 60 days of shelter-in-place prevented 70,364 hospitalizations and saved 7,291 lives.

On May 9, Pan received her most high-profile attack. Tesla CEO Elon Musk tweeted his intention to sue Alameda County for preventing the reopening of a factory. He characterized Pan as “ignorant . . . acting contrary to the Governor, the President, our Constitutional freedoms & just plain common sense!” Pan recalls how trying that moment was. “Ultimately, my job as a public health officer is to protect the health and safety of our community, including our workers, and we were trying to have a collaborative discussion around that. To have it inflamed very publicly in the media was extremely difficult. On the other hand, I’ve been lucky. I have seen colleagues across the state who are getting death threats. I’ve had some very nasty trolls, but I haven’t actually gotten any threats. But it was really hard to be personally attacked.”

It has also been hard, Pan says, to rarely see her husband and her fifth- and eighth-grade daughters. “They’ve been understanding and they’ve been proud, but . . . I’m getting emotional now. It’s been tough since the end of January.”

When she considers the outbreak in Alameda County, she reflects on how the pandemic struck New York. “They’re having to bring in refrigerated trucks since they don’t even have room in the hospitals with all of the deaths. I’m just really grateful we didn’t get there, and I’m confident we won’t. It’s hard in the moment to remind ourselves that it’s the pandemic that’s caused a lot of the economic devastation. It’s been wonderful to have people trust in our decision and authority to make these decisions, but it’s also been a huge amount of pressure, especially now when everyone has intervention fatigue. People want to reopen, but we want to do it safely and we definitely can’t please everybody.”

Research-Based Reopening

How the Bay Area reopens may be influenced by research funded through the Chan Zuckerberg Initiative, a company that Facebook founder Mark Zuckerberg and his wife, Priscilla Chan, established in 2015. The couple donated $13.6 million for two studies conducted through Stanford, UCSF and the Chan Zuckerberg Biohub. Led by Rutherford and Yvonne Maldonado, MD ’81, a Stanford professor of pediatrics and of health research and policy, the first study enrolled 4,000 Bay Area residents to test them monthly for COVID-19 and its antibodies.

“We’ll provide data in real time to the counties so that they know the baseline rate of infection,” says Maldonado. “This will inform them of areas at risk or where people are actually at lower risk, and will help them understand how they can keep moving forward or stepping back as we try to live through this unknown period.”

The second study, led by Stanford clinical associate professor of medicine Marisa Holubar, MS ’14,
and UCSF’s Sarah Doernberg and Vivek Jain, MD ’03, enrolled 3,500 health-care workers negative for COVID-19 and is testing them weekly to determine the impact of the disease on medical personnel.

Rutherford also directs a program training 10,000 civil servants who can’t do their usual jobs to redeploy as contact tracers. “We have people from the city attorney’s office, the assessor’s office and city librarians—people from county and state governments—who will become the backbone of the contact tracing workforce,” he says.

Cody’s team has already begun contact tracing and is in discussion with Stanford associate professor of pediatrics Jason Wang about an innovation to scale it up: an opt-in smartphone app that would keep a 14-day record of Bluetooth interactions between phones and notify users of exposure.

However, given COVID’s often-silent nature, Matyas is skeptical that large-scale contact tracing will be effective. “Contact tracing serves an incredibly vital function in all outbreak investigation,” he explains, “but there’s a big difference between identifying those contacts who are in high-risk environments and focusing on them to protect the high-risk environments versus tracking down everybody who could have been possibly exposed in the last 14 days.” After Solano’s first community transmission, he points out, tracing for the patient, the three infected hospital workers and one family member spanned six counties and linked 350 people.

Matyas advocates prioritizing high-risk environments, as with the single nursing home where an outbreak caused a quarter of Solano’s confirmed cases and, he explains, all but six of its deaths. “You want to identify who among your community are apt to have a more severe outcome from the disease, and you want to protect them preferentially,” he says. “For the rest of the community, what you try to do is educate on how to minimize transmission of the disease.” After all, he points out, it’s a question of how best to protect public health given limited resources.

Since COVID’s arrival, Matyas has spent his days on conference calls at the county, state and national levels while continuing to oversee the work of his team on such programs as nutrition and health promotion. As for his home life, it is thinly separated from work, as his wife runs the public health laboratory. “It does help having a spouse who exists in the same basic environment,” he says. “The only thing that I’ve been really derelict in is walking my dog, so that has fallen to my wife with great consistency.”

Going forward, Matyas wants to prohibit high-risk activities such as concerts, trade shows and parties while allowing low- and medium-risk activities with precautions. “I firmly believe that if you can create an environment where you make transmission risk negligible, then you can operate. That doesn’t make me pro-business. That makes me pro-health, because unemployment is horrible for health.”

In Solano County, which has a third of Santa Clara County’s population density, time will reveal whether his approach is workable now that face masks are widely available. “We have to recognize that we’re dealing with something unprecedented, and it’s dynamic,” Matyas says. “People are genuinely trying to do the right thing. But there are different considerations in different circumstances, and there are really genuinely different cultures across the different counties in the state and reactions on the part of those communities reflect those cultures. I don’t think any of that’s wrong.”

**Uncharted Territory**

Like her counterparts, Cody has struggled with the repercussions of shelter-in-place. “This is extraordinarily difficult,” she says. “In a perfect world, there would be a model where you can say, ‘OK, we understand that shelter-in-place has these economic harms and social harms, and we know how to translate that into a health metric, so we can measure the short-, medium- and long-term harms of food insecurity and poverty and jobs and exacerbations of mental health conditions, and now we can navigate the most protective path given all these terrible, terrible trade-offs.’ However, those sorts of conversions and models really don’t exist.”

As the country reopens, she has spoken publicly about the dangers of moving quickly, arguing that the impact of each phase should be studied before the next is implemented. Pausing for the longest possible incubation period after each round of restrictions is lifted—“at least 14 days,” she says, “and 21 days is even better”—would allow scientists to understand whether newly resumed activities spread COVID.

Thinking back to the Sunday she and the other public health officers decided to shelter-in-place, Cody says, “It was stressful, but it’s nothing compared to how complex it is now.” She is aware of people’s hardship, the political pressure, the fear of lasting economic damage. And she increasingly feels the impact on her husband and two children. “When I’m home, I’m so tired I can hardly speak,” she says. “My spouse is trying to work from home with kids trying to do distance learning. I’m never home. My family says it’s like I’ve been deployed to war.”
Since January, Pinsky had been at the forefront of a vast collaborative effort to establish COVID-19 testing in the Bay Area—an endeavor paralleled by labs across the university striving to understand the disease, develop treatments and address many of the societal challenges presented by the virus. “The university is supporting rapid mobilization for COVID,” says vice provost and dean of research Kathryn Moler, ’88, a professor of applied physics and of physics. It is offering seed grants, expanding biohazard facilities, developing ways for people to work safely and accelerating the approval process for new projects. The race to respond to the pandemic may mark a watershed in how researchers mobilize and work together to face challenges, yielding stories of perseverance and teamwork that they will be sharing for years to come.

**TESTING, TESTING**

In determining how to respond to the pandemic, the crucial first step was having an accurate and rapid test for COVID-19 infection. Medical personnel have to know who is infected in order to prevent the spread of the virus among patients and staff. In the first weeks of 2020, as news of the virus struggled to keep pace with its spread, Pinsky began ordering supplies to create a test. “By February 4,” he says, “we actually started screening specimens that were negative for other respiratory viruses to kind of keep an eye on what was happening in our area with the idea that if we were to identify any positive patients, we would be able to ramp up testing relatively quickly.”

By February 29, the day the U.S. Food and Drug Administration relaxed requirements for clinical laboratory testing, Pinsky’s team had identified patient samples that were positive for COVID-19. The following Monday, his lab notified the FDA that they had completed requirements for testing. “They sent an email back that afternoon, saying, ‘You have permission from the FDA,’” he recalls—a process that would typically take several months or more. “We went live two days later,” he says, “on Wednesday”—just in time to respond to the rise in community transmissions in the Bay Area.

By April, Pinsky was referring to this period—when his lab was rushing to increase testing capacity for many hospitals in the region—as the “early days.” That was seven weeks prior. Since then, the lab has maintained the same pace, open 24 hours a day, with three rotating shifts of dozens of scientists and assistants. Due to the high demand for equipment and supplies, the lab has repeatedly validated the test using different reagents—the
chemicals used to perform the tests. “There was a shortage of the reagents,” Pinsky says. “We didn’t want to run out of any one particular component of the tests, so there was constant work to make sure we were able to continue to offer testing.” Other Stanford labs also rallied, with donations of single-stranded DNA primers and RNA extraction kits. “There was a great outpouring of support from throughout campus,” Pinsky recalls.

**ANTIBODY ANSWERS**

One of the next most pressing questions was how to develop accurate screening for antibodies. Since numerous infected individuals appear to be asymptomatic—as many as 60 percent, by some estimates—reliable antibody testing is crucial for knowing not only which medical personnel might have developed immunity and can most safely work with patients, but also how widespread the virus is, what its actual death rate is and how far the United States might be from developing herd immunity.

Antibodies expert Scott Boyd, an associate professor of pathology, was well suited to the challenge. A native of Winnipeg, Manitoba, he majored in biochemistry at the University of Manitoba before becoming a Rhodes Scholar and studying Renaissance literature at the University of Oxford—an experience he recalls as “a great chance to really broaden my education before I dove into medical academia.” Like many of their colleagues since the pandemic began, he and research scientist Katharina Roeltgen spent day after 16-hour day in the lab. Their goal: to develop an antibody test that would offer greater accuracy than the many point-of-care and home testing kits in the marketplace.

“There’s quite a Wild West of testing going on right now,” Boyd says. “The majority of the tests really don’t seem to have much documented evidence of how well they work.” Though the FDA has eased rules regulating the sale of such tests to make them rapidly available, a good deal of money has been wasted on shoddy products. In late March, for instance, the British government purchased 3.5 million tests that then failed to give reliable results.

Boyd’s team released its test on April 6. In developing it, they kept the focus on maintaining standards—going through all the same steps and seeing how each version of the test performs—but doing more experiments each day than would be typical. “It’s not that the methodology or the approach has changed,” he says. “It’s just that we’re having to do
it more quickly than would be comfortable usually.”

In conjunction with Pinsky and other collaborators, Boyd is now turning his attention to determining whether antibodies confer immunity. Since working directly with the COVID-19 virus is risky, a less dangerous virus will be genetically modified to express COVID-19’s spike: the prominent surface protein that binds with receptors on human cells to inject viral genetic material into them. “You can put that on a different virus,” Pinsky says. “It’s called pseudotyping, and then you use that in experiments to see if antibodies from patients will block the virus from getting into the cell.”

**TREATMENT TRIALS**

Just as research in diagnostics has been accelerating, so too have efforts on finding effective pharmaceutical treatment for patients with COVID-19. Clinical professor of medicine Neera Ahuja, division chief of hospital medicine and medical director of general inpatient medicine, is the principal investigator of a trial to treat severe cases of COVID-19 with remdesivir, an antiviral medication first used during the West African Ebola epidemic of 2013 to 2016. Remdesivir works by interrupting the genetic replication of viruses, and while it showed promise at stopping COVID-19 infections in a trial sponsored by the drug’s maker, Gilead Sciences, and carried out at Stanford and other universities, more data was needed to show its effect on severely ill patients whose lungs were being destroyed by the extreme reaction of their immune systems. A new trial sponsored by the National Institutes of Health and including a control group that received a placebo was initiated on March 30. It enrolled more than 1,000 severely ill patients at Stanford and 63 other sites across the globe. “Time zones don’t matter when you’re trying to find a cure that’s affecting the world,” Ahuja says.

“What’s great,” says co-principal investigator and professor of medicine and of pediatrics Kari Nadeau, “is how fast the NIH was on its feet and how fast the FDA was to address the challenge of this crisis. It usually takes six months to get trials activated. This trial was activated in six days.”

With equal speed, many of Stanford’s scientists have pivoted from their usual fields of study to focus on COVID-19, with as many as 50 researchers at a time on video calls briefing one another about the virus. “The COVID crisis motivated people to work together from many different areas,” says Nadeau, who directs the Sean N. Parker Center for Allergy and Asthma Research at Stanford and is best known for developing treatment for severe food allergies. “Even though our specialty areas might not be to work routinely with one another, most important is that our tools and our approaches are similar.”

Once again, the efforts paid off. On April 29, NIH released preliminary findings from the second remdesivir trial: For severely ill patients receiving remdesivir, recovery shortened from 15 days to 11 days. In a Stanford town hall meeting that same day, Lloyd Minor, dean of the Stanford School of Medicine, announced, “These two rigorously done trials provide really the first evidence of the efficacy of any therapeutic for this disease.”

Two days later, the FDA approved remdesivir for emergency use in the treatment of COVID-19.

