

DOWNLOAD

CSS Notes, Books, MCQs, Magazines

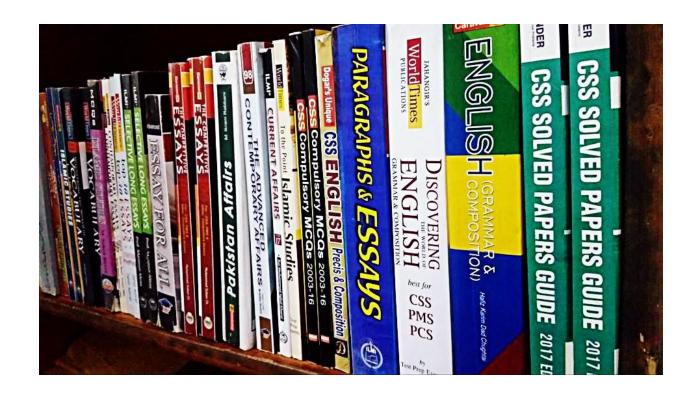


WWW.THECSSPOINT.COM

- Download CSS Notes
- Download CSS Books
- Download CSS Magazines
- Download CSS MCQs
- Download CSS Past Papers

The CSS Point, Pakistan's The Best Online FREE Web source for All CSS Aspirants.

Email: info@thecsspoint.com



BUY CSS / PMS / NTS & GENERAL KNOWLEDGE BOOKS ONLINE CASH ON DELIVERY ALL OVER PAKISTAN

Visit Now:

WWW.CSSBOOKS.NET

For Oder & Inquiry Call/SMS/WhatsApp

0333 6042057 - 0726 540141





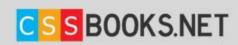
Join CSS Point Forum Today
Discuss, Learn and Explore
The World of CSS



www.csspoint.com.pk

For any Query, Please Call/WhatsApp 03336042057 - 0726540141

ENGLISH PRECIS & COMPOSITION HAFIZ KARIM DAD CHUGTAI



Hafiz Karim Dad Chugtai

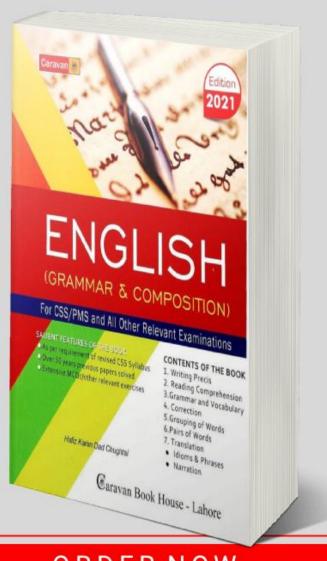
25% DISCOUNT

Cash on Delivery

GET YOUR COPY TODAY

LIMITED. STOCK. AVAILABLE

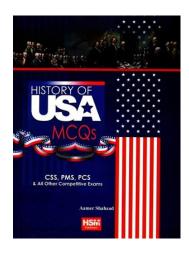
For Order Call/SMS 03336042057

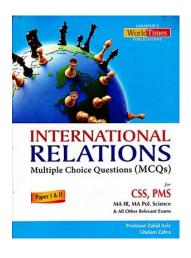


ORDER. NOW

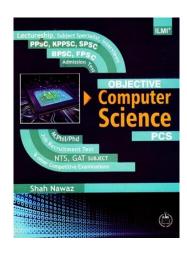
www.cssbooks.net

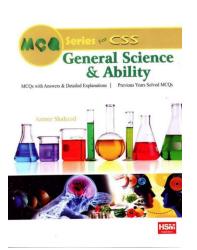
BUY CSS SOLVED MCQs BOOKS ONLINE CASH ON DELIVERY CALL/SMS 03336042057 | Visit: http://cssbooks.net

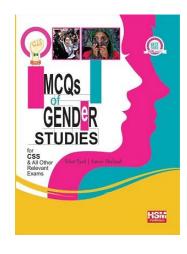


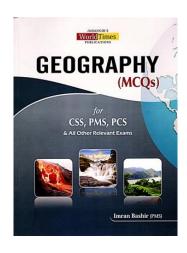


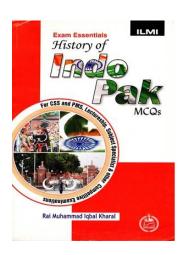


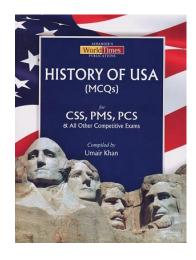


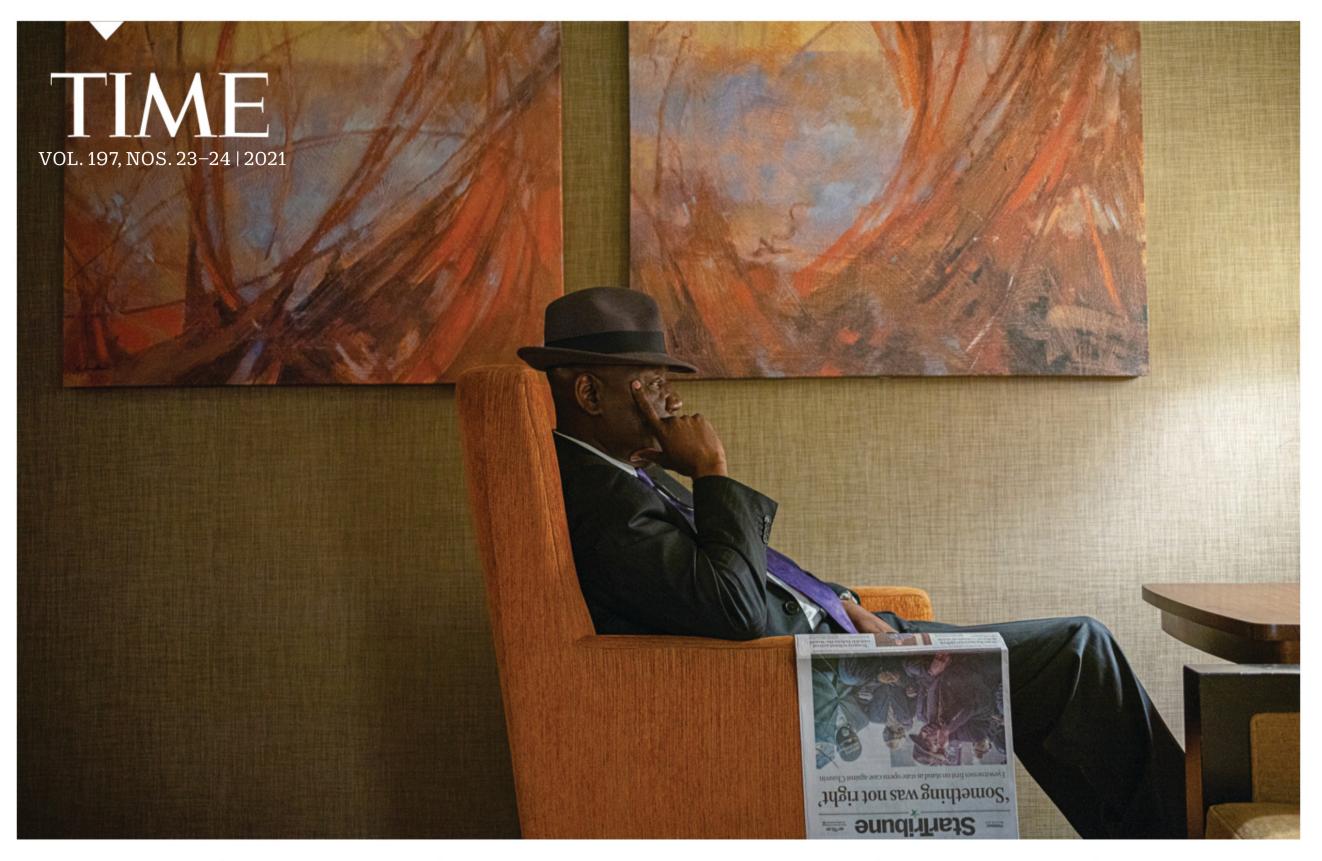












- 2 | Conversation
- 4 | For the Record

The Brief

News from the U.S. and around the world

- **5** | Biden sits down with **Putin**
 - 7 | Ian Bremmer on who stands to gain what from the meeting
 - 9 | Iran's next President was chosen by its Supreme Leader
 - **10** | A controversial **Alzheimer's drug**
 - **11** | New currency futures as El Salvador accepts **Bitcoin**
 - **12** | TIME With... Lupin star **Omar Sy**

The View

Ideas, opinion, innovations

- **15** | Janell Ross on **Juneteenth**
- 17 | Former Treasury chief Larry Summers on the risks of inflation
- **17** | The history of **pet adoptions**
- **18** | Naomi Osaka's huge off-court victory for athlete health

Features

In Plain Sight

How an accused Russian spy worked with Rudy Giuliani to sway a U.S. election *By Simon Shuster* **20**

The Case of Ben Crump

One lawyer's crusade for racial justice *By Janell Ross* **30**

Nowhere to Turn

Trouble at the factory making apparel for Kate Hudson's company By Louise Donovan and Refiloe Makhaba Nkune 38

Revisiting Tourism

Residents reclaimed Barcelona in lockdown *By Ciara Nugent* **44**

The Giving Spree

Philanthropy the MacKenzie Scott way *By Belinda Luscombe* **48**

TIME100 Health 2021

A special report on fixing health care By Alice Park, Jamie Ducharme, Jeffrey Kluger, Abigail Abrams, s.e. smith, Leana Wen, Raj Panjabi, Gavin Yamey and more **53**

Time Off

What to watch, read, see and do

87 | The books of summer: 36 new titles from old hands such as Michael Pollan, Alice Waters and Rita Dove, plus debuts by Ashley C. Ford, Zakiya Dalila Harris, Anna Qu and more

96 | 6 Questions for **Bill Clinton and James Patterson**

Attorney Ben Crump in the lobby of the Westin Hotel in Minneapolis on March 30

Photograph by Ruddy Roye for TIME

ON THE COVERS:



Painting by Tim O'Brien for TIME



Illustration by Eiko Ojala for TIME

For customer service and our general terms and conditions, visit *timeeurope.com/customerservice*, or call +44 1858 438 830 or write to TIME, Tower House, Lathkill Street, Market Harborough, LE16 9EF, United Kingdom. In South Africa, write to Private Bag 1, Centurion 0046. **PRINT SUBSCRIPTIONS:** Visit *time.com/joinus38.* **REPRINTS AND PERMISSIONS:** Visit *time.com/reprints.* For custom reprints, visit *timereprints.com.* **ADVERTISING** For advertising rates and our editorial calendar, visit *timemediakit.com.* TIME is published biweekly (except for the last week of December) by Time Magazine UK Ltd, Suite 1, 3rd Floor, 11-12 St James's Square, London, SW1Y 4LB. TIME is printed in the Netherlands and the U.K. Le Directeur de la Publication: Mike Taylor. C.P.P.A.P No. 0122 C 84715. Editeur responsable pour la Belgique: André Verwilghen, Avenue Louise 176, 1050 Bruxelles. EMD Aps, Gydebang 39-41, DK-3450 Allerod. Rapp. Italia: I.M.D.s.r.I., via Guido da Velate, 11 – 20162 Milano; aut. Trib. MI N. 491 del 17/9/86, poste Italiane SpA - Sped. in Abb. Post. DL. 353/2003 (conv. L. 27/02/2004 -n. 46) art. 1 comma 1, DCB Milano, Dir. Resp.: Tassinari Domenico. Periodicals postage paid at New York, N.Y., and at additional mailing houses. Additional pages of regional editions numbered or allowed for as follows: National S1-S2. Vol. 197, Nos. 23-24 © 2021 TIME Magazine U.K. Ltd. All rights reserved. Reproduction in whole or in part without written permission is prohibited. TIME and the Red Border Design are protected through trademark registration in the U.S. and in the foreign countries where TIME magazine circulates. ISSN 0928-8430.

Conversation

WHEN NEITHER SIDE WINS

RE "A WAR WITHIN" [June 7–14]: In almost every conflict, each side is convinced that it is correct, while the truth lies roughly in the center. This is especially true in the Middle East. Neither side benefits from the ongoing war between Israelis and Palestinians, while Israel is losing the war of public opinion. And a lot of diaspora Jews are disappointed that a diplomatic solution is not being implemented. Many Israelis believe that they are cornered and that peace cannot be found. They feel that they have to fight hard in order to survive. Yet peace was found with Egypt, Jordan and other Arab countries.

Martin Zagnoev, JOHANNESBURG

RE "ISRAELIS CAN'T GO Back to How We Were Before" [June 7–14]: Thank you for publishing this piece by Ayelet Gundar-Goshen. She does an excellent job of being factual and measured, while still conveying the pain of the situation, for both sides. It's important that TIME print pieces like this because much of the narrative in the U.S. is captive to a one-sided, blind support of Israel's leaders. This is ultimately bad for Israel, bad for the U.S. and disastrous for the

Palestinian people whose lands, resources and lives are being stolen by the current leadership of Israel.

Thomas Niehof, AMES, IOWA

RE "A DOCTOR'S ACCOUNT of Life Under Bombardment in Gaza" [June 7–14]: This account of life in Gaza under Israeli bombardment is heartbreaking and must change. A reasonable first step would be for intelligent people like Dr. Salam Khashan, the author of this piece, to oust Hamas from power and prevent the rocket attacks that put Gaza's civilians at risk. As a physician, Dr. Khashan should look to treat the cause, not the symptoms.

Martin Moskovitz, WEST ORANGE, N.J.

QUESTIONS OF HONOR

RE "STONEWALLED" [June 7–14]: What a brilliant encapsulation of the myriad problems facing the U.S. in its need for reconciliation. So many different attitudes and seemingly valid points of view coming out of one 181-year-old quasi-military educational institute in Virginia, finally coming to terms with its Confederate history. Molly Ball's eyewatering synopsis should be compulsory reading for every American student trying to come to terms with all that needs to happen and be



worked on. America's future depends on getting it right in the next generation or two. *James Plunkett-Cole*,

SYDNEY

CALLING THE SHOTS

ing" [June 7–14]: The pandemic may have generated many ideas to change the structure of the workplace, but it did little to change the transactional relationship between employers and employees. And as long as millions of Americans continue to live paycheck to paycheck, the biggest drivers of workplace change will be the employers, not the employees.

Enrique Puertos, CLEVELAND, GA.

STRIVING FOR EQUALITY

RE "40 WAYS FORWARD" [May 24–31]: This list of steps to take for a more

equitable America touched all the right issues. None is more important than any other, but some are more urgent—particularly equitable health care. We all know this is a "moment." But will we go beyond words this time—beyond talking the talk yet again—to actually walking the walk?

Lynn Todman, SAINT JOSEPH, MICH.

RE "LIVING THE NEWS"
[May 24–31]: These stories from TIME journalists were beautiful, courageous and incredibly touching.
I'm proud to subscribe to a news outlet of such journalistic integrity, an organization that examines its own vulnerabilities and encourages its staff to expose its weaknesses, setting a challenge to be better.

Tori Lamb, CANBERRA, AUSTRALIA

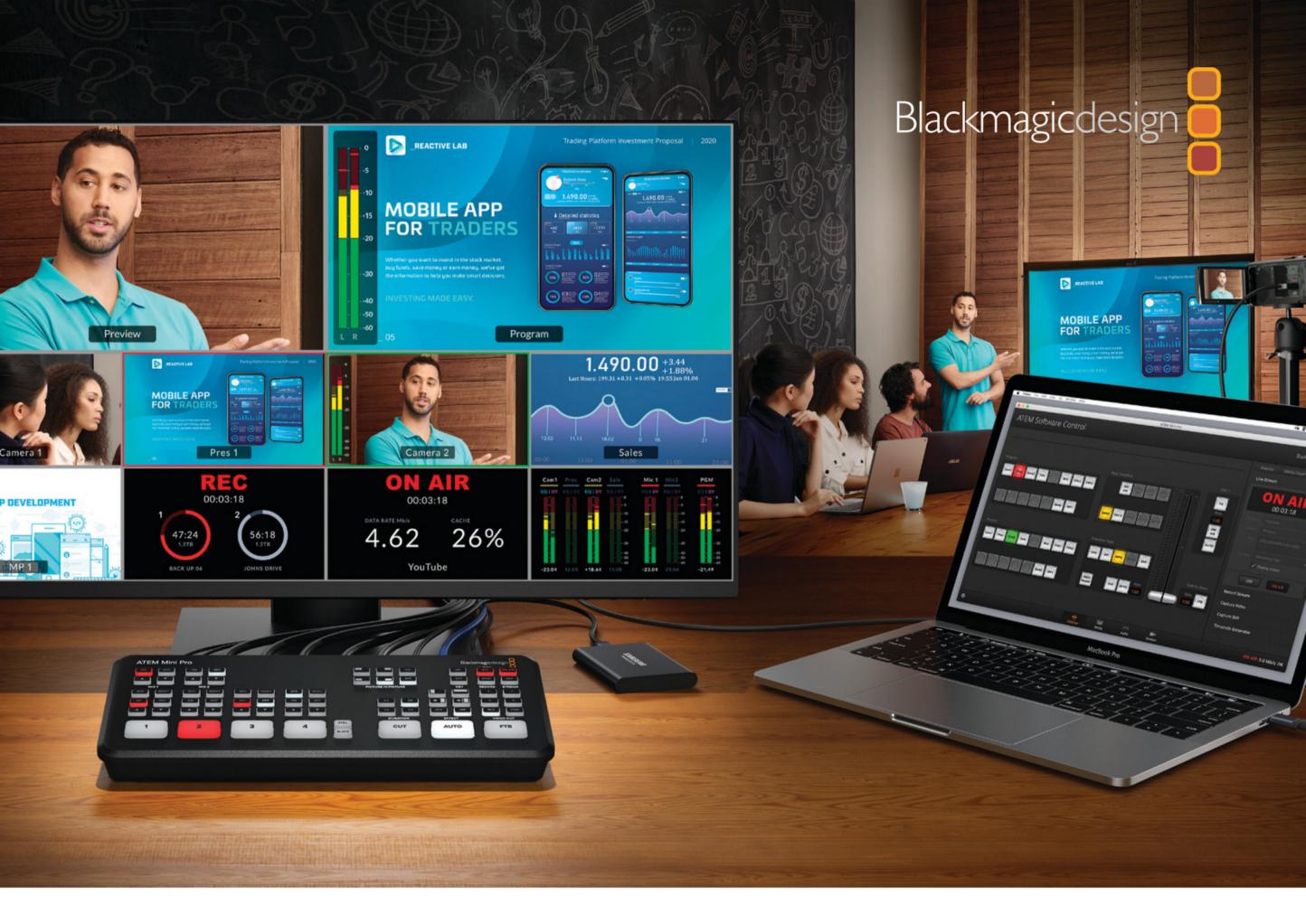
TALK TO US

SEND AN EMAIL: letters@time.com
Please do not send attachments

FOLLOW US:
facebook.com/time
@time (Twitter and Instagram)

Back Issues Contact us at customerservice@time.com or call 1-800-843-8463. **Reprints and Permissions** Information is available at time.com/reprints. To request custom reprints, visit timereprints.com. **Advertising** For advertising rates and our editorial calendar, visit timemediakit.com. **Syndication** For international licensing and syndication requests, contact us at syndication@time.com.





Introducing ATEM Mini Pro

The compact television studio that lets you create presentation videos and live streams!

Blackmagic Design is a leader in video for the television industry, and now you can create your own streaming videos with ATEM Mini. Simply connect HDMI cameras, computers or even microphones. Then push the buttons on the panel to switch video sources just like a professional broadcaster! You can even add titles, picture in picture overlays and mix audio! Then live stream to Zoom, Skype or YouTube!

Create Training and Educational Videos

ATEM Mini's includes everything you need. All the buttons are positioned on the front panel so it's very easy to learn. There are 4 HDMI video inputs for connecting cameras and computers, plus a USB output that looks like a webcam so you can connect to Zoom or Skype. ATEM Software Control for Mac and PC is also included, which allows access to more advanced "broadcast" features!

Use Professional Video Effects

ATEM Mini is really a professional broadcast switcher used by television stations. This means it has professional effects such as a DVE for picture in picture effects commonly used for commentating over a computer slide show. There are titles for presenter names, wipe effects for transitioning between sources and a green screen keyer for replacing backgrounds with graphics.

Live Stream Training and Conferences

The ATEM Mini Pro model has a built in hardware streaming engine for live streaming via its ethernet connection. This means you can live stream to YouTube, Facebook and Teams in much better quality and with perfectly smooth motion. You can even connect a hard disk or flash storage to the USB connection and record your stream for upload later!

Monitor all Video Inputs!

With so many cameras, computers and effects, things can get busy fast! The ATEM Mini Pro model features a "multiview" that lets you see all cameras, titles and program, plus streaming and recording status all on a single TV or monitor. There are even tally indicators to show when a camera is on air! Only ATEM Mini is a true professional television studio in a small compact design!

ATEM Mini.....US\$295 ATEM Mini Pro.....US\$495 ATEM Mini Pro ISO...... US\$795





'SHE IS MORE THAN WE COULD HAVE EVER IMAGINED.'

PRINCE HARRY AND MEGHAN MARKLE,

in a June 6 statement announcing the birth of their second child, Lilibet "Lili" Diana, two days earlier

'I don't know if we'll ever see eye to eye on that day.'

MIKE PENCE,

former Vice President, in a
June 3 speech discussing his
and former President Donald
Trump's differing perceptions
of the Jan. 6 insurrection at
the U.S. Capitol

'Because you represent the best of your generation, we wish to give you a fresh start.'

ELFRED ANTHONY PINKARD,

Wilberforce University
president, announcing in a
May 29 speech at the HBCU's
graduation ceremony that
2020 and 2021 graduates
would have their student
loans cleared

2

Number of years former U.S. President Donald Trump will remain suspended from Facebook (starting Jan. 7, 2021), according to a June 4 announcement by the social media platform



Number of national women's all-around titles now held by gymnast Simone Biles after her win on June 6, the most by any American woman

'The greatest adventure, with my best friend.'

JEFF BEZOS,

announcing on June 7 that he and his brother will travel to space in July aboard a rocket made by his company Blue Origin

'Here the big ships are again. It's shameful.'

TOMMASO CACCIARI,

leader of a Venetian protest group, in a June 3 interview, as the first cruise ship docked in the city's port, despite a March promise by the Italian government to bar the landings



50%

Increase in carbon dioxide in the world's air since the start of the industrial age, measured at its annual spring peak, per scientists on June 7; carbon dioxide traps heat



GOOD NEWS of the week

Citing their impact
on marginalized
communities, Ally
Financial on June 2
became the first major
U.S. bank to confirm
it will stop charging
customers overdraft fees



IRANIANS PREPARE TO IGNORE AN ELECTION

THE QUESTIONS AROUND AN ALZHEIMER'S DRUG

CONFEDERATE LEADER'S REMAINS EXHUMED IN MEMPHIS

PHOTOGRAPH BY EVAN VUCCI

PREVIOUS PAGE: AP; THESE PAGES: ALEXANDER ZEMLIANICHENKO—AP

TheBrief Opener

orchestrating a brazen influence campaign to stop Joe Biden from becoming the 46th President of the United States. Failing at that, the Russian autocrat spent the first five months of Biden's term presiding over a series of attacks by criminal organizations and state-led agencies against America's gas and food supplies at home, and its allies and values abroad. The unspoken question facing the U.S. President when he sits down with Putin on June 16 in a lakeside hotel in Geneva is this: What are you going to do about it?

Taking a page from America's successful decadeslong strategy against the Soviet Union, Biden is planning to rally allies at the G-7 summit in the U.K. and at the NATO confab in Belgium to present a united front against Moscow. Biden's eight-day foreign trip—his first as President—was originally planned as a sedate expedition to reconnect with old friends and discuss strategies for managing climate change and China's global rise. But the recent ransomware attack on Colonial Pipeline and JBS Foods' meat-processing plants, allegedly by criminal hackers acting with Moscow's tacit approval, "changed the calculation," says a senior Biden Administration official. "These guys are running wild, and they think Biden can be taken advantage of."

Now Biden is preparing to get tough when he sits down in Geneva with Putin for the first time as President. Among the moves he and his team have weighed to show he means business: reminding Putin that the U.S. has its own cyberabilities and can target Putin's personal overseas fortunes. Biden hopes to amplify both threats by speaking for U.S. allies as well, and to back Putin down from these provocations. "The whole goal is to have [Putin] come away saying, 'The Americans are onto us and have us encircled,'" the official says.

It won't be easy. Putin has played a weak hand well. Russia's commodity-based economy has been stagnating, and that in turn has fed seething discontent. That may be incentive for raising Russia's profile abroad, exploiting U.S. missteps in the Middle East and the chaos that Donald Trump created in the U.S. and abroad. Putin has wielded Russia's expertise in cyberwarfare and disinformation to launch asymmetric attacks against his opponents in Europe and the U.S.

Biden's mission in Geneva is not about a personal test of wills. It's about halting this risky escalation and getting the U.S. and Russia back on stable footing, Administration officials say. No two countries have more nuclear missiles ready to launch than Russia and the U.S. Under Trump, key treaties between the nations and lines of communication fell into disuse. "What's glaringly missing and dangerous, and what was decimated under Trump, was work on strategic stability," says a senior State Department official. "We've lost all these treaties that were designed to keep this stuff locked down."

TEN YEARS AGO, things looked a lot different. In March 2011, Biden traveled to Moscow to meet with Putin,

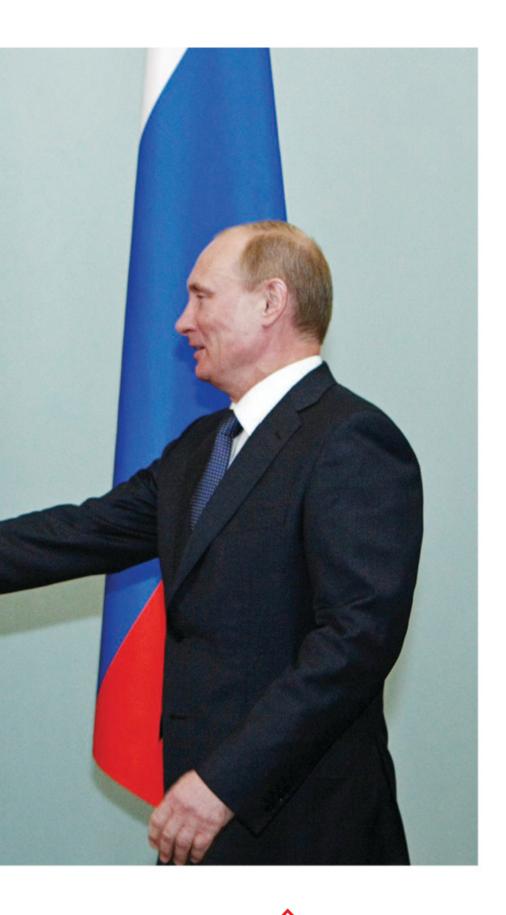


'These guys are running wild, and they think Biden can be taken advantage of.'

> A SENIOR ADMINISTRATION OFFICIAL

who had temporarily stepped aside as President and was holding the title of Prime Minister. Biden, there to foster closer ties with Russia as Vice President, said he wanted to encourage business between the nations as part of the ongoing push to "reset" relations. Quoting a Russia-based Boeing official, Biden said during a meeting, "Russia has the best engineers in the world. Russia has intellectual capital. Russia is a great nation."

Since then, Russia has annexed Crimea, poisoned dissidents with chemical weapons, expanded a proxy war in Syria, meddled in two U.S. elections and stepped up its cyberoffensives. Diplomatic and consular channels between the countries have withered. Russia says it will permanently cut off local hires at the U.S. embassy in Moscow by August in retaliation for U.S. sanctions over Russia's 2020 election interference and involvement in the massive SolarWinds cyberattack, which siphoned off



Biden met Putin in Moscow in 2011, to push a "reset" of relations

sensitive data from U.S. federal government computers and major global companies. By March 2021, when an ABC News interviewer asked if he thinks Putin is "a killer," Biden bluntly said, "I do."

Part of what has made Putin's aggression so hard for the U.S. to counter is his use of cybercriminals. Accused Russian hackers, like those who took down the Colonial Pipeline computers for six days in May, sparking East Coast fuel shortages, may not have acted directly at the behest of Moscow, but often work with its implicit approval, U.S. officials say. When JBS Foods was hacked in late May, the FBI tracked it to one of many criminal networks operating with impunity in Russia.

Striking back carries its own risks. Russia has more experience in cyberwar and has penetrated U.S. government and electrical-grid networks. "We might lose an escalation," says the senior Biden Administration official.

There is also the matter of Russia's nuclear arsenal, a growing portion of which isn't covered by any nuclear treaty. Only one of several Cold War treaties governing U.S. and Russian nuclear stockpiles remains in effect. Biden renewed that agreement, called New START, on Feb. 3, but only for five years. "This is one domain where they are America's equal," says Samuel Charap, a former State Department official and senior political scientist at the RAND Corporation.

Although Biden is planning to talk tough in Geneva, the goal is to ease tensions and establish predictability on both sides by reining in Putin's adventurism. Much of Biden's preparation, three senior Administration officials say, has taken place during his daily intelligence briefing. The leading figure there has been CIA Director William Burns, a former U.S. ambassador to Moscow who worked for Secretary of State James Baker during the collapse of the Soviet Union. Burns and others advocate a return to the Cold War containment of Moscow's moves. "Everywhere [Putin] goes he must meet resistance," the senior Administration official says.

Biden is qualified to lead the approach. He's spent decades in debates on U.S.-Russian relations as a member of the Senate Foreign Relations Committee and as VP. Asked how much time the President has spent preparing for the trip, White House press secretary Jen Psaki said, "He's been getting ready for 50 years."

In the end, that may be Biden's clearest advantage as he faces Putin once again. When George W. Bush invited Putin to his Texas ranch after becoming President in 2001, Bush said he trusted Putin and he was able to get a "sense of his soul." Biden has seen more of Putin over the past 20 years—and he doesn't trust him. In fact, Biden said earlier this year, he, too, has looked into Putin's eyes, and doesn't think he has a soul. Putin's retort, Biden told ABC, was that the men "understand each other." Heading into a tense summit, there are worse places to start. — With reporting by LESLIE DICKSTEIN and ALEJANDRO DE LA GARZA/NEW YORK; and MASSIMO CALABRESI/WASHINGTON

THE RISK REPORT

What game is Putin playing?

By Ian Bremmer

VLADIMIR PUTIN IS PUMPING some last-minute iron and putting finishing touches on his trademark smirk as Joe Biden preps for his first face-to-face with the Russian President since taking office, in Geneva on June 16. For Putin, this meeting is a big deal. It's a chance to sit opposite the man who leads Russia's great nemesis, the U.S. He can smile for the cameras as an equal, bat away subjects like the fate of imprisoned opposition activist Alexei Navalny and cyberattacks on the U.S. that he doesn't want to discuss, and defiantly insist on Russia's view of the world.

For Biden, there are fewer interesting opportunities. He won't get to Putin until after he has met with the allies at the G-7 summit in what he hopes will be a triumphant return of U.S. leadership to the Western alliance. The tougher questions for Biden will be kept behind closed doors, and smiles will prevail before the cameras. Putin won't be there, of course. because Russia's annexation of Crimea led to Russia's expulsion from G-7 summits—despite Donald Trump's best efforts to reinclude him.

When Biden finally sits down with Putin, his mind is likely to wander toward the rising power that both Democrats and Republicans consider the most important American adversary. It is China, not Russia, that poses the greatest challenge to U.S. power and prosperity. China is the growing technological power. China, not Russia, has genuinely global influence and is far more important for the future of the U.S. economy.

Russia is still contending with the collapse of the Soviet Union. Russia can meddle in Ukraine at the margins, but threats to fully invade and occupy

TheBrief Opener

a country of more than 44 million people aren't credible. That big a move would cost too many Russian lives and too many rubles for a chronically weak—and weakening— Russian economy. In recent months, Belarus provided the latest example of the post-Soviet demand for fundamental change and the need to shoot people to keep protests under control. In the most recent presidential election in Moldova, a Harvard-educated economist toppled a pro-Kremlin incumbent. Last year, Turkey's backing for Azerbaijan dealt a humiliating defeat to Russian ally Armenia in a region that Russia once dominated. Beijing is increasingly competing for influence with Moscow among the former Soviet Central Asian states.

Nor is Russia stronger these days within its own borders. Its economy is covered in rust. Despite years of warnings that climatechange fears and rising investment in green energy would make heavy dependence for growth and revenue on hydrocarbons an increasingly bad bet, Russia hasn't changed course. When oil prices surged from 2001 to 2008, its

economy expanded by 6.6% per year. From 2012 to 2019, as oil prices fell in response to a production surge in the U.S., growth fell to about 1% per year. The COVID-19 pandemic only made matters worse. Yet oil and gas still account for more than 60% of exports and about 40% of state revenue. Russia's interventionist foreign policy, particularly in the Middle East, and its nuclear weapons make it easy to forget that Russia's economy is smaller than Canada's and just over half the size of California's.

THAT'S NOT TO SAY that Russia can't make trouble for the U.S., particularly in cyberspace. The two governments target each other as a matter of routine, but a rash of ransomware and other hacking attacks by Russian organized crime on U.S. companies is a growing cause for concern. Russian criminal groups are suspected

Putin speaking at the St. Petersburg International Economic Forum, on June 4 in recent attacks on the world's largest meatpacker and the largest U.S. fuel pipeline. Biden Administration officials have made clear that Biden will raise the issue forcefully with Putin. But the Administration wants "a more stable and more predictable relationship with Russia," according to U.S. Secretary of State Antony Blinken. That's why last month the U.S. President ordered the waiving of sanctions on a company building a controversial Russian gas pipeline to Europe—and why the White House wants this meeting with Putin.