**OUTPATIENT OPTIONS**

Since remdesivir must be administered intravenously in a hospital, that leaves the more than 80 percent of COVID-19 patients recovering at home without a proven treatment.

“We don’t have a lot to offer folks when they’re positive, either asymptomatic or with mild to moderate symptoms,” says Prasanna Jagannathan, an assistant professor of medicine. He and Upinder Singh, professor of medicine and of microbiology and immunology, are co-leading a trial to test the efficacy of interferon-lambda, one of the body’s natural antivirals.

When under attack from viruses, cells produce interferon, a protein that, as its name suggests, interferes with viral replication while alerting other cells. “It’s sort of like you have a burglar trying to get into your home,” Singh explains, “and you’re turning on the lights and shutting the doors and windows. Interferon basically activates the cellular immune response to fight viruses.”

Of the various types of interferon that our bodies create, interferon-lambda is of interest to scientists because receptors for it exist only in the liver, lungs and intestines—the latter two being the novel coronavirus’s primary targets. Previous studies have shown that people injected with interferon-lambda tolerate it well—much better than other forms of interferon—and that it may mitigate infections such as hepatitis, SARS and influenza.

For the current trial, 120 patients with mild COVID-19 will be sorted into two groups. One will be injected with interferon-lambda (which lasts for a week) and the other with a
placebo. Over the next 28 days, the researchers will record patients’ symptoms, rates of hospitalization and amount of viral shedding. “We have three goals,” says Singh. “We want to help them feel better, help prevent them from going to the hospital, and then, very importantly, decrease transmission to family members and close communities.”

As soon as Singh and Jagannathan conclude the first study, they will initiate two more: one with Avigan, an antiviral drug, and the other with Camostat, a compound that blocks viruses from entering cells. Once they have completed all three trials, they will evaluate their results and, if any of the drugs show promise, will consider further studies using them in combination.

“Like we approach HIV or hepatitis C,” says Jagannathan, “we could potentially use some of these drugs together to improve outcomes even more so.”

**STILL ACCELERATING**

Since the pandemic began, Stanford administrators have also been working nonstop to eliminate barriers so that research can proceed rapidly. “We set up a faculty committee to review COVID-19 research and get it approved as quickly as possible for conducting on-campus research,” Moler explains. “We didn’t make it any easier for [faculty], We just tried to make it faster for them. Actually, it was harder because in addition to getting all the approvals that they normally have to get—like if they’re using lasers, they need laser safety approval—we also ask them to get approval to work on campus. But we work really fast to make sure that those approvals get turned around really quickly.” The university has even begun an expansion of the biosafety lab capable of hosting COVID research—where chemistry professor Carolyn Bertozzi and associate professor of medicine Catherine Blish typically each conduct separate experiments on tuberculosis—since it can’t meet the current demand. Says Moler: “We’ve been prioritizing multiple shifts in that facility,” including Blish’s to study the coronavirus and potential antiviral treatments, “and also have begun an expansion of the facility that is moving quite quickly. Typically, that would take a year or two, and we’re hoping to have this expansion by the end of August.”

Also crucial: ensuring that research sponsors are on board. Projects at Stanford and SLAC National Accelerator Laboratory take in $31 million a week, largely from government agencies but also from companies and foundations. “I would say that all of those entities have been very, very thoughtful about allowing people to pivot their research when pivoting their research is appropriate,” Moler says.

Meanwhile, the university has had to ensure the safety of the often-unseen efforts that make infectious-disease research possible, such as lab maintenance, janitorial work, and supply-chain management of personal protective equipment and other essential materials. All the while, the university has been updating its policy manuals to safeguard employee health and keep pace with state and county guidance. “We need to write policy for all of these activities during this time at a really unprecedented speed,” Moler says. “I’ve been working basically nonstop since the pandemic started. Yesterday, my first Zoom call was at 6:30 a.m., and my last one ended at 9:15 p.m.”

Stanford faculty have initiated hundreds of research projects related to COVID-19, many of which go far beyond the lab bench to address economic, policy and social challenges arising from the pandemic. The university has launched Stanford RISE (Respond. Innovate. Scale. Empower.), a response plan to connect researchers across disciplines. “RISE is an effort to bring together all of the research across campus in one place that is relevant for not only COVID-19 as a disease but also what society is going through,” says Moler.

RISE reveals the many ways the pandemic affects society—from the impact of working from home to the ways social inequality affects the disease’s spread—and suggests ways humanity can respond.

The stories of frantic work, sharing, collaboration and cross-disciplinary efforts are far more numerous than the few mentioned here. Take, for instance, how Stephen Quake, ’91, MS ’91, professor of bioengineering and of applied physics, loaded diagnostic equipment into his car at the Chan Zuckerberg Biohub, where he is co-president, and drove it to Pinsky’s lab. Or how David Camarillo, MS ’03, PhD ’08, associate professor of bioengineering, has shifted his research from preventing concussions to designing ventilators—required for severely ill COVID-19 patients—for rapid assembly from fewer parts. Collectively, these efforts suggest that among the mixed legacies of a deadly and devastating virus may be a research community primed for agility, rapid communication and cross-disciplinary innovation. In the meantime, as Nadeau points out, “None of these labs are getting sleep.”

**UPINDER SINGH**

Deni Ellis Béchard is a senior writer at Stanford. Email him at dbechard@stanford.edu.
“Impossible not to love”

Renowned for his leadership and a legacy of public service, Donald Kennedy is also remembered for ‘the spark in his eye.’

By Kelli Anderson

For Stanford people of a certain era, there is one picture of Donald Kennedy that comes to mind before all others. The university’s eighth president is not posed contemplatively in a book-lined office, nor is he clad in academic regalia delivering one of his stirring go-forth-and-give-back commencement speeches. The picture that many remember—with delight—is of the 1986 Stanford men’s swim team soon after it had won its second straight NCAA title. In it, two dozen swimmers stand or kneel in coat and tie. Meanwhile, front and center is Kennedy—eminent scientist, former chief of the Food and Drug Administration, leader of one of the top universities in the world—wearing nothing but his glasses, a Speedo and a smile.

The picture, the payoff on a year-old challenge to the team to repeat as NCAA champions, says a lot about Kennedy, who died April 21 at the age of 88 from COVID-19. Kennedy was open-minded, adventurous, fun and a big fan of Stanford sports, if not of traditional concepts of presidential propriety. He was happy to be surrounded by students. And at 54, he was in great shape, thanks in part to regular early-morning runs he made to the Dish, often in the company of any student who wanted to bend his ear—and could keep up with him.

What the picture doesn’t show is the stunning breadth of Kennedy’s knowledge and intellectual curiosity, or the mind that was constantly churning with ideas for how to make Stanford and
Along with public service, Kennedy made multiculturalism and diversity a priority. During his tenure, the percentage of undergraduates who were people of color increased to 45 percent, and campus policy changed to allow gay couples and unmarried couples the same access to housing as married students. In 1988, Stanford’s Western Civilization requirement morphed into Cultures, Ideas and Values, which included more nonwhite, non-European and female perspectives. (The latter move infuriated William Bennett, the conservative Reagan-era secretary of education, who swooped onto campus to debate Kennedy on the merits of the established canon on national TV.)

With Kennedy at the helm, the value of Stanford’s physical plant doubled, the endowment tripled, and the school completed what was at the time the most successful university fund-raising drive in history, the five-year Centennial Campaign, which raised nearly $1.3 billion.

Even before he became president, Kennedy helped create a legacy that would affect students for generations: As biology department chair in 1969, he co-founded and later directed Stanford’s first interdisciplinary program, human biology, which, a half-century later, remains one of the most popular majors on campus and serves as the model for the dozens of other interdisciplinary programs Stanford now offers.

Along with the triumphs, Kennedy faced controversies and natural disasters, including the 1989 Loma Prieta earthquake, which caused $160 million in damage to campus. (In his typical optimistic fashion, Kennedy would come to see the quake as a boon to campus building.) His reputation among some students and faculty lost its sparkle when students in the mid-’80s protested his resistance to blanket divestiture from South Africa and when he resolved a 1989 minority-student takeover of his office by calling the cops.

In his most bruising challenge, the
indirect-cost controversy of 1990–91, Kennedy grappled with congressional accusations and sensational media reports that Stanford had overbilled the government $231 million in research-overhead costs and included things like wine, luxe furnishings at presidential residence Hoover House and the depreciation of a yacht. Although Stanford was eventually exonerated of any wrongdoing, the PR damage prompted Kennedy to step aside. “I can’t be part of the solution if I am part of the problem,” he said at the time, and he resigned after the 1991–92 academic year.

As soon as the search committee started looking for his replacement, it realized the depth of Kennedy’s impact on Stanford. “There was a lot of pressure to bring in a caretaker to get us through the crisis,” recalls Gaither, who was chair of the Board of Trustees at the time. “But as we went around the country, people told us, ‘That’s crazy! Everybody knows this is now the most important position in American higher education.’ It was clear how the world, other than the political world, felt about Stanford. And that was because of Don.”

**A natural love of biology**

Kennedy was born in New York City on August 18, 1931, the first of two sons of Barbara “Babbie” and Bill Kennedy. The family moved often, but Kennedy spent his earliest years on a rented estate in Greenwich, Conn., while Bill worked as a writer for the J. Walter Thompson advertising firm in Manhattan. The estate’s abundance of maple trees to tap, brook trout to catch and birds to watch sparked Kennedy’s love of nature. It was a passion he would pursue in earnest after a Harvard writing professor asked the would-be English major, “Tell me, Don. What else interests you?”

After completing his Harvard doctoral dissertation, which focused on the electrical signals generated in frog retinas, Kennedy landed his first faculty post in the zoology department at Syracuse University, earning tenure in just his third year. When Stanford called in 1959, Kennedy declined. When the school tried again a year later, he packed up his family—wife Jeanne and young daughters Page and Julia—and took a leap of faith.

Stanford in 1960 was still a regional institution, but it was poised to explode in national influence, thanks in large part to then-provost Fred Terman’s efforts. Terman, Class of 1920, Engr. ‘22, helped seed the area with start-up engineering companies and established “steeples of excellence” with top professors in multiple fields who could attract federal research funds and other distinguished teachers, researchers and grad students. The medical school had just moved from San Francisco to the Palo Alto campus, further boosting Stanford’s academic firepower. “Given such powerful events,” Kennedy wrote in his 1983 memoir, *A Place in the Sun*, “it struck me that Stanford was the place to be.”

The introductory biology classes Kennedy was hired to teach were so large they were held in 1,700-seat Memorial Auditorium, requiring him, on occasion, to lecture in front of the set of a drama department production. “There I’d be,” he recalled in his memoir, “delivering my lecture beside a rumpled bed . . . or situated in a seventeenth-century castle paced the previous night by a tortured undergraduate Hamlet.”

The theatrical setting suited his animated teaching style. “He was kinetic—physically and conceptually,” recalls Pulitzer Prize–winning history professor emeritus David M. Kennedy, ’63, who took one of Kennedy’s biology classes as an undergrad in the early ’60s. “He could make things that were not intrinsically interesting, at least to me, quite compelling.”

If a quadruped feature could best be relayed to hum bio students by demonstration, Kennedy would get up on the table on all fours. “He was dynamic, the best teacher I think I’ve ever seen,” says biology professor H. Craig Heller. “He had the ability to absorb complex information and then convert it into a highly understandable explanation. He was an amazing interpreter of science.”

Kennedy also ran a lab that did important work on the nervous systems of crayfish, a species choice that prompted wry envy in his friend and noted population biologist Paul Ehrlich. “Don was a lot smarter than me,” he says. “He was trying to figure out how nervous systems work. I was trying to figure out why insect populations get larger or smaller. But Don did his research on lobsters, and when he was done with his research, he was able to eat the damn things.”

Acting on his conviction that all scientists should spend some time in government service, Kennedy took a break from Stanford in 1977 to head the Food and Drug Administration under President Jimmy Carter. During his stint, the agency tackled issues ranging from the safety of saccharin to the efficacy of laetrile as a cancer treatment. Although Kennedy lost many of his regulatory battles, his wit, clarity and scientific bona fides elevated the FDA’s status, boosted internal morale and won him a number of nonacademic admirers, including the *New York Times*. Upon Kennedy’s farewell in 1979, the *Times* noted: “One measure of the respect that Mr. Kennedy won is that spokesmen for both consumer and industry groups, who seldom agree on anything, rate him equally high.”

Kennedy returned to Stanford to serve as provost under President Richard Lyman, who had guided the university through the tumultuous ’70s. When Lyman stepped down to become president of the Rockefeller Foundation in 1980, Kennedy was named Stanford’s eighth president, introducing a new vibe on campus. “Dick protected the university during a tough time, and he was terrific at what he did,” says former English professor and associate dean of humanities and sciences Bill Chace, who later served as president of both Wesleyan University and Emory University. “What Don came in to do was to celebrate it, to enhance it. To make it more outward-going. To make it more inventive, more promising, more lively. To make it happier.”