These moves are meant to encourage
Putin to create fewer nuisances that distract
Biden and U.S. allies in Europe from the more
fundamental challenge posed by China at a time

when, according
to Biden's senior
Asia adviser Kurt
Campbell, the era
of "engagement"
with China is over.
Biden gets fewer
Russian headaches,
and Russia gets
more economic
relief.

But don't
expect Biden and
Putin to pretend
they like each
other. In March,
Biden affirmed
to a television
interviewer that
he thinks Putin is
a "killer." Putin
responded with the

diplomatic equivalent of "I know you are, but what am I?" and recalled his ambassador from Washington. Earlier this month, Putin trolled the U.S. over the Jan. 6 attacks on the Capitol to accuse its leaders of hypocrisy as they criticize crackdowns on protest in other countries. Biden will hit the subjects he plans to raise and meet Putin's diffidence shrug for shrug.

But if Putin can get his photo op sitting opposite his fifth U.S. President and score a few style points, he might have something to offer Biden in exchange for an easing of economic pressure on his government. Maybe a promise to continue to seek a diplomatic solution on Ukraine, or a cyber announcement that remains in effect until the next time U.S.-Russian relations head south.

Bremmer is a TIME columnist and the president of the Eurasia Group



WASHED ASHORE Sri Lankan navy personnel clear potentially toxic materials and plastic pellets from a beach near Colombo on May 27 after a cargo ship roughly nine nautical miles offshore caught fire a week earlier. Shipping containers have fallen into the sea as the ship began to sink, and given that it contains a hazardous cargo that includes fuel oil and nitric acid, experts warn of an environmental disaster if the vessel is not stabilized. —*Madeleine Carlisle*

WORLD

The hard-liner poised to become Iran's President

IRAN WILL VOTE ON ITS NEW PRESIDENT on June 18, although many Iranians are criticizing the election's results as a foregone conclusion. A powerful unelected council has disqualified the majority of candidates from running, leaving conservative cleric Ebrahim Raisi—the favored choice of Supreme Leader Ayatollah Ali Khamenei—as the clear front runner.

ILLUSION OF CHOICE Raisi, 60, is the country's chief judge and a close ally of Khamenei's; both hail from the northeast city of Mashhad. He lost the 2017 election to Hassan Rouhani—who is not eligible to stand for re-election again because of term limits—and Iran's power brokers are taking no chances this time around. Few reformist candidates were permitted to run, and Raisi's six remaining rivals are far less well known. Turnout is expected to be minuscule, as many Iranians have pledged to boycott the ballot boxes. On Twitter, a meme has circulated showing Raisi debating six versions of himself.

INTERNATIONAL REPUTATION Human-

rights groups point to Raisi's bloody record presiding over the extrajudicial executions of thousands of political prisoners in the 1980s. Yet despite a reputation as a hardliner, Raisi is expected to oversee continued negotiations with the U.S. over a new deal to limit Iran's nuclear ambitions. The imperative is primarily financial; under the Trump Administration's sanctions, Iran's economy is in tatters, with inflation at close to 40%.

stepping-stone The presidency is widely seen as Raisi's internship for an even greater position—that of Supreme Leader. Now in his 80s, Khamenei was himself President when he took the top job in 1989. Raisi was entrusted with a religious foundation worth billions of dollars, and could get a political promotion to Ayatollah, as Khamanei did. His task as President will be to strengthen his power base within the Revolutionary Guards, guarantors of the regime who shape much of Iran's security, military and foreign policy. —DAN STEWART

NEWS TICKER

Germany recognizes tribal genocide

Germany has formally recognized colonialera atrocities in Namibia, referring to the massacres of the Herero and Nama people in the early 20th century as genocide on May 28 and pledging financial aid worth more than \$1.34 billion over the next 30 years.

Harris tells migrants: 'Do not come'

During a two-day trip to Guatemala and Mexico intended to address the root causes of Central American migration to the U.S., Vice President Kamala Harris said in a June 8 speech that Central American migrants should "not come" to the U.S.-Mexico border, drawing the ire of progressive immigration activists.

4 Muslims dead in Canada 'hate' crime

A man has been accused of murdering four members of a Canadian Muslim family in Ontario by running them over with his truck, an incident Prime Minister Justin Trudeau called "a terrorist attack." Police said Nathaniel Veltman intentionally mounted a curb while driving, striking a family of five on June 4.

NEWS TICKER

G-7 approves Biden's global tax plan

Finance Ministers from the G-7 nations announced June 5 their collective support for a U.S.-proposed plan to make the global minimum tax rate for multinational companies at least 15%, and agreed that major corporations should pay taxes in countries where they generate sales.

Nigeria bans Twitter over deleted tweet

Nigeria blocked Twitter on June 4 after the company removed a tweet by President Muhammadu Buhari threatening regional secessionists, whom he blames for attacks on government offices. Twitter users in Nigeria have condemned the ban; many are bypassing restrictions by using virtual private networks.

Manchin blocks votingrights bill

Senator Joe Manchin (D., W.Va.) said on June 6 that he would not vote for the For the People Act, a major Democrat-backed bill to combat voter suppression, because it lacks Republican support. He also pledged again to preserve the chamber's filibuster, imperiling the prospects of many of Democrats' more ambitious plans.

GOOD QUESTION

Why is FDA approval of an Alzheimer's drug controversial?

MORE THAN 100 YEARS AFTER DR. ALOIS Alzheimer first described the brain disorder that would be named after him, the world has its first treatment for the disease.

The U.S. Food and Drug Administration (FDA) approved aducanumab on June 7 after a contentious review that still has the Alzheimer's community divided over how effective, and therefore how useful, the drug will be. Developed by U.S.-based biotech company Biogen and Japanese pharmaceutical company Eisai, aducanumab is the first treatment to address one of the underlying causes of Alzheimer's—the buildup of amyloid protein plaques in the brain.

But while the data that Biogen submitted from two large clinical trials showed that the drug reduces amyloid levels among those getting the once-a-month IV infusions, the studies were less clear about how much that amyloid reduction translates into improvement in cognitive function. One study showed improvement in patients' memory and recall, while the other showed no benefit. (Biogen scientists say that in the latter study, some people received an inadequate dose, impacting the results.)

That's why the FDA is requiring Biogen to conduct a new study comparing people randomly assigned to get the drug or a placebo to confirm that aducanumab does indeed

improve cognitive skills—with the possibility that approval will be withdrawn if it does not. "We are happy to be doing this trial to verify what we think we saw in [previous trials]," says Dr. Alfred Sandrock, head of research and development at Biogen, "because there are questions out there."

Even aside from those critical questions about clinical benefit are concerns about cost and access to the drug. Biogen estimates that aducanumab will cost about \$56,000 per patient per year, with many patients needing to continue receiving the treatment for years. And because it's an IV infusion, patients will need to get aducanumab at doctors' offices or infusion centers. They will also need to be monitored for potential brain inflammation, which can be a side effect.

Given these issues, doctors say it's important to set realistic expectations for what the drug can and cannot do. For some Alzheimer's patients who are early enough in the disease's process, it could help slow the cognitive decline that can be so devastating for them and their loved ones. But for others, it might not be worth risking any side effects.

"It's incumbent on all of us [as doctors] to behave responsibly in selecting the right patients, discussing the risks and benefits, and following them for a sufficient amount of time to see if they are benefiting," says Dr. Ronald Petersen, director of the Mayo Clinic Alzheimer's Disease Research Center. "This is not the penicillin for Alzheimer's disease. But is it a component of stepping in the right direction to treating the disease? I think so."—ALICE PARK

NATURE

Animal instincts

Magawa, an African giant pouched rat credited as one of the most successful rodents trained to find land mines, is retiring after five years of dangerous work. He's "helped save many lives," Magawa's trainer told the BBC, but is "slowing down" in old age. Here, other heroic animal feats. —Suyin Haynes

PIGEON POWER

Despite being shot en route,
U.S. Army Signal Corps carrier
pigeon Cher Ami delivered a
message that saved nearly
200 American troops' lives
in France during World War I.
Cher Ami was later awarded the
French Croix de Guerre medal for
"extraordinary bravery."

CANINE CLONES

A German shepherd sniffer dog working with a Canadian K-9 police unit, Trakr successfully led rescue workers to the last survivor found in the ruins of the World Trade Center after the 9/11 attacks. In 2009, a California company cloned five puppies based on Trakr's DNA.



The medalwinning Magawa detected 71 land mines and dozens more unexploded items in Cambodia

BEAR BATTALION

During World War II, Polish soldiers bought and adopted a Syrian brown bear cub, naming him Wojtek. He was later officially drafted into the Polish army, where he buoyed morale and, by some reports, assisted his company by carrying heavy artillery shells.

David Dushman, the last surviving Soviet Red Army solider who helped liberate the Auschwitz-Birkenau concentration camp, on June 5 at 98.

DISCOVERED

A shackled male skeleton dating from as early as the 3rd century—a likely indicator of slavery in Roman Britain, British archaeologists confirmed on June 3.

RECOVERED

Most of the \$4.4 million ransom

a U.S. fuel-pipeline operator paid in bitcoin to hackers in May after a cyberattack, the U.S. Justice Department said on June 7.

ENDED

The E! reality-TV show **Keeping Up With the Kardashians** on June 10, after 20 seasons and 14 years on the air.

AMENDED

China's familyplanning policy on May 31, to allow married couples to have three children, in an attempt to address the nation's aging population.

SLAPPED

French President Emmanuel Macron,

by a man in a crowd Macron was addressing during a visit to the region of Drôme on June 8.

RESUMED

Free samples at Costco warehouses

across the U.S. in early June, the big-box chain announced on May 27. The practice was suspended 14 months ago because of the COVID-19 pandemic.



The plinth on which Forrest's statue once stood in what is now Health Sciences Park in Memphis

EXHUMED

Nathan Bedford Forrest

A win in the fight against white supremacy

By Tami Sawyer

IT TOOK DECADES. TENNESSEE'S BLACK RESIDENTS HAVE long demanded the removal of a statue and the remains of Nathan Bedford Forrest—a Confederate general, slave trader and Ku Klux Klan leader—from a city park in Memphis, where I grew up. Although earlier protests led to authorities' removing his statue in 2017, it's only as of June 1 that Forrest's remains are being exhumed.

I've always said that if we could make the changes needed to remove these statues, we can make the changes needed to fight structural inequities. This was a win that not only changed the physical landscape of my city but also, in a lot of ways, its spirit.

I've been receiving threats as long as I've been doing this work: pictures of me with a noose around my neck, messages telling me that my parents are going to find my body floating in the Mississippi River. I recently pressed charges against a volunteer with the Sons of Confederate Veterans, a group involved with the exhumation process. He started threatening me, while holding a Confederate flag and singing "Dixie Land," as I made a press statement.

Still, it's vindicating to know that Black people in Memphis are going to be celebrating on Juneteenth in a park no longer named after one of the most notorious Confederate leaders. We still have a lot to fight systemically, but when I drive past the park now, I smile. I feel freer; there is a sense of closure. For me, this moment is a deep breath, the end of a chapter. —*As told to* SANYA MANSOOR

Sawyer is county commissioner for Shelby County, Tennessee

LEGALIZED

El Salvador goes Bitcoin

EL SALVADOR BECAME THE world's first country to make Bitcoin a legal tender on June 8, as its legislative assembly backed a proposal by President Nayib Bukele.

In the coming months, Salvadorans will be able to use the cryptocurrency to pay for goods and services, and even settle tax bills, alongside the U.S. dollar, which the country adopted in 2001. The government will guarantee convertibility between the currencies at the exchange rate at the time of a transaction.

Bukele, 39, is a controversial leader. A series of recent moves to bring many levers of state power under his control have raised concern among the international community. His campaign for Bitcoin has also been divisive. Bukele argues that adopting the digital currency "will bring financial inclusion, investment, tourism, innovation and economic development" to El Salvador, affording unbanked people access to financial services and allowing remittances which make up around 20% of the country's GDP—to be sent more easily and securely.

Critics say the move exposes El Salvador to fluctuations in Bitcoin's value, which has proved volatile. It will also likely complicate discussions with the IMF, from which El Salvador is seeking a \$1 billion funding program. —CIARA NUGENT



The Brief TIME With...

In Netflix's smash hit *Lupin*, **Omar Sy** plays a hero to match the current moment

By Vivienne Walt

IN JANUARY, WHEN NETFLIX LAUNCHED ITS wildly popular French TV series *Lupin*, Omar Sy went into the Metro station under the Louvre in Paris. In the show, Sy plays a thief who takes a job as a night cleaner at the museum in order to plot a spectacular heist under the noses of white curators who are barely aware of a Black janitor.

In the Metro, in real life, Sy began pasting a giant poster advertising the show on a billboard space on the platform. Incredibly, the commuters took no notice of one of France's biggest movie stars. Sy even asked one person for assistance, yet still no one recognized him. Sy says the experience, about which he posted on his Instagram feed, was illuminating. "There is a category of person in France, people who have specific jobs but who we never stop to consider," Sy (pronounced See) tells TIME in a Zoom interview in May while relaxing in a hotel in Grenoble, France. "People will just pass by you without seeing you," he says. "What we say in the series is not an invention. It is what is happening in real life."

Ironically, Sy's experiment with being unseen came just as *Lupin* gave him visibility to a new, more international audience. Netflix says about 76 million subscribers viewed the first five episodes that launched in January; it counts views as those who watch at least two minutes. The next five episodes are available from June 11. The company's co-CEO Ted Sarandos told investors in January that *Lupin* had ushered in "a really incredible evolution" in which viewers (notably Americans) who have long shunned subtitled content were binge-watching the show. "They push play, and 10 minutes later, all of a sudden they like foreign-language television," he said.

Sy, 43, plays Assane Diop, the orphaned son of a Senegalese immigrant who becomes obsessed with Arsène Lupin, the "gentleman thief" depicted in Maurice Leblanc's classic stories of French literature written in the 1900s, who wows his victims with elegance and charm, even as he robs them blind. Using Lupin's tactics, Assane sets out to avenge an act of savage cruelty against his late father.

The show's intricate plot and twisty narrative offer rollicking entertainment, but it is Sy's magnetism that keeps you watching. Assane, a Black man who deftly navigates a world of white privilege all while wearing his heart on his sleeve,

SY QUICK FACTS

Friends with success

Sy grew up alongside the soccer player Nicolas Anelka, who played for France and remains a close friend.

Comedy stylings

From 1997 to 2012, Sy and his comedy partner Fred Testot appeared in dozens of sketches, shows and even iPhone ads.

Who's that voice?

Sy recently voiced the lead character in the French-language dub of Pixar's Soul.

is a radical update from the original Lupin more than a century ago. "We tried to depict our idea of an ideal French person in the France we see now," Sy says.

Appearing in the midst of pandemic lockdowns and a push for racial equity, Assane is a new breed of hero to match the current moment. "To have Omar represent humanity this year, it just made sense to people," says the filmmaker Louis Leterrier, who directed the first three episodes and is a close friend of Sy's. "Whether you're Black, Asian or Caucasian, people saw him and said, 'That's who I want to root for,'" he says.

came from humble beginnings. He was raised in a housing project in the underprivileged exurb of Trappes, 20 miles west of Paris, one of seven children. His Senegalese father worked in an auto factory, and his Mauritanian mother was a building cleaner.

Sy was drawn to acting in order "to transcend a form of shyness," he says. He launched his career with comedy sketches on the radio but became a national star during the 2000s, as one half of a comic duo, Omar et Fred, that did nightly two-minute acts on France's Canal+ TV.

It was in 2011 that his fame exploded domestically with the movie Intouchables, in which he plays an ex-con from a poor, majority-Black banlieue—much like his real hometown—who lands a job tending to a spectacularly wealthy, white quadriplegic in Paris' glittering center. While some American critics questioned its treatment of Black characters (Variety accused it of "Uncle Tom racism"), French audiences lapped it up. The movie remains France's biggestever global hit, grossing more than \$426 million worldwide, and Sy became the first Black artist ever to win the Best Actor César, France's equivalent of the Academy Award. In 2019, Hollywood released a U.S. remake called The Upside, with Kevin Hart and Bryan Cranston.

In the wake of the original movie's success, Sy moved with his Parisian wife and four kids to Los Angeles, where he now lives; their fifth child





was born there. Roles followed in Hollywood blockbusters *X-Men: Days of Future Past, Jurassic World* and *Inferno*. Sy says he took his family to California initially for a "gap year" before settling in and perfecting his English, effectively forging a U.S. career.

That has happened while Black actors in France have protested the white dominance of their country's movie industry. Sy jokes that he tries hard to keep French culture alive at home, among his increasingly American children, just as his own father tried to instill his Senegalese culture in his children. "We are very happy in Los Angeles," he says. "I see my children blossoming. That is all one wishes as a parent."

'We tried to depict our idea of an ideal French person in the France we see now.'

OMAR SY, on creating his character in *Lupin*

For all his happiness and success, the theme of *Lupin* remains deeply familiar to Sy from his own life experience—the schism between wealth and poverty, and its close overlap in France with race. "There are two Frances that exist side by side," Sy told me back in 2012, after *Intouchables* came out. Growing up in a Black immigrant family, he was shut out of white, rich France. "We always knew it existed, but we didn't ever see it," he said then.

TODAY HE LIVES in a different world from many of the people he grew up with, a fact that he says spurs "sometimes guilt, of having succeeded while others have not. There is still that question of, What can I do to change it?" He is an ambassador for his wife Hélène's foundation, which helps hospitalized children in France, but he hesitates to become a celebrity activist. "It works best if we don't raise our voice every five seconds," he says.

Standing on the sidelines was no longer a possibility in 2020. In the midst of what Sy calls "a sad summer," he joined a Black Lives Matter protest in L.A., and wrote an appeal in the French magazine *L'Obs* calling for France to investigate the 2016 death in police custody of Adama Traoré, a Black Parisian. "Wake up," he wrote. "Let's have the courage to denounce police violence in France. Let's act to fix it."

Events pushed him to speak out, he says. "I told myself this was a particular moment, and therefore I had to do something particular." But he grappled with the decision before making it, he says. "My main instinct is to stay out of all this. We say so many things with the work we do, with films we choose and the characters we embody."

To Sy, his character in *Lupin* carries a message that has resonance today. In the stories on which the show is based, he notes, Arsène Lupin practiced the ancient martial art of aikido. "The whole point of aikido is to use the strength of the adversary, and turn it around to our advantage," Sy says. Similarly in the show, Assane learns to turn his liabilities into strengths as he plots revenge. "So this thing that is against us can be turned around." —*With reporting by* MADELINE ROACHE/LONDON



For children battling a critical illness, a wish is more than a dream. It can be a turning point that can give them the emotional and physical strength to keep going.

WISHES NEED YOU ★ WORLDWISH.ORG/DONATE



TheView

NATION

WHO MADE JUNETERTH?

By Janell Ross

If you ask Black people born and raised on the island, Juneteenth marks the day Black soldiers in blue uniforms came with their guns to Galveston. That is the story they have told for generations, about the moment some of their ancestors knew freedom had finally arrived in Texas, the westernmost Confederate breakaway state.

INSIDE

WHY LARRY SUMMERS
WORRIES ABOUT INFLATION

IT'S BOOM TIMES FOR RESCUE PETS WHY NAOMI OSAKA'S CHOICE SAVED LIVES

The View Opener

That's the truth as it's widely understood by Black people in Galveston, even if the common story of that day often focuses on a single white man: General Gordon Granger, who led Union troops to the harbor there on June 17, 1865. Two days later, records in the National Archives tell us, he issued what's known as General Order No. 3.

In doing so, Granger laid out the meaning of freedom more explicitly than any U.S. government official had to that date, says Robert C. Conner, author of *General Gordon Granger: The Savior of Chickamauga and the Man Behind "Juneteenth."* The order declared "absolute equality of personal rights and rights of property between former masters and slaves." As word spread, so did jubilation, shock, religious awe and anger.

Declaring freedom and creating it are two

different things, as Deborah Evans, secretary and director of communications with the National Juneteenth Observance Foundation, tells me. After all, Granger was there because, though the Emancipation Proclamation had liberated the enslaved in the Confederate states. slaveholders in



A mural in Galveston, Texas, marks the spot where General Order No. 3 was issued

places like faraway Texas still clung to the idea that U.S. law didn't apply to them.

Among the Black and white troops who came to Galveston to enforce the Union's dictates was William Costley, who with his two sisters and mother had been the first enslaved people freed by a then newly minted lawyer named Abraham Lincoln in 1841. The KKK would try to burn certain records of that case, and portions of his service records went up in flames, thanks to another KKK faction. Costley himself was likely illiterate, says Carl Adams, who wrote the book *Nance* about Costley's mother's fight for freedom. Whatever the young soldier felt in Texas has, like so much that happens to those whose lives are not thought worth recording, been lost.

The story of William Costley, the baby freed by Lincoln who grew up to set others free, like the story of Juneteenth, cannot be told fully without oral tradition. Yes, newspaper accounts of organized Black public revelry—and white enmity—survive. But so too, in some circles, have folk stories attesting that some of the Black soldiers in Galveston that day changed history by insisting that Granger make clear the freedom of those still enslaved. If he didn't do it, the story goes, they would do it themselves.

MY GRANDMOTHER'S GRANDMOTHER was a child made free that June day—however it happened. But Black people have always been involved in the fight to make our own American lives, demanding something of the country that stole so much from us. That fact is, by folktale and firm record, key to the Juneteenth story.

Last year, Juneteenth came to an America awakened to racial injustice, prompting new groups to recognize a holiday heretofore cel-

ebrated mostly by Black people with Texas connections. This year, it's a reminder of the fight.

A Senate bill to make Juneteenth a federal holiday failed in 2020 by one vote. This year, a similar bill has yet to have a preliminary hearing date set, but among those on the Judiciary Committee who can

cast a vote to send it to the floor is Jon Ossoff, a Georgia Democrat whose election this year helped flip the Senate. His victory has been widely attributed to the organizing power and electoral force of the Black vote.

Two days after that first Juneteenth, the New York *Herald* published a dispatch from Macon, Ga., whose white citizens finally saw that "slavery is dead and nothing remains but to bury its carcase [sic]." Abraham Lincoln was gone by then, but he probably would have liked General Order No. 3 for making a national reality plain and involving in its delivery the Black troops he praised, says David S. Reynolds, author of *Abe: Abraham Lincoln in His Times*.

For those whose Juneteenth story does not put Black people at its center, consider that there is no evidence that Granger ever spoke about his role in freeing Texas' estimated 250,000 slaves. But Black people have kept telling the story—and each time that happens, Juneteenth is created anew.

SHORT READS

Highlights from stories on time.com/ideas

Give health care workers a shot

For moral,
humanitarian and
practical reasons, the
U.S. should commit to
vaccinating the world's
health care workers,
writes Dr. Ashish K.
Jha, dean of the Brown
University School of
Public Health: "Does
the U.S. really have
this many doses to
spare? Absolutely."

When visibility isn't enough

President Biden has taken some action to protect LGBTQ rights, but activist Raquel Willis says not much has changed for the majority of the trans community: "Anytime we enter a new

we enter a new political era, groups on the margins are told to be patient, temper our expectations, demand less or feel grateful for making it as far socially as we have today."

An alarming sign of the times

If you were shocked by Michael Flynn's call for a military coup, you haven't been paying attention, write U.S.
Representatives Jason Crow and Chrissy Houlahan: "Let us be clear—this assault on democracy is as intentional as it is insidious."

THE LEADERSHIP BRIEF

Inflation worries are keeping Larry Summers up at night

By Eben Shapiro

WHEN A FORMER DEMOCRATIC SECREtary of the U.S. Treasury raises alarm bells about the potential harmful consequences of the current President's economic policies, it raises home-team hackles. Larry Summers, who served as Treasury Secretary under Bill Clinton and director of the

National Economic Council under President Obama, has emerged as a leading cautionary voice about how heavy government spending can trigger damaging levels of inflation. "The Fed has had almost no success gently bringing down inflation once an economy has started to overheat," Summers said in an interview on May 28, the day President Joe Biden unveiled a \$6 trillion budget. Summers, who is the Charles W. Eliot University Professor at Har-

vard University and the Weil Director of the Mossavar-Rahmani Center for Business and Government at Harvard Kennedy School, joined TIME for a conversation on the risks of inflation and speculative froth.

What do you think the biggest threat facing the economy is right now?

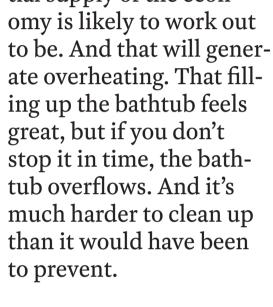
The long-run threat is that we will cease to be one effective country. Whether that's a failure of public investment in everything ranging from collecting the taxes that are owed—where there will be \$7 trillion in taxes that are owed but not paid over the next decade; that is a huge loss to the government ... [and] a huge source of injustice because most of the nonpayment comes among the highestincome Americans. Whether it is the fact that at the early stage, we were dependent on other countries for masks, and we were not well prepared for a pandemic, despite the fact that there had been repeated warnings that a next pandemic would come. Whether it is the fact that it takes half an hour longer on the schedule to fly

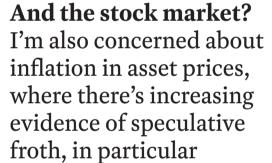
from Boston to Washington than it did when I first started taking the trip regularly 40 years ago. This falling-apart of society is our greatest long-term threat.

And does the new budget address that?

I think that's what the President's program is trying to address in many powerful ways. I do think that it is also important, and it is important for the sustainability of the progressive enterprise, that it be managed in a macroeconomically prudent way. And I am concerned that we are injecting more demand into the economy than the poten-

tial supply of the economy is likely to work out ate overheating. That filling up the bathtub feels great, but if you don't stop it in time, the bathtub overflows. And it's much harder to clean up than it would have been





markets like the SPAC [special-purpose acquisition companies] market and like the recent events in cryptocurrency.



Former Secretary of the Treasury Larry Summers

Can you expand on your view of cryptocurrency?

Look, the blockchain is a fundamentally important innovation that will be part of our economy for a long time to come. The particular cryptocurrency assets are highly speculative vehicles enormously dependent on changes in sentiment. We have not seen the end, and we may not have seen the beginning of the end of their extraordinary volatility. Nobody should confuse them with any kind of bedrock of safety, or as a central way in which to hold wealth.

Any other concerns?

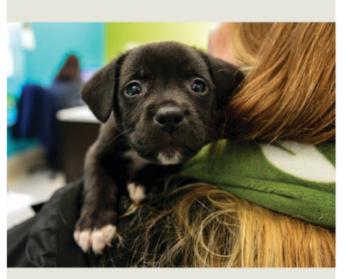
I think another important part of the calculus is that when governments lose control over money, people tend to lose confidence in them. Progressives need to ponder the fact that when they're not able to keep inflation under control, they can pay a very large political price. \Box **HISTORY**

The popularity of rescue pets

More than 12 million U.S. households have gotten a pet since March 2020, according to the American Pet Products Association. But though shelters and rescues have gained popularity in recent years, their history in America is more than 150 years old. In 1869, Caroline Earle White and other women activists started what's considered the country's first animal shelter. In the Progressive Era, activists called for the humane treatment of animals, and after World War II, pets were seen as part of the quintessential suburban family. TIME's Dec. 23, 1974, cover story on "The American Pet" declared that "pet ownership has become almost as sacred a democratic right as if it had been written into the Constitution."

But as the number of breeders increased, so did the number of cats and dogs, and by the 1970s, animal-welfare groups promoted sterilization to reduce the number of unwanted animals. More recently, social media is thought to have boosted awareness of adoptions. Experts believe the Bidens' adoption of Major, as First Dog, will help the cause too.

—Olivia B. Waxman



Harold was adopted in Charleston, W.Va., in January

ROM LEFT: AVIER GARCIA—BPI/SHUTTERSTOCK; CLIVE ROSE— GETTY IMAGES; THOMAS BOYD—THE NEW YORK TIMES/REDUX

The View Sports

A turning point for athlete mental health

By Sean Gregory

AFTER MICHAEL PHELPS HEARD ON MAY 31 THAT NAOMI Osaka had pulled out of the French Open and he read her Instagram message explaining why—Osaka cited "feeling vulnerable and anxious" in Paris, and revealed that she has suffered from "long bouts of depression" since defeating Serena Williams at the 2018 U.S. Open—a bunch of thoughts rushed into his head. Phelps is the greatest swimmer of all time, winner of 23 Olympic gold medals. But no amount of winning staved off his depression and contemplation of suicide.

Phelps, who has gone public with his struggles and emerged as one of the foremost mental-health advocates in sports, could sense that Osaka's revelations—and her decision to forgo a shot at another Grand Slam title so she could take a mental-health break—were a big deal. Osaka is a certified global superstar, the highest-paid female athlete on the planet with a huge social media imprint and endorsements from Nike, Nissan and Louis Vuitton. "I felt very happy after reading her message because she's showing that vulnerability; she's showing a side of her that we haven't seen before, and that's so powerful," Phelps tells TIME. "It's definitely going to be a game changer in mental health moving forward."

He read some of backlash against Osaka, who before dropping out of the French Open had announced she was declining to participate in postmatch press conferences at Roland Garros, mentioning the potential mental harm of these exchanges with reporters. "I was almost shocked in a way," says Phelps, "especially with everything I feel like the world has learned about mental health over the last year." But the next day, Phelps started seeing more articles sympathetic to Osaka. "That does bring a smile to my face," he says. "Because yes, then we are understanding that this is something—that it doesn't matter if you're No. 1 in the world or the average Joe; anybody can go through this. It is real. I hope this is the breaking point of really being able to open up and save more lives."

That hope isn't all that outlandish. In recent years, professional athletes like Phelps have helped destigmatize conversations surrounding mental health, having shared their struggles with the public and defying shopworn sports conventions to show no signs of vulnerability, to just power through. Phelps was an executive producer on the 2020 HBO documentary *The Weight of Gold*, which explored the mentalhealth struggles that often befall Olympic athletes after the Games. In the NBA, Kevin Love revealed he suffered a panic attack during a game; DeMar DeRozan, another NBA All-Star, shared his battles with depression. In baseball, Zack Greinke spoke up about his social anxiety; NHL player Robin Lehner opened up about his bipolar disorder; gymnast Aly Raisman has been candid about her anxiety as well.

But through the size of her platform, and her decision to choose well-being over pursuit of a Grand Slam title, Osaka offers the promise of bringing mental-health awareness—

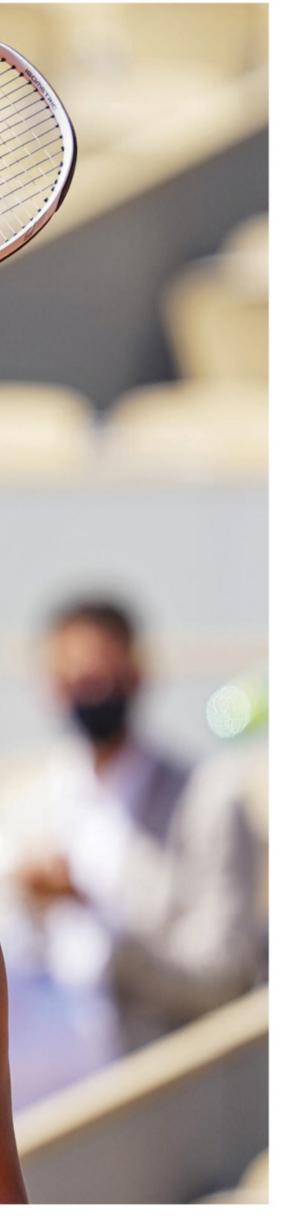


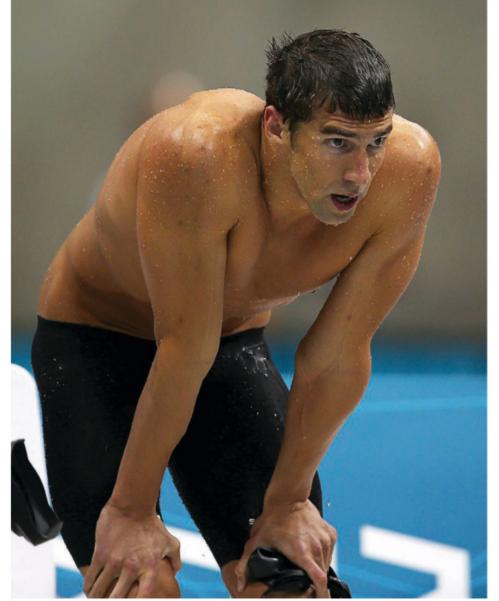
'This will 100% save somebody's life.'

—Michael Phelps

both inside and outside sports—to an entirely new level. "It's groundbreaking," says Lisa Bonta Sumii, a therapist with Galea Health, a company that connects athletes with mental-health providers. "She has prioritized mental health, and has said so. And that's a great example."

Osaka's move also marks the latest step in her stunning personal evolution. In less than three years, she has gone from a shy 20-year-old who apologized to Serena Williams after beating her at the 2018 U.S. Open to a social activist finding her voice—at last year's U.S. Open, which she won, Osaka wore masks honoring seven Black Americans







Osaka prioritized mental health in Paris; Olympians Phelps and Pappas have talked about depression

killed in recent years—and a proponent of mental health. "It goes to show that you don't have to be this charismatic, really extroverted person to be an advocate," says Bonta Sumii. "She's said minimal things here. It's the act. Our behavior can be a form of advocacy."

MANY EXPERTS SAY that when Osaka announced she would not participate in French Open press conferences, she was by no means being "petulant" or a "diva," as some critics chirped. "To me, this looked like a woman who was set-

ting a boundary and saying, I'm not going to put myself in those situations where I'm likely to experience increased risk of harm for my mental health," says Katherine Tamminen, an associate professor of sport psychology at the University of Toronto. In taking this stance, Osaka offers a valuable lesson for anyone experiencing anxiety. "For all of us, it's important to take a look at these different things going on in our lives and say, You know, here are the things I'm willing to work with, and here's where I'm not," says Tamminen.

A common reaction to stories of athlete mental-health struggles is puzzlement. How can someone with a career most people envy possibly be so stressed? But athlete anxiety is more common than many people realize. According to the *British Journal of Sports Medicine*, the reported prevalence of mental-health symptoms and disorders in elite male athletes in team sports varies from 5% for burnout and alcohol use to 45% for anxiety and depression. Alexi Pappas grew up in the

U.S. and ran for Greece in the 2016 Rio Olympics, setting a national record in the 10,000-m. After achieving her Olympic dream, she fell into a debilitating funk. "I felt that the way the world saw me didn't match the way that I felt," says Pappas. "And that's the most scary feeling in the world."

Anxiety caused American Mardy Fish, a former world top 10 tennis player, to drop out of a U.S. Open match against Roger Federer in 2012. "It's incredibly naive to think that someone that just makes a lot of money or is very successful at their career doesn't have stress," says Fish. "Everyone is entitled to their own stresses."

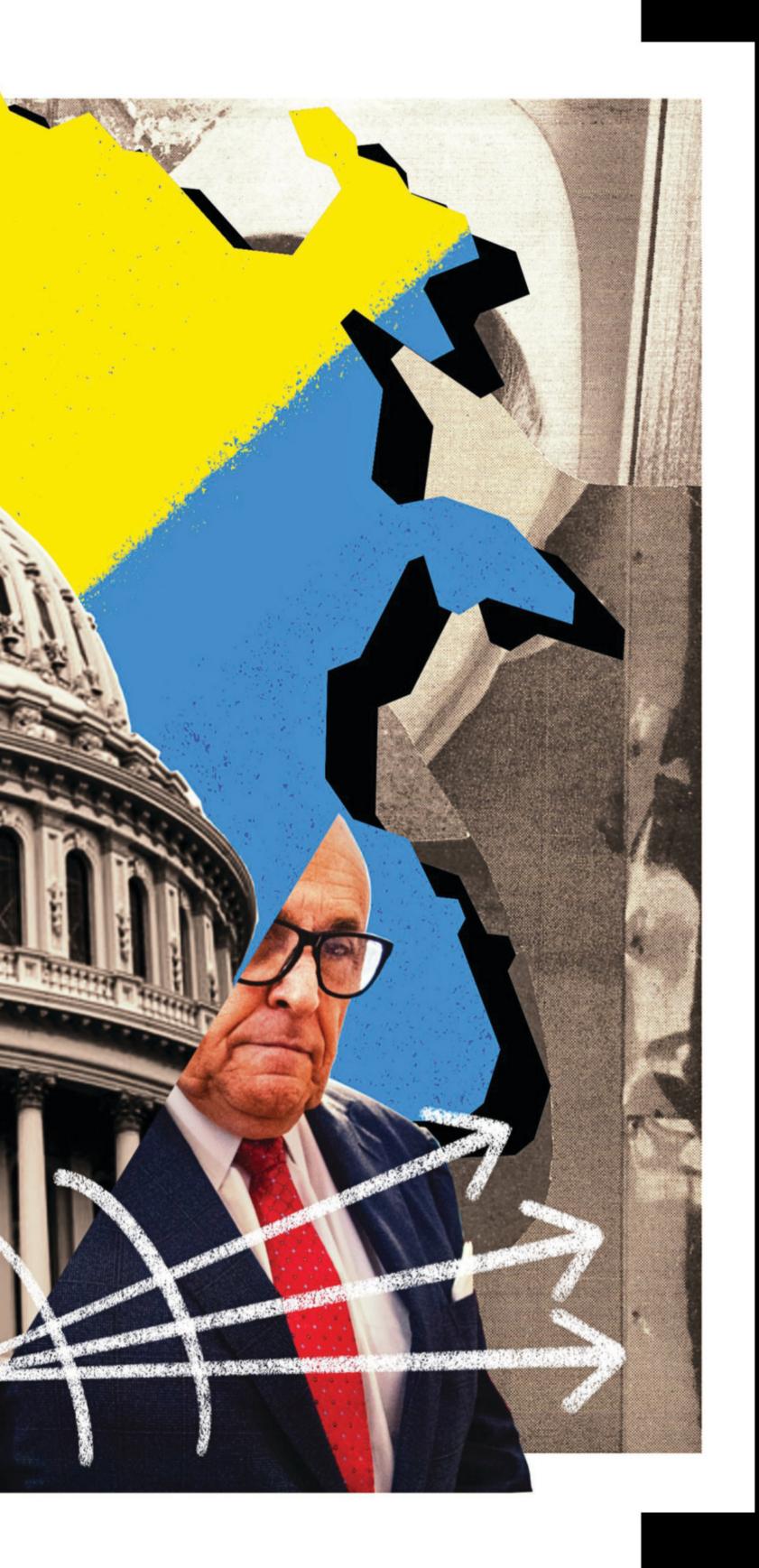
Phelps, who has had more success than nearly any other athlete in history, says winning cannot erase your emotions. "We might be No. 1 in the world and we might be one of the greatest of all time, but we're human beings," he says. "We deal and we feel with emotions just like you do. And we go through depression or anxiety or struggle with other things, just like everybody else does. Just because we're No. 1 in the world doesn't make us invincible."

Pappas, who wrote about her post-Olympic depression in her book *Bravey: Chasing Dreams*, *Befriending Pain*, *and Other Big Ideas*, released earlier this year, sees Osaka as someone who can help us move away from the win-at-all-costs ethos in sports. "This could be epiphanal," says Pappas. "It takes a certain type of person, a certain type of energy to be like, Oh wow, let's never go back. And we've seen that in other things over time, when we've never gone back to this, we've never gone back to that. And perhaps this is one of those turning points where we only go forward and forgive ourselves."

Phelps is retired from the pool, but as the Tokyo Olympics approach—with Osaka still the face of the Games for the host country—he'll be watching from a new perspective. He predicts that Osaka, having spoken her truth, will feel a great sense of relief. And she'll help others find their truths too. "I know how I struggled, for years, of not wanting to dive into the stuff I was holding onto," says Phelps. "When I opened up and really started talking about it, I felt freer. This will 100% save somebody's life. That's something that's bigger than we can ever imagine."

World





The Overt Operative

How an accused Kremlin agent worked with Rudy Giuliani in a plot to sway the 2020 election By Simon Shuster/Kyiv

The accused Kremlin agent was not hard to find. It took only a few days of pestering him for a meeting in early April before his answer arrived via encrypted message, beneath a profile picture of a lion showing its fangs. "I tried very hard and found an opportunity," Andriy Derkach wrote to me in Russian, adding politely, "if it is convenient for you."

We set a time in Kyiv the next day, but he declined to send an address. Instead, he dispatched one of his bodyguards to pick me up in a black van and drive in circles for a while, weaving through the gridlock of the Ukrainian capital, before handing me off to two more bodyguards in the back of a luxury apartment tower.

Through a side door and up a few flights of stairs was a space that could have housed a startup in Brooklyn or Silicon Valley: exposed brick painted in a shade of avocado, glass partitions, a foosball table, a black cat that eyed me from its nook in the waiting room. Only a few of the details aligned with my host's reputation. There were Orthodox icons crowding the shelves, and invisible speakers played a sound that barely registered, like the distant chatter of a crowd, designed to jam unwanted listening devices. As we sat down in a conference room, Derkach urged me to tape our conversation. "I'm already recording," he noted flatly, though it wasn't clear why or with what.

In the world of espionage, it's rare to come across a spy with an office, a website and a story to tell. It happens now and then, usually when the spy has retired and written a memoir. But active intelligence operatives, especially those with ties to Moscow, do not tend to speak on the record while pursuing their

mission in the field. That's partly what makes Andriy Derkach so perplexing.

The U.S. government—under both Joe Biden and Donald Trump—has called Derkach an "active Russian agent." About a month before our meeting in Kyiv, the Office of the Director of National Intelligence, which oversees all U.S. spy agencies, accused him of being a Kremlin operative par excellence, the tip of the spear in a Russian plot to sway the 2020 presidential election. In a declassified report, it said with "high confidence"—the gold standard for such conclusions—that Russian President Vladimir Putin had authorized and "probably directed" the plot to help Trump win a second term. As part of this operation, the report concluded, "Putin had purview over the activities of Andriy Derkach."

Derkach's efforts differed from Russia's more infamous round of election interference. During the 2016 presidential race, Russian military hackers stole and leaked emails from Hillary Clinton's campaign, hiding their work behind proxy servers and fake identities. Derkach, a seven-term member of the Ukrainian parliament, worked in plain sight, often publicizing his efforts in the press as they unfolded.

In the fall of 2019, he gained access to Trump's inner circle through Rudy Giuliani, the President's personal lawyer. He then provided Giuliani with documents purporting to show that Joe Biden and his family were involved in corruption. After their first meeting, Derkach even posted a photo of himself with Giuliani on Facebook, mugging for the camera as they exchanged a stack of documents. In the months before Election Day, he released a series of secret recordings of Biden pressuring top Ukrainian officials to fight corruption. The source of

In the present age of American division, foreign influence campaigns need not be clandestine to achieve their goals

those tapes remains a mystery to this day.

The paradox of these maneuvers is that their brazenness helped shield Derkach: if he was a spy, his associates told me, why would his work be so overt? Derkach says the allegations of election interference are merely "rumors and gossip," and he claims he went after the Biden family to expose corruption in Ukraine. At our meeting in Kyiv, I asked him several times about the U.S. assessment that he is a Russian operative, and he dodged the questions: "Let's talk about your President instead."

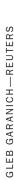
In the run-up to the election, the FBI and CIA both warned the Trump Administration that Derkach was advancing a Russian disinformation campaign. Trump and his allies nonetheless continued to amplify the narrative, initially on Twitter, Facebook and cable news, and then, roughly a month before Election Day, from the stage of the first presidential debate. The online forums of QAnon, the cultlike movement of Trump obsessives, also promoted the Derkach material; at one point it appeared in posts from Q, their anonymous prophet.

The plot served multiple interests. Derkach could not have gotten through to American voters without help from Trump and Giuliani, while the Trump campaign's attacks against the Biden family relied in large part on the ammunition Derkach provided. Whatever the truth of the U.S. allegations against Derkach, Russia benefited from his efforts.

Yury Shvets, who served undercover as a KGB spy in Washington throughout the 1980s, says he was awed by the events as they played out. "They got inside the Americans' heads," Shvets, who studied the operation closely, told me by phone from his home outside D.C. Derkach's actions, he says, bear the hallmarks of Soviet and Russian tradecraft, and succeeded in ways that most disinformation campaigns could only aspire to. "They would have been popping champagne over this back in Moscow," says Shvets.

The operation showed that in the present age of American division, foreign influence campaigns need not be clandestine to achieve their goals. They only need to serve the interests of one side of the partisan divide. The plot also showed how hard it is for the U.S. to fight back.

The costs of running this playbook have





Derkach holds a news conference in Kyiv in October 2019 to promote his false claims about Biden

been manageable for Russia—a fresh set of U.S. sanctions that evoked hardly more than a shrug from Putin.

As for Derkach, the fallout could be worse. The U.S. has not released any direct proof of its allegation that he is a Russian agent. But his activities are now reportedly the focus of a federal investigation in New York, according to a May 27 report in the New York *Times*. So far, however, the personal sanctions imposed against him for election interference in September 2020 have not been much of a deterrent. He is still at it—still offering up dirt on President Biden to any American who asks.

when he appeared in the waiting room, Derkach looked relaxed, much younger than his 53 years. He'd ditched the business suit and thick mustache I had seen in his Facebook photo with Giuliani. Instead he wore a shaggy beard and a carmine sweater unzipped to the

middle of his chest, vaguely resembling the Orthodox saints depicted in the icons that filled his office.

On the table in front of him, he had arrayed the tools of his trade in a neat stack of yellow folders. Each contained a set of kompromat (the Russian term for compromising material) about a specific politician, billionaire or public figure. The folder he handed me was labeled REPORTS ABOUT RECORD-SETTING BRIBE. Inside was a sheaf of papers—mostly press clippings, printouts from Twitter and a letter that Derkach had sent to members of the U.S. Senate—accusing President Biden and his family of corruption. The accusations related mostly to Hunter Biden, the President's son, who held a lucrative seat on the board of a Ukrainian gas company while his father was Vice President.

"This isn't even the deep state. It's a state-run corruption machine," Derkach said with mild frustration, as though repeating things that should be obvious. "The machine is called Demo-Corruption." This is the term Derkach invented for his baroque conspiracy theory, which holds that Biden sits atop a vast system of graft that permeates the Democratic Party and

colludes with George Soros and other Western billionaires.

Rising from his seat, Derkach uncapped a highlighter and began to draw schematics on a whiteboard, an indecipherable pattern of squiggles and numbers. To his right was a poster he had printed to better illustrate the theory. It had the shape of a pyramid, with Biden and Soros atop a panoply of U.S. and Ukrainian officials, diplomats, oligarchs and spies. "The only interest Biden has is to protect the income of this group of comrades here," he said, looking at the poster. "If you want I can give you all this on a thumb drive."

It seemed obvious that he had delivered this lecture before, and he smiled when recalling the time Giuliani was his audience. "Giuliani is a very capable lawyer. I appreciated his meticulousness," Derkach said. "When we spoke, it was very useful for me. He records everything. He writes everything down in his notebook. He never relaxes."

The pair first spoke in the fall of 2019, during the first impeachment Trump faced in the House of Representatives. The inquiry had been embarrassing for Trump and Giuliani; it was even more

humiliating for Ukraine. A parade of witnesses, many of them highly regarded diplomats and military veterans, detailed how the President and his lawyer had pressured Ukraine to open investigations related to the Biden family. In an infamous phone call in July 2019, Trump urged his Ukrainian counterpart, Volodymyr Zelensky, to "do us a favor" by launching these probes.

The House impeached Trump for abuse of office, but the Republican majority in the Senate voted to acquit him. Giuliani likewise emerged undaunted. He carried on with his mission in Ukraine, merely adjusting his tactics. Instead of pushing Ukraine to probe the Bidens, Giuliani launched a renegade investigation of his own, relying on a cast of sources and fixers in Kyiv to help him gather information on the Bidens. Among them was a former diplomat named Andriy Telizhenko, a Trump devotee who shares Giuliani's taste for whiskey and cigars.

His function, Telizhenko told me, was "just to help Mr. Giuliani connect to the right people in Kyiv, filter the evidence, what is true, what is not true." The information came from every corner of Ukraine's political swamp: local tycoons, political operatives, corrupt cops and prosecutors. "We were getting stuff from everywhere," Telizhenko says. "Documents, tapes, you name it."

The process for assessing this material was haphazard. Telizhenko, who told me he was on the payroll of at least two Ukrainian oligarchs at the time, would give Giuliani advice on what sources seemed reliable. They would then compile their

findings and pass them to Trump's allies in Washington, including Republican lawmakers on Capitol Hill and officials at the State and Justice departments. As the material flowed in, Attorney General William Barr created what he called an "intake process" to assess its credibility. Two Republican Senators, Ron Johnson of Wisconsin and Chuck Grassley of Iowa, used Telizhenko as a key witness in their own investigation of the Biden family.

Derkach seemed eager to get in on the action. In November 2019, he called a press conference in Kyiv to talk about his theory of DemoCorruption, using visual aids translated into English. The briefing room was small, but there were plenty of empty seats when I arrived in the middle of his presentation.

As he began taking questions, I asked Derkach whether he realized that his attacks against the Bidens could be seen as an act of foreign election interference. He looked annoyed. "These matters can be interpreted by different people in different ways," he said. "There's nothing we can do about that."

News of the press conference was quick to reach Giuliani's associates in Kyiv. Some of them were skeptical. Telizhenko, who was at that point Giuliani's main fixer in Ukraine, says he repeatedly raised the alarm about Derkach to his boss. "It was the Russia connection," he told me when I asked him to explain these concerns. "Even if his material looked good, it smelled terrible. It was all tainted by Russia. I explained all this to Rudy."

But Giuliani pressed ahead. A few days after the press conference, Derkach got a call from Giuliani, who wanted to

know more about what he had uncovered. "He says to me, 'Hey, what an interesting story!" Derkach recalls of their first conversation, in late November 2019. "'When I get to Kyiv, I'd like to meet with you and talk about it." They set a date for the following month.

HAD GIULIANI LOOKED into Derkach's background—even with a simple Google search—he would easily have learned the basic details of his ties to the Russian intelligence services. Derkach had never made a secret of his past. His father, Leonid Derkach, worked during the height of the Cold War as a KGB officer at a topsecret factory in eastern Ukraine that produced the Soviet Union's most advanced ballistic missiles. One was a rocket the U.S. nicknamed Satan, designed to carry a nuclear payload big enough to wipe American cities off the map.

In the early 1970s, as that weapon underwent its final tests, Derkach's father went back to school. He gained admission to the Soviet Union's premier academy for spies, the Dzerzhinsky Higher School of the KGB in Moscow. A generation later, his son followed in his footsteps. After finishing his military service at a nuclear-missile base, the younger Derkach enrolled in 1990 at the KGB academy in Moscow. (The degree he received was a doctorate in law, though his studies suggest interests beyond jurisprudence. The subject of one thesis paper, he told me, was how to organize meetings with secret agents.)

During the second year of his coursework, Derkach and his fellow students faced a crisis of leadership. Hard-liners ©



at the KGB had staged a coup that August, seeking to overthrow the government of Mikhail Gorbachev, the reformist general secretary of the Communist Party. The putsch not only failed in humiliating fashion but also precipitated the collapse of the Soviet Union later that year. All the empire's constituent republics, from the Baltic states in Europe to the borderlands in Central Asia, became independent countries overnight, each with its own intelligence agency, staffed primarily by KGB veterans.

At the academy in Moscow, Derkach says, "Everyone had to answer the question: Where are you going to serve?" Of the 16 Ukrainians in his class, he says, 14 decided to go home after graduation rather than go to work for Russia. Derkach was among them. In 1993 he went to work as a Ukrainian intelligence operative in his hometown of Dnepropetrovsk, the fading industrial powerhouse where his father had served for years as a senior KGB officer.

The following year, the Derkach family got its big break in politics when Ukraine elected a former rocket engineer named Leonid Kuchma as its President. Kuchma was a close family friend, having worked for years alongside the elder Derkach at the missile factory that produced the Satan rockets. When Kuchma ascended to the presidency, he brought the younger Derkach with him to Kyiv, appointing him to senior posts in his administration, including chief adviser on foreign economic relations, and helping him to win a seat in parliament in 1998. That same year, Kuchma appointed the elder Derkach to head the Security Service of Ukraine, the nation's main intelligence agency.

Leonid Derkach's tenure as intelligence chief was brief. Secret recordings made inside Kuchma's office by a rogue bodyguard and leaked to the press in November 2000 showed President Kuchma and Derkach discussing their ties to the Russian mafia. The recordings also implicated both of them in the murder of an investigative journalist, Georgiy Gongadze, whose headless, mutilated body had been found weeks earlier in a forest outside Kyiv.

Had Giuliani looked into Derkach's background, he would easily have learned the basic details of his ties to Russian intelligence

Leonid Derkach and President Kuchma both denied any connection either to that murder or to Russian organized crime. But their reputations were forever marred by what became known as "the cassette scandal." The elder Derkach was fired the following year. Ukraine soon got a new spy chief with no background in the KGB, Ihor Smeshko, who began investigating the Derkach family after taking up his post in 2003. Throughout his tenure, Smeshko told me, he maintained close relations with the FBI.

When we met on a recent evening in Kyiv, Smeshko had prepared a folder of material related to his investigations of the Russian mafia. (It seemed to be a habit among the city's intelligence veterans, collecting files and passing them on to reporters.) He never brought any charges against the Derkach family, but the probe led Smeshko to believe that following the cassette scandal, the younger Derkach had continued to serve as "an element of Kremlin soft power."

Derkach denied this, and he grew evasive when I pressed about his ties to Moscow. He said he had "probably" met with Putin over the years at "some events of a social nature, some negotiating processes." But he would not talk about these meetings in any detail. Only a couple of times, while discussing his education at the KGB academy, Derkach admitted how useful his skills and connections from that world remain for him today. "If I'd studied at the conservatory, I would dance," he told me. "If I'd studied to be a nanny, I'd be changing diapers. But my life turned out in such a way that I was taught what I was taught. And I do it, in my view, pretty well, to a high standard."

THE HUMILIATION OF HIS FATHER did not seem to handicap Derkach's career. On the contrary, the years that followed the cassette scandal traced a peripatetic journey, passing through the worlds of politics, industry and religion while often appearing to further President Putin's vision for Ukraine.

While serving in parliament in the early 2000s, Derkach launched his own TV network, which did not shy from

World

attacking his political rivals. But it also invited them on air, embracing the public spectacle of debate in ways Ukrainian viewers had seldom seen.

Though he says he enjoyed the clout that came with running a news network, the most satisfying work of his life, he told me, was not in television but in the nuclear sector. In 2006, the government appointed the younger Derkach president of a state-owned firm that controls all four of Ukraine's atomic power stations. The job was demanding in part because of its his-

torical baggage. The Chernobyl disaster of 1986 had seen one of Ukraine's nuclear reactors explode, spewing a cloud of radiation over half of Europe. International monitors and Western governments have kept a close eye ever since. For Derkach that meant dealing with visits from safety watchdogs and managing the trade in nuclear fuel. "It meant balancing relations with the Russians, with the Americans," he told me.

Around the same time, Derkach began to play a greater role in Ukraine's religious affairs. When I asked him about this, Derkach denied that his work with the Russian Orthodox Church had anything to do with politics. "It was a very personal thing," he told me, describing his visits to a Greek monastery on the Holy Mountain of Athos in northern Greece, where Orthodox believers, including Putin and members of his inner circle, often go to pray for absolution. I asked to see photos of those trips, but Derkach demurred. "It's not something to advertise," he said. "And I'm not a saint, most definitely not a saint."

Starting in the mid-2000s, Derkach taught at the main Russian Orthodox seminary in Kyiv, lecturing priests about relations between church and state. He also sat on an advisory council that guided the decisions of senior Russian



Giuliani met twice with Derkach as part of the effort to spread misinformation about Biden

clergy back in Moscow. The council, created in 2009, had around 140 members, says Sergei Chapnin, who met Derkach at its gatherings. It was not unusual, Chapnin says, for people with an intelligence background to advise or even join the clergy.

For Putin, himself a veteran of the KGB, the connection between the church and the intelligence services has been an instrument of foreign policy. The Russian President had long made it a priority to advance the influence of the Russian Orthodox Church, helping it to face down rival clergy in the struggle for Ukrainian souls. "The infiltration of the KGB was serious and deep inside the church during the Soviet period," Chapnin told me. "This friendship still exists, and it is only growing."

During Putin's last visit to Ukraine, in July 2013, he marked an important anniversary for the church: 1,025 years since Putin's namesake, Prince Vladimir the Great, converted to Christianity and brought his pagan subjects into the faith. In a speech to mark the occasion before a roomful of priests and politicians, Putin argued that their shared religious heritage would forever bind Ukraine and Russia. He hoped it would also discourage Ukraine from signing an integration deal with the European Union later that year. "We all know what happened after the Soviet Union fell apart," Putin told the hall of dignitaries. "Today we live in different countries. But that in no way cancels out our common historical past."

The appeal from Putin did not win many hearts in Kyiv, at least not among its people. Although

the government took his advice and refused to sign the E.U. integration deal, thousands of Ukrainians responded by taking to the streets that winter. One of their core demands was for Ukraine to build closer ties with the West and make a final turn away from Russia. As an adviser to Ukraine's Prime Minister, Derkach was involved in the efforts to stop the uprising, and he voted for a set of laws in January 2014 that sought to criminalize political protests.

The passage of those laws only accelerated the revolt. A month later, police snipers killed dozens of protesters in the streets of Kyiv. The regime collapsed the following day. Its leaders packed their treasures into helicopters and sought refuge in Moscow. With a majority of parliament siding with the protesters, Ukraine demanded swift integration with the West, and Russia responded with force, sending troops into the country that spring.

Under Putin's direct supervision, special forces began their assault by seizing Crimea, a vast peninsula in southern Ukraine that was soon annexed into Russia. The land grab marked a historic break between the U.S. and Russia. As part of its response, the White House entrusted Joe Biden, then the Vice President, to help Ukraine get back on its feet after the revolution and to fend off further Russian attacks.

As the conflict intensified, Derkach left his advisory role in the Orthodox Church and stopped teaching at the seminary. He turned his attention to the U.S. embassy in Kyiv, becoming one of its most vocal hecklers. He recalls a typical exchange in 2016, when Ukraine decided, with the encouragement of U.S. diplomats, to require that public officials publish their assets and incomes in an online register. Derkach attacked the anticorruption measure as a form of American "trolling," the latest sign that Ukraine had become a "hostage" to the West.

After Trump was elected, Derkach began insisting that it was Ukraine, not Russia, that had interfered in the U.S. presidential campaign of 2016. This theory had no basis in fact; it had first appeared in a statement from the Russian Foreign Ministry a few weeks after Trump won those elections. Derkach devoted himself to popularizing it.

On television shows and in the halls of parliament, he insisted that Ukraine had colluded with the U.S. embassy in Kyiv to help Clinton's campaign. He even tried to launch a parliamentary investigation of the matter.

Within Trump's inner circle, Giuliani became the most vocal advocate of the fiction Derkach was promoting. Giuliani clung to these allegations for over two years, long after they were

widely debunked as a conspiracy theory by senior officials in the Trump Administration. "I can prove it!" he said on ABC News in late September 2019. Members of the Clinton campaign, he added, "were colluding with the Ukrainians, conspiring with the Ukrainians!"

ABOUT TWO MONTHS LATER, on Dec. 4, 2019, Rudy Giuliani arrived in Kyiv on a flight from Budapest, passing through customs with a suite of advisers and a bodyguard. The impeachment inquiry had by then discredited his claims about Ukrainian election interference. It had also exposed Giuliani's plan to investigate the Biden family in Ukraine. There was no longer much sense

in hiding it. As he prepared to travel to Kyiv, Giuliani even invited a film crew to document his exploits for One America News, the pro-Trump cable network.

William Taylor, who was then the top U.S. diplomat in Kyiv, says the embassy worked hard to stymie Giuliani's efforts in the city. "For one thing, we urged the government not to meet with him," Taylor told me. But Giuliani was no longer interested in pressuring the government. According to two of the people who accompanied him on that trip, their base of operations was a luxury hotel and spa called the Equides Club, which boasts its own golf course and equestrian stables on the southern edge of Kyiv. The place was secluded, allowing Giuliani to meet his sources away from the roving reporters, myself included, who were searching for him around the city's more central restaurants and hotels.

The man who helped organize the trip was Andriy Artemenko, a Ukrainian businessman and lobbyist who resides near Washington and who is well connected in Trump's circle. He is a long-standing business partner to Erik Prince, a major Republican donor and Trump ally. "Rudy called and asked me to help arrange his meetings for the trip," Artemenko told me. "He was approaching it as the personal lawyer of the President of the United States. It's not like he came as an undercover agent," he added, pantomiming a cartoon spy hiding behind the collar of a was Vice President, the tapes did not con-

trench coat. "It was all completely open."

Artemenko, a Kyiv-born citizen of Canada, had plenty of contacts to share. One of them was Derkach, who told me he has known Artemenko at least since 2014.

Once they were settled in the Equides Club, Artemenko began inviting guests to meet with Giuliani. Derkach showed up on the second day, wearing a dark blue suit with a burgundy tie and carrying a folder of documents. As he walked into the hotel, Derkach felt puzzled by the furtive atmosphere. "I don't like secret meetings," he recalled telling Giuliani when they sat down in one of the hotel's dining rooms to talk. "We're having an official conversation."

To dispel the air of conspiracy, Derkach asked whether he could take a photo of their meeting. Giuliani agreed. The resulting snapshot shows both with stern expressions, staring at the camera as the accused Russian agent passes a sheaf of papers to the lawyer of the U.S. President. The photo caused a minor scandal in the U.S. media after Derkach posted it on Facebook that night. But Giuliani was not deterred. In February 2020, they met again in New York City to film an episode of Giuliani's talk show, Common Sense.

Derkach's campaign against the Bidens soon accelerated. That spring and summer, he released a series of audiotapes of Joe Biden. Recorded in 2016, while Biden

> tain anything obviously incriminating or even particularly embarrassing. The first featured Biden calling on the President of Ukraine to fire the country's top prosecutor or face the loss of \$1 billion in U.S. financial assistance. The demand was consistent with Biden's public stance against the prosecutor, whom the U.S. and European Union had blamed for Ukraine's failure to root out graft. Biden's request was even included in an official, public White House summary of the conversation at the time.

> But Derkach painted the tape as proof of his theory of Demo-Corruption. On social media, Trump and his allies ran with that message. The leaked tape was played on Fox News and other



Putin meets with Leonid Derkach in April 2000

World

conservative media. Trump shared a link to it on Twitter, as did his eldest son, Donald Jr., helping to draw millions of views to the Derkach material on YouTube.

The material also spread on the forums of QAnon, raising particular alarm among some U.S. officials. The FBI had identified the movement as a domestic terrorism threat as early as May 2019. About a year later, a link to a Derkach press conference appeared as the 4,500th post from Q, the movement's figurehead, who hinted at the post's significance for the future of the 45th President. "Worth listening (reading)," Q wrote on the movement's main forum, known as 8kun, on June 23, 2020, the day after Derkach released the second of his Biden tapes. "The doubters will soon be believers. Years in the making," read a related post from Q an hour later.

As the tapes trickled out, they fueled one of the central falsehoods propagated by the Trump campaign in 2020—the claim that Biden had acted improperly in Ukraine to help his son's financial fortunes. No evidence ever emerged to support this accusation, and even Senators Johnson and Grassley, two of Trump's Republican allies, concluded after a yearlong investigation that Biden had not used the power of his office to help his son. Yet the material Derkach and Giuliani promoted still became one of Trump's favorite talking points.

During the first presidential debate in September 2020, Trump repeatedly hurled the accusation at his rival. "He threatened Ukraine with a billion dollars if you don't get rid of the prosecutor," Trump shouted. "You're on tape doing it! You're on tape!" Biden denied doing anything wrong, and the moment quickly passed. Amid the crosstalk, few people noticed Trump's reference to a tape—apparently the same one Derkach had released a few months earlier in Kyiv.

U.S. intelligence agencies later concluded that the release of those recordings was part of a broader Russian effort to "launder influence narratives" against Biden. From Russia's perspective, Trump's use of them on the debate stage was the climax of a campaign that had taken nearly a year to orchestrate, says Shvets, the former KGB spy in Washington. This was the moment, Shvets told me, when Trump had his chance "to fire



the political weapon" that Derkach and Giuliani had loaded for him.

It wasn't enough to cost Biden the election. But in the history of information warfare, it may be the only time a foreign power has managed to introduce a piece of kompromat into a U.S. presidential debate. As he delivered it live on television, Trump did not seem bothered by its source.

THE FALLOUT from Giuliani's work in Ukraine hit home on the morning of April 28, when federal agents served a warrant at his apartment in Manhattan and seized his electronic devices. His lawyer, Robert Costello, told reporters afterward that the warrant was part of a

criminal probe related to Giuliani's work in Ukraine. Investigators wanted to know whether Trump's lawyer had illegally lobbied for Ukrainian officials without registering with the Justice Department, as is required under the Foreign Agents Registration Act, Costello said.

In the months leading up to that raid, investigators questioned numerous witnesses about Giuliani's work in Ukraine. Two of those witnesses told me the investigators were especially interested in his ties to Derkach. "They wanted everything—every meeting, every text," one of them told me.

When news of the raid broke, I happened to be at the Trump International hotel in Washington, waiting in the lobby

<

Andriy Telizhenko served as a fixer for Giuliani's mission in Ukraine

to meet with another witness in the case. Artemenko, the lobbyist who had helped organize Giuliani's trip to Kyiv in 2019, had not yet heard the news when he arrived. He spent a few moments staring at the television screens above the lobby bar, which showed footage of federal agents outside Giuliani's apartment building. "Not at all surprised," he said once the images had sunk in.

For more than a year, Artemenko says, he has been cooperating with federal investigators, telling them what he knows about Giuliani's travels to Ukraine and his meetings with Derkach. It is not clear what, if anything, that relationship has to do with the criminal investigation against Giuliani. (A spokesman for the U.S. Attorney in Manhattan declined to comment on the matter.)

But well before the raids on Giuliani's apartment, the fortunes of his Ukrainian associates began to turn. Telizhenko had his U.S. visa revoked and his U.S. bank accounts frozen when the government sanctioned him in January over alleged election interference. In announcing those sanctions, the Treasury Department said Telizhenko was "part of a Russia-linked foreign influence network associated with Andriy Derkach."

Three months earlier, in September 2020, the U.S. had also imposed harsh sanctions on Derkach and publicly identified him as "an active Russian agent." Giuliani tried to distance himself from Derkach the next day, telling NPR that "my work with him was over months ago well before the election." (Giuliani did not respond to requests from TIME for further comment.)