Where Lyman had been reserved, Kennedy was warm and gregarious. As effective as he had been in his other roles, his ascent to the presidency allowed the full range of his talents to flourish. Kennedy embraced every one of his many responsibilities, riding his 10-speed across campus from appointment to appointment, tie flapping over his shoulders. “He knew a lot about everything that was taught at Stanford and about every research institution,” says Gaither. “He was very comfortable with music or choir or biology or with the humanities. He fought very hard to protect the humanities as Stanford
Don understood early on that there was a tremendous desire on the part of young people to serve and that if you gave them the right opportunities for preparation, they could change the world.

Kennedy’s seemingly boundless energy and bandwidth awed and exhausted his colleagues and staff. “We probably entertained four nights a week—it was nuts,” recalls David Voss, ’75, the manager of Hoover House early in Kennedy’s reign. “The busier he was, and the more stress that was on the situation, the more energized he got. Sometimes we were like, ‘Don, slow down. You’re killing us.’ ”

A Kennedy quality that students and faculty had always appreciated—his knack for making you feel uniquely valued, “like you’re the only person in the room,” says Voss—was particularly valuable on the fund-raising circuit. “Don could come up to you, put his arm around your shoulder, grab your forearm and talk you into doing something that you in your right mind would never do, but you’d be thankful to him for the opportunity,” says Heller.

Among the things Kennedy talked Heller into was serving on a committee to decide how a particular fund-raising campaign could be used to enhance undergraduate education. Out of that committee came the first opportunity for undergraduates to write grant proposals for research projects. “And now at Stanford, most undergraduates, not just in the natural sciences but also social sciences and humanities, get involved in independent research projects,” says Heller. “It was Don’s enthusiastic support of that idea that got it started.”

Likewise, it was Kennedy’s listening, early in his presidency, to student complaints about the lack of public service opportunities at the career center that led him to hire Catherine Milton, an old friend from his FDA days, to investigate solutions. From those efforts emerged the Haas Center for Public Service, which now engages more than 1,000 students each year with opportunities ranging from direct service to social entrepreneurship, and Stanford in Washington, a program focused on public policy. In 1985, Kennedy co-founded Campus Compact, which institutionalized the public service movement in higher education and that now includes more than 1,000 U.S. colleges and universities. “Don understood early on that there was a tremendous desire on the part of young people to serve,” says Milton, “and that if you gave them the right opportunities for preparation, they could change the world.”

Kennedy loved his role as enabler, says Heller. “I once asked Don, when he was president, ‘Don, I know you enjoy this, but don’t you miss being in the lab doing science?’ And he said, ‘Well, of course I do, but the rewards of making it possible for other people to have that opportunity are so much greater.’ ”

Kennedy was also a gifted public speaker, and he was quick on his feet. When Soviet president Mikhail Gorbachev visited campus in June 1990, at the end of his first visit to the United States, Kennedy prepared an introductory speech that would be broadcast nationally. When he stepped up to the rostrum, he reached into his coat.
just one of the gang. When the group
Outside the classroom, Kennedy was
in every single person in his classroom.”

empathy for the people he was teaching.

brought such joy to his subject,” says

acadamic schedule so his time there

winter quarter living with students and

hosting heads of state—Queen Elizabeth

II visited campus in 1983—Kennedy

stayed engaged with students, taking on

freshman advisees, visiting the dorms
every month, teaching the occasional

hum bio lecture and giving constructive

feedback to TAs. At awards banquets

honoring student service and achieve-

ment, Kennedy was there. The ascen-
dant star of the student body, he was the

biggest fan. Gaither remembers one

Saturday in the midst of the indirect-

cost crisis when he accompanied

Kennedy to four different sporting

events. “Don knew all about all of the

sports and the kids on every team,” he

says. “We had a lot of fun.” Indirect costs
ever came up in conversation.

“It was really fun to work with Don;
his energy, his brilliance, generosity and

enthusiasm. Later, she knew Kennedy as a

colleague—he interviewed her for her first

job at Stanford, as director of faculty/

staff housing, and they were friends for

many years. “Some have described Don

as a force of nature—someone impossi-

ble not to love,” she says. “During that
time, I saw not only the qualities I had

heard about from my freshman class-
mates but also his passions—for students,

for science, for higher education, for

nature, for intellectual honesty, for

public service and for giving back. In

the end, it was his compassion for me

during a difficult time during my life that I

learned the depths of his soul and of

his heart. I found him impossible not

to love.”

In addition to Robin, Kennedy is

survived by his children, Page Kennedy

Rochon, Julia Tussing, ’82, Cameron

Kennedy, ’94, JD ’01, and Jamie Hamill,

and nine grandchildren.

It is ironic that Kennedy, who in his

final years struggled with dementia and

the effects of a severe stroke, had his life

ended by a public health crisis that could

have benefited from his thoughtful,

authoritative and clarifying voice. One

of the signatures of his hum bio lectures

was challenging students to consider

the trade-offs between individual

rights and social responsibility. “He

would have become a public figure on

this crisis, no question,” says Ehrlich.

“He couldn’t have resisted. He would

have been writing to the New York Times

and organizing things and so on. That’s

the sort of person he was.”

That wasn’t to be a legacy, but he has

many others. “His real legacy, I think,
is the number of students he

empowered to be their best selves,”
says Anderson. Senator and former

presidential candidate Cory Booker,

’91, MA ’92, was one. When Booker was

about to lose his football scholarship

with one year of eligibility remaining,

Kennedy intervened with the coach to

preserve it, helped Booker find housing,

and urged him to apply for a Rhodes

Scholarship, which Booker won. “He

lifted me at an inflection point in my

youth and helped make me the person

I am today,” Booker wrote in the fore-

word to Kennedy’s memoir.

Kennedy kept up with many of the

students he befriended and mentored

during his time at Stanford, and

maintained correspondence with them

even after they had graduated, making

time to chat with them whenever they

dropped by the campus. Anderson, who

owns a lobbying firm in Washington,

Washington, visited Kennedy every

chance he got. “There was always a little

spark in his eye, a curiosity about what

you were doing and how you were mak-

ing the world a better place,” he says.

“And even if you weren’t, he made you

feel like you were.”

KELLI ANDERSON, ’84, is a writer in

Sonoma, Calif. Email her at stanford.
magazine@stanford.edu.
HERE’S HOW PEOPLE LOOKING FOR A FRESH START ARE CULTIVATING POTENT NEW VERSIONS OF THEMSELVES.

SOME REASSEMBLY REQUIRED

BY DENI ELLIS BÉCHARD
ILLUSTRATIONS BY DAVIDRO
vague borders of midlife are thought to start around 45, the age when Chip Conley’s world began falling apart. With the burst of the dot-com bubble in 2000, the Bay Area hotel chain he’d founded nearly folded and, not long after he’d revived it, the hemorrhaging resumed with the economic crash of 2008. During that same period, his eight-year relationship ended, his foster son was wrongly imprisoned for months until the verdict was overturned, and five of his friends committed suicide. Though his closest advisers urged him to keep his business going, his heart was no longer in it. “What had been a calling had worn off and was just a job, not even a career,” Conley recalls. He sold his life’s work at the bottom of the market. To make matters worse, he also died—literally, as some millennials like to say.

Some millennials also say, “OK Boomer,” an expression of frustration used when an older person—usually one of the 73 million baby boomers, like Conley—seems out of touch. For many of the 168 million Americans born between the early 1980s and mid-2010s, the term also expresses a sense that boomers have made decisions that damaged the prospects for future generations. And yet if a story could make people rethink intergenerational relations and aging itself, it is Chip Conley’s—not because he flatlined, but because of what he did afterward.

But first, his death: During a baseball game at a friend’s bachelor party, Conley cut his leg sliding into third. The wound became infected, and a few days later, before giving a talk in St. Louis, Conley took antibiotics. He had an allergic reaction and his heart stopped. Paramedics resuscitated him several times before he finally stabilized.

Experiencing so much distress and seeing so many negative portrayals of midlife made Conley question whether he still had something to contribute. What he’d thought was his life calling had lasted nearly 2½ decades: the chain of 52 boutique hotels he began creating at 26, buying rundown hotels and reinventing each one according to a theme—luxury camping, new age wellness or romance novels. But with so many years ahead of him, he wanted a fresh calling. During his search for it, he accepted a job as Head of Global Hospitality and Strategy at Airbnb, the iconic millennial online marketplace for home rentals. There, among colleagues who were half his age and far more refined, he was lost. “I felt like maybe the argot of his co-workers. Music and pop culture references went over his head, and he was startled to hear women call each other “dude.” When others discussed “shipping a feature” (releasing a product that may need alterations and could be endlessly refined), he was lost. “I felt like maybe the business world, especially the technology part of it, had passed me by and there was no way to catch up.”

On a spring day, he met his father, a 75-year-old retired banker turned real estate investor, for a hike above Los Altos Hills. When Conley lamented feeling like “the old

IN MANY WAYS, Conley came of middle age on the cusp of an identity crisis for Boomers—the result of converging tectonic forces: the tech revolution that favors skill sets overwhelmingly possessed by young workers and the increase in longevity that has resulted in a rapidly aging populace. Accelerating this collision is automation, which displaces an aging workforce and increases the demand for workers with coding skills.

Conley lays out the situation in his latest book, *Wisdom@Work: The Making of a Modern Elder:* “More than half of American baby boomers plan to work past the age of 65 or not retire at all, and the number of workers in the 65 and older demographic is expected to increase at a faster rate than any other age groups. In 2025, we will likely have three times as many 65-year-olds working in this country than we did 30 years earlier, and the number of workers age 75 and older is expected to increase by an unprecedented 6.4 percent annually through 2024.”

Though financially stable, Conley felt daunted as he faced a culture transformed by tech, dominated by youths and pervaded with ageism—a prejudice he himself shared, he realized after accepting the job at Airbnb in 2013. The company’s founders had read his 2007 book, *Peak: How Great Companies Get Their Mojo from Maslow,* in which he describes managing his hotels based on psychologist Abraham Maslow’s hierarchy of needs to ensure that every employee was happy and engaged. “They wanted to create a culture at Airbnb that was comparable,” Conley recalls. “So I joined and realized I was twice the age of the average person there and I’d never worked in tech before.”

At 52, he understood neither tech culture nor the millennial argot of his co-workers. Music and pop culture references went over his head, and he was startled to hear women call each other “dude.” When others discussed “shipping a feature” (releasing a product that may need alterations and could be endlessly refined), he was lost. “I felt like maybe the business world, especially the technology part of it, had passed me by and there was no way to catch up.”
fogey at Airbnb,” his father said, “All I’m hearing are your fears. How can you turn your fear into curiosity?” Conley was surprised to realize he’d assumed he couldn’t learn tech lingo and had nothing to offer. “I made the shift,” he says, “to realizing how, instead of being focused on my self-absorbed fear, I could serve and be helpful to these young people and their mission for the company.”

At Airbnb, Conley increasingly thought about a new generational compact in which old and young learn from each other. “I realized I could offer some mentoring,” he says, “while also learning and in essence being mentored by them.” Recalling Conley’s time with Airbnb, CEO Brian Chesky, in the foreword of Wisdom@Work, writes: “He affirmed that we all have a story to share and something to learn from one another. That if we take the time to connect, we can learn anywhere and from anyone. . . . He’ll show you that wisdom has very little to do with age and everything to do with approach.”

Conley’s reflections at Airbnb led both to Wisdom@Work, in which he describes making peace with being an elder, and to the Modern Elder Academy (MEA), the school he founded in Baja California Sur in 2018 to help “people navigate midlife,” according to its website—which also notes that “a positive perspective on aging can add 7.5 years to our lives.” Through group projects, the academy’s weeklong workshops teach people that they can learn at any age.

After 20 years in the shrinking field of publishing, Irene Edwards, former editor in chief at Sunset magazine, says attending MEA “made me open to completely new experiences.” She subsequently sold her Bay Area home and moved her family to Denmark to work in interaction design—a field exploring digital environments and interactive technology such as mixed reality and artificial intelligence. “It’s basically designing the experience of the user,” Edwards explains. “It’s really cutting edge. If you told me that I was going to be working in this field a year ago, I would have laughed.”

Similarly, Joseph Del Hierro, ’83, a film producer formerly with Disney ABC and Walden Media, attended MEA because he found himself sidelined in the youth-obsessed film industry and wanted to do nonprofit work. (He now raises funds and fosters mentorship networks for an organization that helps underprivileged students apply to college.) “You learn that you’re just at the beginning of your new cycle,” he says. “Social media comes down on people of my age group, but we have a lot to offer.” Listening to Conley talk about his own struggle to hear “elder” not as “elderly”—someone in the last years of life—but as a person who is simply older than others and has many years left, Del Hierro revised his own ideas about aging.