The government in Kyiv followed the U.S. sanctions with its own, revoking the licenses of TV channels that had broadcast Derkach's claims against the Bidens. Zelensky says investigators are working on the case in Kyiv. "Ukraine needs to do everything it can. It needs to turn this case inside out, finding the slightest reason to say, 'There! Derkach committed this and that,'" the President told me a few days before my meeting with Derkach.

Ukrainian investigators are still trying

to understand how the alleged Russian agent got his hands on those recordings of Biden, and whether any crimes were committed as part of the apparent leak. "This was the biggest problem," Zelensky says. "With whose permission was [Biden] taped at the time? And how did those tapes get from the office of the President to someone else?"

On that question, Derkach has stuck to the same improbable answer. He says he got the tapes from "investigative journalists" who were so afraid to publish the tapes that they handed them over to Derkach. Two of Ukraine's best investigative journalists told me this explanation made no sense: publishing the tapes would not be dangerous in Ukraine, and even if there were some risk of backlash, Derkach would not be the person they would turn to for help.

Still, the cover story has provided Derkach a level of protection, allowing him to don the mantle of free speech and investigative journalism. The declassified report from U.S. intelligence agencies does not suggest any alternative for where Derkach could have gotten

'Ukraine needs to do everything it can. It needs to turn this case inside out.'

—President Volodymyr Zelensky

those tapes, and the Director of National Intelligence has declined to release the evidence supporting its allegations about Derkach. Even if New York prosecutors end up indicting him as part of their reported investigation, it's far from clear whether Derkach can be brought to trial.

About a month after our interview, Derkach abruptly canceled a scheduled photo shoot with a TIME photographer, saying he had been forced to leave Ukraine in a hurry. "That's how the circumstances have unfolded," he wrote to me. A week later, the New York *Times* reported he was under federal investigation. I wrote to ask

whether he'd known about it when he left Ukraine and whether he had gone to Russia, which does not have an extradition treaty with the U.S. Derkach would only say he was not in Russia, and called the question "provocative."

Up to now, the worst consequences he has faced for his role in the 2020 presidential race are the U.S. sanctions imposed against him, and he concedes that these have caused him considerable pain. What hurts the most, he told me, is the impact on his family members. Derkach's father, who recently underwent an amputation due to severe diabetes, can no longer travel to the U.S. for medical treatment. His daughter, who studied journalism at the University of Southern California and maintained a home nearby, also had her U.S. visa revoked. Derkach was even forced to take his 10-year-old son out of a private school in Kyiv affiliated with the U.S. embassy there. (The school did not reply to my request for comment.)

As he described his final meeting with the school's director, Derkach's look of wry indifference lifted for a moment to reveal a flash of anger. "Explain it to me," he demanded. "These people from the U.S. embassy, when they wage revenge against my children, are they building a democratic society?"

Maybe not. Maybe they are just trying to deter others from meddling in a U.S. election. Their actions may not seem fair to Derkach. To Biden, the attacks and accusations against his son may also have felt like a sucker punch. "That's not exactly right," Derkach said, snapping back into the narrative he had invited me to hear. "It's not only about Biden. The main thing is the scheme of DemoCorruption. Biden is just the personification of this. He is its god. The system is bigger than him."

No matter the cost, Derkach intends to continue attacking that system and publicizing his attacks by any means he can. Two days after we met, he sent me a link to a statement he had posted on his website. It claimed, in flawless English, that during the U.S. presidential race, he had released only a fraction of the Biden tapes at his disposal: "There are still five hours more." — With reporting by Mariah Espada, Barbara Maddux and Simmone Shah

Ben Crump's Quest to Raise the Value of Black Life In America

How a 'country lawyer' became the go-to advocate for families fighting police abuse

By Janell Ross/Minneapolis

PHOTOGRAPHS BY RUDDY ROYE FOR TIME

Crump on his way to visit a client in Thomasville, Ga., on April 3, 2021



Nation

Ben Crump is on the phone.

No. Ben Crump, 51, is on the phone—while also reading email, looking at texts and intermittently contributing to a hushed conversation happening in the room above the sanctuary at Minneapolis' Greater Friendship Missionary Baptist Church. In the center of the room, men in dark suits and, in most cases, face masks with references to George Floyd, stand in a tight cluster: Floyd's younger brother Philonise Floyd; the Rev. Al Sharpton; Crump's white cocounsel, the Chicago-based lawyer Antonio "Tony" Romanucci. It's a makeshift war room where, instead of a tabletop map and a wreath of smoke, there's a collection of *djembe* drums and a cross above the door.

It's the night before the trial of Derek Chauvin, the former police officer charged with killing Floyd. And the church, a five-minute drive from where Floyd died, is hosting a prayer vigil for the Floyd family, which is about to experience a trial of its own. In the courtroom, the video of Floyd's final moments will be played again and again; defense attorneys will emphasize the substances in Floyd's system when he died; stereotypes about Black men will be aired. As Crump tells the men, everyone and everything in the vicinity of where Floyd died will be blamed—except Chauvin. George Floyd and the eyewitnesses to his death will be called "everything but a child of God," Crump says.

The reason: the unwavering math of American justice. To acquit, Chauvin's defense needs just one juror's doubt.

With the trial long over and Chauvin's sentencing slated for June 25, it may be difficult to remember the unlikelihood of the eventual outcome—Chauvin becoming Minnesota's first white police officer convicted of murder for killing a Black person while on duty. Yes, this was the case with up-close and gruesome video of the crime, from the beginning to the brutal end, and several eyewitnesses. But those elements have been there before, and American juries have opted not to convict or hand out lengthy prison terms. That's why Ben Crump is here.

Many Americans first encountered Crump as the lawyer, adviser and crowd clearer for the grief-stricken parents of Trayvon Martin, the 17-year-old Black boy killed by a neighbor in 2012. In the years since, Crump, a state-college-educated attorney with no establishment connections, has become one of the best-known lawyers in the U.S. His facility for navigating the media's fickle interest in the evidence of American racism has grown, his suits have become more impeccably tailored and his security detail necessary. Crump acts as legal interpreter, lay mental-and spiritual-health counselor, logistics wrangler, spokesman, litigator and advocate. He also negotiated the single largest wrongful-death case involving

a Black victim and a white police officer in U.S. history: on March 12, Minneapolis settled with Floyd's family for \$27 million.

Now, with Chauvin's conviction, Crump has become the lawyer most closely associated with whether there are limits to what a police officer can do to a Black person. "This really is a seminal moment in American history, so we gone pray for America, that it won't act like its usual self," Crump says, that Sunday night before the trial, to the men in the circle. "We gone pray she will be her very best self and deliver justice to this family."

Downstairs in the sanctuary, more than 350 people—masked but not distanced—have come for the vigil. When Crump rises to address the crowd, his voice does too.

"I have been a civil rights lawyer for all of my professional life, but I have been Black *all* of my life," he says. "And nobody can tell me if that was a white citizen down on the ground, who police have restrained and handcuffed, face down, with their knee on his neck for 8 min. 46 sec., that this would be a hard case. Nobody would say that ... It is the intellectual justification of discrimination. You all, this murder case is not hard when you look at that torture video of George Floyd ... Say it with me: This murder case ain't hard."

"This murder case ain't hard!" much of the audience chants.

You, he tells the audience, are our co-counsels. A woman in front of me applauds. Later she tells me that she's had a family member killed by police. This is the world Crump inhabits, where tragedy and injustice walk into every room and sit down.

"If you consider property issues, workplace issues, banking and housing issues, police issues, traffic-level issues that can mushroom to a terrible place, hiring and firing, education and all that going on in our schools," he tells me later, "almost every Black person has some kind of legal problem."

THE GROUP OF LAWYERS most likely to grasp this reality is small, very small. Just 5% of all lawyers in the U.S. are Black, compared with about 13% of the total population, according to the American Bar Association's 2020 legal profession profile.

Born in Lumberton, N.C., where people speak with voices soft on consonants and slow in pace, Crump credits his mother with illuminating his life's work. It's a story he doesn't mind telling often. He grew up in the projects with his mother working as a maid or in factories. A full 24 years after school integration was decreed by the U.S. Supreme Court, in the 1970s, Crump and others integrated what had been the whites-only school. He found classrooms



Crump talks
with co-counsel
from his office in
Tallahassee, Fla.,
on April 3, 2021.
Crump went to law
school and lives in
the Florida capital

TIME June 21/June 28, 2021



with more desks, more and newer books, and vast differences between his life and that of his new classmates. White classmates had allowances that topped his mother's weekly wages, he says. She told him that Thurgood Marshall made Crump's school transfer possible when he led the legal team that won the landmark *Brown v. Board of Education* case. Marshall became Crump's personal hero.

In high school, Crump's mother sent him to live with his stepfather in Florida, believing only a man could help Crump become a man. Crump earned a scholarship to Florida State University in Tallahassee, where he became Black Student Union president. Then he went on to the university's law school.

"Any injustice that Ben perceived was one that he was willing to fight," says Sean Pittman, another Florida State graduate, lawyer and former Orange Bowl Committee president who has known Crump for more than 30 years. Today, the issues are bigger, but the man is the same.

"He prides himself on standing in the gap between the justice system and the people that are being victimized by it," Pittman says from his home in Tallahassee, where Crump also lives blocks from his mother, brothers and several relatives.

After law school, Crump built a private practice with a reputation for walking Black defendants out the courthouse's front door after trial—an option only for those acquitted or whose charges were dismissed. His point: people in Tallahassee could see

that Crump and his law partner were persuading mostly white juries and judges to acquit their clients. Calls began to come in from people with legal problems that they knew had everything to do with race. His clients were—and still are—people treated as if they did not matter. Those who say America has become too litigious might not describe personal-injury law this way, but Crump does.

"I'm a country lawyer who is unapologetic in the defense of Black life, liberty and the pursuit of happiness," Crump tells me.

Two examples: In 2003, Crump and a team filed suit on behalf of Curtis and Annie Jones, a Florida couple who had been through the wringer of workplace-injury law. Curtis barely survived an explosion at a manufacturing facility supplying the Defense Department; Crump pursued the case to the state supreme court, winning the right to sue the company and securing a settlement of over \$10 million. And in 2006, Crump and his partner at the time pressed for charges after a 14-year-old Florida boy, Martin Lee Anderson, died at a juvenile justice system boot camp. The death was attributed to natural causes, but Crump uncovered security-camera footage of him being beaten and made it public. A jury acquitted the guards and nurse of manslaughter, but the state settled with Anderson's family for \$5 million and closed all its juvenile boot camps.

That's the kind of work that prompted Tracy Martin, father of Trayvon, to call Crump in 2012. It's part





of the reason CBS's Gayle King called Crump "the African-American emergency plan" in 2019 and why Sharpton now refers to him as Black America's Attorney General. Ask Crump about those monikers and he shrugs, and then physically leans in.

Crump is hyperaware of the moments and the people who pushed and pulled, tried and failed, then beat the drum long enough in just the right spot to make the American legal system envelop more of us in the protective embrace of the law. Crump believes that protection should include civil and criminal cases. "I hope I do everything I can humanly possible, as long as I can, and when I can't, I am perfectly O.K. with handing the baton to the next generation," he says.

In the interim, Crump says, his role is not just that of an attorney, but that of a public figure steering action and attention, what Martin Luther King Jr. called a "drum major" for justice.

Take what happened in 2017 in Camilla, Ga., where a city-owned cemetery remained segregated, with different upkeep schedules and a fence keeping human beings racially divided, even in death. The cemetery's caretakers took down the fence, he tells me, after Camilla's first Black mayor hired Crump and as CNN was on the way to report the story.

ON THE FIRST DAY of the Chauvin trial, a few hundred feet from the Hennepin County Government Center, Crump and others supporting the Floyd family kneel in a huddle, wind whipping around them, for 8 min. 46 sec. It is a long, uncomfortable time. It is also what they believe to be the time Chauvin pressed his knee into Floyd's body until he died.

"We need to pray that America can live up to its high ideals," Crump tells the crowd. "We need to pray that America could continue to be the beacon of hope and justice... because the whole world is watching."

The argument is not entirely different from the one Crump says he made in private during Floyd set-

tlement talks. Crump approaches negotiations with the idea that everyone present has a stake in what happens and in what will be remembered by history. He expresses all of that, early and often, he says.

In Minneapolis, city officials arrived with concerns about how to demonstrate that theirs is a community where terrible deeds are not simply shrugged off. As negotiations continued, Crump says he made it clear that if the civil case went to trial, he had evidence police had a pattern of violating departmental procedures and breaking the law. In court, the Floyd family was likely to win a larger payment than if the city settled.

"The real question," Crump says he told city officials, "is, Do you want to put your city through that ... or do you want to try to talk about how we solve these issues together and be in partnership and say that we want to be on the right side of history?"

The work produced policy changes and what the local paper described as the single largest pretrial settlement in a civil-rights-related wrongfuldeath case in U.S. history. Negotiations with officials in Louisville, Ky., after police shot and killed 26-year-old Breonna Taylor were similar, Crump says. They produced new policy and a \$12 million agreement, the single largest payout connected to the wrongful death of a Black woman caused by police in U.S. history. The U.S. Department of Justice has since announced plans to investigate policing in both cities.

In a statement to TIME, Minneapolis city attorney Jim Rowader described his working relationship with Crump as "extremely positive and productive" and said the settlement "reflects a shared commitment to advancing racial justice and a sustained push for police reform."

As Crump disappears inside the courthouse to watch the opening day of Chauvin's trial, a group of protesters puts a coffin on the ground. It's covered in the broken shards of a mirror. On the top,





From left:
Crump at home
in Tallahassee;
praying before
Easter dinner with
family; hugging
friend and former
client Curtis Jones

someone has written in red paint: FOR ALL WHO WEREN'T FILMED, WON'T GET A TRIAL, HAVEN'T RECEIVED JUSTICE, WHOSE NAMES WEREN'T SAID, CASES THAT WERE SWEPT UNDER THE RUG, WHO DIDN'T GET A NATIONAL UPRISING AND WHOSE CITIES DIDN'T BURN FROM GRIEF, YOU DESERVED IT ALL.

After that, Crump is so busy that what I see is just a blur shaped something like the man known as Ben Crump. He's in demand on cable and radio. He's offering assessments of the day's events and what is to come. He's trying to press into the public's understanding the same facts and ideas expressed at that vigil.

Crump is doing all his unofficial legal work while tailed by a crew producing a Netflix documentary. Nadia Hallgren, the filmmaker responsible for Michelle Obama's *Becoming* film, leads the team. Like Obama, Crump has written a memoir, *Open Season: Legalized Genocide of Colored People*, and has appeared in multiple documentaries and has his own production company. He is asked to pose for selfies in hotel lobbies and on city streets. But on the second morning of the trial, when he takes a seat at a table inside a dim lobby restaurant with some of his staff, Crump is unusually quiet.

A few days earlier, a Black man had been killed by police in Virginia Beach. Police say the man fired at them. The person in the best position to refute that is dead. The man's family has called.

"I think we'll have to see," Crump says to Adner Marcelin, a young associate in Crump's now 14-city law firm. "You know the big questions."

On the way to court, Crump explains the big questions, the somber mood. There are more people being killed than he or anyone else can represent. There's a new hashtag every day memorializing or screaming for justice for some poor soul. It's the stuff of Crump's recurrent nightmares, he tells me. These days, Crump only has the bandwidth for cases

where elements of what happened "shock the conscience." He will not take cases where anyone used their weapon against an officer. "I take cases that help David beat Goliath," he says. "Because where's the glory in helping Goliath beat David?"

CRUMP DECIDES NOT TO TAKE the Virginia case, and in doing so highlights something else: he does not contact families to encourage suits. Lawyers who do that risk censure or disbarment. Families, many of whom watched Crump speak for Trayvon Martin nine years ago, or for an almost innumerable list of victims since, call *him*.

Contained in those often-lobbed accusations of ambulance chasing and crisis profiteering are sometimes legitimate worries, and sometimes discomfort with a well-paid, outspoken, unintimidated Black person. Sometimes it's a combination thereof. Crump tells me he doesn't expect to be everyone's favorite person. All his personal heroes—Marshall and King, to name two—were hated in their lifetimes. "You understand that you not gone be loved by everybody and hopefully history will get it right," Crump says. "But if they don't, you know in your heart what you were fighting for."

Daniel Cameron, Kentucky's attorney general—a Black Republican and acolyte of Senate minority leader Mitch McConnell—is among those who have criticized Crump's methods. Cameron told *Fox & Friends* in October that Crump "goes into a city, creates a narrative, cherry-picks facts ... creates chaos ... then he leaves with his money, and then asks the community to pick up the pieces."

Crump's fees are the industry standard for cases taken on with an agreement that the client pays nothing until the case ends. Those who win a judgment in court or receive a settlement typically pay their lawyers 33% to 40%. The Floyd settlement is no different. The four law firms involved will divide up to 40% of \$27 million. That's \$2.7 million per firm, before

Nation

taxes. Crump makes most of his money and pays a staff of about 110, he explains, with income from less visible cases—banking discrimination, product liability and other issues. In 2020, for example, Crump won a personal-injury case for \$411 million.

Although prosecutors decide whom to charge, a small number of former clients seem to view Crump's pre-Chauvin trial track record—civil penalties paid out by cities where officers ultimately face no criminal penalties—as a distraction. Both Leon Ford Jr., a young Black man paralyzed by Pittsburgh police in 2012 in a case of mistaken identity, and Samaria Rice, mother of Tamir Rice, a 12-year-old boy killed by Cleveland police in 2014, publicly said they would not hire Crump again. Rice, who declined to comment further, has described Crump's legal knowledge as insufficient and his approach as a diversion from justice. Ford, in a message to TIME, wrote that he objects broadly to the building of civil rights careers, "the commercialization, sensationalism, and capitalistic nature of activism" that hurts already injured families. Both Rice and Ford hired new lawyers. Each received settlements of \$6 million or less. The officers in the Rice case were not prosecuted, and officers involved in Ford's case were not convicted.

Asked about these criticisms, Crump is at once philosophical and practical. "I'm ... trying to raise the value of Black life," Crump says of the civil suits he files. "Every chance and every opportunity that I get."

It's not just a matter of funneling dollars to wronged and grieving families. There may well be a point, Crump says, at which the current state of police accountability becomes unsustainable. The price tag of civil litigation could outstrip insurance coverage or overrun a city budget, forcing changes.

"I used to think that if every time they shot a Black man in America they were forced to pay a million dollars," Crump says, "then that would be the last Black man shot in the back. That wasn't true."

Rashawn Ray, a sociologist at the University of Maryland and fellow at the Brookings Institution, says that while specific policy reforms are needed, he admires how Crump has made police conduct a major part of the national conversation. "Over the last five years in the top 20 metro areas of the country, over \$2 billion has been paid out in civil payouts," says Ray, the executive director of the University of Maryland's Lab for Applied Social Science Research. "These are just the major metro areas. But of late there have been more payouts in rural and suburban areas."

There's also the reality, Crump says, that in America, money tends to be a pretty accurate gauge of what and whom we value. In 2019, for example, Minneapolis paid \$20 million to the family of Justine Damond, a white woman mistakenly killed by a police officer. It was more than the city had paid to

settle all cases alleging police misconduct, mostly to Black families, over the preceding decade. Mohamed Noor, the Black officer who killed Damond, became the first Minnesota cop convicted of a crime in connection with an on-duty shooting. Noor was given a 12-year prison term, also a first.

"Why can't Black people have the same thing? We want full justice," Crump says. He will repeat this idea in some way many times before the Chauvin trial ends. "Not partial justice. George Floyd's family deserves a settlement and a conviction just like Justine Damond's family did."

ON EASTER WEEKEND, some combination of the holiday, the type of testimony expected in the Chauvin trial and the need for clean clothes takes Crump home to Tallahassee. From the outside, his office downtown looks like a modest one-story burnt sienna stucco building, but inside it has vaulted ceilings and office space for multiple lawyers. Professionally matted newspaper stories about Crump and awards from civic organizations dominate the decor.

Near the entrance to his office are two certificates showing Crump has credentials to argue a case before the Florida and U.S. Supreme Courts. Inside, alongside various symbols of justice—brass scales, a sculpture of an eagle in flight—there's a laptop and a ring light set up for TV appearances, like the one he's filming now, on Easter morning. When the host turns to Crump, he talks about events in the trial that week, including the revelation that Chauvin kneeled on Floyd's body not for 8 min. 46 sec., but for 9 min. 29 sec. Crump speaks of the evocative testimony of two young cousins who witnessed it. He mentions that the defense lawyer put blame on bystanders who begged Chauvin to remove his knee.

When he's done, Crump heads to church—outdoors, due to the pandemic. The service will reference the need for justice in America, and he'll be asked to offer an update on what's happening in Minneapolis. After, people approach: to speak with Crump, to shake his hand, to share a thought. A group of Black fraternity brothers in matching blazers and ties want pictures. Then, they linger. Crump is not just a known name who arrived in a Mercedes. He is their champion, the person trying to push the law to protect people like them, who contend each day with what it means to be considered a threat.

Crump told me he planned to stay home for a week, "unless they kill somebody else."

It didn't happen that week. But it did the following Sunday.

Daunte Wright was shot dead by a police officer in Brooklyn Center, a Minneapolis suburb, during a traffic stop. His family called Crump. Crump took the case. — With reporting by LESLIE DICKSTEIN and MARIAH ESPADA

Crump waits to meet George Floyd's family in Houston on June 7, 2020, two days before Floyd's funeral



Business

As employees at the factory that makes Kate Hudson's activewear line allege rampant sexual abuse, a workers'-rights movement takes hold

BY LOUISE DONOVAN AND REFILOE MAKHABA NKUNE

EMPLOYEES AT A GARMENT FACTORY IN LESOTHO, A TINY country in southern Africa, say they have lived in fear for years. Each day at 7 a.m., as their sewing machines whirred, a familiar panic rose in many of them: it's not safe here.

At least 38 current workers say abuse and harassment took place within the walls of Hippo Knitting, a Taiwanese company located in Lesotho's capital, Maseru, an investigation by TIME and the Fuller Project found. All employees interviewed asked to remain anonymous out of safety concerns and fear of losing their jobs.

The factory, which employs 1,000 garment workers, about 90% of whom are women, predominantly supplies one brand: Fabletics, a popular U.S. athletic-apparel line co-founded by actor Kate Hudson.

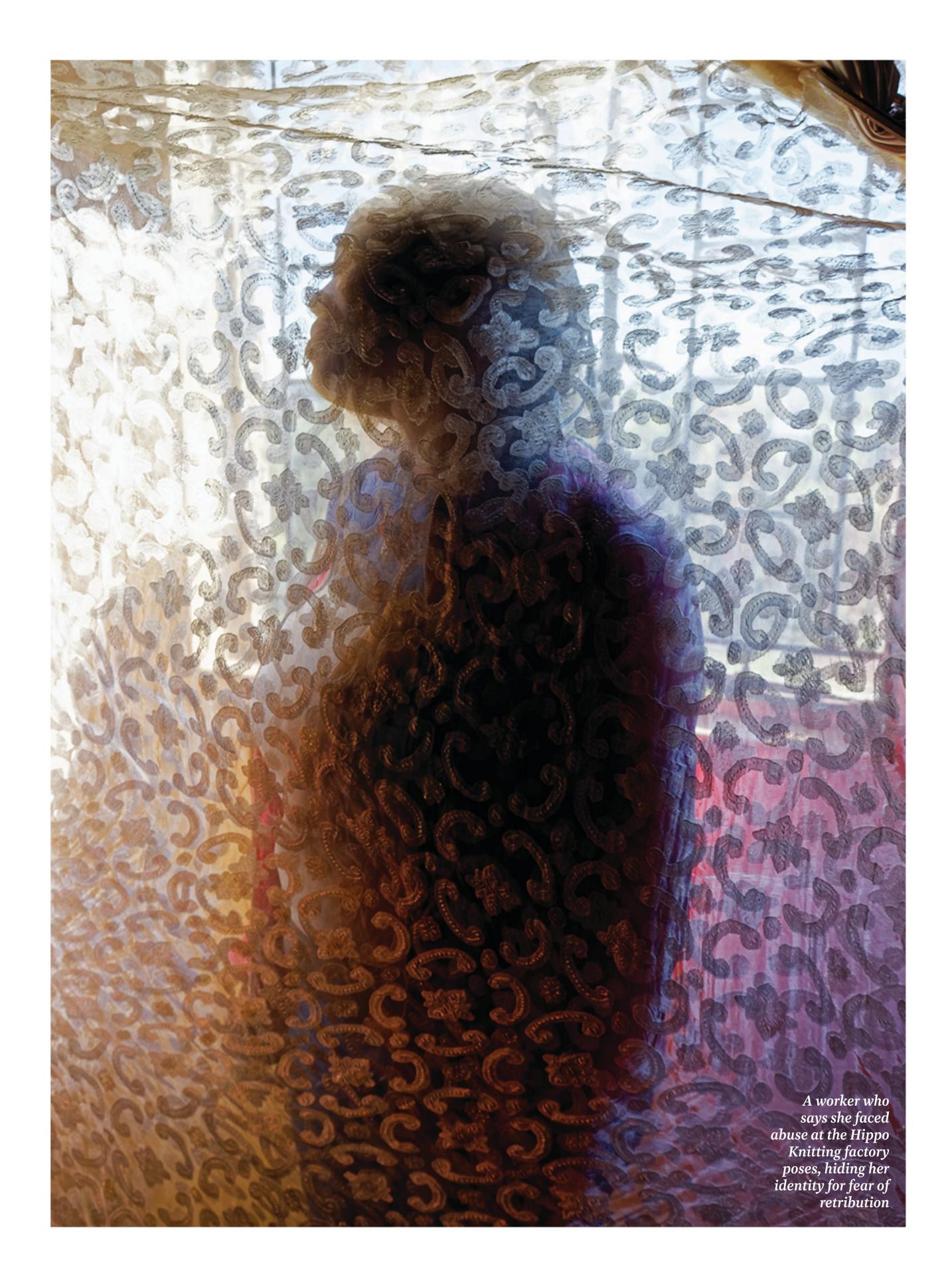
Thirteen women interviewed say their underwear and vulvas were often exposed during routine daily searches by supervisors. Another woman says a male supervisor tried to pressure her into a sexual relationship, while three women allege male supervisors sexually assaulted them. Several of those workers added that they were often humiliated and verbally abused by

management. Workers say they were forced to crawl on the floor by one supervisor as a punishment. In one instance, a woman says she urinated on herself because the same supervisor prevented her from accessing the bathroom.

After TIME and the Fuller Project reached out to Fabletics on April 29 for comment on the alleged abuse at Hippo Knitting, the brand vowed to do "everything in [their] power to further remedy the situation," according to a spokesperson. The brand immediately suspended operations with Hippo Knitting and sent a "senior leader" to Lesotho to investigate.

"The top priority for Fabletics is the workers who are impacted, and we are committed to providing their full pay during the course of the investigation," the spokesperson wrote in an email sent May 2. Workers and unions in Lesotho confirmed that production at Hippo Knitting stopped on May 3. The investigation is ongoing, according to Fabletics.

This story is a partnership with the Fuller Project, a global nonprofit newsroom reporting on issues that affect women



Business

A representative for Kate Hudson said she had no knowledge of the reports before TIME and the Fuller Project reached out and that "Fabletics management attested to Kate that they maintain the highest ethical and social standards in their factories and workplaces and have commenced a full and comprehensive investigation."

Many workers say they've been working under these conditions for years. In recent weeks, Hippo Knitting and factories across Lesotho closed because of massive worker strikes, part of a growing movement for better pay and improved working conditions. Last month, garment workers barricaded the roads with rocks, logs and broken streetlamps, blocking traffic for hours. Police deployed water cannons and rubber bullets to disperse protesters, while at least two workers died during the clashes, according to media reports. Spearheaded by various trade unions in Lesotho, the strikes coincided with the investigation of alleged abuse at Hippo Knitting. Many of the factory's employees took part in the protests to continue demanding change.

"We are tired, we need help, we work with bleeding hearts," says a woman who has worked at Hippo Knitting for a decade.

IN THE '80s, Taiwanese and South

African companies set up some of the first garment factories in Lesotho, a landlocked country encircled by South Africa. They were drawn by its low labor costs, tax benefits, and access to both the southern African and international markets. When then U.S. President Bill Clinton signed the African Growth and Opportunity Act in 2000, allowing duty-free exports to the U.S., the industry boomed. In the four years after, the number of people employed in the sector jumped to 54,000 workers a 260% increase—according to the U.S. Agency for International Development (USAID) TradeHub.

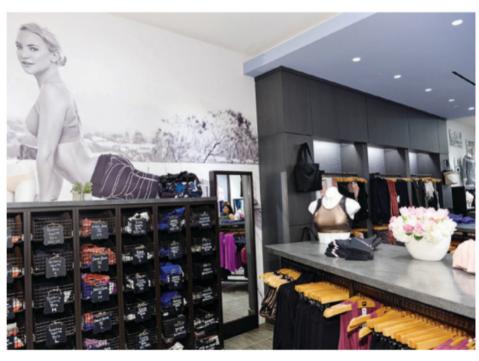
Today, the garment industry is Lesotho's second largest employer, and its workers, an estimated 90% of whom are women, craft clothes for some of America's most prominent brands: Levi Strauss, Wrangler, JCPenney and Walmart. The U.S. is the largest recipient of Lesotho's garment exports, worth \$303 million in

2019, according to USAID TradeHub. While the country is known for its denim, the largest part of its apparel industry is dedicated to knit garments: T-shirts, tracksuits and sportswear, like Fabletics' fast-fashion leggings, which sell for \$50 a pop.

In a country with persistently high unemployment rates, a steady decline in opportunities for men in the South African mining sector coincided with increased employment for women in Lesotho's garment industry, and women are now often the breadwinners of their households. Most of the Hippo Knitting employees interviewed were paid roughly \$150 per month.

"I hate my job, but I cannot leave because there is nowhere else," says one female employee at Hippo Knitting.

Two years ago, a report by Worker Rights Consortium, a U.S.-based NGO,



Fabletics has seen growth during the pandemic and plans to open 24 more stores this year

revealed widespread rape, sexual harassment and assault at three factories in Lesotho. The Taiwanese company that owns the factories, Nien Hsing, and the three U.S. brands that produce there— Levi's; the Children's Place; and Kontoor Brands, which owns Wrangler and Lee then signed what's referred to as the Lesotho Agreement in a bid to protect workers from gender-based violence. As a result, employees must now attend training led by the unions and women's-rights groups. An independent body, with authority to dismiss perpetrators, was also set up to investigate complaints of harassment by supervisors and managers at the factories.

At the time, the three U.S. brands said they believed the program could "create lasting change" and that they were committed to making female workers feel "valued and empowered." Female employees have since said the Nien Hsing factories feel safer. But there are roughly 50 more factories across the country, including Hippo Knitting, where rights groups fear abuse goes unchecked. Meanwhile, the government in Lesotho has offered only a tepid response to the issue.

Over the course of 40 interviews, seamstresses, cutters and cleaners at Hippo Knitting factory allege that verbal abuse and harassment have been rife for years. But several say the unwanted touching during daily searches has worsened during the pandemic because different supervisors are now in charge.

At least 11 of the incidents detailed by employees have been independently verified with unions in Lesotho, fam-

ily members or friends, and fellow workers in the factory. TIME and the Fuller Project have not been able to independently verify all of the workers' claims, but several Lesotho-based unions say their stories are common—and reveal a wider pattern of abuse across the garment industry.

EACH WEEKDAY, many of Hippo Knitting's workers set off on foot before dawn from nearby villages to arrive at the factory gate on time. Sewage from a septic tank spews onto the factory yard floor, where employees eat their lunch every day, workers say. "The stench is horrible," says one seamstress. "We breathe it [in] all

day." At lunch and shortly after workers clock out at 5 p.m., supervisors conduct routine body searches, with little privacy, checking for stolen items.

"A supervisor pulled my jeans down, pulled my tights elastic toward her and let go ... it slapped my [fibroids] operation wound. I was in so much pain," says one female employee. "She has done this to numerous women ... and told several that they don't shave their private parts." At least three workers in the factory independently mentioned during their interviews with TIME and the Fuller Project that they witnessed the operation-wound incident.

Another female employee says she experienced almost daily harassment from

WHATIS AVAXHOME?

the biggest Internet portal, providing you various content: brand new books, trending movies, fresh magazines, hot games, recent software, latest music releases.

Unlimited satisfaction one low price
Cheap constant access to piping hot media
Protect your downloadings from Big brother
Safer, than torrent-trackers

18 years of seamless operation and our users' satisfaction

All languages
Brand new content
One site



We have everything for all of your needs. Just open https://avxlive.icu



Hippo Knitting, a garment factory located in the industrial area Ha Hoohlo, Maseru, Lesotho

a male supervisor for six months in 2020. "He made comments about my weight, that I have a beautiful body ... the things he would do to me if he got the chance," she says over the phone. When she refused to engage in a sexual relationship, he "started trying to make my work hell," assigning her increasingly difficult sewing styles, she says.

After she reported his behavior to the factory's HR department, he was moved to another production line. She says she feels safer now but is concerned the issue has not been dealt with properly. "Many women have gone through this; it is not just me," she says. When asked about the male supervisor's behavior toward women, another female employee who has worked at the factory for over a decade said it was common knowledge. "Everyone knows [about him]," she says.

TIME and the Fuller Project spoke with three women who say they have been sexually assaulted by male supervisors, including incidents in which supervisors grabbed the workers' genitals and repeatedly smacked their buttocks.

"Most of the factories [across Lesotho] have sexual harassment," says Tsepang Makakole, deputy general secretary of Lesotho's National Clothing Textile and Allied Workers Union (NACTWU), which represents more than 4,000 workers. "But people are afraid to lose their jobs."

Makakole noted the landmark Leso-

tho Agreement gave workers at the Nien Hsing factories the confidence to report harassment issues to NACTWU. But without this system in place at other factories or among other employers, he fears workers are staying silent.

"If the factory doesn't have [the Lesotho Agreement in place], that's the problem," he says. "People know if they speak up it won't be easy for them."

CO-FOUNDED BY HUDSON in 2013, Fabletics began as an online brand selling what it describes as accessibly priced workout wear. Hudson and her partners, Adam Goldenberg and Don Ressler, saw a gap in the market for high-quality clothes that "you could perform in" but that were "cute, fashionable and affordable," Hudson told the Daily Front Row, a fashion industry publication, in 2019.

With the help of her star power, Fabletics took off. More than 1 million orders were shipped in the first six months, making it one of the "fastestgrowing fashion brands in history,"

'She is supposed to protect us, but if you go to her, you will come back even in more pain.'

according to Fabletics' parent company, TechStyle Fashion Group, formerly JustFab Inc.

Four years ago, Hudson said onstage at the Fast Company Innovation Festival that she believes Fabletics' subscription model was the key to its success. Shoppers can opt to pay a monthly \$49.95 fee in exchange for access to "VIP Member" prices (like 50% off) to receive new gym wear in the mail. Yet customers have accused both Fabletics and TechStyle of scamming shoppers into unknowingly signing up for recurring monthly fees that are difficult to cancel. Amid criticism, in 2016, Fabletics vowed to make membership fees clearer, though customers still regularly take to social media to decry the brand's hidden costs.

Meanwhile, Fabletics has been hailed as a retail success story, expanding quickly across Europe, Australia and Canada, and into more than 50 U.S. brick-andmortar stores. In 2019, it raked in more than \$400 million in sales. Celebrities like singer Kelly Rowland collaborate on limited collections. Last year, comedian Kevin Hart became an investor and the face of Fabletics Men, and has since curated a dual-gender collection with his wife Eniko.

Neither Rowland nor the Harts responded to multiple requests for comment.

On social media, the message from both Fabletics and Hudson is one of inclu-

Business

sivity, empowerment and sunny Californian confidence mixed with social justice. "When women rise, we all rise," reads one Instagram caption on March 8, International Women's Day, this year. After the police killing of George Floyd in Minneapolis last May, the brand committed to eradicating "racism, racial inequality and racial injustice." On her own Instagram page, Hudson wrote, "[We] invite you to stand with us, in solidarity with the Black community. Let's make a real difference—together."

The fast-fashion industry has long relied on the exploitation of garment workers, who are predominantly women of color, to quickly produce low-cost clothing, and as Fabletics expands, women working thousands of miles away in unsafe environments have been bearing the burden. Rights groups say some brands maximize their own profits while often turning a blind eye to unpaid overtime and subpar human-rights standards.

"Global brands have long outsourced their responsibility," says Mirjam van Heugten of the Clean Clothes Campaign, an Amsterdam-based alliance of labor unions and NGOs. "The demand for fast fashion falls down the supply chain to these women, who are put under immense pressure with little protection."

At Hippo Knitting, supervisors shout and pile on the pressure to hit their targets, say workers. One employee says they are given "loads" that are "not humanly possible." Women are arranged in sewing lines of roughly 30 and are pushed to complete up to 1,400 garments each day.

If they miss the target, workers say, management often forces them to stay beyond 5 p.m. without pay, violating Lesotho's labor laws, which stipulate a 45hour workweek limit. Across the industry, government enforcement of laws to protect workers from gender-based violence is also notoriously weak, say rights groups.

In the 1990s, retail giants like Nike were plagued by reports of workers paid less than \$2 a day and subsequently pledged to end child labor. After the international outcry, fashion brands began to carry out voluntary social audits. Now, across the industry, brand representatives or independent third-party auditors will visit factories to ensure that their suppliers are adhering to various labor, environmental and social standards, such as fire safety and workplace discrimination.

Factories that supply products for TechStyle and its affiliated brands, like Fabletics, are contractually obliged to honor their "Ethical Sourcing Code," which includes compliance with working hours and prohibits discrimination and harsh and inhumane treatment of workers. To evaluate this, TechStyle says it "subjects its suppliers" to "random unannounced" audits.

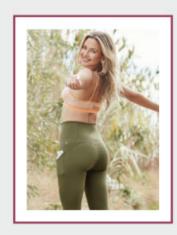
In an emailed response to the allegations, Grace

Social justice on social media

Online, Fabletics presents a sunny image, promoting causes like women's empowerment and racial equity



The brand has a small men's collection, but most of the products are marketed to women



After George Floyd's murder, Hudson posted "in solidarity with the Black community" and that she wants to "make a real difference"



Inspirational messages and quotes pepper the brand's Instagram page

Lin, the owner of Hippo Knitting, confirmed that annual audits are conducted at the factory, the most recent taking place in April this year. But workers say management pressures them not to tell auditors the truth and threatens that they will lose their job if they do.

That comports with the warnings by advocates, who have long called voluntary inspections merely a box-ticking exercise designed to give brands deniability if problems later emerge. When asked about audits in Lesotho, Solong Senohe, general secretary of United Textile Employees (UNITE), another large union, said they are mostly ineffective and sometimes misused.

"The employees are hesitant to report the sexual and physical abuse, as it often amounts to no action against the managers," says Marorisang Letseka, senior organizer at the Independent Democratic Union of Lesotho (IDUL), "and results in the worker being attacked to a point of wanting out of the job."

THE GRAY WALLS inside the men's bathroom at Hippo Knitting are chipped and cracked, the floor punched with pockets of black dirt. Early one afternoon last year, a male employee was waiting his turn to use the urinal, he says, when the female HR manager, Ellis Tseka, entered. She "pressed" him against the toilet door and "reached" for his zipper to try to touch his genitals, he says.

"I was angry," he says over the phone. "I was so embarrassed by that lady. Why did she do that to me?"

In interviews with workers, many issues revolve around Tseka. She is both verbally and sexually abusive, says Letseka from IDUL. She is often present when harassment occurs and takes no action, according to IDUL. Many workers say they report incidents of abuse from other staff members to her, but very little changes.

The male employee reported the toilet incident to his union later that day, which advised him to take the matter to the labor court. "It's like I'm in jail," he says, referring to his workplace. "I have no right to say anything to anybody here."

A female employee says Tseka forced her to crawl along the factory floor as punishment for being late. "I had an injury on my knees, and they $\bar{\omega}$ were inflamed," the employee says. "I cried the whole time, as I was in pain."

She told her daughter about the incident, who confirmed to TIME and the Fuller Project that her mother's knees were swollen when she arrived home from work that day last year.

Unions and employees say practices inside the factory are also substandard. One female employee says she was made to operate heavy machinery late into her pregnancy and that Tseka demanded to see a marriage certificate before giving her maternity pay. As the worker was unmarried, her child's surname was different from hers. In order to obtain the right documentation, she married her partner.

TIME and the Fuller Project have viewed the paperwork she produced for Tseka, and spoke to the worker's husband, who confirmed that his wife had told him a marriage certificate was needed.

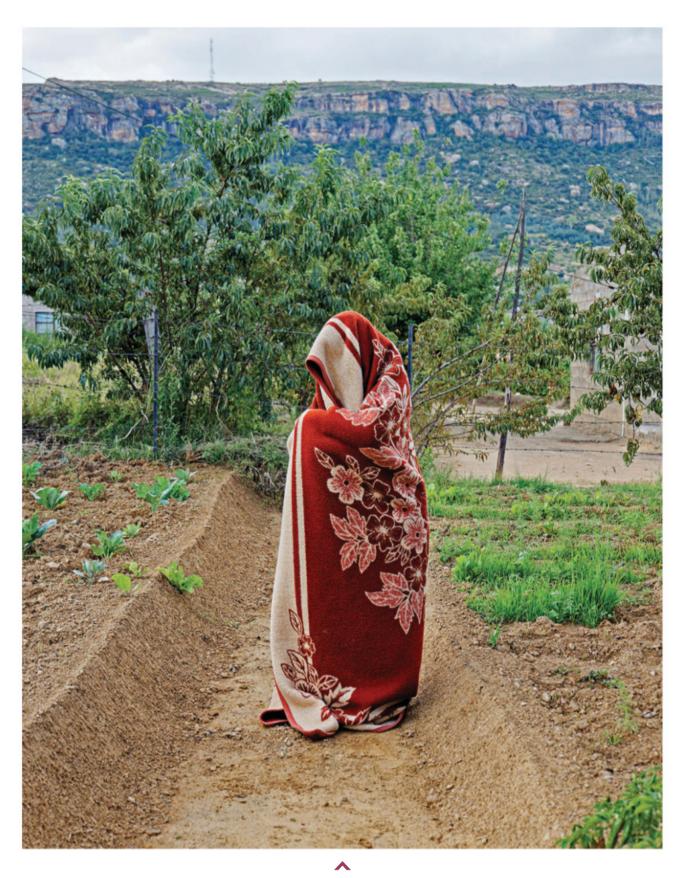
Of all the sexual and verbal harassment taking place inside the factory, many workers say, Tseka's behavior is the most damaging. The one person who should provide a safety net is failing them, they say. "She is supposed to protect us," says one female employee, "but if you go to her, you will come back even in more pain."

In an emailed statement, Lin, the owner of Hippo Knitting, said she is "committed to addressing [the allegations] with the seriousness they deserve" and has "initiated a process of engaging an independent international auditor to establish the credibility and basis of these allegations."

Tseka is no longer employed at Hippo Knitting, according to Lin, who added that she is working with the unions "on a plan of action with clear time lines and deliverables to ensure that all these issues are addressed adequately." Tseka did not respond to multiple email and phone call requests for comment.

Police in Lesotho are now investigating at least three cases of sexual offense and public indecency at Hippo Knitting, according to the national police spokesperson Mpiti Mopeli. "There are more allegations, though the victims are skeptical about reporting in fear of losing their jobs," Mopeli said.

The perpetrators must be "brought to justice and expelled from the factory," says one female employee. "As long as



Another worker who says she faced abuse at Hippo Knitting hides her identity for fear of retribution

they are still present, then harassment won't go away."

One viable option to help curb gender-based violence at garment factories could be to extend the new Lesotho Agreement across the entire industry. "I've been asked, even by [members of] the public, Why is the project only at Nien Hsing?" says Senohe from UNITE. "It should cover the whole industry, not only certain companies. Women at Hippo Knitting also want protection."

Since TIME and the Fuller Project's story ran online on May 5, three Hippo Knitting employees confirmed that they'd received their May salary, despite a reduction in work due to Fabletics' investigations. While the brand has promised not to pull production, according to Letseka from IDUL and several Hippo Knitting employees, there are still concerns about layoffs and short time, whereby staff are sent home unpaid until there is more work.

At least one worker confirmed that management told him on May 28 not to return to work. He was on a temporary contract and said he was not provided with "any assurance" that he would return. Lin, the owner of Hippo Knitting, did not respond to multiple requests for comment on job cuts.

"They say we are causing instability in the factory," says one female Hippo Knitting employee who spoke up about the abuses. "To Chan [the factory owner] says there is no work [and] the buyers are pulling their orders. [But] the investigators are always assuring us they are here to protect us, our jobs are secure and we should speak freely."

Meanwhile, in the U.S., as a pandemic-pummeled retail industry lies in tatters, Fabletics is expanding into 24 more stores across the country and launching a new fitness app. The brand's success has yet to translate into any permanent improvement in working conditions in Lesotho. Nor has it quelled any sense of unease for workers.

"We need to be treated like human beings and not animals," says one female employee. "We need to feel free." — With reporting by MADELINE ROACHE and MAHER SATTAR

World

SUNBATHERS
ENJOY THE BUSY
BARCELONETA
BEACH ON JUNE 6



TOURISM REVISITED

BARCELONA
WANTS THE SECTOR
TO WORK FOR
LOCALS TOO

BY CIARA NUGENT

EFORE LAST YEAR, MARTÍ CUSÓ didn't like to linger in the streets of Barcelona's Gothic Quarter, the neighborhood where he has lived all his life. It was impossible to sit on a bench or play with his kids outside without being engulfed by tourists. Shuffling behind tour guides, gazing upward at the architecture or pausing abruptly to buy souvenirs from street hawkers, the visitors were often a nuisance to locals navigating the streets. Some zoomed through the area's narrow medieval streets on scooters and taxi bikes. Many crowded the bar terraces, which had gradually replaced the local amenities that residents once relied on. "Tourism had eaten up all of the public space and relegated us locals to a role of extras on a movie set," says Cusó, 31, a teacher and member of the Gothic Quarter residents' association.

Despite residents' protests, the number of tourists flooding into Barcelona has soared over the past two decades, with nearly 12 million visiting the city of 1.6 million in 2019. But when COVID-19 hit, forcing Spain to close its borders to tourists, locals reclaimed the city center. "We saw scenes we hadn't seen in a long time. The squares that are normally full of *terrazas* and tourists were occupied by kids playing, or families, or people sunbathing," Cusó says. "Now we're scared we're going to lose that again."

E.U. leaders have agreed to allow vaccinated tourists to visit European countries this summer without quarantining. News of the plan prompted an immediate 47% surge in searches for flights to Europe, according to travel-analytics firm Hopper. Barcelona, where Americans make up the largest group of foreign visitors, hopes to welcome 1 million tourists this summer. On May 29, the Sagrada Familia, Antoni Gaudí's iconic cathedral, reopened to visitors.





Across Europe's many tourism hot spots, authorities are walking a tightrope as the COVID-19 recovery gathers steam. The pandemic laid bare how dependent some downtowns are on tourism. Officials are desperate to revive the sector, which has suffered mass layoffs and normally contributes heavily to many local economies across Europe. (In Barcelona, it makes up 15% of GDP.) At the same time, residents are pressuring city governments to use the disruption of COVID-19 to impose new rules on the industry. In March, Italy's government said it would ban cruise ships from entering the center of Venice, while Amsterdam is pressing ahead with a plan to curb sex work in the city center and relocate its famous red-light district.

In Barcelona, officials have launched a strategy to transform post-pandemic tourism in a way that satisfies both residents and visitors. Under the progressive mayor Ada Colau, Barcelona announced in January a plan that would effectively ban homeowners from renting out individual rooms to tourists on platforms like Airbnb. In a bid to revive central areas and reduce tourism's grip, the city announced a \$21 million plan in April to buy empty commercial spaces and fill them with businesses catering to locals. A new app and crowd-monitoring system aims to divert tourists to avoid congested parts of town. "We've had a break from tourists for a year to think about how we want to deal with them," says Xavier Marcé, Barcelona's councillor for tourism and creative industries.

The city is also changing how it sells itself. On May 17, the tourism board launched an ad campaign, "Barcelona like never before," touting cleaner, calmer streets. Authorities say the ads, running in English and Castilian Spanish, target "high-quality" tourists who come to participate in the local lifestyle, and also encourage locals to visit areas and attractions normally overrun by tourists.

Locals are skeptical that the plans can help them preserve their newfound ownership of the city. But

TOURISTS VISIT
THE RECENTLY
REOPENED
SAGRADA FAMILIA,
CASA BATLLÓ
AND PARC GÜELL

Marcé insists Barcelona can improve for residents and welcome tourists back at the same time: "I can't put up walls around the city. I can't move the Sagrada Familia. But there's a lot of things I can do."

BARCELONA HAS HAD a love-hate relationship with tourists since its rapid growth as a leisure hub after hosting the 1992 Summer Olympics. Almost all its major attractions are in the historic center, meaning that tourists were concentrated in a few neighborhoods. Its cruise port and proximity to seaside towns attracted hordes of day-trippers, who spent less money and flooded the city center. An influx of study-abroad students and "lifestyle migrants"—who come for a few months or years at time to work remotely—compounded the issue, says Claudio Milano, a professor in the social anthropology department of the Autonomous University of Barcelona.

Rents climbed, and public services like waste management came under pressure. Tourism became a lightning rod for anticapitalist and antiglobalization sentiments that had grown in Spain following the recession of 2008–2009. Some locals protested by vandalizing tourist buses and other infrastructure. Limits on new hotel construction and short-term home rentals didn't solve the problems. "Before the pandemic, coexistence between locals and tourists, especially young people and those who come to get drunk, was very conflictive," says Antonio Martínez Gómez, president of the residents' association for the Raval, another central Barcelona neighborhood.

But COVID-19 has also shown just how much places like Barcelona now rely on tourists. More

'I CAN'T MOVE THE SAGRADA
FAMILIA. BUT THERE'S A LOT
OF THINGS I CAN DO.' — XAVIER MARCÉ





than 200 businesses in the city center folded between March and September 2020. "Lots of people fell into unemployment, and families are suffering because of the lack of income," Martínez Gómez says.

Alok Lahad, who runs a souvenir shop near the Sagrada Familia, says Barcelona "is dead without tourists." He has lived in the city for 25 years and used to be a jeweler, but converted his store after the 2008 financial crisis, selling models of the cathedral and nearby Parc Güell, as well as T-shirts emblazoned with the logo of Barcelona's soccer team. The business has been mostly shuttered since March 2020, and Lahad says he has burned through his savings to pay rent and bills. "There's a very big possibility I'll lose the business if tourists don't come back this summer," he says. "The locals who criticize tourism don't seem to understand that the people who are working in the industry are not foreigners, not tourists. They eat, drink, go to school and give business to the local nontourist businesses. They're locals too."

Officials say the pandemic might help rebalance the relationship between locals and tourists by starting afresh. "Without this year, it'd be like entering a wheel and it's spinning and you can't stop it," says Marian Muro, director of Barcelona's embattled tourism board. "We've spent a year just thinking."

Muro says a key goal is alleviating pressure on the city center. Tourist buses will take a new route, and the Check Barcelona app will warn visitors about already busy attractions, beaches and parking lots. The app and marketing materials will highlight alternate neighborhoods such as Poblenou to the east, a hub for tech; northern Gràcia, for its food scene; and the nearby wine region of Penedès.

But officials also want to revitalize locals' relationship with their city. In June, the Rambla, the pedestrianized shopping street normally brimming with tourists, will hold a two-week festival encouraging residents to reconnect with retailers and restaurants. Barcelona has earmarked a fifth of its city recovery

funds to "diversify and balance" neighborhoods, buying up some of the 5,323 vacant street-level commercial spaces in the city to rent to local-friendly businesses, like hair salons or bookshops, at below-market rates. Paris credits a similar program in the 2000s with saving local amenities and stemming the rise of chain stores in its center.

Muro says her long-term goal is to bring different classes of visitors to Barcelona. That includes bigger spenders like Russian tourists, who spend almost 30% more during their stays than the average visitor. But she also wants people attracted by Barcelona's culture and customs more than sunbathing and drinking. "In the center, there are restaurants where I wouldn't eat," she says. "And if I wouldn't eat there, then neither would the kind of tourists we're pursuing."

BUT SHORT-TERM ACTION is also needed. European governments are under substantial pressure to revive their pandemic-ravaged travel industries. International visitors spent \$619 billion in Europe in 2019. That figure fell by 64% in 2020, and about 3.6 million people lost tourism jobs.

Governments across the region are now pushing to relax travel restrictions to allow a rebound this summer. But officials in Spain, Italy and Greece say they will use the recovery to make tourism more environmentally and socially sustainable. At a local level, the key is a more equal distribution of the industry, not just geographically, but also of the wealth it creates, says Marcé, the Barcelona tourism councillor. "We need to widen the frame. It can't just be hotels and restaurants and luxury brands in the center of town, but also local actors that have a lot to offer visitors but maybe aren't part of powerful lobbies that have set the agenda in tourism." Stores selling daily necessities, cultural creators and local sports venues should also benefit, he adds.

Cusó, the Gothic Quarter resident, doubts the city's plans will improve the lives of residents like him. The only way to do that, he says, is to stop promoting the city and reduce the number of tourists who come. "I wanted the government to use this opportunity to rethink a new model for the city," he says, arguing that it should spend recovery funds to create new jobs in public health and education. "What they're doing now is just an attempt to revert to the situation we had in 2019."

Even if it is, Marcé doesn't expect Barcelona's tourism to recover to pre-pandemic levels until 2023, amid varying rates of vaccine rollouts and restriction easing around the world. Marcé says that time will allow the city's strategy to bear fruit. "We think we can have a very different situation," he says. "To find out, we need tourists to come back."

Society

The Giving Spree

MacKenzie Scott donated \$6 billion last year. It's not as easy as it sounds

BY BELINDA LUSCOMBE

rageously rich. I know you've done it before. You probably have a list of priorities: college for the kids, new car, paid-off debts. Forget that list. That list is puny. You're so rich that you can do everything on it three times. You could buy a small Massachusetts town and deliver the title deed to Harvard along with your kid's application. You could get Jay Leno to autograph the mud flap of his 1994 McLaren F1 before selling it to you. You could eliminate the debt of Kentucky. This is the kind of rich where nothing except a second home on an exoplanet is out of your reach.

That is the position in which MacKenzie Scott found herself in July 2019, when her divorce from Jeff Bezos, the founder of Amazon, was finalized and she became the owner of 4% of Amazon's stock. She was a single woman in her 50th year with about \$38 billion to blow. Since then, Amazon's share price has grown like the piles of cardboard boxes it leaves on doorsteps of quarantined homes, so estimates of her wealth are even higher, something like \$57 billion. And that's after she gave away \$5.9 billion.

People have given away that much before. But not usually so fast. Or without starting a foundation first. Or without any of the recipients asking for it or even knowing in advance. Or with so few strings attached; the organizations can use the money in any way they see fit. One of the beneficiaries of her largesse, Borough of Manhattan Community College (BMCC), got an amount, \$30 million, that was 3,000% of the size of any other gift in its history.

A community college in Nebraska got \$15 million, equal to its entire endowment. The Charlotte, N.C., YMCA got \$18 million, enough to make its CEO burst into tears. According to Candid, an organization that tracks spending in the charitable sector, Scott was responsible for 20% of all the COVID-19-related philanthropic funds given away globally last year, and almost 75% of those given by individuals. More than half the money given to BIPOC communities by rich people last year came from her.

Scott was rich before her divorce, of course. Increasingly so, during her 25-year marriage to Bezos. But perhaps because the wealth was not strictly hers to dispose of, she was not noted for her extravagant giving. In fact, she was not noted for her extravagant anything. She drove a Honda minivan to drop off her kids at school—and Bezos at the office. She wore a \$700 jersey dress to the couture-laden 2018 *Vanity Fair* Oscars party. Some of the dinners she hosted at her home were potluck.

So it's probably not surprising that even before the Amazon stock was transferred to her, Scott signed the Giving Pledge, a public promise to give away the bulk of her wealth. "We each come by the gifts we have to offer by an infinite series of influences and lucky breaks we can never fully understand," she wrote in her May 2019 pledge. "In addition to whatever assets life has nurtured in me, I have a disproportionate amount of money to share." Warren Buffett is a signatory to the pledge, as are Bill Gates, Melinda French Gates and more than 200 others. (Bezos is not.) But



Society

in her first year of giving, Scott has been behaving quite differently from her fellow philanthropists. And in doing so, she may be changing the way the trillion-dollar-ayear philanthropy business operates.

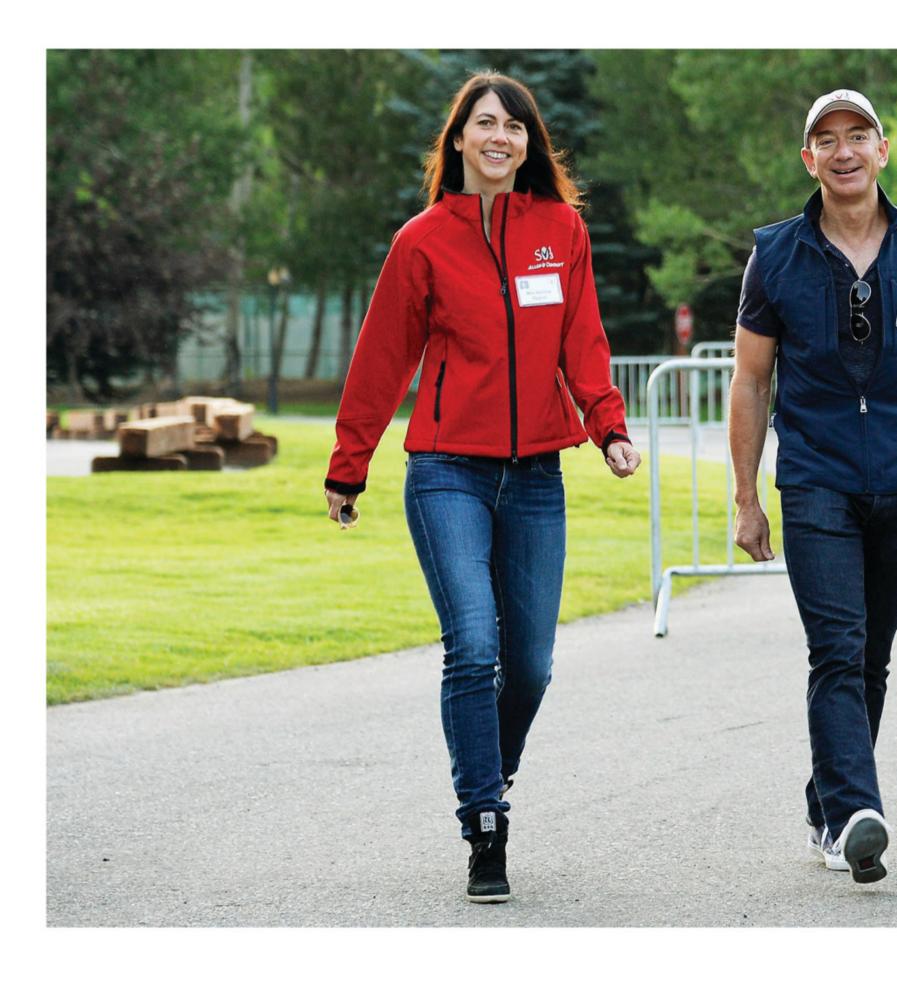
"I DON'T EVEN remember the subject line," says Leah Barrett, president of Northeast Community College in Norfolk, Neb., of an email she received in December. "It simply said, you know, 'President Barrett, I represent a philanthropist who is interested in giving a gift to Northeast Community College. Can we set up a time when we could talk in the next few days?" She sent back her phone number. Then she had a pang of doubt. What weird email address had she just responded to?

She called her head of IT and her VP of development. Their suggestions calmed her; it probably was spam or, her development officer said, "some farmer that wants to give us five grand." The last group to give the school a significant gift was the Acklie family—Northeast alumnus Duane Acklie made it big in the trucking business—whose foundation donated \$5 million and got a farmequipment warehouse named after it.

A few days later, Barrett got on the phone with a woman whose name she is not allowed to reveal, who told her that a philanthropist known as MacKenzie Scott was giving the school \$15 million. Scott wanted nothing named after her in return, not even a tractor. Barrett was told Scott believed in her and in her ability to do the right thing with the money. "I said, 'I'm sorry, I don't mean to be rude, but this is crazy. Help me to confirm the legitimacy of this,'" says Barrett. "She sent me to the Medium post."

Scott announced her giving via two articles on Medium, one after her \$1.7 billion donating spree in July 2020 and another after she handed out \$4.2 billion in December of the same year. She has made no further statements. She is not, by all reports, an extrovert. She does very few interviews. (She did not respond to repeated requests through several intermediaries for an interview for this story.)

The groups that received money from her were given instructions as to what they could and could not reveal; some would not even disclose the gender of the person from whom they got the news. This makes sense. Rich people with children are



always vigilant about privacy. (Amazon's SEC filings reveal that it spent \$1.6 million on security for Bezos and his family in 2019.) Scott doesn't need any more attention. And as she told *Vogue* in 2013, she doesn't like glad-handing: "Cocktail parties for me can be nerve-racking. The brevity of conversations, the number of them—it's not my sweet spot." You can see her discomfort in a 2013 interview with Charlie Rose for one of her novels, as a red rash creeps around her neck even before Rose's questions move away from her book and toward her marriage.

Her inaccessibility has come with a cost. Scams have been perpetrated in her name. A mother in Wollongong, Australia, who started a GoFundMe campaign to help cover the cost of her autistic son's education, was contacted by someone who said they were MacKenzie Scott. The woman, Danielle Churchill, told the New York *Times* that she borrowed more than \$10,000 (then U.S. \$7,900) from her family to pay what were called associated fees, only to find she had been defrauded. Churchill wrote in a GoFundMe update that she did not blame Scott but noted that "maybe a different approach at her giving

Scott and Bezos at the Allen & Co. Sun Valley tech and media conference in Idaho, in 2013

will help this from happening again."

Some experts in philanthropy have questioned the wisdom and utility of operating on the scale of the largest foundations but being as unreachable, and thus unaccountable, as a private individual. Inside Philanthropy called her methods "simultaneously exciting and troubling to behold." If all philanthropists worked the way she did, grantmaking might be more efficient, but it would be less transparent and possibly less diverse in its interests and approaches.

Scott explained in her Medium posts how she tried to make her unusual strategy rigorous. The causes she funded could broadly be described as progressive: organizations that support women's and LGBTQ rights; address climate change; alleviate poverty, disability and hunger; and seek racial equity. What she outlined could be described as a hunter rather than a gatherer approach to giving: instead of hanging out a shingle and gathering applications, she amassed a hunting party



with the Bridgespan Group, an elite non-profit consultancy, to sniff out organizations with strong leadership and results. Other foundations, including Gates and Rockefeller, have also worked with the group, but not the way Scott did—using it more or less as a one-stop shop for all her philanthropy needs. Over the months, they whittled the list down from 6,490 to 500, with at least one from each state, plus Washington, D.C., and Puerto Rico.

The posts are well written and literary—with allusions to the glasswing butterfly and Emily Dickinson—but they beg the question: Why not let your money do the talking, especially if you're averse to the spotlight? "There was probably some sense that she wanted to express some of the emotional and analytical frames that she was using to guide this process," says Candid's executive vice president, Jacob Harold. But it was also to amplify the gift's effect. Scott writes, "My own reflection after recent events revealed a dividend of privilege I'd been overlooking: the attention I can call to organizations and leaders driving change."

Scott lists every organization and suggests others join her in sending money

to these groups. The grant recipients TIME contacted said they had not seen an increase in giving. But they had received other unexpected dividends. Most of the organizations were midsize, and some of them began to form loose coalitions. The president of BMCC, Anthony Munroe, emailed every other college on that list to see if they wanted to join forces and share resources and ideas. About a dozen did, including Barrett's school in Nebraska. They've formed committees to discuss how to leverage their combined energy on marketing and communications, development and fundraising, strategic planning and helping their students succeed.

Eboo Patel's organization, Interfaith Youth Core, which tries to bring together students of different faiths to work toward unity, got \$6 million. But Patel also got something less tangible. Scott put all the organizations into categories to demonstrate her priorities. "The category that we were under was empathy and bridge building," says Patel. "MacKenzie Scott named a new category. There are very few foundations that have a bridge-building giving area, and by naming that space, then by making gifts to a dozen or so organizations, MacKenzie Scott accelerated the growth of a field, dramatically." It's not as if others weren't attuned to the problem of divisiveness—the Einhorn Collaborative and other foundations have formed the New Pluralists to support nonprofits that help build empathy, and in 2020, the group established a \$100 million fund but Scott's nomenclature moved the needle. "She categorized these organizations as a necessary field to invest in," says Jenn Hoos Rothberg, executive director of the Einhorn Collaborative. "For those of us who have been in this space for so long, it was a cause for celebration."

money effectively than it actually is. Money is like fertilizer; if you put it in the wrong places or lay it on too thick, you can destroy ecosystems and poison people. Most wealthy benefactors create their own foundations, limited liability companies or donor-advised funds (which invest the money until the donor decides to give it away), and have infrastructure and staff to handle their giving. Some pick a few favorite existing charities that they understand and work with.

Keeping the money can also be difficult. John D. Rockefeller's adviser Frederick T. Gates warned the tycoon that his fortune was like an avalanche: "You must distribute it faster than it grows! If you do not, it will crush you, and your children, and your children's children!" Because money begets money, billionaires like Bezos—and even some who are trying a little harder to give it away—struggle to make a dent in their wealth. Scott, who has promised to keep giving "until the safe is empty," was richer at the end of the year than before she handed out her \$6 billion.

It's also true that Scott wrote about what she was doing because Scott is a writer. At Hotchkiss, the fancy private boarding school Scott attended when she was still MacKenzie Tuttle (Scott is her middle name, after her grandfather), she was known as one of the strongest writers, says Katie Gates, who was in the same study group in her dormitory, Buehler. "She was an excellent editor, especially of certain papers, like those for Robert Hawkins—the Hawk. In his class, if you were lucky, you'd get a C."

Toni Morrison, her professor at Princeton, called her "really one of the best" creative-writing students she'd ever had and wrote a blurb for her first novel, *The Testing of Luther Albright*, which won a 2006 American Book Award. Scott's second novel, *Traps*, was published in 2013. Writing is how Scott prefers to communicate. Writing was how Scott intended to spend her life. The whole billionaire thing was just an accident.

SCOTT MET BEZOS at the New York City hedge fund D.E. Shaw in 1992. The fund's founder had decided to hire smart assistants who weren't math majors, and Scott sent in her résumé. Scott may be quiet, but she is not timid. The woman who was once the equipment manager of the Hotchkiss men's lacrosse team was not going to be intimidated by a bunch of finance people. Scott got an office next to the guy with the loudest laugh in the joint. She has said that she fell in love with the guffaw and pursued its owner, a fellow Princeton grad. After dating for three months, they got engaged. Three months later, they were married. Scott was 23.