“When I was 57,” Conley recalls, “I’d taken some longevity tests that said I would probably live till 98. If I do, I wouldn’t have been even halfway through my adult life. The question I started asking myself was what is it that I wish I’d learned 10 years ago and what are the things I should learn now, so I don’t regret 10 years from now that I didn’t learn it now?”

**PERCEPTIONS OF LIFE STAGES SHIFT as cultures change.** In 1960, French historian Philippe Ariès proposed that “in medieval society, the idea of childhood did not exist,” arguing that children were treated like small adults until, after centuries of social and economic transformation, childhood became a concept in 17th-century family life. Similarly, in 1904, G. Stanley Hall, president of the American Psychological Association, argued that adolescence was becoming a developmental phase thanks to universal education and child labor laws that freed the teenage years of the burdens of adulthood.

More recently, the term middlescence has begun circulating in English, referring to the period of self-doubt and readjustment in midlife. Conley argues that, like adolescence, middlescence should be shaped by education. “If adolescence is the transitional period between childhood and adulthood,” he says, “middlescence is the transitional period between adulthood and elderhood. It is similarly a period where you go through emotional and hormonal changes. But it’s a period where we have zero in the way of schools or tools for people to understand this next period of their life.”

It is precisely this challenge—creating educational opportunities for people later in life—that inspires Phil Pizzo, founding director of Stanford's Distinguished Careers Institute. Born in 1944 in the Bronx and raised in Queens, Pizzo grew up in a family of Sicilian immigrants that imbued him with the value of education. His mother, a homemaker, didn’t finish high school, and his
father stopped in sixth grade; after returning from World War II, he sold women’s coats during the day and spent nights as a cashier at Yonkers Raceway. Pizzo became the first in his family to attend college. After earning his MD, he began a residency at Children’s Hospital Boston, where he had the experience that first made him think about midlife education, though he was only in his 20s.

“I saw incredible people who had invented the fields of pediatric surgery or oncology,” he recalls. “They were more senior people [by then] and were not at the top of their game and were not being treated with the same degree of respect. I found that pretty distressing. I made the decision that I needed to have an alternative career plan so that when I got to that point, I wouldn’t be hanging on.”

Over the following decades, Pizzo served in many roles—leadership positions at the National Cancer Institute, physician-in-chief of Children’s Hospital Boston, chair of pediatrics at Harvard Medical School and dean of the Stanford School of Medicine—but he was also laying the groundwork to retire and do a PhD in history. A long-distance runner, he listened to history books first on a Walkman, carrying multiple cassettes for long runs, then on an iPod and finally on an iPhone. But as 2012 neared—the date he had set for stepping down—he began to question his plan. “That’s when I realized that the social narrative that had guided most careers up until then—you get educated, you work and you retire—was less relevant,” he recalls.

Pizzo found himself thinking about American life expectancy’s increase from 46 years in 1895—when Herbert Hoover graduated from Stanford’s first class—to 79 today. Mindful of the challenges facing aging Americans, he focused back on education, founding the Distinguished Careers Institute, a program that allows people in midlife to attend Stanford for a year.

“It turns out that in healthy longevity, education is one of the single most important determinants,” Pizzo says. “People who’ve had less than a high school education do not do as well compared to those who do. Those who’ve had greater than a high school education have a much more significant likelihood of doing well.”

Likewise, studies show that community interaction increases longevity, while other research has warned of epidemic levels of loneliness—with 47 percent of Americans describing a lack of meaningful relationships. Social isolation, whether from changes in the labor market, economic hardship or other factors, often correlates with drug overdose, suicide and alcohol-related illnesses—the “diseases of despair” responsible for the decrease in life expectancy since 2015.

If this crisis has a solution, it might be in a return to education, says Dianne Millner, who retired from a law career supervising the real estate and economic development units of the Oakland City Attorney’s Office to be a 2018 DCI fellow. At 68, she studied education so she could provide legal and strategic advice to an educational nonprofit. DCI’s impact on her life was “monumental,” she says. “One of the biggest factors was forming a new cohort.”

DCI accepts approximately 40 fellows (including their partners) each year, during which they audit classes and meet frequently to discuss their experiences and goals. Since the challenge of making lasting friendships later in life is often contrasted with the ease of establishing them in college, returning to school at any age offers the possibility of building community while renewing one’s purpose.

If Pizzo’s fears about aging haven’t borne out, it may be precisely because of purpose: his new mission with DCI. “People in their 50s who have a high correlation on the scales of purpose,” he says, “have a significant improvement in all-cause survival.”

In recent years, programs similar to DCI have started up at the University of Texas at Austin and the University of Notre Dame. Though Pizzo envisions a future in which freshmen enter university with classes of midlifers, such programs are expensive. Furthermore, DCI has limited space, and only 217 people have participated since the program’s 2015 launch. However, they, like graduates of MEA, have gone on to be ambassadors for lifelong learning, and Pizzo sees the program as a prototype. Making the model scalable—capable of supporting the educational needs of millions—remains the challenge.

AGING IS A FIELD that Laura Carstensen, professor of psychology and founding director of the Stanford Center on Longevity, likes to say she came to by accident. “I was in a
car accident when I was 21 years old that landed me on an orthopedic ward with 20-plus broken bones for four months.”

While she was on her back, with one leg in traction, the nurses gave her the job of keeping elderly patients up and moving. Her conversations with women changed her views on aging, making her realize that older people aren’t all similar. “I got to see the diversity in their circumstances, attitudes, roles, statuses and places in life,” she says. Simultaneously, she also saw how similar her experience—confined to a bed, requiring help—was to theirs.

“I began to wonder how much of aging is a biological process—and it clearly is a biological process—but how much of that process was being shaped by the social world.”

Until then, Carstensen had shrugged off college despite the hopes of her father, a biophysics professor at the University of Rochester. “It was the ‘70s,” she says. “That’s my only excuse.” But during her convalescence, he offered to tape course lectures. “I picked psychology, and that man went to every single introductory psychology class, and I took my first college course in the hospital, surrounded by old women.”

Over the following decades of research, Carstensen concluded that writing on aging was often reductive and there was little evidence for theories about fixed, biologically determined stages that all people go through. “Part of the problem with stages,” she says, “is that we’re keeping everything up to 60 the same and then saying it’s at 60 that we’ve got more time.”

In her 2011 book, *A Long Bright Future: Happiness, Health, and Financial Security in an Age of Increased Longevity*, she points out that in 2050, there will be a million centenarians in the United States, compared with 80,000 today. With such extended life spans, she argues, tackling extra decades to the end makes less sense than casting off notions of stages and spreading the extra years throughout our lives. “We wouldn’t be doped with too much work, which is what we do now in the middle, or too much education, which is what we do early, or too much leisure at the end.”

Carstensen believes we should integrate leisure, education and work from the beginning. “Let’s make high school six years instead of four,” she says, “and one of those years you volunteer in your community and the other year you work. If you think you might want to be a physician, you work in a hospital.” The result would be healthier, more balanced youths who have a clearer sense of purpose and who learn to create financial security for longer lives.

Such an integration of education and work would also create less age segregation—a problem to which “OK Boomer” could be attributed. Young people working with adults and adults studying with the young could foster understanding. Just as Carstensen adjusted her views on aging as she became friends with older women, Kate Jerome, a children’s book author, publishing executive and 2015 DCI fellow, grasped the frustrations of young people better after having taken classes alongside them. “Opening conversations between generations,” she says, “can only help get rid of stereotypes.”

As for “OK Boomer,” Carstensen sees the conflict behind it from multiple angles. “I don’t want people to judge me based on my age,” she says, “but we really do need to think about what our responsibilities are to other generations.” In her writing on the importance of older generations actively investing in young people, she quotes a Greek proverb: “A society grows great when old men plant trees in whose shade they know they shall never sit.”

**THOUGH THE UNITED STATES** has a long history of adult education—from the Lyceum Movement in the 1800s and Chautauqua assemblies at the turn of the 20th century, to the massive open online courses offered by learning platforms and universities—few existing programs provide community and funding or are tailored to contemporary challenges.

Transforming higher education, Chip Conley believes, may require a government initiative similar to the G.I. Bill, which bankrolled education for veterans after World War II. One opportunity for such an intervention, he argues, lies in the educational crisis predicted by Clayton Christiansen, the Harvard Business School professor who coined the term “disruptive innovation.” In 2018, Christiansen stated that 50 percent of colleges would close over the next decade since their standardized approach was irrelevant in the marketplace. Though critics say his prediction is exaggerated, a number of colleges have shut down in recent years or are struggling financially, and the COVID-19 pandemic could be the final blow to many.

“There are a lot of campuses around the United States that focus their energy on 18- to 22-year-olds, and many of those campuses are not going to make it,” Conley argues, pointing out the obvious opportunity to integrate education for people of all ages and shift the focus to lifelong learning—an experience so in demand that Conley was surprised after starting his academy. “We thought we wouldn’t accept anybody other than people 45 to 65, but almost 25 percent of the people have been younger than 45 or older than 65.”

While boomers might be bellwethers in the social experiment with second acts, the indications are clear that the results will apply to the following generations and that more and more people in those generations will need to revise how society approaches work, education, retirement and aging itself.

Carstensen says, “People sometimes said, ‘Oh yeah, how could that ever work?’ And what I say is, ‘How can this work right now? What we have right now doesn’t work. It’s not working for anybody. So we’ve got to start making some changes.’”

Deni Ellis Béchard is a senior writer at Stanford. Email him at dbechard@stanford.edu.
AT FIRST GLANCE, a description of a 60-mile trek by a father and his son across an unforgiving wilderness on a remote Aleutian island would seem to be a fairly typical account, familiar to readers of adventure nonfiction. Typical save for one small detail—the son in this case was 6 years old.

The depiction of their weeklong sojourn, the goal of which, says the author, was to “initiate a lifetime of shared wilderness adventures,” is punctuated by wildlife sightings, extravagant weather and nightly readings of Charlotte's Web. It is a delightful window into a budding relationship. The boy, Cody, even declares at one point that he wants to use his middle name, Roman—same as his father's name—from then on.

But that trip, and others like it described in later chapters—in Borneo, in Mexico, and in various exotic locations where one might find Bear Grylls on assignment—also set the frame for what will become a torment of self-reproach by Dial when Cody/Roman, at age 27, disappears while on a solo expedition in the Costa Rican jungle.

Most of the book is devoted to the search for Roman, undertaken by Dial and a revolving cast of friends, local volunteers and, finally, hired investigators. It’s a litany of false leads and frustrating dead ends, always shadowed by Dial’s struggle to reconcile feelings of guilt and regret—did his own thirst for adventure inspire his son to put himself in harm’s way?

The setting is Corcovado National Park, a 105,000-acre rain forest preserve along the Pacific coast of Costa Rica that’s considered one of the most biodiverse places on the planet. The mostly untracked park harbors ample dangers—difficult, disorienting terrain and poisonous snakes at every turn, as well as occasionally violent human inhabitants. But it is also a beautiful and edifying cradle of natural wonders. Navigating it becomes a kind of metaphor for safe passage through the emotional trauma that Dial undergoes.

All parents wonder whether their influence has been positive or negative, and in The Adventurer’s Son, Dial’s search for his missing child is also a prayer for forgiveness, an argument with himself about whether he was a good dad. His heart-wrenching discoveries, both literal and metaphysical, conclude an agonizing journey of mind, body and soul.

Together we had spent too many months over too many years in too many countries on too many continents for that to be the son I raised. He was in trouble. I knew.

The Adventurer’s Son: A Memoir, by Roman Dial, PhD ’92; William Morrow.
We Recommend

A Great Escape

**Hollywood Park**
Mikel Jollett, ’96;
Celadon Books.
Child of the Synanon cult, Stanford alum, journalist, and lead singer of the Airborne Toxic Event, Jollett proffers the antidote to boredom.

**The Resisters**
Gish Jen, Gr. ’80; Knopf. Welcome to AutoAmerica, a dystopia that’s strangely familiar and just as unsettling, where too many are born with three strikes against them.

**Camp Girls: Fireside Lessons on Friendship, Courage, and Loyalty**
Iris Krasnow, ’76; Grand Central Publishing. What better time to reminisce about the tippy canoes, sticky songs and sweet freedom of summer camp?

**The Collected Schizophrenias**
Esmé Weijun Wang, ’05; Graywolf Press. Catch a prismatic glimpse into a life fueled by a desire to achieve and colored by, Wang says, “the archetypal disorder of lunacy.”

**Places I’ve Taken My Body**
Molly McCully Brown, ’12; Persea Books. It’s tempting to finish the book in one go, but don’t. This poet’s essays on moving through life with cerebral palsy are worth savoring.
Once, life was a job. Here it’s an art.