Before long, they were driving across the country in Bezos' dad's car to pursue Bezos' dream of setting up an online book

Society

business. This meant leaving behind the safe salaried job at the hedge fund, but Scott, the last woman Bezos can know for sure didn't marry him for his money, was reportedly unruffled; she had experienced a change of fortune before. While she was at Hotchkiss, her father Jason Tuttle, who had an investment-planning business in San Francisco, ran afoul of the SEC. The Tuttles declared bankruptcy and moved to Palm Beach, Fla., and Jason was barred from the financial advisory field.

During the upheaval, Scott got into Princeton with the help of financial aid, some of which was paid by the Class of 1926, who each year supported one student for a four-year education. In return, she turned up at their reunions to help out. (They loved her.) She also had to work, she told Charlie Rose, 30 hours a week in low-wage jobs—waitressing, dishwashing, retail—to pay her way, and she worried that she could not take full advantage of what her Ivy League education offered. These experiences may be reflected in the more than 35 schools that received grants from her. Munroe of BMCC says his student body, "the majority of whom are female, of color, and many of them head of household," were struggling to stay in school in 2020, because the stay-athome measures had meant they lost jobs or had hours cut back and they needed work. A fifth of his students reported being homeless at some point during the pandemic. "The usual suspects for really big grants are elite cultural institutions, elite health care institutions—basically hospitals—and elite universities," says Candid's Harold. "The fact that those organizations were not on her list was definitely noticeable."

The Tuttle family's financial woes seem to be behind them. One of her brothers, Chandler, is CEO of Freethink, an innovation-focused media platform. Her other brother, Jason Jr., is an indie videogame developer, and his wife is director of operations at one of L.A.'s most celebrated restaurants. Her parents are well ensconced in Palm Beach society, and Scott's mother Holiday (she was born on Dec. 25) is on the charitable-works committee of a local Catholic church guild. Elizabeth Ailes, widow of Fox News honcho Roger Ailes, is also on the committee, which may explain why the Tuttles' 55th-weddinganniversary party in 2018 was like a who's who of conservative big shots: Liz Ailes, Rush Limbaugh, Ann Coulter, Laura Ingraham and Anna Murdoch Mann (Rupert Murdoch's second wife) mingled with the likes of the artist Edwina Sandys (a.k.a. Winston Churchill's granddaughter) and Andres Fanjul, the son of a sugar baron. "It was a splendid occasion," says Sandys. "They're a very warm family."

Bezos was there with Scott, although within eight months, the *National Enquirer* would publish intimate texts between Bezos and Lauren Sánchez, a TV personality cum helicopter pilot cum aerial-filming-business owner, and in April 2019, the Bezoses would announce that they had reached a divorce settlement. Scott did no damage to her reputation for extravagant modesty when she wrote, in the first ever of her three total tweets to her 148,000 followers, that she was "Grateful to have finished the process of dissolving my marriage with Jeff."

There are those who say, especially in the comments sections under sto-

ries about Scott, that she should give away the money because she did not earn it. This is true and not true. There is some luck in the accumulation of any fortune. Before she left Amazon to focus on raising their four kids, Scott was doing the books, some

deals and whatever was necessary to keep the company going and the staff happy. Many of her colleagues from that time no longer have to work for a living. ("I have nothing but the kindest memories and thoughts about and sentiments toward MacKenzie," says Jonathan Kochmer, another former employee who was made rich by his early association with Amazon.)

on her doorstep by chance, it is also true that it is leaving with a lot of purpose. She recently remarried. What eligible bachelor did she score? Dan Jewett, who taught her children science at Lakeside School. He's tall, intelligent, about five years younger than she is, and was previously married to an interior designer with whom he shared several dogs. Former students recall him as a nerd and disciplinarian, but one with an impressive repertoire of bad chemistry jokes and a heart. "One time,

the administrator came to the classroom to take attendance," that is, the names of those who had been late or absent, says Griffin Cock Foster, who was taught by Jewett in 2008. "He jumped out the window because turning in attendance basically means, like, ratting on kids." Jewett shares Scott's affection for books and often recommended that his students read a YA collection of essays about the history of chemistry, *Napoleon's Buttons*.

Like Scott's first husband, Jewett is bald and has a booming voice. Unlike Bezos, however, he's more into giving away money than making it. He signed the Giving Pledge in March, noting that he had been schooled in generosity by "people who supported me through challenging times, showed me grace when I was at my worst, befriended me despite our differences and offered me a home when I had none." While Jewett's background is not well known, he grew up in Maine and got both his bachelor's and master's degrees from Eastern University, a Christian

college noted for its commitment to social good. "He's an incredibly gentle and generous person in all realms," says someone from the Lakeside School community who doesn't wish to be named because the school has discouraged speaking to the press, but

who wanted to make clear Jewett was no gold digger. "It doesn't surprise me one bit that he's excited to be in the position to give away money."

Scott's very first book, written when she was 6, was called *The Book Worm*. It had several chapters and, from the sound of things, was more autobiography than treatise on annelids. We will never know, however, because it was destroyed in a flood. Her other books, one featuring an engineer father, whose life—and work—is shaken up by an unexpected tremor, the second featuring a woman who's famous, also sound like they have drawn from her life experience. Given Scott's fame, aversion to publicity and the enormous amount of money she wants to give away, her future literary output may be slim. But she is now getting to write the narrative of the rest of her life, rather than just getting crushed by the avalanche. —With reporting by BARBARA MADDUX

'MacKenzie Scott accelerated the growth of a field, dramatically.'

Eboo Patel, founder of Interfaith Youth Core





How we get better

THE HEALTH CARE SYSTEM WILL IMPROVE ONLY WHEN WE RETHINK WHO COUNTS AS AN EXPERT

By s.e. smith

AMERICANS ARE EMERGING FROM THE COVID-19 pandemic like survivors of a wildfire surveying an unfamiliar landscape. As we take stock of what's left, we are forced to rebuild, but we need not simply restore what was taken in a hollow echo of what we knew before. We can make health care and the infrastructure that supports it better, stronger, more resilient. To do that, as we learned at great cost over the past 15 months, we must value all the stakeholders in the system: not just insurance executives and hospital CEOs, but patients, disabled people, older adults, low-income people, people of color who have faced historic

health care discrimination, and health care workers and supporters, from home health aides to hospital registrars.

Millions of Americans interact with the health care system every year—if and when they can afford it. But discussions about health care reform often leave out some of these voices. Policymakers, industry executives, hospital officials and others

in high-status positions hear from others in similar roles, or from prominent members of the health care

community like sought-after specialists who bring in high-value patients. Underrepresented in these conversations are those who know the system at its worst, like ambulance crews making minimum wage, nurses in underfunded community health clinics and uninsured patients who know what it's like to halve their insulin dose to stretch to the next paycheck. The devaluation of these members of the health care community is paradoxically what makes their voices so important: those who are considered lowest in status often have the best observations about the systems they are trapped in.

Two groups of stakeholders were particularly vocal and active during the pandemic: nurses and disabled people. While communities banged pots and cheered, hospitals hung HEROES WORK HERE banners and the media trumpeted about "essential workers," many nurses were laboring in conditions that didn't have to be so dangerous. Nurses are on the front line of patient care, on shift for hours with their assigned patients, unlike physicians, technicians and other providers who typically see patients briefly for tests or assessments. Nursing work can be grinding and emotionally exhausting, and nurses often know their patients and their families best, seeing elements of the health care system that others may be oblivious to. Yet these medical professionals are often not afforded the respect given to doctors.

During the pandemic, though, the nation had no choice but to hear the collective voice of nurses everywhere. Hospital by hospital, nurses worked together to make themselves and their patients safer, even if it meant wearing garbage bags as PPE, as some had to do in New York City—forcing those in charge to confront the reality that we were ill-prepared for a national public-health catastrophe. And as nurses rapidly adopted technology to allow for remote patient visits, too many of which ended with families saying goodbye via video chat, they reminded the health care community that patient care isn't just about physical health.

The disability community, including a broad swath of people from those with chronic illnesses to wheelchair users to mentally ill people, makes up roughly 26% of the U.S. population. While the term *professional patient* is sometimes used in a derogatory way, it accurately describes many people who regularly interact with the health care system. They are, by nature of their health care needs, extremely familiar with the ins and outs of the system, including the problematic elements. During the pandemic, some organized around hashtags like #HighRiskCA, which was used to call out the way California's vaccine-distribution system, in the first phase of the rollout, left out disabled people who did not meet its 65-plus age requirement but

REMINDED THE
HEALTH CARE
COMMUNITY
THAT PATIENT
CARE ISN'T JUST
ABOUT PHYSICAL
HEALTH

were highly vulnerable to COVID-19. Furthermore, through a partnership between the Johns Hopkins Disability Health Research Center and the Center for Dignity in Healthcare for People With Disabilities, a team that included disabled researchers set up a Vaccine Prioritization Dashboard to track how states were handling disability eligibility for vaccines and help disabled people navigate incredibly confusing guidance. The disabled researchers drew upon their own experiences and fears in developing an accessible, clear product to help the community, filling a gap in the public-health outreach system.

WE SHOULD NOT JUST CHEER these examples as cases where some often overlooked people happened to offer something useful during a disaster; we should see them as a road map for the future. As we move forward, we should use the knowledge and skills of nurses, disabled people, health care coordinators and myriad others to build the health care system we deserve. Those people need to be represented in the rooms where policy is developed, including among legislatures, advocacy groups and other entities that push policy priorities. People interested in health care reform should actively seek out these voices: to learn more about how to advocate for what people actually need, and to figure out what questions to ask those in power. When people raise issues that make advocates uncomfortable, it's necessary to lean into that discomfort and use it as an opportunity to do better.

People with extensive experience in the health care landscape have critiques that may improve proposals to fix it. Consider the notion of a government-funded single-payer health care system. Many Americans, as much as 36% based on a 2020 Pew survey, say they support such a program, but the public conversation on this topic does not clearly define what such a plan would look like, and it's been muddled by conflicting proposals. Although people without experience in the health care space may think it's as simple as needing care and getting it paid for by the government, disabled people want answers to questions that, to others, might seem in the weeds but are actually critical to everyone, such as how prescription benefits would be covered, or what happens when a costly test or procedure is recommended but a patient doesn't meet strict criteria. We are emerging from a hard-fought war against an invisible enemy and we know the current system is broken, but if we leave out the voices of people in the know when we fix it, whatever we develop may not be an improvement, but rather, the same problems in a new package.

As post-World War II Japan slowly began its

economic recovery and manufacturing began to bloom, Toyota introduced the Andon cord: a literal cord that anyone on the production line could pull to pause production to address a safety or quality issue. The prospect of allowing anyone to bring a multimillion-dollar process to a halt may sound wild, but it turned out to be highly effective, making everyone into an experienced stakeholder, no matter the nature of the task they were performing. The Andon played a role in the culture turnaround of the NUMMI auto-manufacturing plant in Fremont, Calif., which had a toxic and unproductive work environment until the mid-1980s, when Toyota and GM began jointly operating it using Toyota's manufacturing processes. Empowering workers with the Andon proved successful in improving morale and increasing buy-in.

The U.S. health care system as a whole needs a metaphorical Andon cord. It's something we know

works in health care settings, as some facilities use similar safety checks to protect patients and providers—one of which is "Stop the Line," which can be called by anyone to stop and address a safety concern or other issue such as the wrong medication or improper use of equipment. The point is, the real expert is not always the foreman or the team lead, the prestigious surgeon or the person with the broad, big-picture view. Sometimes it's someone on the assembly line, or it's the hospital orderly who cleans

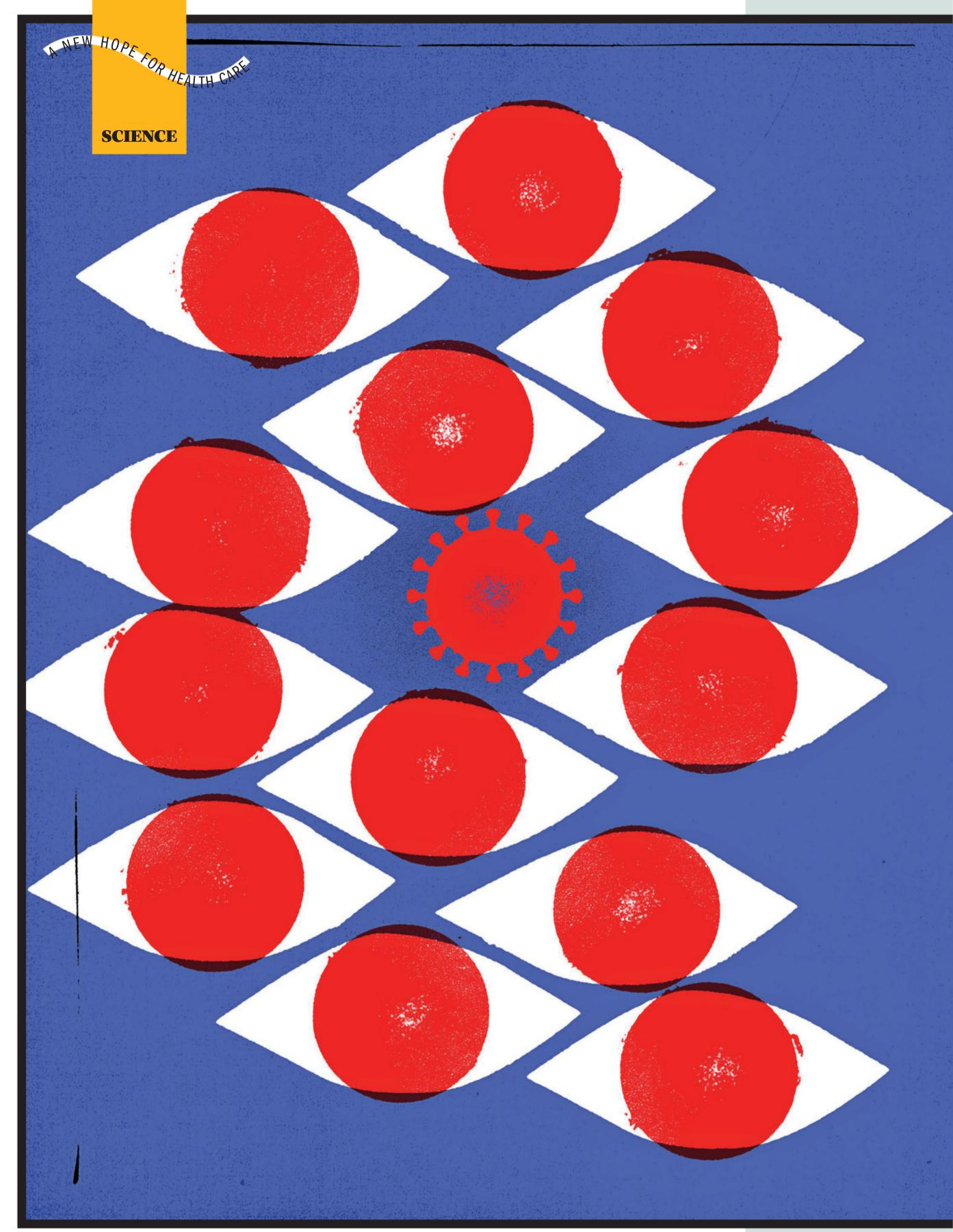
rooms between patients. A physical plant worker can have a sharp idea for more safely sealing doors. An intern reading about right-to-repair laws can fight to get sidelined ventilators up and running.

We may not know when the next pandemic will strike, but we do know that everyone needs health care, and the system needs to be much more robust the next time a new virus or mass-casualty event happens. Repairing America's health care system requires the humility to recognize expertise no matter where it comes from, and the ability to integrate stakeholders into the process as early as possible. If we truly want everyone in the U.S. to have access to high-quality, safe, equitable, compassionate health care, we must stop to value everyone who's embedded in the system.

RAISE ISSUES THAT
MAKE ADVOCATES
UNCOMFORTABLE,
IT'S NECESSARY TO
LEAN INTO THAT
DISCOMFORT

WHEN PEOPLE

smith is a National Magazine Award—winning essayist and journalist



THE SEQUENCING SOLUTION

GENETIC SURVEILLANCE IS THE KEY TO CONTROLLING FUTURE PANDEMICS

By Alice Park

YOU DON'T WANT TO BE A VIRUS IN DR. DAVID HO'S lab. Pretty much every day since the COVID-19 pandemic began, Ho and his team have done nothing but find ways to stress SARS-CoV-2, the virus that causes the disease. His goal: pressure the virus relentlessly enough that it mutates to survive, to help drug developers understand how the virus might respond to new treatments. As a virologist with decades of experience learning about another obstinate virus, HIV, Ho knows just how to apply that mutationgenerating stress, whether by starving the virus, bathing it in antibodies that disrupt its ability to infect cells, or bombarding it with enough promising antiviral drug candidates to make it blink. "We actually have more mutants [of SARS-CoV-2] selected in the lab than I suspect most labs do," says Ho.

As a result of that work, "we have basically been seeing viral evolution happen in front of our eyes for the past year and a half," he says. Ho, director of the Aaron Diamond AIDS Research Center at Columbia University, is among the vanguard of researchers aggressively finding ways to dismantle SARS-CoV-2 from the inside out—by mining the virus's genetic code for signs of weakness. The viral genome, it turns out, is an underutilized pool of useful information about the virus's likes, dislikes and survival strategies, all coded in the 30,000 base pairs that make up its genome. Ho, who built his career around finding ways to control HIV with drugs, once said of the disease, "It's the virus, stupid." Among the many lessons that will be taught in public-health classrooms and in genetics labs around the world after the COVID-19 pandemic recedes is a corollary: "It's the genetics, stupid."

One of the most powerful ways of fighting a pandemic caused by a never-before-seen virus is decoding the microbial culprit's genome. Doing so can, and should, be the top priority of public-health efforts going forward, so scientists can expose how the microbe works and learn, in real time, the best ways for controlling it and ultimately snuffing it out.

Ho's group was among the first to identify a new mutation in SARS-CoV-2 that was responsible for a growing proportion of new infections diagnosed in New York City in February. He alerted city, state and U.S. Centers for Disease Control and Prevention (CDC) officials, as well as Dr. Anthony Fauci, the White House chief medical adviser on COVID-19. Ho also added these sequences to the public database GISAID (which stands for Global Initiative on Sharing All Influenza Data, reflecting its initial focus on flu), which collects disease-causing genetic codes from researchers around the world. "When we looked at the database, we found these mutations were already there," Ho says. "It's just that no one was scrutinizing or interrogating the database on a regular basis."

That's already changing, and GISAID is becoming the digital watering hole for public-health, infectious-disease and policymaking experts as concerns about new variants, and what they mean for immunity provided by vaccines, dominate public-health decisions about COVID-19. "People are looking at the database differently from this point on," says Ho.

That's also true of genomics more broadly. The COVID-19 pandemic is a hands-on workshop in how genetic information can help us more quickly control a pandemic. Relying on the SARS-CoV-2 code, first made public in January 2020, researchers at



academic labs were ready to develop a diagnostic test for the virus within weeks (although regulators were slow to greenlight them). Teams at the National Institute of Allergy and Infectious Diseases and biotech company Moderna, as well as U.S.-based Pfizer and German biotech BioNTech, went to work to develop vaccines relying on the virus's genetic material called mRNA and set new speed records in coming up with formulas ready to test in people. In under a year, they stunned medical experts when they showed their shots were 94% and 95% efficacious, respectively, in protecting people from symptoms of COVID-19, becoming the first COVID-19 vaccines authorized by the U.S. Food and Drug Administration, in December.

Knowing the virus's genetic footprint, scientists at other pharmaceutical companies developed other types of vaccines, as well as drugs to treat infection. And a year into the pandemic, the same viral genetic blueprint is helping researchers predict how different patients' immune systems will respond to infection and triage those who might be more prone to getting seriously ill so they can be treated more aggressively early on. It's also enabling experts like Ho to track deviations in the genetic code that might enable the virus to slip past these drugs and vaccines.

"Genomics and genomic epidemiology have emerged as an incredibly powerful tool in fighting this pandemic," says Francis deSouza, CEO of Illumina, which makes the genetic-sequencing machines that form the foundation of this field. "And they will be essential to how we fight future biological threats, whether it's the next coronavirus or antimicrobial resistance or even bioterrorism."

THE COVID-19 RESPONSE is among the first major pandemic scenarios to benefit from decades of investment in genetic sequencing and genomic science. "In public health, we are using sequencing as a really powerful tool to understand how diseases spread, to understand how diseases and infections behave," says Dr. Jinlene Chan, deputy secretary for public-health services at the Maryland department of health. However, while the technology and the know-how to stay ahead of viruses like SARS-CoV-2 already exist, the



Dr. David Ho's New York City lab tests how SARS-CoV-2 mutates in response to stress factors

resources to coordinate and exploit that knowledge and expertise remain spotty. Few state public-health departments, for example, were in a position to sequence the samples of SARS-CoV-2 from people in their jurisdiction when the virus made its debut in the winter of 2019-20. "All of the U.S. has been having challenges scaling up genomic surveillance," says Giovanna Carpi, an assistant professor of biological sciences at Purdue University, whose lab assisted the Indiana state health department in its sequencing efforts. "The infrastructure is not present."

In April 2021, Congress earmarked \$1.7 billion for the CDC to ramp up its sequencing efforts to include more consistent genetic sweeps of COVID-19 samples in the country and to fund state and local laboratories to purchase the equipment and hire the staff needed to decode more disease-causing viruses and bacteria more regularly. The funding will seed a stronger genetic-based system of disease reconnaissance, which should pick up new pathogens as well as keep tabs on how quickly these microbes can threaten the public's health.

Currently, the CDC and its partners throughout the country are sequencing 20,000 to 30,000 SARS-CoV-2 genomes a week. It's more than the 3,000 the agency was sampling at the start of the year, but, experts say, still far from adequate; on average, states are sequencing under 2% of their positive samples.

Researchers, and governments, also still need to figure out a better way to coordinate this effort around the globe. "We haven't learned this much about any disease so quickly, I would say, in the history of science that I'm aware of," says Sumit Chanda, the director and a professor of the immunity and pathogenesis program at Sanford Burnham Prebys Medical Discovery Institute. "Genomic technology allowed us to get here. But if we really want to get serious about preparing for the next pandemic, there needs to be a global command and control infrastructure, with transparency from all governments around the world. These viruses don't know national boundaries, so it does not make sense to have a balkanized response to the virus."

"VIRUSES MUTATE. It's what they do," Fauci likes to remind us. Almost every time a virus makes new copies of itself, it makes a mistake—or a few. The majority of the time, these genetic typos don't change how the virus acts. But sometimes, by chance, a genetic mutation gives the virus an advantage—it could help the virus infect cells more easily, for example, and thus spread more efficiently from one person to another. Or a mutation might help the virus evade the immune responses generated by vaccines. In such cases, those advantages help the mutant virus outcompete its peers, eventually dominating new frontiers.

That's what happened soon after SARS-CoV-2 left Wuhan, China, in late 2019. Hitching rides on unsuspecting people traveling from that region to the rest of the world, the virus soon found entire continents of people to infect. That fertile infecting ground pushed the virus to make its first noteworthy mutation, one that helped it both form a tighter handshake with the cells it was infecting and high-five as many other uninfected human cells as possible. "This first variant that spread quickly in early to mid-2020 was just a random mutation—these happen by chance all the time," says Neville Sanjana, an assistant professor of biology at New York University and the New York Genome Center who has studied SARS-CoV-2's first major genetic morphing, which experts dubbed D614G, in detail. "Now it's virtually impossible to get COVID-19 without getting this mutation, so we've seen how natural selection and evolution can take a new mutation and bring it to dominance in a population."

Like a magnet to metal, the spike proteins embedded all around the virus's surface are attracted to a specific protein receptor lining the surface of human cells. How tightly the virus sticks to this receptor determines in part how infectious the virus is, and certain mutations can affect how closely the virus binds to human cells. Another such mutation which has since become the dominant strain in new cases of COVID-19 around the world—was discovered in December 2020, by scientists in the Kent region of southeastern U.K., largely because of the country's highly coordinated geneticsurveillance system.

Last November, despite a lockdown across the country, daily case numbers were inching upward in a few areas, including Kent. At the time, health labs were genetically decoding samples from around 5% of positive COVID-19 tests in the country. Researchers at Public Health England noticed that about half the sequences shared similar genetic aberrations, potentially representing a new variant. But they couldn't be sure.

That's where the commitment that the U.K. government made in establishing a network of "lighthouse labs" proved invaluable. These local labs test tens of thousands of swabs daily using automated machines trained to detect three genetic signatures of SARS-CoV-2. Oddly, the lighthouse labs in Kent were only detecting two of those signatures in their samples. More complete genomic sequencing of those samples confirmed health officials' worst fears: they did indeed have a new variant of the virus that had mutated from the D614G strain.

The next step was to understand what the mutation meant. Did the new variant—which they called B.1.1.7—cause more severe symptoms? Did it spread more? For those answers, the results from the high-tech genetic sequencing had to be combined with old-fashioned, boots-on-the-ground (or, increasingly, fingers-on-the-keyboard) epidemiology to match the genetic information with individual cases of disease. Public-health experts connected electronic health records in the

National Health Service of anyone who tested positive with contact-tracing information to figure out what proportion of people who came into close contact with someone infected with the B.1.1.7 variant, then became infected with it themselves.

Again, the results validated their concerns: it appeared that many who came into contact with people infected with the B.1.1.7 variant also became infected with the same variant, suggesting, says Dr. Tom Frieden, president of Resolve to Save Lives and a former director of the CDC, "with a high degree of confidence that yes, it's more infectious."

Frieden points out that the takeaway from that experience should be that we need to invest both in tech and in people. "Despite the importance of exciting new technology like genetic sequencing, in the end, it comes down to people—do you have the people who are able to collect the data well, analyze it well, interpret it well, disseminate it well and use it well? That's something you don't get by spending a ton of money all at once. You get that by building a field."

The U.K. is emerging as a model for how to construct such a foundation for genomic disease management. Within months, scientists were able to answer another question about the variant that was on everyone's mind as more people were getting vaccinated against COVID-19: Would the immunity generated by the vaccines protect against B.1.1.7.? The answer, to the relief of public-health officials worldwide, was yes. They tested blood from vaccinated people against lab versions of the B.1.1.7 variant and found that the immune cells present in the vaccinated blood could still neutralize the virus.

That's been the case with the other major mutations that have contributed to the handful of new variants emerging in the past year—including B.1.351, first identified in South Africa; as well as P.1, first identified in Brazil; and the B.1.617 variants emerging from India.

That said, it might be only a matter of time before variant strains do find a way to evade vaccine-based protection—the more the virus replicates among unvaccinated and unprotected people, the more chances that immunity-evading mutations can pop up. Ho and others are

SCIENTIFIC BREAKTHROUGHS WE MISSED DURING THE PANDEMIC

While most eyes were on COVID-19, researchers have also made groundbreaking advancements in other fields. Here's a look. —Jeffrey Kluger

The other big vaccine news

Public-health officials have long sought a vaccine against malaria, which infects up to 600 million people a year and kills 400,000, mostly children. This year, there was dramatic progress toward that goal. In a study of 450 children in Burkina Faso, published in the *Lancet* in April, researchers reported that a new malaria vaccine, called R21, is 77% effective—just clearing the World Health Organization's 75% efficacy standard.

However, the sample group was comparatively small, and while the subjects were followed for 12 months. malaria is active in Burkina Faso for only about six months out of the year, making it unclear if the disease's half-year absence was partly responsible for the study's promising results. Investigators working for a multicenter international team including the University of Oxford plan to follow the initial sample group for at least another year and will conduct other trials in countries where malaria is active year-round, while also working to improve the shot so it triggers a more effective immune response.



searching for patterns in the virus's previous mutations to understand in what direction it might morph in the future to ensure that any new COVID-19 treatments are not just effective but also durable.

To create a dynamic map of how the virus is changing, however, researchers need a deep pool of virus to sequence. "Ideally what you want to do is surveillance sequencing," says Chanda. "That means going out to hot zones, going into animals, going into the local population, and doing genomic sequencing to see what's popping up." The problem is, the public-health labs that would theoretically be doing this work in the U.S. don't have the resources or expertise to do comprehensive genetic sequencing and read the raw genetic code.

THE USE OF GENETICS to track disease can be traced to the 1990s, when researchers at the CDC used the most basic DNAanalysis methods to routinely test produce and other food products for bacteria in a national network called PulseNet. Frieden, who at the time was an Epidemic Intelligence Service officer—public health's version of a disease detective—in New York City's department of health, conducted one of the CDC's first genomic infectiousdisease studies, on an outbreak of drugresistant tuberculosis in the city. He had to send hundreds of samples to CDC technicians in Atlanta, since New York's labs weren't equipped with the proper genetic tools. "I had to fly down to the CDC, and the TB labs at the time were still based in Quonset huts from World War II that had leaking ceilings," he says. "I had to put 350 images on a big, rutted wooden table and compare them by eye to see if they were similar. It took three weeks."

By the beginning of the next decade, the human genome was fully sequenced and companies like Illumina had developed sequencing machines that could produce more accurate and detailed maps of any living thing's genome. The CDC, along with state health departments, began sequencing tuberculosis bacteria and influenza viruses on a regular basis to monitor changes in the pathogens that could hint at more troublesome strains. But the system was still relatively feeble. In 2012, a frank review of the U.S.'s genetic-sequencing capabilities at the

time revealed "that there are high school science labs that have more sophisticated genomic tools than the CDC does," says Frieden, who by then was the agency's director and commissioned the review. He lobbied Congress for funding, and in 2014 the federal government established the Advanced Molecular Detection program, which relies on high-throughput genetic sequencing to detect and manage outbreaks of infectious disease, with \$30 million a year over five years.

That was a start, but the result is still, says Dr. Greg Armstrong, head of the CDC's molecular detection program, "a very patchy system." Much of the sequencing in the U.S. occurs in academic labs for research purposes, to better understand diseases from influenza to cancer, or in commercial labs working for pharmaceutical companies to develop smarter drugs to target tumors. "Public health in general has fallen behind in this area," says Armstrong. "We've really been doing a lot of catch-up over the last several years."

State health labs vary widely in how much genetic-sequencing equipment and qualified personnel—they have on hand, forcing many to partner with local academic teams to get the job done. The Texas department of health began sequencing SARS-CoV-2 samples last June—but was able to complete only about 50 sequences a week, since there was only one public-health lab in the state capable of conducting such genomic work. So the agency turned to better-equipped academic institutes and private medical centers, including at Baylor College of Medicine, Texas A&M and Houston Methodist, a hasty stopgap pattern seen in state after state last year.

To build more reliability into these sequencing efforts, the CDC in May 2020 launched the SARS-CoV-2 Sequencing for Public Health Emergency Response, Epidemiology and Surveillance consortium, a group of now more than 200 public-health, academic and commercial labs that agree to sequence COVID-19 samples and share the data on GISAID. Separately, to bolster the public-health contributions, the CDC also asked state and local health departments to send more COVID-19 specimens on a routine basis to the CDC for analysis—the starting ask was five samples every other week.

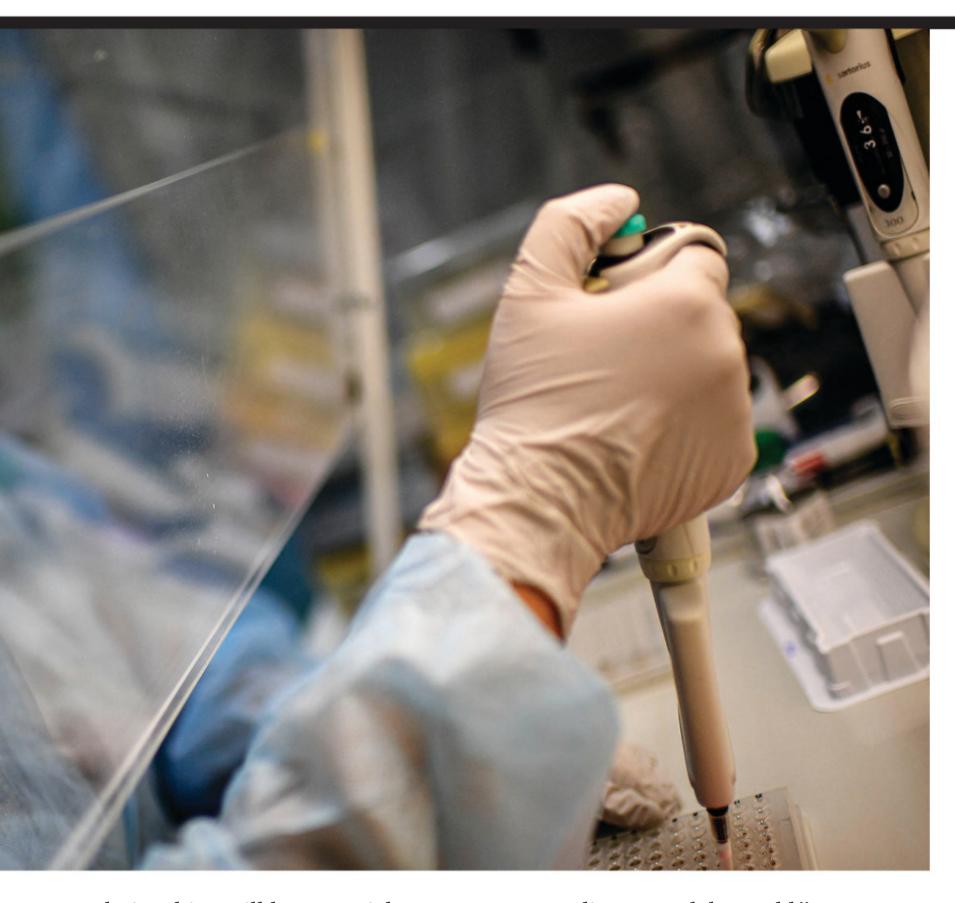


A lab technician sequencing the SARS-CoV-2 virus and its variants at the Pasteur Institute in Paris

That scaled up to a peak of 750 specimens a week from these public-health labs.

To improve on that, when President Joe Biden took office in January, he proposed a massive investment in public health as part of his American Rescue Plan-and prioritized genomics. The \$1.7 billion in funding to the CDC, designed to support the genetic-sequencing network in the U.S., couldn't come at a more critical time, as public-health experts face the next phase of the pandemic: keeping on top of any new variants and ensuring that vaccines continue to be effective. The bulk of funding will go toward sequencing machines and hiring bioinformatics experts to read and interpret raw genetic data in public-health labs throughout the country. Building that expertise is critical for avoiding the delay of shipping samples to central labs at the CDC.

The Biden plan will also create six Centers of Excellence in Genomic Epidemiology, to further solidify the currently haphazard partnerships between state health departments and academic groups. Those



relationships will be essential, says Ho, since "the top-ranked sequencing experts, bioinformatics experts, are largely in academia, and I suspect many may not want to leave their posts." Some funding will help create a uniform data system so public-health labs can share and analyze genetic-sequencing information seamlessly.

Private labs will also play a role in expanding the breadth of the sequencing network. Last month, the CDC announced a partnership with North Carolina-based Mako Medical to sequence about 5,000 positive samples of SARS-CoV-2 a week, taken randomly from Mako's clientele of hospitals, long-term-care facilities, pharmaceutical companies, workplaces and public-health labs in 43 states. With partners like Mako, the CDC is ramping up its ability to sequence any positive samples from places like airports, since travelers are a common vector for introducing new variants of the virus into the country. That strategy is proving useful in the U.K., where sequencing of positive samples from international travelers began in March 2021, with help from commercial labs. "In some ways the sequencing from airports is acting as an early radar system to find out what new variants are

spreading around the world," says Dr. Gareth Williams, a co-founder and the medical director of Oncologica, one of the labs working on the project.

How well other countries learn from the U.K.'s efforts will likely shape the world's response to the inevitable next eruption of infectious disease. Embedding genomic techniques into the public-health arsenal won't, on its own, prevent pandemics, but together with proven measures like hand hygiene, social distancing and mask wearing, it could help contain them and minimize their toll on human health.

"We got pretty lucky that [COVID-19] vaccines work as incredibly well as they do," says Sanford Burnham's Chanda. "But we can't just rely on luck. We need to make a global commitment and come up with an organization that has some teeth and has some funding whose job it is to survey, track and share genetic information. We have the tools to do it we just need the will and leadership and especially the public to demand that the devastation of COVID-19 is something that shouldn't have happened and that we never want to have happen again." —With reporting by MADELINE ROACHE and simmone shah

New face, new hands new man

_

In summer 2020, a team of 16 surgeons and 80 operating-room staffers at NYU Langone Health performed the world's first successful face and double hand transplant, completing the procedure in just 23 hours. Speed is essential in transplant surgery, because the sooner donor tissue is connected to the recipient's vascular system, the less time it is denied a blood supply.

The recipient was 22-yearold Joe DiMeo of Clark, N.J., who suffered third-degree burns over 80% of his body in a 2018 car accident. His fingertips had to be amputated, and damage to his face was so extensive that he was left without lips or eyelids even after 20 reconstructive surgeries. In 2019, DiMeo was listed as a possible transplant recipient; 10 months later, a suitable face-and-hands donor was located. Only two other face-and-hand transplants have been attempted: in the first, the recipient died of complications from the surgery; in the second, the hands had to be amputated because of infection. Advanced computer modeling helped the surgeons plan the latest transplant, and 3-D cutting guides assisted in sawing and aligning bones, as well as properly positioning the plates used to attach the donor tissue. More than nine months postsurgery, DiMeo continues to recover—and thrive.



CHINAWATCH

PRESENTED BY CHINA DAILY 🕈 🗐 🛚 🗱

SUZHOU MAKES BEST USE OF ANCIENT & MODERN

In eastern city, conservation has become an integral element in urban construction

BY WANG KAIHAO

For centuries, canals and rivers have flowed past ancient houses in Suzhou, Jiangsu province. The white-walled homes are clad with black tiles dotted with moss.

Under the eaves of properties in narrow, neat alleyways, locals chat in the soft Wu dialect, which can be difficult for travelers from outside the area to understand.

The city of 10 million people, which is a major tourist draw, has taken vast strides in recent years, with a booming modern manufacturing sector established in newly developed industrial zones.

Impressive progress has been made, but the sixth-largest city-level economy on the Chinese mainland also boasts a proud history that locals have meticulously protected.

Construction of the city began more than 2,500 years ago when a Wu vassal state was established during the Spring and Autumn Period (770-476 B.C.).

Gusu district in the heart of Suzhou is home to the city's rich cultural legacy — best exemplified by its classical gardens, which are a UNESCO World Heritage site.

Nearly 1 million people live in the district, including Xu Gangyi, 70, a retired public servant, who since the early 1990s has regularly walked around the city's ancient neighborhood in his spare time, taking photos to record people's lives.

"A city cannot grow without urban development, but as demolition work began on some of the old buildings, I felt that something may be lost forever," he said.

The 14.8-square-kilometer (3,657 acres) ancient city core area is surrounded by moats, and Xu grew up near Panmen Gate, which traverses one of these waterways.

Xu, who has a deep regard for the history of his hometown, has often written letters to the authorities appealing for ancient sites to be spared from demolition.

"Everything we have now was left by our ancestors," he said. "What will we leave for our children? Our roots lie in this ancient city, and it has influenced





From top: The Beisita pagoda in Suzhou. PROVIDED TO CHINA DAILY Tourists enjoy cruising on a canal near Pingjiang Road, an ancient area centered on a 1.6-km-long lane that boasts a long history. WANG JIANKANG / FOR CHINA DAILY

our character. We have to take good care of it."

He did not have to wait long to receive positive feedback. In 2002 a comprehensive project to restore the ancient city area was initiated by the local government. A series of renovation projects has followed.

During the 1990s a construction rule was rigidly enforced. This is still the case today. No new



Sun Yong discusses Wood Joints, an app which demonstrates the mortise-and-tenon structures that are frequently applied in traditional wooden furniture and architecture, at Apple's retail outlet in Sanlitun, Beijing, on April 18. PROVIDED TO CHINA DAILY

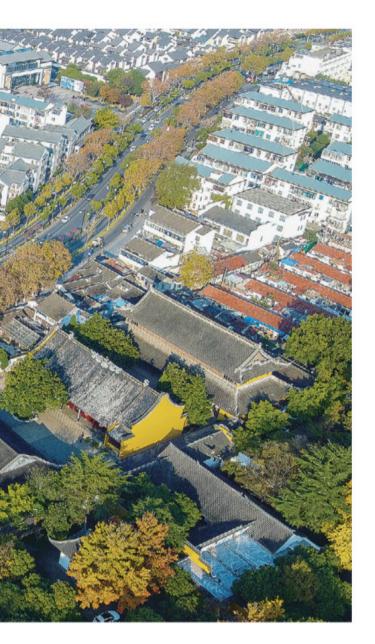
Gaming culture BY FANG AIQING

The app developer Sun Yong believes young people continue to be interested in traditional culture and history, but the key is to find the proper medium for them to enjoy it in an age in which few people have the time or the patience to read books.

Among his most successful productions is an app called Wood Joints that demonstrates 31 typical mortise-and-tenon techniques frequently applied in the manufacture of traditional wooden furniture.

China has a long history of woodwork without the use of nails, from making delicate wooden furniture to entire buildings.

The assembly of such complicated conjunctions results in a simple, smooth surface, which



EVERYTHING WE
HAVE NOW WAS
LEFT BY OUR
ANCESTORS.
WHAT WILL WE
LEAVE FOR OUR
CHILDREN? OUR
ROOTS LIE IN
THIS ANCIENT
CITY, AND IT HAS
INFLUENCED OUR
CHARACTER. WE
HAVE TO TAKE
GOOD CARE OF IT."

XU GANGYI.

RETIRED PUBLIC SERVANT

building in the ancient city area can be higher than 24 meters (79 ft.) — one-third the height of Beisita, a landmark Southern Song Dynasty (1127-1279) pagoda in downtown Suzhou.

Thanks to the rule, no skyscraper breaks the skyline in the ancient city.

In 2018 a provincial-level regulation covering the ancient city area was implemented to rigidly supervise construction. The rule, in particular, stressed that basic colors used in the area should be black, white and gray to "reflect simple but elegant aesthetics". Traditional building materials and styles were also called for.

Last September Suzhou was listed by the National Cultural Heritage Administration as one of six national-level exemplary areas for the protection and use of cultural relics. In late March the city government issued a plan for further conserving the old city, focusing on the area within the moats.

Zhou Liping, an official from Pingjiang subdistrict, who is in charge of cultural development and revitalizing ancient neighborhoods, said such work involves far more than turning old buildings into showcases for history.

"The buildings are alive only if they are given new roles. Their exteriors should remain intact, but the interiors have to be adapted to the needs of modern life, such as hotels, bookstores and cafes."

Pingjiang Road, an ancient area centered along a 1.6-km-long (1 mile) main lane, boasts a long history, typified by its architecture.

Before restoration work on Pingjiang Road began in the 2000s, the area was full of dilapidated houses, Zhou said.

Although refined artistic taste is included in the refurbishment plan, as much historical detail as possible has been retained.

For example, in turning a butcher's shop into a club for *kunqu* (the oldest surviving form of Chinese folk opera, which originated in Suzhou), the planks on the front door were retained. The planks were used to secure the door when the shop was closed.

Bars, karaoke lounges and booths selling street food have become widespread in many revitalized ancient streets in China, but Pingjiang Road is an exception, having little room for them.

"It's wrong to just relocate locals and let shopkeepers from elsewhere run businesses here," Zhou said. "Native residents play a key role in boosting their home community."

Wu Liangying grew up in Pingjiang Road. Once an established performer of *pingtan* — an indigenous type of singing from Suzhou — Wu, who is in her 50s, chose to return to her old neighborhood from else-

where in the city in 2017.

She opened a teahouse in a renovated villa built in the 1920s, where she holds daily afternoon pingtan performances. Tickets for a show, which include a cup of tea, cost 38 yuan (\$5.90).

"There are plenty of opportunities to seek a new career in other cities, but like many others, I choose to stay (in Suzhou)," she said.

"Life here is comfortable and we cherish the emotional support given by this area and its culture."

Shan Jixiang, an urban planner and former director of the Palace Museum in Beijing, said: "It's like an ecosystem. If local people cannot enjoy the benefits of living comfortably through the renovation of the old cities, governments will feel that the cost of protecting cultural heritage is a burden and that the ecosystem is not sustainable.

"Tourism is important, but only when it is combined with improved facilities in local people's everyday lives."

Zhou Furong and Lu Yujun contributed to this story.



Tourists watch a *pingtan* performance at a teahouse in Pingjiang Road run by Wu Liangying (right). WANG KAIHAO / CHINA DAILY

embodies ancient Chinese aesthetics and philosophies.

In the app, users can examine different structures that use mortise-and-tenon joints and, with a series of clicks, take them apart to see how separate pieces of wood are bound together. They can also learn about the features of different kinds of wood, tools and techniques.

It took the team more than six months to complete the app and, in June 2014, the iOS version for Apple devices was released. It was soon a recommended product in the Apple App Store and later won an award from the company.

The team got further encouragement when Apple CEO Tim Cook visited the studio in October 2015. From then to just before the outbreak of COVID-19, the studio put out several more apps featuring other folk art crafts, such as folding fans, new year paintings and jade antiques.

Sun says mobile application technologies have enabled more people to learn about traditional cultural elements in a short time and in a convenient manner.

Stunning visual effects have also helped *Ink*, *Mountains and Mystery*, a phone game jointly developed by the technology company NetEase and the Palace Museum in Beijing, garner a positive response from users, especially helping them appreciate the beauty of the traditional

Chinese blue-and-green landscape genre of painting.

Blue-and-green landscape painting is a kind of ink-wash painting style in which the artist applies strong, vibrant palettes. This kind of painting style flourished during the Sui (581-618) and Tang (618-907) dynasties. However, the most renowned example of the style is *A Thousand Miles of Rivers and Mountains* by Song Dynasty (960-1279) painter Wang Ximeng.

CHINAWATCH

PRESENTED BY CHINA DAILY | | 1 | 1 | 1 |

He had a dream, and it helped

Scientist remembered for breakthroughs in developing high-yield strains of rice

BY ZHAO XINYING,
ZHAO HUANXIN,
YANG HAN and
PRIME SARMIENTO

When a hearse drove out of Xiangya Hospital in Changsha, Hunan province, at about 4 p.m. on May 22, people gathered on the roadside in the rain to see it off.

Drivers stopped their cars and blew their horns to show respect, and people on both sides of the street cried out, "Grandpa Yuan, we wish you a peaceful life in another world."

Yuan Longping, nicknamed the father of hybrid rice, who died aged 91, will long be remembered for his contribution to help feed humanity.

He was globally respected for his breakthroughs in developing the genetic materials and technologies essential for breeding high-yield hybrid rice varieties.

The generosity of Yuan, and other researchers, in making their breakthroughs available to the world has been profoundly important in efforts to end global hunger, said Barbara Stinson, president of the World Food Prize Foundation in Des Moines, lowa, which awarded Yuan the 2004 World Food Prize, the top international honor for those who have improved the quality, quantity or availability of food globally.

The U.N. said Yuan made outstanding contributions to boosting food security, eradicating poverty and improving people's livelihoods.

He began researching hybrid rice in 1964, succeeding in cultivating the world's first high-



Yuan Longping with super hybrid rice in Guanyang county of Guilin, Guangxi Zhuang autonomous region, on Aug. 5, 2017.

PROVIDED TO CHINA DAILY

yield hybrid rice strain in 1973. He continued to work in this field and made breakthroughs.

Stinson said: "He made such a powerful contribution. He was one of our most laudable leaders. Professor Yuan will long be remembered."

In China the annual planting area of hybrid rice now exceeds 16 million hectares (39.5 million acres), 57% of the total rice planting area, helping feed an extra 80 million people a year in a country in which rice is a staple for most of the population, Xinhua News Agency reported.

Stinson said Yuan was credited not only for his hybrid rice achievement, but for the ability to shift land out of rice production and into other kinds of food production, including fish, fruit and vegetables, thus increasing the nutritional content of food in China, helping reduce hunger and poverty.

Born in 1930 in Beijing, and raised in an era of wars and famine, Yuan witnessed the despair of people displaced from their hometowns and losing the land they lived on.

HE MADE SUCH
A POWERFUL
CONTRIBUTION.
HE WAS ONE
OF OUR MOST
LAUDABLE
LEADERS.
PROFESSOR
YUAN WILL LONG
BE REMEMBERED."

BARBARA STINSON,

PRESIDENT OF THE WORLD FOOD PRIZE FOUNDATION



Yuan receives the World Food Prize in 2004 from Norman Borlaug, winner of the Nobel Peace Prize in 1970.
PROVIDED TO CHINA DAILY

When he applied for university he decided to study agriculture, although his mother thought such work would be tough and exhausting.

In an article in *People's Daily* in 2019, Yuan wrote, "I was fond of agriculture and insisted on studying it at the time, telling my parents that having enough food was people's utmost priority and that they couldn't live without filling their stomach. Eventually my parents were persuaded."

After Yuan graduated he was assigned to teach at an agriculture school in a remote town in Huaihua, Hunan province. He was prepared to make contributions to the development of the country by spreading agricultural knowledge and techniques.

However, a few years later, from 1959-61, the country suffered food shortages.

"That made me start to think that our country's growth relied greatly on food security and that I needed to work to let Chinese people have enough food."

Yuan's research results have been used throughout the country since the mid-1970s and

feed the world

have greatly increased national rice yields.

In the decades that followed, he led a team to conduct research on super hybrid rice, achieving goals of harvesting 10.5 tons of rice per hectare in 2000, 12 tons in 2004, 13.5 tons in 2011 and 15 tons in 2014.

In 2017 the average output of hybrid rice per hectare in China was 7.5 tons; globally it was 4.6 tons.

Yuan appears in the movie Yuan Longping, which premiered in 2009, talking with a foreign reporter about a dream he had.

"Several years ago I had a dream," Yuan said in English. "I saw my super hybrid rice plant as high as sorghum, the panicle as large as a broom, and the grain as big as peanuts. I was very happy to rest under the panicle with my assistant. As long as I live, I'll never stop pursuing and dreaming about super hybrid rice."

In recent years Yuan and his team started to research a salttolerant crop, known as sea rice, with a research and development center being set up in Qingdao, Shandong province, in 2016.

China has about 100 million hectares of saline-alkali soil, and about one-fifth of this land can be developed and cultivated, according to official figures. Yuan believed if the land was covered with high-yielding sea rice, output prospects would be bright.

Developing hybrid rice to ben-

efit people globally was another of Yuan's lifelong pursuits.

The China National Hybrid Rice Research and Development Center said the annual growth area for this type of rice has reached 8 million hectares in countries including Bangladesh, Brazil, India, the U.S. and Vietnam, with each hectare on average producing about 2 metric tons more grain than local strains.

For more than a decade the World Food Prize Foundation has placed young U.S. agriculture students on Borlaug-Ruan International Internships at Yuan's center in Changsha.

Stinson, the foundation's president, said she expected the U.S.-China cooperation program to resume in person, after having run it virtually since last year because of the pandemic.

"It's my hope to continue this longstanding powerful relationship between the World Food Prize Foundation and many researchers and leaders in China," she said, adding that the foundation considers the partnership part of Yuan's legacy.

The President Emeritus of the World Food Prize Foundation, Kenneth Quinn, who knew Yuan for more than 20 years, said, "I think, 100 years from now, people will still be talking about Yuan Longping in China and the rest of the world. That's how significant his achievements were."



Yuan plays volleyball at age 81. YU XIANGQUAN / FOR CHINA DAILY



Bai Yun says she enjoys talking about her reading preferences online. PROVIDED TO CHINA DAILY

Veni, vidi, legi

Bai Yun talks about reading books in a 30-minute online video every month, impressing audiences with her erudition.

Bai, 29, a teacher in Beijing, has attracted more than 211,000 admirers on the short-video sharing platform Bilibili who watch and listen to her to find out what books she is recommending.

"I like to tell others about my interests and what I enjoy," said Bai, who says she reads about 50 titles a year and instructs senior middle school students in broadcasting and teaching at an education center in Beijing.

Internet users have set up accounts on such platforms to discuss reading, with those who produce creative and good-quality content on the internet becoming influencers in various fields.

The Chinese Academy of Press and Publication recently issued the 18th annual report on people's reading habits, with more than 46,000 people in 167 cities surveyed between September and December.

The report found that 81.3% of Chinese adults say they read either in print form or on mobile and other digital devices last year, 0.2% more than in 2019.

According to the survey adults said they read on average 4.7 printed books and 3.3 digital ones last year, compared with corresponding figures of 4.65 and 2.84 in 2019.

About 11.6% of the respondents said they read more than 10 printed books last year, and 8.5% said they had read more than 10 e-books.

Bai visits bookstores to discover works on a range of subjects. In addition to novels, she enjoys books on social sciences, which she reads to broaden her knowledge.

Since she has been making videos, she has discovered works on psychology, law and economics, and has found there are many good books that provide readers with a basic knowledge of such subjects.

"Through making videos I've formed the good habit of reading, and my character has been shaped by extensive reading. I'm more mature and open-minded than I used to be, feel empathy for others and see things from many perspectives."

Through reading books people gradually remodel themselves, forming values and outlook on life, Bai said.

Chang Tongtong, a marketing editor at CITIC Press Group in Beijing, said that to promote new books domestic publishing houses often work in conjunction with influencers in the field of reading.

"The traditional way of promotion is through book reviews by experts and the media. However, in the mobile internet era, people are more interested in short videos than reading articles. We have discovered this to be a more efficient marketing approach, because short videos are easily spread online."

WE'RE ENTERING A NEW ERA OF INNOVATION

By Madhukar Pai and Gavin Yamey

made by countries like the U.S. and the U.K. in stymieing the COVID-19 pandemic, it continues to ravage much of the world. It also continues to revolutionize global health care in ways that could have lasting benefits.

For example, the rapid development of safe, highly effective COVID-19 vaccines heralds a vaccine revolution. Researchers and pharmaceutical companies are already gearing the pioneering approaches of the COVID-19 vaccine makers toward vaccines for a range of other diseases like HIV, tuberculosis and malaria. COVID-19 also accelerated international science collaborations and sparked an unprecedented mobilization of research funds to develop new diagnostics, treatments and vaccines. For the first time ever, COVID-19 prompted scientists as a whole to immediately share their research online with no paywalls as soon as their papers were ready.

Obstacles remain. Manufacturing of new health technologies still takes place mostly in rich nations, with such technologies eventually trickling down to low-income nations. These advantages need to be more equitably distributed so that low- and middle-income countries become self-sufficient in producing

their own health tools. The regulatory approval process worldwide needs to become faster and more streamlined. And we need to put a system in place to prevent rich nations from hoarding vaccines, diagnostics and medicines in future pandemics.

On another front, COVID-19 forced a global adoption of telemedicine. For example, one U.S. Centers for Disease Control and Prevention study found a 50% increase in telehealth visits in the first three months of 2020 compared with the same period in 2019. Every single clinician we have spoken to—physicians, nurse

practitioners and nurses who have run telemedicine clinics during COVID-19 told us they want this shift to become permanent. "Such visits are clearly not appropriate for every condition," says Zeynep Tufekci, associate professor at the University of North Carolina School of Information and Library Science, but "when warranted, they can make it much easier for people to access medical help without worrying about transportation, childcare or excessive time away from work." In low- and middle-income countries, telehealth has been used during the pandemic as a low-cost service to reach people in poor or remote areas. In India, right now, home-based care is the only realistic option for millions of people, as hospitals are overwhelmed.

Another improvement to global public health that developed during the pandemic is in fighting scientific misinformation. Conspiracy theories, bogus remedies and antiscience ideas abounded for the past 18 months, in part thanks to social media. The good news is that scientists have responded with urgency and creativity. For example, new hubs like the University of Washington's Center for an Informed Public, the Taiwan FactCheck Center and Britain's Science Media Centre have emerged to specifically tackle misinformation. Despite such efforts, vaccine hesitancy is still a huge issue during this pandemic and will require redoubled efforts to fight misinformation.

ALONGSIDE COVID-19, the year 2020 saw calls for racial justice and for the global health and development community to acknowledge their roots in colonialism and white supremacy. One ideal outcome here is that COVID-19 should push us to reimagine global health education, focusing more on equity and human rights and integrating antiracism and antioppression into our courses. This is, in many ways, an exemplar of the larger trend: COVID-19 has been the deadliest pandemic in a hundred years, and the scars it leaves will endure. But the pandemic has also catalyzed innovations in science and health care delivery, forced us to turn back a tide of misinformation, pushed health higher on global and national agendas, and made us better teachers. Out of crisis comes opportunity.

Pai is a physician and a Canada Research Chair of Epidemiology & Global Health at McGill University; Yamey is a physician and professor of global health and public policy at Duke University



The rapid vaccine rollout shows how the pandemic changed health care





The Ocean Race is the toughest and longest sporting event in the world.

Since the first race in 1973, it has been described as the ultimate team challenge, and has brought exceptional people together to achieve the extraordinary.

Now we are racing with even greater purpose. We've teamed up with TIME and we're bringing the spirit of ocean racing, and the mentality of winning, to the fight to save our planet.

Together, we can build a better future.

Find out more at www.theoceanrace.com



MENTAL HEALTH

Dotherapists still need couches?

TELETHERAPY IS SUPPOSED TO DEMOCRATIZE MENTAL HEALTH. THE PAST YEAR WAS THE PERFECT TEST

By Jamie Ducharme

FOR YEARS, TELETHERAPY HAS BEEN PITCHED AS THE NEXT frontier in mental-health care. Unlike medical disciplines requiring a more hands-on approach—say, physical therapy or surgery—talk therapy has long seemed a natural and effective fit for telehealth. And by taking appointments off the therapist's couch and into patients' homes via their devices, advocates argued, telehealth could make counseling more accessible and convenient for everyone, with particular benefits for those who lived in health care deserts or who couldn't regularly drive back and forth to see a clinician. The hope was that virtual therapy could help democratize a system that allowed almost 20% of white Americans to receive mental-health care in 2019, but fewer than 10% of people identifying as Black/African American, Hispanic/Latino, Asian or Pacific Islander.

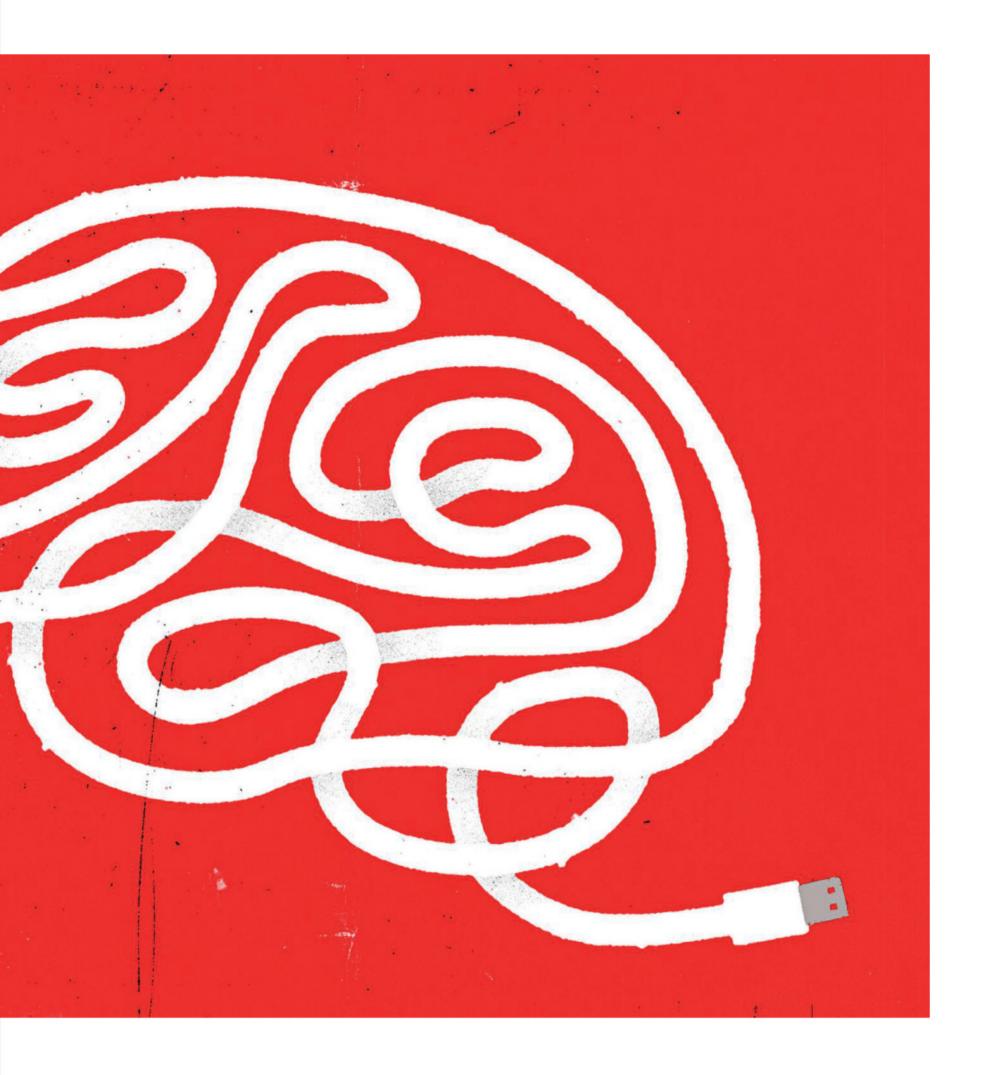
Then, of course, the pandemic hit, sending the U.S. health care system into a panic and shuttering clinics and private practices nationwide. Telehealth, once psychiatry's up-and-comer, was suddenly its lifeline. With impressive speed, a system built around face-to-face visits shifted almost exclusively online. By May 2020, 85% of the American Psychiatric Association's (APA) surveyed clinician members said they were conducting the majority of their sessions virtually, up from just 2% prior to the pandemic. It was the perfect pressure test for the promise of virtual mental-health care. If there was ever a time for teletherapy to shine, it was during the pandemic.

But the data isn't so shiny. Telehealth has indisputably improved mental-health care access—but not to such an extent that it delivers on promises of revolutionizing the mental-health system. The same problems that kept many people—particularly those who are lower-income or of color—from seeking care before the pandemic still exist, even with the expansion of telehealth. As a result, mental-health usage in the U.S. hasn't changed as drastically as many advocates would have liked.



'IF WE TRULY
WANT TO
REDUCE THE
GAP, WE NEED
TO MAKE IT A
TRUSTWORTHY
SYSTEM!

-DR. AMANDA CALHOUN, YALE UNIVERSITY



In a series of TIME/Harris Poll national surveys conducted this winter and spring, about half of respondents reported using telehealth since the pandemic began, compared with about 25% who said they had beforehand. But only about 5% said they'd gotten mentalhealth care for the first time during the COVID-19 crisis. That suggests the expansion of telehealth didn't bring in an influx of new patients to the mental-health system. Government data show a similar picture: about a quarter of U.S. adults received mental-health care in the winter of 2021, according to the U.S. Centers for Disease Control and Prevention (CDC), up from about 19% in 2019. That's an improvement, but not an enormous one.

Similarly, a March 2021 study from California's Kaiser Permanente health system found that telehealth allowed clinicians to conduct 7% more psychiatric visits in spring 2020 than 2019—but most

of those were with patients who already had a psychiatric diagnosis. Among people without a pre-existing diagnosis, volume declined by more than 40%, suggesting that virtual appointments were more helpful for people already served by the mental-health system than those outside it. On the opposite U.S. coast, telehealth allowed McLean Hospital, a psychiatric institution near Boston, to increase outpatient volume by about 15%, counting both new and existing patients, but psychiatrist-in-chief Dr. Scott Rauch says there's "absolutely the recognition that there are some populations," like certain older adults, "that are having difficulty accessing the technology."

In fact, despite the increased availability of telehealth, the share of American adults with an unmet mental-health need increased from August 2020 to February 2021, from 9% to almost 12%, according to CDC data. That's

Psilocybin and MDMA prove their psychotherapeutic mettle

Over the past year, psychoactives that had been mostly used as recreational drugs started really establishing themselves as frontline mental-health treatments. In an April study, published in the New England Journal of Medicine, 59 patients with depression were divided into two groups: one received psilocybin (a.k.a. psychedelic mushrooms); the other received escitalopram (a selective serotonin reuptake inhibitor and a smaller dose of psilocybin). Both had therapy alongside the treatment. At the end of the sixweek study period, those in the psilocybin group performed better on a self-rating depression survey than those receiving the escitalopram—though the difference was just shy of statistical significance. In an unrelated Nature Medicine study published in May, 90 people suffering from PTSD were similarly divided into two groups, one of which received three doses of MDMA—the active ingredient in ecstacy—plus talk therapy. The other received the therapy and a placebo. The conclusion: 67% of the people who had taken MDMA no longer met the criteria for a PTSD diagnosis, compared with 32% of the placebo group. Multiple startups—including Canada-based Cybin and U.K.based Compass Pathways—are working to commercialize the use of psychoactives for therapeutic purposes.





understandable, given elevated levels of anxiety, depression and stress during the pandemic, but it also suggests teletherapy is not a panacea. And that means the harder work is still ahead.

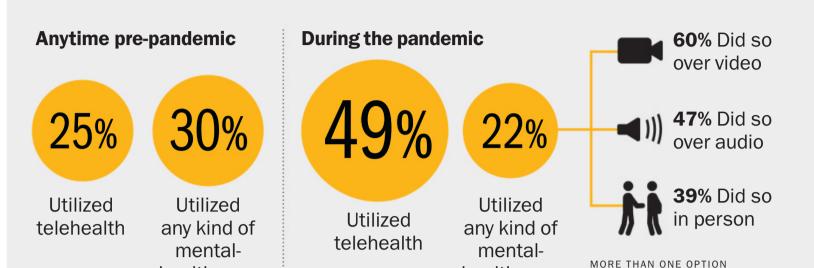
THERE ARE LOTS of ways to think about access to care. The most obvious—making it easy for a patient to speak directly with a clinician, either in person or via a device—is only one.

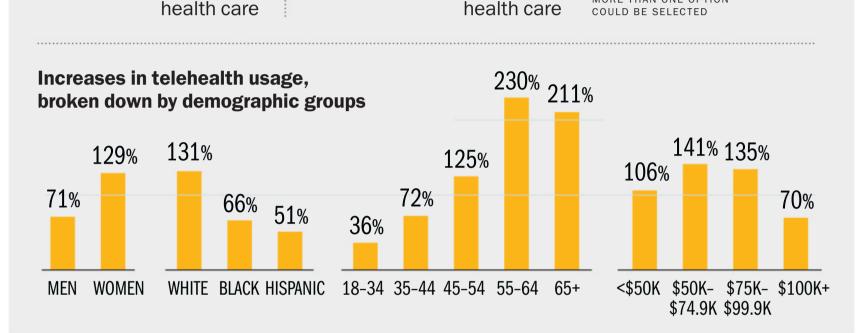
There are also financial barriers. A single therapy session can easily top \$100 (without insurance) in many parts of the country, and telehealth has done little to change that. Rightly so, argues Dr. Joe Kvedar, a former president of the American Telemedicine Association, since there's no evidence to suggest virtual therapy is lower quality than face-to-face. Be that as it may, high price tags mean both therapy and teletherapy remain unattainable for many.