Spend your days doing the things you enjoy in gorgeous surroundings. Carmel Valley Manor is the only Life Care community for people age 65+ in Monterey County, and only one of six in all of Northern California. That means there are three levels of health care on site, should you need them, at no additional cost. For information, call Angie Machado, (800) 544-5546 or visit cvmanor.com
FACULTY

**Athena Milatovich Cherry**, of Stanford, February 4, at 60, of lung cancer. She was a professor of pathology and pediatrics. She co-authored more than 100 papers on gene mapping, medical genetics and cestodology. She started her career as a lab technologist, which proved to be invaluable experience for her as director of the Stanford Cytogenetics Laboratory, where she evaluated and diagnosed thousands of cases each year for more than 20 years. She also served as president of the American Board of Medical Genetics and on the boards of the American College of Medical Genetics and the American Cytogenetic Conference. Survivors: her husband, Bradley; and daughter, Jacqueline.

**Bruce Foster Johnston**, MA '50 (economics), PhD '53 (food research), of Portola Valley, Calif., February 1, at 100, after a brief illness. His work for the Army with food rationing and distribution in postwar Japan led to a career in international agricultural development. With NATO, he worked to implement the Marshall Plan. He then returned to Stanford as a faculty member for the Food Research Institute. His career brought him to many parts of the globe and entailed collaboration with the U.N. Food and Agriculture Organization, World Bank, Agency for International Development, and the Ford and Rockefeller Foundations. He also enjoyed skiing, hiking and rooting for Stanford sports teams. He was predeceased by his wife of 67 years, Harriet, and son, Bruce, '58. Survivors: his daughter, Patricia, '76; and two grandchildren.

**1930s**

**Martha Sprague Hurley**, '37 (basic medical sciences), of Palo Alto, January 7, at 104. She was a member of Chi Omega and the track team. She was involved in the life of her children through church activities and social clubs, including PEO and Colonial Dames of America, and especially by passing on to them her love of reading poetry and literature. As a lifelong fan of Stanford football, she made sure to retire near campus. She was predeceased by her husband, Melvin, '37, MD '42, and a grandson. Survivors: her children, Arthur, Nancy van Roesel and Janet Boone; four grandchildren, including Peter van Roesel, MD '07; and five great-grandchildren.

**Nancy Pettigrew Moser**, '37, of Walnut Grove, Calif., January 23, at 104. She met her future husband on a Sierra Club outing, got married and transferred to Stanford for her senior year. The couple moved to the Sacramento River Delta to run a farm and raise their children. She was a charter member of the Courtland Community Methodist Church and a member of the Walnut Grove Community Church. She served her community through the Sacramento River Delta Historical Society, Delta Young Women's Club, and Mary and Martha Knitters, and she received a 50-year pin from La Perita Garden Club. She was predeceased by her husband, Carel, '41, and daughter Laurie Shonerd. Survivors: her children Topper, Russell, '66; Libbey McKendry and Helen Cardenas; 16 grandchildren, including Steven '02, and Julie Murray, '04; 18 great-grandchildren; and sister.

**Raymond Renton Ross, Jr.**, '44 (biological sciences), MD '47, of Santa Ana, Calif., December 21, at 97. He practiced internal medicine from 1957 until 1992. He was an avid tennis player and an active Kiwanian member. He was predeceased by his wife of 53 years, Kay. Survivors: his son, Raymond III; and stepchildren, Janice Jensen, Richard Bate, Karen Courtemanche and Barbara Preston.

**Mary Adeline Richards Culp**, '47 (political science), of San Francisco, January 18, at 93, of peripheral arterial disease. She held numerous community service leadership roles, including director of volunteers at Mt. Zion Hospital, coordinator for Florence Crittenton Services and president of the Volunteer Center of San Francisco. She helped found the San Francisco Interfaith Council and worked with pastors and lay leaders around the Bay Area in her role with the San Francisco Presbytery. The Junior League, PEO, Old First Concerts and Century Club of California also benefited from her talents. She was predeceased by her husband, Frank. Survivors: her sons, Thomas, Fred, James and John; and two grandchildren.

**Florence H. Wickersham “Wicki” McDonald**, '47 (speech and drama), of Newport Beach, Calif., February 26, at 94. She was a member of Kappa Kappa Gamma. She was devoted to helping children with speech therapy and remedial reading, through the International Orphans Organization and through co-founding a chapter of Childhelp USA. In 1974, she pursued her dream of starting a family-style restaurant and later played key roles in two more family-owned restaurants. She was an avid golfer until the age of 90. She was predeceased by her husband of 52 years, Lloyd, '40. Survivors: her sons, Steven, Bruce, '77, and Christopher; and six grandchildren.

**Jean Faults Stohl**, '47 (biological sciences), of Cupertino, Calif., January 12, at 95. She served in the Coast Guard Women’s Active Reserve during World War II. She met her husband at Stanford; raised her family and later embarked on a career as a lab technician at Kaiser Hospital in Santa Clara. She was predeceased by her husband, Bob, '47, and son Eric. Survivors: her sons David, Scott and Jeff Magus.

**Ernest Floyd Latham**, '48 (biological sciences), of San Diego, December 26, at 94, of Parkinson’s disease. He was a member of Theta Chi. He earned his MD from Johns Hopkins and then began service in the Navy, in service in combat zones while attached to the Marine Corps during the Vietnam War; he was awarded the Bronze Star. For his lifelong support of Boy Scout units wherever he stationed, he was awarded the Silver Beaver. In retirement, he provided training, conducted safety inspections and assisted distressed boaters as a member of the Coast Guard Auxiliary. He was also an active Mason and Shriner. He was predeceased by his first wife, Doris (Vivian, '46); second wife, Sandy Hills; third wife, Audrey Finkelson; and fourth wife, Della Wootley. Survivors: his stepchildren, and a niece and nephew.

**1950s**

**Richard Clemens Dice**, '50 (English), of Arroyo Seco, N.M., January 11, at 92. He served in the Navy during World War II. At Stanford, he was in the marching band and met his future wife. He spent his career with First National Bank of Denver, where he became vice president of the trust department. Retirement gave him the opportunity to enjoy gardening, raise sheep and horses, and feed wild birds in his adopted home near Taos. He was also a published author, mountain climber and tango dancer. He was predeceased by his wife of 62 years, Louise (Reyburn, '52). Survivors: his children, Michael, Christopher, Timothy and Kathleen; seven grandchildren; and nine great-grandchildren.

**John Edward Sudden**, '50 (psychology), of Thousand Oaks, Calif., November 16, 2018, at 91, of heart failure. He served in the Navy and was a member of Chi Psi. He worked first for GTE and then for the Ventura County Association for the Retarded. He loved gardening, especially tending to his roses, watching football and travel, but his favorite place was South Lake Tahoe. He was predeceased by his first wife, Virginia, and a grandson. Survivors: his second wife, Millie; children, Lynn Martinelli, Robert and Mark; stepson, Jerry McClain; five grandchildren; two great-grandchildren; and sister.

**Elizabeth Ann Alexander Bennett**, '51 (sociology), of Corralsitos, Calif., January 4, at 91. She earned her master’s degree in clinical psychology from San José State and worked as a school psychologist for more than 25 years in Santa Cruz, Calif. She was also a marriage and family therapist and an educational psychologist in private practice. She earned a second master’s degree and pursued additional graduate coursework at the Pacific Graduate School of Psychology. Her greatest joys were family vacations at Salmon Lake, meeting with friends for birthdays and to support each other’s writing, and helping her clients. She was predeceased by her former husband, Robert, and daughter, Rebecca. Survivors: her sons, Mark, Matthew and Todd; eight grandchildren; eight great-grandchildren; and sister, Frank X. Gordon Jr., '51 (sociology), of Phoenix, January 6, at 90. He was a member of Sigma Alpha Epsilon and the swimming, tennis, crew and golf teams. He earned his JD from the U. of Arizona. After practicing law alongside his father, he was appointed and then elected to the county superior court. In 1975, he was appointed to the Arizona Supreme Court and served as chief justice from 1987 to 1992. After retiring, he joined the firm of Roush, McCracken & Guerrero. Survivors: his wife, Joan; children, Frank III and Candy Lander; three grandchildren; and fourth wife, Della. Survivors: his stepchildren, and a niece and nephew.

**1960s**

**Elizabeth Coffin “Pan” van Löben Sels**, '41 (biological sciences), of Walnut Grove, Calif., February 9, at 101. She met her future husband on a Sierra Club outing, got married and transferred to Stanford for her senior year. The couple moved to the
Aegir Systems and served on the Somis School District Board for 16 years. He was a photographer and woodworker, bred and raced thoroughbred horses, and exhibited oil and acrylic paintings. He was also an avid fan of Stanford football for more than 60 years. His son, Thomas A. Dott Jr., was an assistant professor of economics at Stanford. He was a member of Phi Delta Theta and served in the Army after graduation. He was a member of the Economics Club of Chicago for more than 50 years. He was a member of the San Francisco Symphony Orchestra and served as class correspondent for Stanford magazine. Survivors: his wife of almost 50 years, Barbara; children, Deborah Phadnis and Mike; four grandchildren; and two siblings.

Delight Stacy Kolar Leonard, '53 (sociology), of Portland, Ore., January 5, at 89, of Alzheimer's disease. She was a well-known community activist. She was a member of the university acrobatics troupe. She worked as a mail handler for the Postal Service and an engineering aide for the Santa Clara County Department of Public Works. She loved swimming and diving at Rinconada Park of the Clara County Department of Public Works. He later started and for 23 years helped run a wholesale importing business with his father. On his buying trips, he traveled extensively in Europe and Asia, while retired offered him the chance to visit New Zealand, the Galapagos Islands, India, Alaska, Africa and Patagonia. He gave back to his adopted home of Mendocino by helping to manage its water infrastructure, serving as vice president of the music festival and on the county mental health board, and through the Rotary Club. Survivors: his wife, Mary Ann; children, Pat, Kelly and Paige; 10 grandchildren; and five great-grandchildren.

Roger Alan Schwartz, '53 (international relations), MA '55 (political science), of Mendocino, Calif., December 25, at 88, of metastatic prostate cancer. He spent a year in France as a Fulbright scholar. He later started and for 23 years helped run a wholesale importing business with his father. On his buying trips, he traveled extensively in Europe and Asia, while retired offered him the chance to visit New Zealand, the Galapagos Islands, India, Alaska, Africa and Patagonia. He gave back to his adopted home of Mendocino by helping to manage its water infrastructure, serving as vice president of the music festival and on the county mental health board, and through the Rotary Club. Survivors: his wife, Mary Ann; children, Pat, Kelly and Paige; 10 grandchildren; and five great-grandchildren.

Dorothy Elaine Spratt, '53 (geography), of Los Angeles, February 28, at 88. She played in the symphony orchestra. After graduation, she spent her career in real estate. She enjoyed horseback riding and playing both the piano and violin. She was an avid tennis player and also loved tending her garden. Survivors: her sister, Dorothy; and two grandchildren.

Betty Jane Armstrong Dole, '54 (political science), of Palo Alto, May 4, 2018, at 85, of Alzheimer's disease. She was a translator for the State Department in Peru before returning to Palo Alto to marry a fellow student. She recorded testimony from tech giants, mobsters and civil rights leaders. She was a member of the Women of Good Samaritan Hospital and a Junior League member, Junior League president, chair of the Board of Directors of the Junior League of Palo Alto, May 4, 2018, at 85, of Alzheimer's disease. She married his university acrobatics troupe. He worked as a mail handler for the Postal Service and an engineering aide for the Santa Clara County Department of Public Works. She loved swimming and diving at Rinconada Park of the Clara County Department of Public Works. He later started and for 23 years helped run a wholesale importing business with his father. On his buying trips, he traveled extensively in Europe and Asia, while retired offered him the chance to visit New Zealand, the Galapagos Islands, India, Alaska, Africa and Patagonia. He gave back to his adopted home of Mendocino by helping to manage its water infrastructure, serving as vice president of the music festival and on the county mental health board, and through the Rotary Club. Survivors: his wife, Mary Ann; children, Pat, Kelly and Paige; 10 grandchildren; and five great-grandchildren.

Harriet Louise Ritchie Nard Rivers, '54, of Modesto, Calif., January 14, at 87. She completed her degree at Stanislaus State and worked as an accountant for the Yosemite Area Boy Scout and the Muir Trail Girl Scout Councils. She gave volunteer service to Babe Ruth Baseball, Memorial Hospital, the Center for Senior Employment and other organizations. She was also treasurer for Saron Lutheran Church in Escalon, Calif., and an avid player of tennis and bridge. She was predeceased by her first husband, Robert Nard, and second husband, John Rivers. Survivors: her children, Dennis Nard, Nancy Morgan, James Nard, Lisa Ryan, Brenda Nard, '82, MA '83, Celia Harris and Maureen Nard; stepchildren, Susan Engstrom and Barbara Rivers; 10 grandchildren; and seven great-grandchildren.

Martin Adelbert “Marty” Spelman, '54 (basic medical sciences), MD '57, of Fremont, Calif., February 10, at 87. He was a member of Delta Kappa Psi. He served two years in the Army, finished his degree and then earned his JD from UC Berkeley. He spent his legal career with Dowd, LeBeau & Woods. His true passions were organizing sports for the neighborhood kids, jazz, singing in the Berkeley Community Chorus and leading trips to the Sierra Nevada. Survivors: his wife of 56 years, Heidi; sons, Donald and Robert; and sister, Kim Ernest Linnett Sr., '56, MS '57 (mechanical engineering), of Palos Verdes Estates, Calif., January 31, at 85, of Alzheimer's disease. He married his university acrobat and worked as a mail handler for the Postal Service and an engineering aide for the Santa Clara County Department of Public Works. He loved swimming and diving at Rinconada Park of the Clara County Department of Public Works. He later started and for 23 years helped run a wholesale importing business with his father. On his buying trips, he traveled extensively in Europe and Asia, while retired offered him the chance to visit New Zealand, the Galapagos Islands, India, Alaska, Africa and Patagonia. He gave back to his adopted home of Mendocino by helping to manage its water infrastructure, serving as vice president of the music festival and on the county mental health board, and through the Rotary Club. Survivors: his wife, Mary Ann; children, Pat, Kelly and Paige; 10 grandchildren; and five great-grandchildren.

Bruce D. Gillies, '56 (economics), of Berkeley, November 25, at 84. He was a member of Phi Kappa Psi. He served two years in the Army, finished his degree and then earned his JD from UC Berkeley. He spent his legal career with Dowd, LeBeau & Woods. His true passions were organizing sports for the neighborhood kids, jazz, singing in the Berkeley Community Chorus and leading trips to the Sierra Nevada. Survivors: his wife of 56 years, Heidi; sons, Donald and Robert; and sister, Kim Ernest Linnett Sr., '56, MS '57 (mechanical engineering), of Palos Verdes Estates, Calif., January 31, at 85, of Alzheimer's disease. He married his university acrobat and worked as a mail handler for the Postal Service and an engineering aide for the Santa Clara County Department of Public Works. He loved swimming and diving at Rinconada Park of the Clara County Department of Public Works. He later started and for 23 years helped run a wholesale importing business with his father. On his buying trips, he traveled extensively in Europe and Asia, while retired offered him the chance to visit New Zealand, the Galapagos Islands, India, Alaska, Africa and Patagonia. He gave back to his adopted home of Mendocino by helping to manage its water infrastructure, serving as vice president of the music festival and on the county mental health board, and through the Rotary Club. Survivors: his wife, Mary Ann; children, Pat, Kelly and Paige; 10 grandchildren; and five great-grandchildren.

Richard Maurice Codiga, '58 (mechanical engineering), of Carlsbad, Calif., November 10, at 82. He was a member of Tau Beta Pi. His career as a microwave telecommunications engineer spanned more than 40 years in the Santa Clara Valley. Survivors: his wife of 61 years, Nancy; children, Laura Codiga-Edwards, Douglas and Daniel; and brother, Bill, JD '56.

Anne Eastham Lewis, '58 (Spanish), of Carmel Valley, Calif., December 14, at 83, of progressive dementia. She was a member of the golf, tennis, club skiing teams, and the Texas and spirit clubs. She raised her blended family in Atherton, Calif., and Houston and was active in Peninsula Volunteers and Junior League. She earned a master's degree from the Church Divinity School of the Pacific and served church communities in Sun Valley, Idaho, and on the North Shore of Kauai. She was predeceased by her second husband, John Lewis, and son Steven. Survivors: her first husband, John Neff, '56, MS '63; children Linda Neff Sunde, '84;
Legal Pioneer, Scholar, and Mentor

A trailblazer for women in the legal profession and the first female tenured faculty member at Stanford Law School, Barbara Babcock was a charismatic campus presence who inspired students, defended the indigent and promoted gender justice.

Barbara Allen Babcock, the Judge John Crown Professor of Law, Emerita, died of cancer on April 18 at her Stanford home. She was 81. Encouraged by her lawyer father, whom she recalled as “a real Arkansas storyteller,” Babcock graduated Phi Beta Kappa from the University of Pennsylvania and was just one of 13 women in her class of 175 students at Yale Law School. In 1963, the year she earned her JD, the U.S. Supreme Court ruled in *Gideon v. Wainwright* that states must provide attorneys to criminal defendants who could not afford one—and Babcock’s career was set in motion. By 1968, she was director of a pilot project in Washington, D.C., that she renamed the Public Defender Service. “We became a great agency and designed the best practices for public defense,” she told *Stanford Lawyer* in 2016. Georgetown University law students served as volunteers, and they prevailed on Babcock to teach a Women in Law course, one of the first in the country. Recruited to Stanford in 1972, she helped found a San Francisco public interest law firm, Equal Rights Advocates, to promote gender equality. She took a leave when President Jimmy Carter appointed her to be the assistant attorney general in charge of the Justice Department’s civil division, tasked with increasing the number of women and minorities on the federal bench. She would later say of that time, writing for the Women’s Legal History blog: “I was often asked what it felt like to get my job because I was a woman.’ I developed a stock answer: ‘It’s far better than not getting it because I’m a woman.’”

She also pursued the lost history of California’s first female lawyer—like Babcock, an inventor of the public defender’s role and a leader of the women’s movement. Celebrated in the late 19th century as a legal reformer and public intellectual, Clara Foltz had been all but forgotten until Babcock made it her life’s work to return her to public prominence. She retired from teaching to devote herself to the project, which resulted in the critically acclaimed 2011 book *Woman Lawyer: The Trials of Clara Foltz.* “It was a labor of love for her to spend years writing the life of another special woman . . . and to restore Clara to her proper role in legal history,” Lawrence Friedman, Marion Rice Kirkwood Professor of Law, told *Stanford Lawyer* in April. “A century apart, two women pioneers.”

Babcock left a legacy of scholarship, leadership, feminism, and the enduring admiration of students and colleagues. In an email the week after Babcock’s death, Justice Ruth Bader Ginsburg credited her with “support for my nomination to the U.S. Court of Appeals for the D.C. Circuit in 1980 and, 13 years later, to the Supreme Court, [that] was constant and influential.”

Beyond that, Ginsburg added, “she had a zest for life that made it a delight to be in her company.” Babcock delivered the annual Justice Ruth Bader Ginsburg Distinguished Lecture on Women and the Law in 2018.

Others appreciated Babcock’s verve and inspiration. California Supreme Court Justice Mariano-Florentino Cuéllar, MA ’96, PhD ’01, noted her encouragement when he, a freshly hired law professor in the early 2000s, proposed a research project at a faculty meeting. “The paper was nice, very nice,” I recall her saying. ‘But you know what better? That you got up there and said to folks: This is what I’m about! This is what I’m interested in and why I have something to say about it.” Cuéllar adds: “Nothing made me feel more confident that I belonged than Barbara’s mix of warmth and wisdom.”

In 1979, Deborah Rhode became Stanford Law School’s third female professor (the second, Carol Rose, Gr. ’77, taught there from 1978 to 1980). There were 36 men on the faculty, and women in the law were so rare, Rhode says, that she and Babcock were widely perceived as the same person by their colleagues. “One thing that struck me as odd was how often I was mistaken for Barbara Babcock. I mean, she was tall and brunette,” Rhode, who is blonde and shorter, recounted in a 2017 interview. Both felt so isolated, Rhode said, that they circulated a memo asking the faculty to perform a thought experiment: What if you were the only woman teaching at the law school? “It was like a feather falling into a well,” Rhode said. “It became known as the ‘Barbara and Deb need a friend’ memo. That somewhat missed the point, though it was true.”

As an educator, Babcock was immediately embraced and admired by her students who, in 1981, honored her with the John Bingham Hurlbut Award for Excellence in Teaching. She would win the award three more times.

Judge Michelle Friedland, ’94, JD ’00, of the 9th U.S. Circuit Court of Appeals, recalls Babcock greeting her class with encouraging words to this effect: “You belong here. You have everything it takes to succeed here, and we are here to support you and cheer you on as you do.” Friedland adds, “Her speech caused the entire [first-year] class in the audience to breathe a sigh of relief. And she set a tone of friendship rather than competition that continued through our law school years. I often felt like she was my law school fairy godmother.”

In her 2016 autobiography, *Fish Raincoats: A Woman Lawyer’s Life*, Babcock describes a fourth-grade contest when she blurted out “raincoats” in response to a question asking what, besides food, Indians use fish for. Laughter erupted (the answer was fertilizer), and she lost the contest. “I had failed spectacularly,” she writes, but at Stanford she would share the anecdote as a tale of childish exuberance—until Professor Pamela Karlan visited a museum and spotted a 1910 Yu’pik Indian *gasperrluk*, a fish-skin raincoat. “You have been vindicated!” Karlan emailed her colleague. The story encapsulated Babcock’s self-deprecating wit—and her lifelong tendency to be right.

Babcock is survived by her husband of 41 years, Thomas Grey, ’63, the Nelson Bowman Swetizer and Marie B. Swetizer Professor of Law, Emeritus; stepdaughter, Rebecca Grey, JD ’96; granddaughter; two brothers; and first husband, Addison Bowman.
cancer. She worked for the California State Legislature, in educational publishing and import/export. After marrying (and learning to pilot a Cessna during her honeymoon), she was active in town government and served a term as Portola Valley mayor. In her later career, she held positions at multiple Silicon Valley software startups. She also made an appearance on the TV quiz show Jeopardy.

She enjoyed tennis, paddle tennis, bridge and golf. Survivors: her husband, Tim; Gr. ’82; sons, Paul, John and Mike; granddaughter; and two siblings. 

John I. “Jack” Yellott Jr., ’60 (political science), MA ’61 (sociology), PhD ’66 (psychology), of Laguna Beach, Calif., December 4, at 81. He was a member of Phi Kappa Psi. He was professor emeritus of UC Irvine’s department of cognitive sciences, which he helped found. He taught previously at the U. of Minnesota and was a visiting member of Princeton’s Institute for Advanced Study. He was a popular teacher of mathematical psychology, and continued his research in mathematics and vision sciences until last year. Survivors: his wife, Dorothea (Geary, ’60); children, Carolyn Yellott Darlington and John; two grandchildren; and sister.

Marvin Gary Dickson, ’61 (history), of Edinburgh, Scotland, February 25, at 81, of Alzheimer’s disease. He was a Woodrow Wilson fellow at Yale, then earned his PhD at the U. of Edinburgh. As a medieval historian, he published numerous journal articles and two books on the Children’s Crusade and charismatic movements. He was a fellow of the Royal Historical Society and a member of Princeton’s Institute for Advanced Study. He was predeceased by his wife of 45 years, Margaret. Survivors: his daughters, Sarah Brengman and Rachel; and two granddaughters.

Raymond C. Fisher, ’61, LLB ’66, of Sherman Oaks, Calif, February 29, at 80. He finished his undergraduate degree at UC Santa Barbara before returning to Stanford for his law degree. He clerked for Justice William Brennan Jr., was in private practice for 30 years and served as president of the Los Angeles Police Commission and Constitutional Rights Foundation. He was appointed to the 9th U.S. Circuit Court of Appeals in 1999. His decisions touched on right of the press to observe executions, the use of cigarette tax money for anti-smoking ads, employment discrimination based on HIV status and the secrecy of the government’s no-fly list. Survivors: his wife of 59 years, Nancy; children, Jeff and Amy; and four grandchildren.

James Clair Flood, ’61 (political science), of San Francisco, February 18, at 80, of heart failure. He was a member of Theta Chi and ROTC. After serving in Army intelligence, he began a banking career with Wells Fargo. He later joined the family business. In this capacity he managed and oversaw the restoration of the Flood Building in San Francisco. The mountains and rivers of northwest Wyoming became a second home for him. One of his favorite accomplishments was sponsoring the Grand Teton with his daughters. In the week before his death, he went horseback riding and duck hunting, and he skied in Jackson Hole the day he died. Survivors: his wife of 54 years, Astrid; daughters, Christina Flood Kane, Lisa, and Karin; seven grandchildren; and three siblings.

John Ritchie “Jack” Lane, ’61, of Seattle, December 15, at 80, of cancer. He was a member of Phi Delta Theta and the golf team. He finished his degree at the U. of Washington and stayed for an MD. During 30 years of practice in obstetrics and gynecology, he delivered around 5,000 babies. Retirement allowed him to re dedicate himself to golf as a senior amateur player and as board president of the Pacific Northwest Golf Association. He also served in leadership roles for Big Brothers of Seattle and Northwest Forum.

Survivors: his wife, Yvonne; children, Lisa Stewart, Heidi, Michael, Jason and Laura; stepchildren, Mary Simpson, Taylor Everett and Paige Porter; 10 grandchildren; and sister.

Robert Stanton Niccolls Jr., ’61 (mechanical engineering), of Meridian, Idaho, December 31, at 79, after a long illness. He was active as an expert witness in preparations and historic preservation of the Flood Building in San Francisco. He was also an assistant professor at Auburn U. and research manager of the American Society of Civil Engineers (ASCE). He served as president of the Oregon section of ASCE and the Society of Architects and Engineers. Survivors: his wife of 55 years, Connie (Tilton, ’62); children, Julie and Berkeley, two grandchildren; and three brothers.

Lee James Sneller, ’63 (industrial engineering), of Long Beach, Calif., December 31, at 79, after a long illness. She enjoyed tennis, paddle tennis, bridge and golf. Survivors: her husband, Tim, Gr. ’82; sons, Paul, John and Mike; granddaughter; and two siblings.

Ronald S. David, ’62 (psychology), MD ’67, of Tucson, Ariz., February 10, at 80. After Army service, he pursued training in psychiatry in New York. He was director of outpatient services at a mental health center in the East Bronx, N.Y., and then in Tucson. He also was the director or managing partner of several private practice groups and was a clinical associate professor of psychiatry at the U. of Arizona for 30 years. He was awarded the position of Life Distinguished Fellow of the American Psychiatric Association and served on the board of the Borderlands Theater in Tucson. Survivors: his partner, Madeleine; children, Diana and Sam; five grandchildren; two stepchildren, Sophie and Stephan; and three stepgrandchildren.

Carter H. Harrison Jr., ’62 (petroleum engineering), MS ’64, Engr. ’66 (civil engineering), of Tucson, Ariz., January 2, at 83, from Parkinson’s disease. He served in the Army. At Stanford, he was head usher at Memorial Auditorium. He was a consultant for water projects throughout the Northwest. He was also an assistant professor at Auburn U. and research manager of the American Society of Civil Engineers (ASCE). He served as president of the Oregon section of ASCE and the Society of Architects and Engineers. Survivors: his wife of 55 years, Connie (Tilton, ’62); children, Julie and Berkeley, two grandchildren; and three brothers.

John Roemer

Spiritual Leader Who Popularized Psychedelics

Before transforming himself into the counter-cultural guru known as Ram Dass, author of the bestselling Be Here Now, Richard Alpert was a psychology grad student exploring achievement anxiety in academia.

Baba Ram Dass, formerly known as Richard Alpert, PhD ’57, died December 22 at his home on Maui, Hawaii. He was 88. In 1997, he suffered a cerebral hemorrhage that left him in a wheelchair and unable to talk, but he learned to “surf the silence,” he said. He eventually regained some ability to speak.

Born in Boston, Alpert majored in psychology at Tufts University, and he pursued a master’s degree at Wesleyan University but failed the oral exam. Nonetheless, he was accepted to the PhD program at Stanford, where he and Ralph Norman Haber, PhD ’57, chose to study the impact of anxiety on students’ academic achievements. Alpert turned the inquiry into his doctoral thesis.

So did Haber, separately. Professor Robert Sears, then chair of the psychology department, “told us we had probably produced the first joint PhD dissertation in Stanford’s history,” Haber says.

Alpert and Haber applied to the National Science Foundation for a grant to expand their theories through experiments. The proposal was accepted, Sears supervised their research, and their work was published in 1960 in the Journal of Abnormal and Social Psychology.

Alpert was hired to teach at Harvard, where he met Timothy Leary and famously embarked on the psychedelic drug experiments that would lead to their dismissal in 1963. It was also at Harvard that Alpert reconnected with a Stanford pal, Elliot Aronson, PhD ’59, an expert in experimental methodology. Alpert and Leary consulted Aronson on a study of psilocybin (aka magic mushrooms) and rejected his suggestion for making the study rigorously controlled.

“They ignored the precautions I recommended, and the next thing you knew, Richard Nixon was calling Tim the most dangerous man in America,” Aronson says.

He continues: “I knew Richard in all his three incarnations: the hard-driving young academic who’d have killed to get tenure at Harvard, the door opener to the Age of Aquarius, and the lifelong spiritual leader.” Alpert, he says, returned from a years-long trip to India transmuted into Baba Ram Dass. “He sought to expand people’s consciousness without the aid of chemicals. He did an awful lot of good in the world.”

Dass, who described himself as primarily homosexual in a 1997 interview with the website Gay Today, reportedly had an affair with a female graduate student at Stanford that produced a son. Peter Reichard, whom Alpert learned about in 2010. His survivors also include a granddaughter.

—John Roemer
struggle with Alzheimer’s disease. He was a member of Delta Chi. He earned an MBA from Cal State LA in 1968 and was a manufacturing executive at several companies, starting with Mattel. He met his wife while working there in 1963. After his Alzheimer’s diagnosis, she took him to meet several educators to educate others about the disease. He was an avid supporter of the Alzheimer’s Association and rode on the organization’s Rose Parade float in 2011. Survivors: his wife, Pat; children, Traci, Jeffrey, ’92, MS ‘92, and Todd; and seven grandchildren.

**Robert Vincent Violante,** 63 (basic medical sciences), MD ’66, of Palo Alto, February 25, at 80. As an Army physician, he was based in Bangkok for three years, and he returned often to Thailand throughout his life. He managed emergency departments at the Santa Clara Valley Medical Center and other Bay Area hospitals and helped build medical institutions in Santa Clara County. He enjoyed skiing, sailing, swimming, fly-fishing and sports cars. He was also a fan of Stanford athletics and gave guest lectures on emergency medicine for the School of Medicine. He was predeceased by his wife Barbara. Survivors: his wife Lauren Weissman; children, George, Gina Haynes, Tida, Suzanne Lyon and Cristina; stepdaughter, Danika Kohler; 12 grandchildren; and sister.

**Graham Gilmer III,** 64 (biological sciences), of Lynchburg, Va., January 17, of cancer. He was a member of the track team and Sigma Chi. He earned his MD from the U. of Maryland, served in the Marine Corps as a flight surgeon and then completed his ENT residency in San Diego. He practiced medicine for 41 years in Lynchburg. He served his community through Meals on Wheels, Habitat for Humanity, and the Lynchburg Tree Stewards and was an elder at First Presbyterian Church. His interests ranged from photography, borsalino and woodworking to birding, duplicate bridge and golf. Survivors: his wife of 50 years, Helen; sons, Christopher, Drew and Graham IV, ’05; eight grandchildren; and three siblings.

**Charles Bryan Burton,** 65 (political science), of Phoenix, February 17, at 76, after a short illness. He was a member of Kappa Sigma. He earned his JD from Duke U. and then returned to his hometown of Phoenix. He founded Burton & Leather & Associates and enjoyed a legal career lasting nearly 40 years. Retirement gave him the opportunity to focus on golf, watching sports and supporting his beloved Stanford Cardinal teams. Survivors: his children, Elizabeth and Bryan; and three grandchildren.

**Robert S. Rosch,** 65 (history), JD ’68, of Bear, Del., July 20, at 76, of ALS. He was predeceased by his first wife, Anne (Selby, ’66, MA ’69, PhD ’71). Survivors: his wife, Phyllis; and daughters, Stephanie and Caroline.

**Lawrence Gordon Tesler,** 65 (mathematics), of Portola Valley, Calif., February 17, at 74. As a student, he was hired to write software for various university departments and set up a successful consulting company. During the 1970s, he worked at Xerox’s Palo Alto Research Center in California, which produced many breakthroughs in computer technology. He went on to work for several leading tech companies, including Xerox, Apple, Amnon and Yahoo, devoting his career to making computers practical, affordable and easy to use. His best-known innovation was the “cut, copy and paste” command, which was incorporated into Apple’s Lisa computer in 1983 and is now an elemental feature of all electronic devices. Survivors: his second wife, Colleen Barton, PhD ’88; daughter, Lisa; and two brothers.

**Harry McDougal Parker,** 67 (geology), MS ’74 (statistics), PhD ’75 (geology) of Reno, Nev., December 19, at 73, of melanoma. He developed the use of conditional probability distributions to forecast recoverable resources, an approach still used in the mining industry. His career, first with Hanna Mining and then Fluor before he co-founded Mural Resources, took him to 17 states, eight Canadian provinces and 35 countries outside North America. He served extensively in administrative roles for the Society for Mining, Metallurgy and Exploration, and his work was recognized with numerous awards from professional bodies. He also pursued interests in trilobites, food and wine and Porsches. Survivors: his wife of nearly 51 years, Susan; children, Meg and Winthrop; six granddaughters; and sister.

**Douglas Alden Karlson,** 69, MS ’75 (mechanical engineering), of Palo Alto, January 1, at 71. He was a member of Chi Psi and the crew team. He spent his career as a manufacturing and supply chain manager in the Bay Area. He found joy in nature and the outdoors, in the Bay Area’s food and wine culture, in travel to Europe and Asia, and in the community at Stanford Memorial Church. He reconnected with the sport of rowing later in life through the Island Aquatic Center in Redwood City, where he served on a board member, president and treasurer. He was predeceased by his wife of 41 years, Rebecca. Survivors: his partner, Nanad Raycliffe; and children, Sarah and Doug.

**1970s**

**James Edward Duignan,** 71 (general engineering), of Redwood City, February 9, at 77. He served in the Navy during the Vietnam War. He worked on the construction of the Trans-Alaska Pipeline and enjoyed a long career as a heavy equipment mechanician and welder for Peterson Tractor, Caterpillar, Fisk Firenze and McLean, and he retired from the San Mateo Department of Public Works. He was also a coach, referee and regional director for AYSO Soccer, sang in local church choirs, played acoustic guitar, baked bread, won chili cook-offs and built everything from coffee tables to industrial-size BBQ grills. Survivors: his wife, Sue; children, Nellie Mikulin and Paddy; two grandsons; and two siblings.

**Timothy Bell Moyer,** ’72, MA ’74 (economics), of Califon, N.J., February 2, at 69. He was a member of Delta Upsilon and the club lacrosse team. After earning his MBA at Harvard, he had an extensive banking career with Salomon Brothers, Day & Night and Société Générale. After 9/11, he joined the FBI’s newly formed financial counter-terrorism unit, where he worked until his passing. He pursued broad interests in world travel, French and history, but he especially loved the peace and quiet of the woods surrounding his home. Survivors: his wife, Wilhelmina; children, Lindsay Stempniak and Timothy Jr.; four grandchildren; and three siblings.

**1980s**

**Marianne Miller Boyle,** ’85 (economics), of San Francisco, January 27, at 56, after a long struggle with metastatic breast cancer. She was a member of the crew team and Kappa Alpha Theta. Survivors: her husband of 34 years, Albert, ’92; sons, Evan, Thomas, ’12, and Trevor; and grandson.

**1990s**

**Scott Wallace Pearson,** ’91 (political science), of Alameda, Calif., January 25, at 50, of hyperten- sion. He was a member of Alpha Delta Phi and the marching band. He worked as a project manager for several computer game start-ups. He was devoted to his sons and enjoyed playing sports with them, especially golf, skiing, baseball and soccer. Survivors: his sons, David and Adam; parents, Mark and Kathy; former spouse, Kim Cusato; and sister, Willow, ’92.

**BUSINESS**

**Raymond Hawkins Sheen,** MBA ’57, of Thousand Oaks, Calif., February 5, at 96. He served for 26 years in the Navy and retired at the rank of commander. He then started a second career at RAND Corp. in Santa Monica. He retired in 1978 as head of the facilities and services department. To fellow parishioners at the United Methodist Church in Thousand Oaks, he was known as the “friendliest man at church.” In retirement, he dedicated his time to visiting the sick and elderly and also found time for travel. He was predeceased by first wife, Marion Bell, and second wife, Ruth Evans. Survivors: his third wife, Lois Olson Thorngren Sheen; daughters, Nancy Pasquarelli, Carolyn and Pam; six grandchildren; and two great-grandsons.

**Richard Whitehead,** MBA ’66, of Brookhaven, Ga., February 4, at 82, of Lewy body dementia. In 1983, he founded the National Association of Personal Financial Advisors, and he was a principal of several Atlanta financial advisory firms for more than 30 years. He was an avid reader of nonfiction and a fan of Atlanta sports teams. Survivors: his wife of 55 years, Karen; sons, KC and Jeff; and five grandchildren.

**ENGINEERING**

**Rune Evert,** MS ’66 (aeronautical and astronomical engineering), of Solvang, Calif., November 20, at 93. He came from Sweden to work in aviation, advanced his career with his engineering degree from Stanford and later added an MBA from UCLA. He developed and operated satellite space launch systems in engineering and management positions at several aerospace companies, including Lockheed Martin and Hughes Aircraft. He was also a visiting engineer at the Aeronautical Research Institute of Sweden. In retirement he enjoyed building his dream home in Solvang, traveling with the Stanford Alumni group and keeping two Volvos perfectly maintained. He was predeceased by his wife of 56 years, Anne-Marie Johansson.

**William Eric “Bill” Drummond,** MS ’67, PhD ’71 (electrical engineering), of Cupertino, Calif., January 17, at 77, of bladder cancer. At Nuclear Semiconductor Inc. (later Spectrance) in Menlo Park, he developed semiconductor devices for measuring X-ray spectra. Over his 34-year career, he rose to the position of general manager and helped make the company a leader in its field. He loved traveling the world, collecting stamps, and being with family and friends in Solvang, Calif., where he especially loved the peace and quiet of the woods surrounding his home. Survivors: his wife, Wilhelmina; children, Lindsay Stempniak and Timothy Jr.; four grandchildren; and three siblings, including James, JD ’72.

**Alfred Rew Yarrington,** Gr. ’69 (electrical engineering), of Venice, Fla., January 1, at 83, of a blood clot. He served in the Army. In addition to his engineering degree, he earned a JD from Lincoln Law School in San Francisco. He married and had two degrees in his career as an international contracts attorney in the defense industry. Survivors: his wife of 50 years, Rita; children, Julia and Albert; stepson, Russell Jones; seven grandchildren; and sister.
Kevin William Hannan, MS '79 (electrical engineering), of Tacoma, Wash., January 3, at 63. He had a 30-year career with Boeing and retired in 2011. Survivors: his sister.

HUMANITIES AND SCIENCES
Vladimir Joseph Kovalik, MA '53 (economics), of Monterey, Calif., February 15, at 91. He was a member of the Alpineers Club. Born in Slovakia, he became a member of the Czech national hockey team and carried the flag at the 1948 Olympics. But he was soon arrested for anti-communist activity and put on a train bound for Siberia. He escaped, met his future wife in a displaced persons camp and came to the United States. After earning his master’s degree, he took a position at the Stanford Research Institute. Together with his wife, he published several books on oceanography. He was predeceased by his former wife, Nada (Skidmore, '47), Survivors: his children, Kim, Kyle and Karen.

Thomas William White, MA '65 (Latin American studies), of Houston, November 24, of cholangiocarcinoma. He studied in Brazil as a Fulbright scholar prior to graduate study. Later, he served in Army intelligence in Vietnam and was awarded a Bronze Star. In his civilian career, he worked in banking, savings and loan, and the oil industry. He served on the board of the Stanford Club of Houston for more than 20 years. He especially enjoyed being part of the Houston chapter of the Larry Dierker Society for Baseball Research. Survivors: his wife of 57 years, Linda (Harrison, '63); children, Terry and Marisa; and five grandchildren.

Russell Glenn Allen, JD '71, of Newport Beach, Calif., January 19, at 73. He served as a judge advocate at Norton Air Force Base for four years, then joined O'Melveny and Myers, specializing in wills and trusts. After 32 years, he left the firm and worked for JP Morgan Chase before opening his own private practice in Corona del Mar, Calif. Survivors: his wife, Joan; daughters, Samantha Allen Ochoa, ‘91, Theresa, Rebecca and Deborah; and two grandsons.

Klaatri Robbins Boiges Grigg, JD '71, of San Francisco, February 15, at 74, of frontotemporal dementia. After initially working in the Wells Fargo Bank legal department, she switched to a career in nonprofit leadership. She served on the board of directors of San Francisco Children’s Hospital, later the California Pacific Medical Center. She was also a founding trustee and board member and chair for San Francisco Day School. She performed additional board service for Breakthrough Collaborative, Chanticleer and the American Conservatory Theater. She was predeceased by her son Jeffrey. Survivors: her husband of 48 years, Douglas; son Eliot; five grandchildren; and brother. Cynthia Ann Vroom, JD '87, of San Jose, November 27, at 70, of cancer. She earned a PhD in French literature from UCLA before earning a law degree. She worked at several law firms but found her dream job as legal counsel for the University of California. Her primary areas of practice included employment litigation, First Amendment issues and academic personnel issues. She was a visiting professor at the University of Aix-Marseille and once had the opportunity to translate for Chief Justice William Rehnquist. She was fluent in Italian and an avid fan of college sports. Survivors: her brothers, Scott, Barry and Brad.

LAW
Charles Lawrence Swezey, LLB '48, of Palo Alto, February 10, at 96, of heart failure. He served in the Army and attended law school on the GI Bill. As an attorney, he specialized in workers’ compensation law, and he had particular impact through public service. He was president of the Palo Alto Fair Play Council and served on the Larry Dierker Society for Baseball Research. Survivors: his wife, Betty Ann; his children, Tim West, Kirk, Charles, Thomas Jr.; 10 grandchildren; and two sisters.

Russell Glenn Allen, JD '71, of Newport Beach, Calif., January 19, at 73. He served as a judge advocate at Norton Air Force Base for four years, then joined O’Melveny and Myers, specializing in wills and trusts. After 32 years, he left the firm and worked for JP Morgan Chase before opening his own private practice in Corona del Mar, Calif. Survivors: his wife, Joan; daughters, Samantha Allen Ochoa, ‘91, Theresa, Rebecca and Deborah; and two grandsons.

Klaatri Robbins Boiges Grigg, JD '71, of San Francisco, February 15, at 74, of frontotemporal dementia. After initially working in the Wells Fargo Bank legal department, she switched to a career in nonprofit leadership. She served on the board of directors of San Francisco Children’s Hospital, later the California Pacific Medical Center. She was also a founding trustee and board member and chair for San Francisco Day School. She performed additional board service for Breakthrough Collaborative, Chanticleer and the American Conservatory Theater. She was predeceased by her son Jeffrey. Survivors: her husband of 48 years, Douglas; son Eliot; five grandchildren; and brother. Cynthia Ann Vroom, JD '87, of San Jose, November 27, at 70, of cancer. She earned a PhD in French literature from UCLA before earning a law degree. She worked at several law firms but found her dream job as legal counsel for the University of California. Her primary areas of practice included employment litigation, First Amendment issues and academic personnel issues. She was a visiting professor at the University of Aix-Marseille and once had the opportunity to translate for Chief Justice William Rehnquist. She was fluent in Italian and an avid fan of college sports. Survivors: her brothers, Scott, Barry and Brad.

MEDICINE
Michio “Mitch” Takahashi, MD ’58, of Walnut Creek, Calif., September 22, at 86. He interned and did his residency in internal medicine with the U.S. Public Health Service, first in Seattle and then in San Francisco. In 1965, he joined Kaiser Permanente in Walnut Creek. He was later chief of internal medicine at Kaiser Permanente in Pleasanton and physician in charge at Kaiser Park Shadefields. His favorite pastimes were playing golf with his wife and friends, supporting the Stanford women’s basketball team and playing the ukulele. He was a self-appointed class photographer and attended every Stanford reunion with camera in hand. But his greatest joy was his granddaughter. Survivors: his wife of 57 years, Millie; daughters, Sandy Takahashi Sirai, MBA ’89, and Sherry; granddaughter; and three siblings.

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

Please let us know. Simply fill out our online form: https://stanfordmag.org/obituary

Or send the information to:
Stanford magazine
Frances C. Arrillaga Alumni Center
320 Galvez St.
Stanford, CA 94305-6105
Attn: Obituaries
REAL ESTATE


INDIANAPOLIS REAL estate and homes for sale - www.reddoorindy.com

HONOLULU, HAWAII. Choi International. www.ChoiRealty.com. Cedric Choi, JD, R’70 (808) 285-2486 or cedric@choirealty.com, RB-22512

SELLING CONDOS to Castles and Lots in between, on the Peninsula and around the campus. Deanna Tarr and Jennifer Pollock, Compass. (415) 999-1232 or (650) 867-0609


ESTES PARK, Colorado. 3/3½/2 near RMNP, YMCA of the Rockies. Nimbusvacationhome.com


VACATION

COLORADO

ESTES PARK. Colorado. 3/3½/2 near RMNP, YMCA of the Rockies. Nimbusvacationhome.com

HAWAII


PARIS (QUAI HENRI IV/MARAIS). Spectacular 1 BR apartment (King bed) with two living rooms (one converts to 2d BR). Seine and Eiffel Tower views. Two bathrooms, kitchen, laundry room, elevator, onsite manager. (415) 613-1011.

OTHER

DATE SMART! Join the introduction network for single graduates, faculty and students of Stanford, The Ivies, MIT and other excellent schools. www.rightstuffdating.com

FINANCIAL SERVICES

Wells Fargo Advisors

WEALTH MANAGEMENT

Why not work with a fellow Stanford grad? Class of ’80. Financial advisor for over 30 years.

Christopher K. Hutchinson

Vice President – Investment Officer

724-934-8501 | 866-580-3913

christopher.hutchinson@wfaadvisors.com

Investment and Insurance Products:

• NOT FDIC Insured • NO Bank Guarantee • MAY Lose Value

Wells Fargo Advisors is a trade name used by Wells Fargo Clearing Services LLC, Member SIPC, a registered broker-dealer and non-bank affiliate of Wells Fargo & Company. CAR-0420-03210 6741416

PERSONALS

DATE SMART! Join the introduction network for single graduates, faculty and students of Stanford, The Ivies, MIT and other excellent schools. www.rightstuffdating.com

DATING FOR book lovers. Find a date that loves books. Join free. www.booklovers.dating

PUBLISHING

MODERN MEMOIRS, INC.

Commissioned memoirs & self-publishing services since 1994

www.modernmemoirs.com

413-253-2353

WANTED

SEEKING WORKS on paper by Nathan Oliveira 951 768-7306 johnseed@gmail.com

OCTOBER 2020, is the deadline to promote your book in Stanford magazine and reach 203,000 Stanford alumni, faculty and staff.

The December 2020 issue will feature the Stanford Authors’ Showcase Holiday Reading List—a special advertising section for Stanford authors. Your ad includes a full-color book jacket photo, your book title, name and class year along with up to 8 lines of descriptive text.

For pricing and information, please contact Valerie Pippin at 650-723-0460 or vpippin@stanford.edu.
On May 6, 1992, one week after the Rodney King verdict was announced, the Stanford Daily published the following column by then–master’s student Cory Booker. We are republishing it with his and the Daily’s permission.

“How Can I Write, when I have lost control of my emotions?


Not Shocked—Why Not?

“TURN OFF THE ENGINE!
PUT YOUR KEYS, DRIVER’S LICENSE, REGISTRATION
AND INSURANCE ON THE HOOD NOW!
PUT YOUR HANDS ON THE STEERING WHEEL AND DON’T EVEN THINK OF MOVING!”

Five police cars. Six officers surrounded my car, guns ready. Thirty minutes I sat, praying and shaking, only interrupted by the command, “I SAID, DON’T MOVE!”

Finally, “Everything checks out, you can go.” Sheepishly I asked why. “Oh, you fit the description of a car thief.”


I’m a black man. I am 6 feet 3 inches tall and 230 pounds, just like King. Do I scare you? Am I a threat? Does your fear justify your actions? Twelve people believed it did.

Black male: Guilty until proven innocent.

Reactions to my kind are justified. Scrutiny is justified. Surveillance is justified. Search is justified. Fifty-six blows . . . Justified.

Justice? Dear God . . .

I graduated from Stanford last June—I was elated. I was one of four presidents of my class—I was proud. In the fall, I received a Rhodes Scholarship—I approached arrogance.

But late one night, as I walked the streets of Palo Alto, as the police car slowed down while passing me, as his steely glare met me, I realized that to him and to so many others I am and always may be a N----: guilty till proven innocent.

I’m struggling to be articulate, loquacious, positive, constructive, but for the first time in so long, I have lost control of my emotions. Rage, Frustration, Bitterness, Animosity, Exasperation, Sadness. Emotions once suppressed, emotions once channeled, now are let loose. Why?

Not Guilty . . . Not Shocked.

The violence did not surprise me. If I were the powers that be, it would not have taken me three days to call the National Guard. But maybe when you’re disconnected from reality you move slowly.


No! Not until someone catches on video one small glimpse of your everyday reality and even then, can you get justice?

Our inner cities are stacks of dry leaves and lumber, waiting for a spark. This is but a mere campfire compared to the potential inferno awaiting us. Conditions are worsening and the Rodney King verdict is certainly not the most egregious injustice in our midst.

Why have I lost control of my emotions? Why do my hands shake as I write? Tonight, I have no answers.

Dear God . . . help us to help ourselves before we become our own undoing.

Cory Booker, ’91, MA ’92, is a U.S. senator from New Jersey.
“Through all these years...

...I have kept a mental picture before me. I could see a hundred years ahead when all the present trials were forgotten ... I could see beyond all this the children’s children’s children coming here from the East, the West, the North, and the South.”

JANE STANFORD

Stanford endures.
If you would like to learn more about planning a future gift to Stanford, we’re here to help.
Office of Planned Giving
plannedgiving.stanford.edu
(800) 227-8977, ext. 54358
Character, knowledge, and skills to lead

A community of graduate-level scholars dedicated to addressing the world’s challenges with multidisciplinary and multicultural understanding.

Visit kh.stanford.edu

Know an outstanding individual considering graduate school? We welcome your referral at kh.stanford.edu/alum-referral

Knight-Hennessy Scholars
Stanford University