Another limitation: there are simply not enough therapists to go around. More than 125 million people in the U.S. live in an area with a shortage of mental-health practitioners, according to U.S. Health Resources and Services Administration estimates. Whether they're seeing patients virtually or in the flesh, there are a finite number of mental-health professionals with a finite number of hours in their days. Rauch, from McLean Hospital, says telehealth can increase appointment capacity somewhat, mainly because patients are less likely to cancel or no-show, but "as long as it requires an hour of clinician time to deliver an hour of clinical service, expanded access won't be drastically enhanced."

To meet demand, the U.S. needs not only more therapists generally, but also more therapists from diverse backgrounds. A 2020 study concluded that just 10% of U.S. psychiatrists identify as Black, Hispanic, American Indian, Alaska Native, Native Hawaiian or Pacific Islander. That means many patients of color can't find a therapist whom they trust and with whom they can form a close rapport, a barrier that dissuades many people from getting the help they need or prevents them from reaping the full benefits of therapy, says Dr. Amanda Calhoun, a psychiatry resident at Yale and a fellow on the APA's Council on Minority

TELEHEALTH'S UNEVEN GROWTHDuring the pandemic, telehealth usage in the U.S. increased across the board, with the greatest percentage rises in the middle class, older Americans, women and white people





SOURCE: TIME/HARRIS POLL OF 3,214 TOTAL RESPONDENTS TAKEN ON FEB. 17, MAY 4 AND MAY 27

Mental Health and Health Disparities.

"There are many patients who want a Black therapist and they can't get it," Calhoun says. "If we truly want to reduce the gap [in mental-health care usage] we need to make it a trustworthy system where people feel they can connect with their therapist or psychiatrist."

Patients who do not speak fluent English, or who feel more comfortable using another language, may also struggle to find a therapist with whom they can communicate freely. Increased use of language interpretation could be an essential tool for expanding access, Calhoun says.

It seems naive, or at least wildly optimistic, to think telehealth could overcome some of these entrenched structural issues. And in some cases, virtual care actually worsens disparities. Some people don't have a reliable Internet connection or a smart device, for example. About 7% of American adults don't use the Internet at all, according to Pew Research Center, and those without advanced education and people of color—i.e., those already often underserved by the mental-health system—are least likely to be "digitally literate," according to a 2020 *Health Affairs* article. Further, elderly adults, an

estimated 20% of whom have some sort of mental-health condition, may struggle to navigate virtual platforms even if they have quality Internet access. And online platforms aren't perfect. Some people feel uncomfortable sharing their most intimate thoughts through a screen, and any digital system runs the risk of malfunctioning or being hacked. That recently happened in Finland, when a data breach led thousands of patients' sensitive appointment notes to land in hackers' hands.

Plus, teletherapy is only convenient if you're able to step away from work and other responsibilities to conduct the call in a private place. While the pandemic has many white collar workers drowning in time at home, surrounded by devices, that's far from a universal experience. For essential workers, a disproportionate number of whom are people of color, it may be only slightly easier to steal away for a teletherapy appointment than it would have been to schedule an in-person visit with a clinician. Perversely, teletherapy may be making it easier than ever for people who already had access to mentalhealth care to get it, while leaving behind the people who arguably need it most.

If teletherapy isn't doing the trick,

the question then becomes how to better serve those still not getting the mentalhealth care they need. Calhoun says any real solution needs to take a step backward and investigate why many people either cannot or choose not to seek help.

For people of color, centuries of neglect and mistreatment by the medical institution are not easily forgotten. In the 1700 and 1800s, influential American doctors coined since-discredited diagnoses like "drapetomania" (psychosis or madness causing an enslaved person to run away) and "negritude" (essentially, the "disease" of not being white). Many contemporary providers aren't aware of those offensive diagnostic frameworks, Calhoun says, but the cultural legacy of that racism is still widely felt in communities of color.

Training more clinicians from underserved backgrounds is the single most impactful way to encourage people of color to get help, Calhoun says. But that process takes time. In the interim, she says, all clinicians need to be educated about psychiatry's problematic past so they can acknowledge and understand why some patients may not feel comfortable seeking help, and then hopefully address those issues in their own practices. Looking beyond telehealth and focusing on community-based programs—like church-run mental-health groups or the Confess Project, a nationwide initiative that trains barbers to be mental-health advocates—may also help build that trust.

Case studies also suggest teletherapy can work well when it's integrated into the traditional, in-person medical system. For the past decade-plus, Massachusetts has run a program that allows participating primary-care providers to teleconference in a psychiatrist during a child's checkup, for example. Such programs don't eliminate mistrust of the medical system, but they can at least make it easier to introduce people to the mental-health system.

Mental-health apps—while not appropriate for patients with serious diagnoses, and clearly not an option for those without a smartphone—can also provide a cheap (or even free) stopgap measure for people struggling to find or afford an appointment with a clinician, Rauch says. And in some cases, adds Dr. Adrienne Robertson, a family medicine physician

who works with the online medical startup Nurx, through which people can request prescription medicines and diagnostic tests simply by filling out a form, eliminating face-to-face interactions with providers can actually put patients of color at ease, because they can "just [be] a patient like everyone else."

Policy also plays a role. Nordic countries, like Sweden, have among the most robust and widely used telemedicine programs in the world, boosted by affordable, state-sponsored medical networks. Unlike in the U.S., where insurance limitations and out-of-pocket costs are roadblocks for some patients regardless of platform, many people in Nordic countries have a public option for virtual care. Last year, the Centers for Medicare and Medicaid Services made it easier for Medicare holders to use telehealth services, a policy that allowed more than a quarter of Medicare beneficiaries (and more than 30% of Black and Hispanic beneficiaries) to use telehealth during the fall and summer of 2020, but it's not clear what will happen after the pandemic ends. Permanent federal action for Medicare and Medicaid holdersmany of whom are low-income or elderly adults—could open up therapy to millions of people who can't currently afford it. And changing federal policies that currently limit clinicians to treating patients located in the state where they are licensed could help even out distribution of the mental-health workforce.

All of these fixes are considerably more complex than bringing appointments online; they require rebuilding the system, rather than simply shifting it to a new platform. That work needs to happen sooner rather than later, Calhoun says. Already, according to TIME/ Harris Poll data, many people are returning to in-person medical appointments, both psychological and physical. In May, more than half of respondents who'd received mental-health care said they'd had an in-person appointment since the start of the pandemic, up from 37% in February. While some patients and clinicians are sure to stick with teletherapy after the pandemic, much of the system will seemingly revert back to how it was—and without concerted effort, the same problems may persist for years to come.

The first humanmonkey chimera

In an April study published in the journal Cell, professor Juan Carlos Izpisua Belmonte created an embryonic chimera that combined human and nonhuman primate cells, designed for research purposes only, and unable to advance beyond the embryonic stage. The research has two purposes. The first is to study the process known as gastrulation—the point two weeks after conception when embryonic cells begin to differentiate into the body's more than 200 cell types. The second goal is to help scientists develop better systems for growing tissues and organs—intended for transplantation into humans in other animals, including pig embryos, which are less ethically controversial and more accessible.

Bone-marrow transplant cures HIV

For blood-cancer patients who are not responding to chemotherapy, a bone-marrow transplant is sometimes an option. For one such patient in the U.K., the transplant proved to be a treatment for a second disease, too: HIV/AIDS. The patient received marrow from a donor who had a mutation in the CCR5 gene, which prevents HIV from effectively binding to cells. After the transplant, circulating HIV disappeared from the formerly positive patient's blood. What's more, 18 months after the patient stopped using antiretroviral medications, the virus had not yet reappeared. However, the doctors involved stress that such transplants can carry more risk than simply staying on retroviral medications.



AGING

ELDER CARE GROWS UP

COVID-19 EXPOSED THE NEED TO FIX ONE OF THE U.S.'S TOUGHEST PUBLIC-HEALTH CHALLENGES. CAN IT BE DONE?

By Abigail Abrams

FOR THE AMERICAN PUBLIC, ONE OF THE FIRST SIGNS OF THE COVID-19 pandemic to come was a tragedy at a nursing home near Seattle. On Feb. 29, 2020, officials from the U.S. Centers for Disease Control and Prevention (CDC) and Washington State announced the U.S. had its first outbreak of the novel coronavirus. Three people in the area had tested positive the day before; two of them were associated with Life Care Center of Kirkland, and officials expected more to follow soon. When asked what steps the nursing home could take to control the spread, Dr. Jeff Duchin, health officer for Seattle and King County, said he was working with the CDC to provide guidance, "but," he acknowledged, "it is a very challenging environment, particularly with so many vulnerable patients, to manage an outbreak."

It turned out the virus had already been circulating among Life Care's residents for weeks by the time administrators took action, and soon it was tearing through the facility. By March 5, at least nine residents had already died of COVID-19, and a group of families whose loved ones were still inside held a desperate press conference. "Our families are dying. We don't know what to do. Our calls for help aren't working," Kevin Connolly, whose father-in-law lived in the facility, told reporters. "We have limited resources to battle this disease, and I think somebody somewhere decided that this population of people wasn't worth wasting resources on."

Many long-term-care experts would say Connolly was right. The pace at which that first U.S. coronavirus outbreak spread through Life Care, killing dozens of residents in weeks, shocked the public. But for those familiar with long-term care, it wasn't surprising. "We really failed in a lot of ways, historically but also during this pandemic, to value older adults," says David Grabowski, a professor at Harvard Medical School and an expert on long-term care. That is to say, the U.S. health care system basically left its nursing-home







residents as sitting ducks for a viral pandemic like COVID-19.

Nursing homes and other group facilities are inherently petri dishes for pathogens. People with frail health frequently share rooms and rely on workers to help them bathe, eat and get out of bed. The staff perform physically and emotionally taxing work for little pay and few benefits, which means they often work for multiple facilities to make ends meet, potentially spreading infections further, as the CDC found was the case with Life Care.

Even before the pandemic began, the low pay and tough working conditions had led to high turnover among U.S. nursing-home workers, and facilities struggled with infection control.

This wasn't the case around the world. Many wealthy countries have smaller group homes with more private spaces and highly trained care workers, and generally spend more on their elders. In Denmark, for example, which spends 2.5% of its GDP on a universal long-termcare system compared with the U.S.'s 0.8%, deinstitutionalizing care has been prioritized. Even when Danes do live in nursing homes, they often have individual apartments—perhaps one reason that by February 2021, the country had recorded fewer than 950 deaths among nursing-home residents, while in the U.S., as of mid-May, more than 132,000 longterm-care facility residents had died from COVID-19, accounting for nearly 25% of the country's total coronavirus fatalities. This horrific toll sent the nursing-home industry into free fall, with occupancy rates plummeting 14% from first quarter 2020 to first quarter 2021 as new admissions dropped, according to the National Investment Center for Seniors Housing & Care research group.

The nursing-home industry says that it has lost tens of billions of dollars during the pandemic and that many facilities are in danger of closing. COVID-19 vaccines have improved things, but images of last year's destruction may not fade quickly for people who need care or for their families. The pandemic has thrown into relief concerns that advocates, experts, workers, industry reps and patients have long raised about long-term-care facilities, and it has created a unique moment, they say, to reconsider how the



CAPABLE includes a one-time payment of \$1,600 for home modifications and assistive devices

country can better care for people outside those settings in the future.

"What we collectively realized [during the pandemic] is that we're all isolated and dealing with the same struggles because of a lack of care infrastructure in this country to support our ability to take care of the people that we love, particularly as we're working," says Ai-jen Poo, co-director of Caring Across Generations, which advocates to strengthen the long-term care system. "It's really a once-in-alifetime opportunity to update our public policy, our systems and our infrastructure for the next era."

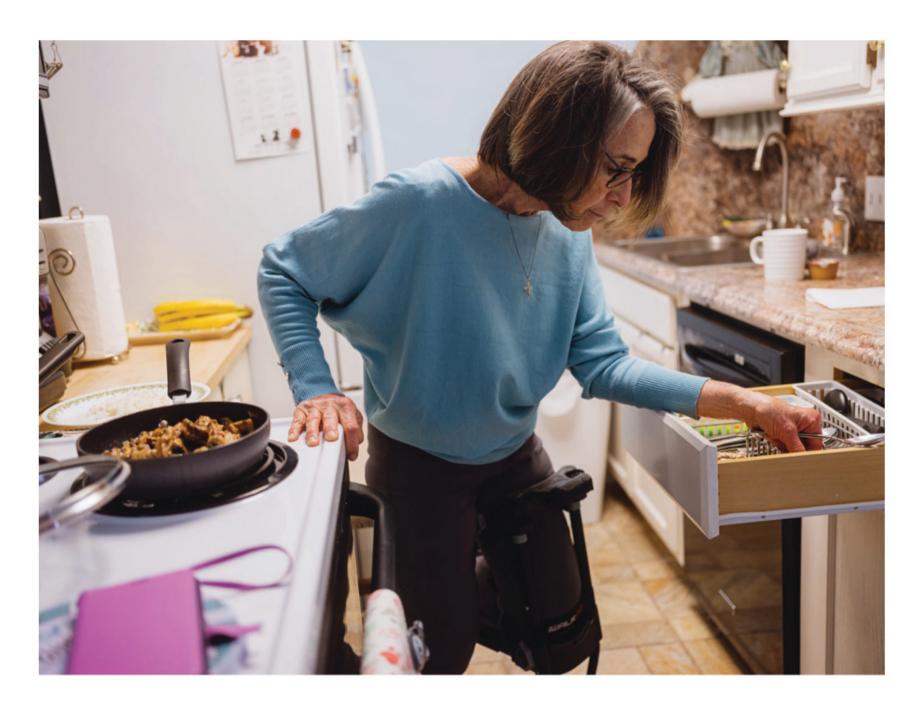
with disabilities would be able to choose their care based on what they, along with family members or case managers, believe is most appropriate—and not on cost. Yet, unlike most other rich countries, the U.S. does not provide a public long-term-care benefit for everyone who needs it. The result is a system that is fragmented. Care is often siloed into two categories, medical treatments and social/personal support; underfinanced; and frequently leaves people with little choice about their care. Many end up in group homes when there is no clinical reason for them to be there,

and those who do stay at home often struggle to find or afford enough professional care to meet their needs, instead relying on unpaid family caregivers.

One of the biggest challenges is paying for care. Medicare, the federal program that provides health insurance for seniors, does not cover most long-term services. Instead, Medicaid, the federalstate program that covers the health care of very low-income Americans, ends up being the primary payer for long-term care. But in most states, older adults must have a monthly income under \$2,382 and \$2,000 or less in assets to qualify. That leaves many middle-income Americans with too much money for Medicaid but unable to afford expensive care. Roughly 8 million seniors fall into this category, a number expected to reach 14.4 million by 2029, according to a *Health Affairs* study co-authored by Grabowski.

In addition, Medicaid has a historical structural bias toward institutions. While Medicaid is required to cover care in group facilities (for those who do qualify), there's no coverage mandate for care delivered in people's individual homes. States have started to shift their Medicaid spending toward home- and community-based services over the past decade, but the amount and type of home care available still varies widely by state.

Further, states can cap Medicaid enrollment, creating long waiting lists for home-based care. There were 820,000



Thanks to CAPABLE, Thompson can now cook meals at home without falling or becoming too tired to eat

Americans on such lists in 2018, the most recent year for which data is available, according to the nonpartisan Kaiser Family Foundation. The average wait time is 39 months, and many people see their health deteriorate or die before they get help, says Nicole Jorwic, senior director of public policy for the Arc, a nonprofit that supports people with disabilities.

That long wait is in part due to a scarcity of home health aides and nurses in the U.S., a trend further exacerbated by the pandemic. Dottie Walden, 74, saw the shortage firsthand this year when she tried to find help in rural Georgia while caring for her husband Joe, who had a stroke in 2015 and a feeding tube inserted last winter right before the pandemic began in earnest. For the past year, she's spent every day bathing, feeding and moving him around their home—even when lifting him caused her to pull her own back. When Dottie started looking for help this spring after she realized she could no longer move him safely, it took a local care coordinator contacting three home-care agencies and waiting more than four weeks to find a company that had enough staff to cover Joe's needs. "It's so dangerous for me to even go out here to the grocery store for a few minutes and

leave him. You walk out the door, and you don't know when you come back in what you're going to find," Dottie says. "You're thinking every night, Maybe tomorrow will be the day that I will have some help. It just really takes a toll on you."

The financing issues that make it tough for families to afford care also constrain what care workers can make, as Medicaid pays rates the industry has long complained are too low. Homecare workers earn a mean hourly wage of \$12.60, according to the Bureau of Labor Statistics. More than 15% live in poverty, and more than half rely on some form of public assistance like food stamps, according to the Paraprofessional Healthcare Institute (PHI), a nonprofit that advocates for long-term-care jobs. Tracey Richards has been a home-care worker in Las Vegas for over 15 years, making \$9 to \$10 an hour for most of that time. This March, she switched agencies and now makes \$13 per hour. Even with the raise, Richards can't afford health care for herself, let alone save for the future. "I cry about it at night," she says. Richards says she knows her work is essential and she deserves to be paid a wage that reflects it—she also knows she could make more money doing another job, but she doesn't want to leave the clients who rely on her. "They don't have anyone else," she says.

Most home-care workers look like Richards: 9 in 10 are women, and nearly two-thirds are people of color. They've

A clear connection between sleep and dementia

Poor sleep duration has long been thought to be associated with Alzheimer's disease and other neurodegenerative conditions, but the cause-andeffect association is hard to establish, and studies typically don't run past 10 years or so, making it hard to track how sleep patterns play out over decades. In a robust study published in April in Nature Communications, a sample group of 7,959 people had their health and sleep patterns tracked throughout their 50s, 60s and 70s. The results were striking: those who slept six hours or less per night had a 30% higher risk of developing dementia than those who slept seven hours. While depression and other mental-health disorders are thought to have a role in changes in sleep duration and increasing dementia risks, the investigators corrected for those variables and did not find them to be relevant in their findings. They also ruled out sociodemographic and cardiometabolic factors. Though the investigators did not say with certainty which mechanism connects short sleep cycles to the onset of dementia, they speculated that lack of sufficient sleep can be associated with neuroinflammation, atherosclerosis and poor clearance of amyloid protein which makes up Alzheimer's plaques—from the body.





been trying to advocate for better pay and working conditions for years, but long-standing racism and sexism has led the country to undervalue this work and made change slow, says April Verrett, president of SEIU Local 2015 in California, the country's largest union of longterm-care workers.

These efforts may soon get a lift. President Joe Biden has proposed spending \$400 billion over eight years on home care for the elderly and people with disabilities as part of the infrastructure plan he hopes Congress will pass this summer. While that isn't enough to fix all the problems with long-term care—and it's not clear whether the funding will make it through negotiations with Republicans—it would be the biggest investment in this kind of care in more than half a century.

Biden's economic stimulus passed in March included a one-year investment of \$12.7 billion for these kinds of home-and community-based services, but Jorwic sees that as "filling holes in a sinking ship" after the stress the pandemic put on care providers. She's heard from states that are wary of using that funding to make significant changes to their home-care programs because the money runs out after a year. Even beginning to permanently improve home care, she says, will require the kind of funding Biden has proposed in his infrastructure plan.

THE PROBLEMS with long-term care are only getting more urgent. Some 10,000 Americans turn 65 every day, and the Census Bureau projects the number of seniors will reach 94.6 million by 2060, with the majority expected to need long-term-care services at some point. Retirement savings have not kept up with lengthening life expectancies. After a year and a half of a pandemic that drove millions of women out of the workforce, advocates are also making the case that addressing the simmering care crisis is key to the nation's economic recovery.

As lawmakers look to change the country's long-term-care system, advocates and researchers are exploring creative solutions to tackle not only the issues of access to care and worker pay, but also the kinds of care Americans receive in their homes. Right now, Medicare and Medicaid each pay only for specific services, and

individuals must navigate complex systems to find support, which means their doctors don't always talk to other caregivers, and medical care is often siloed from other social and personal support someone might need. A better system might align all these services under one payer, says Rachel Werner, a professor of medicine at the University of Pennsylvania, so that providers are incentivized to help manage all parts of their patients' care and could keep them in their own homes, which is typically the least expensive setting. One such program is CAPABLE, or Community Aging in Place—Advancing Better Living for Elders, a model developed by researchers at Johns Hopkins University (JHU) that offers low-income seniors regular visits from a nurse, an occupational therapist and a home-repair person over the course of about four months.

Sarah Szanton, a professor at JHU's School of Nursing, came up with the idea over a decade ago, when she was a nurse practitioner treating homebound patients. She saw clients who had developed coping mechanisms to stay at home—like crawling around the kitchen because their wheelchair wouldn't fit through the door frame—that were making their lives less enjoyable and more dangerous. While it was important to treat conditions such as diabetes or congestive heart failure, she realized that holistic, often nonmedical interventions like teaching someone to shower on their own or finding a new way to reach the second floor of their house were just as important.

The CAPABLE program has grown significantly over the past few years. It now has 33 sites across 18 states, and Szanton and her colleagues have strong evidence the model works. Studies have shown it reduces hospitalizations, depression and the number of functions with which participants report struggling. Federal evaluators found the program saves both Medicare and Medicaid roughly \$10,000 per year per participant. And because it can help some people function more independently in their own homes for years or even avoid a nursing home permanently, Szanton believes it could stretch the country's current supply of care workers.

For 72-year-old Nancy Thompson, CAPABLE has changed her whole life. Until last year, Thompson had a grim



Thompson now feels more comfortable navigating her home. "I'm very independent," she says

routine. At least once a month she would fall down—maybe while making dinner or perhaps when getting out of the bathtub. Next there would be a trip to the emergency room, followed by outpatient wound care and sometimes months of home health care, depending on the severity of the fall. She thought about getting a knee replacement, which would in theory improve her balance, but before she could follow through, she fell again and needed to heal before her doctor would approve it. The cycle was always expensive—and Hurricane Harvey devastated her savings a few years ago—but Thompson felt she had no other options.

Her collapsed foot and weak knee were making it increasingly difficult to walk, and the health care she was getting was depleting what little money she had left, but at least she managed to return to her own condo outside Houston after each



accident. "I don't ever want to end up in a nursing home," she says. The pandemic heightened that fear, but fortunately, Thompson's primary care provider, Village Medical at Home, wanted to try CA-PABLE for some of its patients. Starting in December, the program's staff helped Thompson develop personalized goals like climbing in and out of her tub without falling and cooking dinner safely without getting too tired to eat; facilitated longneeded doctor appointments; and paid for necessary assistive devices including a wheelchair, a specialized kitchen stool and a raised toilet seat. All of this was free for Thompson. "I haven't been to the hospital, to the emergency room or anything since I've been with them," she says. "And for me, that is totally amazing."

Most CAPABLE sites right now are still relatively small pilot programs funded by grants or individual organizations, but the program is making progress. Massachusetts was recently the first state to get approval for Medicaid to pay for CAPABLE; other states are now exploring this option. Private Medicare

plans, also known as Medicare Advantage, can now cover it, and the first Medicare Advantage CAPABLE site is launching in Missouri this summer. The federal Department of Housing and Urban Development recently announced it will make available \$30 million for organizations to run a version of CAPABLE. And the House Ways and Means Committee is working on legislation that would allow CAPABLE to be covered under traditional Medicare, which would open up access to the program to millions of older adults.

The doctors behind Village Medical at Home, which runs Thompson's CAPABLE program, hope the cost savings they'll accrue when their patients go through CAPABLE will allow them to keep expanding the program. Senior medical director Dr. Thomas Cornwell says the patient outcomes are so positive they may continue even if the savings end up being only enough to break even. "What's good for the patient is good for the managed care plan. The managed care plan makes more of a profit, the patient has a better quality of life, stays out of the

An obesity drug that actually works

A study published in March in the New England Journal of Medicine showed that the drug semaglutide—typically administered to treat Type 2 diabetes—can have powerful weight-loss effects. A sample group of 1,961 people with a body mass index of 30 or greater (the level considered "obese," though the scale has been criticized for overgeneralizing) were given either a weekly dose of 2.4 mg of semaglutide (the average weekly dose for diabetes treatment is 1 mg) or a placebo, coupled with lifestyle intervention like diet and exercise. At the end of a 68-week trial period, the semaglutide group lost an average of 14.9% of their body weight compared with 2.4% for the placebo group.

Polio kicked out of Africa

As recently as the 1990s, an estimated 75,000 children in Africa were paralyzed by polio each year. Last year, Nigeria—the last country on the continent to have reported a case of wild polio—was declared clear of the disease, making Africa as a whole poliofree. The breakthrough was a result of the Kick Polio Out of Africa campaign launched in 1996 by Rotary International in collaboration with groups including UNICEF, the World Health Organization, the U.S. Centers for Disease Control and Prevention, and others. Polio, which in 1988 was endemic in 125 countries around the world, has now been eliminated in all but just two of them: Afghanistan, where there were 56 cases of wild polio in 2020; and Pakistan, where there were 84. hospital—in theory, it can work for everybody," says Howard Gleckman, an expert on long-term care at the Urban Institute.

Another program that could expand is PACE, or Programs of All-Inclusive Care for the Elderly, which has centers in 30 states. The program, in some ways a supercharged version of CAPABLE, provides comprehensive medical and social services for older adults who need significant nursing care but want to live at home. PACE sites get a payment every month for each patient, mostly from Medicaid and Medicare, and the program uses that revenue to take care of all the participants' needs, including routine doctor's visits and meals at the PACE adult day center, home health aides, laundry services—and if needed, specialists or hospital visits.

"The nature of payment provides significant flexibility, as well as really strong incentives for PACE organizations to really proactively monitor and get out in front and address existing and emerging health needs," says Shawn Bloom, president and CEO of the National PACE Association. During the pandemic, this meant PACE programs shifted some services from their adult day centers to patients' homes, added telehealth check-ins and made other changes that providers say kept patients safe. While nursing homes nationally had a COVID-19 case rate of close to 60%, the rate among PACE participants was 19% through the end of March. There are regulatory obstacles to expanding PACE, but U.S. Senator Bob Casey, a Pennsylvania Democrat who chairs the Senate Committee on Aging, has introduced legislation to address some of these, and Bloom's organization has been lobbying to change them as well.

While such national solutions are still a long way off, individual states are pursuing their own ideas. California Governor Gavin Newsom released a "Master Plan for Aging" in January, calling for 1 million new caregiving jobs and new housing specifically for seniors. Other states such as Massachusetts, Colorado, Minnesota and Texas already have published similar plans; still others are working on their own, spurred in part by the destruction their leaders saw during the pandemic.

In addition, a range of municipalities as well as independent researchers are experimenting with everything from planned communities designed to be accessible for older adults to modular nursing homes and even care homes where disabled or older Americans would live side by side with caregivers and share different chores such as childcare and meal prep in a cooperative-style setting.

None of this will be easy. Republicans have rejected Biden's \$400 billion proposal, and the President has spent weeks trying to work out a bipartisan agreement. Even if Democrats do concede to a smaller infrastructure package that does not include the home-care funding, they could try to get it passed in other legislation that they would force through the budget-reconciliation process later this year. But that's not certain either, and plenty of experts, advocates and lawmakers are nervous that the likelihood of such an investment is diminishing. The stakes are high. "This is our moment to really provide transformative change to how we care for seniors and people with disabilities," says Casey. "If we don't get it right in this moment, I'm not sure we're going to be able to do this for 10, 20 years."

AFTER NANCY THOMPSON stopped falling down thanks to the training and home modifications provided by the CAPABLE program, her doctors decided this March she was finally ready for her long-needed knee replacement. She recovered in a fraction of the time her team expected, and was able to return home after only 10 days of rehab. Once back in her own condo, her mobility and confidence increased rapidly and she stopped needing home health aides sooner than expected too. Now, she's planning for the future and considering finally getting her foot operated on later this year—something she had put off for more than half a decade.

"This is the best thing that could have happened to me," she says. "I can be independent but be smart at it." That independence is what Szanton, the CAPABLE creator, envisioned when she dreamed up the program. And it's what most Americans say they want throughout their lifetimes. Now the question is if the political will can meet this moment. —With reporting by EMILY BARONE, TARA LAW, MADELINE ROACHE and SIMMONE SHAH

Stopping dengue at the source

Dengue fever has had a free ride for too long. There is no effective vaccine or therapeutic against the mosquito-borne disease, which infects 50 million people per year—and in a warming planet, the dengue-carrying Aedes aegypti mosquitoes' range is spreading to include regions that typically had a low incidence of the disease. But a study led by the World Mosquito Program in the Indonesian city of Yogyakarta and released in August 2020 may point to a solution: infect the insects with another pathogen—the Wolbachia bacterium—which prevents Aedes aegypti from spreading dengue when they bite humans. In the 27-month trial, Wolbachia-infected mosquitoes were released across Yogyakarta, and the result was a 77% reduction in dengue incidence. The benefits of the strategy can be self-sustaining, because Wolbachia-infected mosquitoes can spread the bacterium via their eggs when they reproduce. Investigators believe the strategy may also be effective in preventing other mosquito-borne viral diseases, including Zika, chikungunya and yellow fever.





WILL YOU BE ON THE LIST?

TIME IS ONCE AGAIN RECOGNIZING THE BEST INVENTIONS
OF THE YEAR—THOSE BREAKTHROUGHS THAT HELP TO MAKE
OUR WORLD BETTER, SMARTER, AND EVEN A BIT MORE FUN.

DO YOU HAVE A GROUNDBREAKING PRODUCT OR SERVICE THAT FITS THIS PRESTIGIOUS DESIGNATION?

TIME IS NOW ACCEPTING SUBMISSIONS.



APPLY NOW

TIME.COM/BESTINVENTIONS





A NEW HOPE FOR HEALTH CARE

EPIDEMICS

Maybe there doesn't need to be a next time

73 EXPERTS EXPLAIN HOW TO PREVENT ANOTHER PANDEMIC

By Emily Barone

IN HINDSIGHT, WE COULD HAVE PREPARED MORE SERIOUSLY, reacted more quickly, communicated more effectively, protected one another more actively and so on. But the next time there's a public-health threat, we will do better. Right?

Not necessarily. Knowing the many ways that we mishandled COVID-19 is a bit like knowing the number of pages in a textbook to study before an exam. It gives us an idea of the task ahead but not how difficult the work will be. True preparation means studying the problems and working out solutions. There's a lot of material to cover from this pandemic. And we have no idea when the next test is coming.

TIME's science and health team, with guidance from the University of Washington Alliance for Pandemic Preparedness, set out to make a study guide of sorts. In late May, TIME sent a list of about 50 initiatives that could mitigate the next health crisis to experts who could expect to be involved. We asked them to score each strategy's priority and feasibility on a scale of 1 to 5. Seventy-three responses came back from thought leaders in public health, infectious disease, immunology, hospital administration, data and technology, environment and climate, health inequity, supply chains and biosecurity. A third of them were outside the U.S., spanning 16 countries.

The responses offer a blueprint for a more prepared world. At the top of the list was bolstering vaccine research and manufacturing—rated by experts as the most urgent and highest-impact initiatives. Improving systems that track and alert the world to new diseases also scored high. What's more, these proposals also produced high feasibility scores, meaning experts saw either few barriers to implementation or strong momentum to overcome the challenges.

Other initiatives look tougher to accomplish. Ranked as high priority but less feasible were expanding health care access, distributing vaccines fairly and other strategies addressing inequalities that have exacerbated COVID-19's toll on vulnerable populations.

Leadership and communication strategies were ranked as

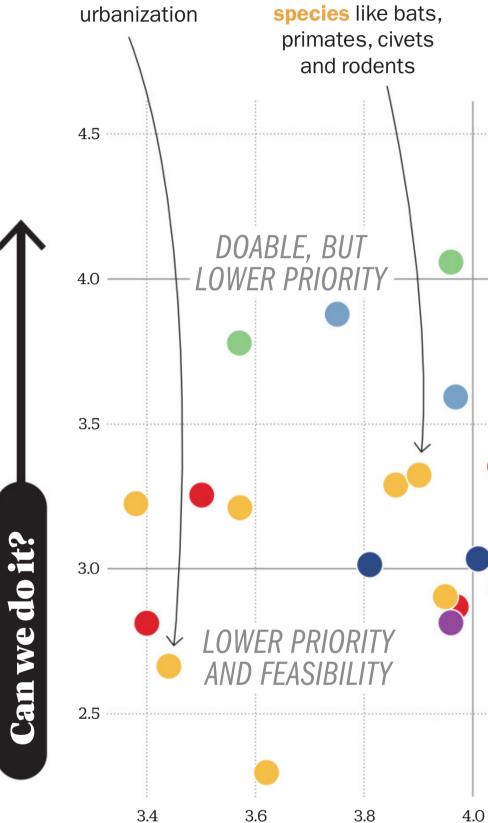








More rigorously regulate trade of high-risk primates, civets



Should we do it?

fairly high priority and moderately feasible, while on the other end of the spectrum, land-use and live-animaltrade strategies were deemed not very effective and also not very likely to happen.

The above chart shows the average rating for each strategy but does not in every case indicate consensus. A number of the strategies received both high and low scores. Some of those differ-



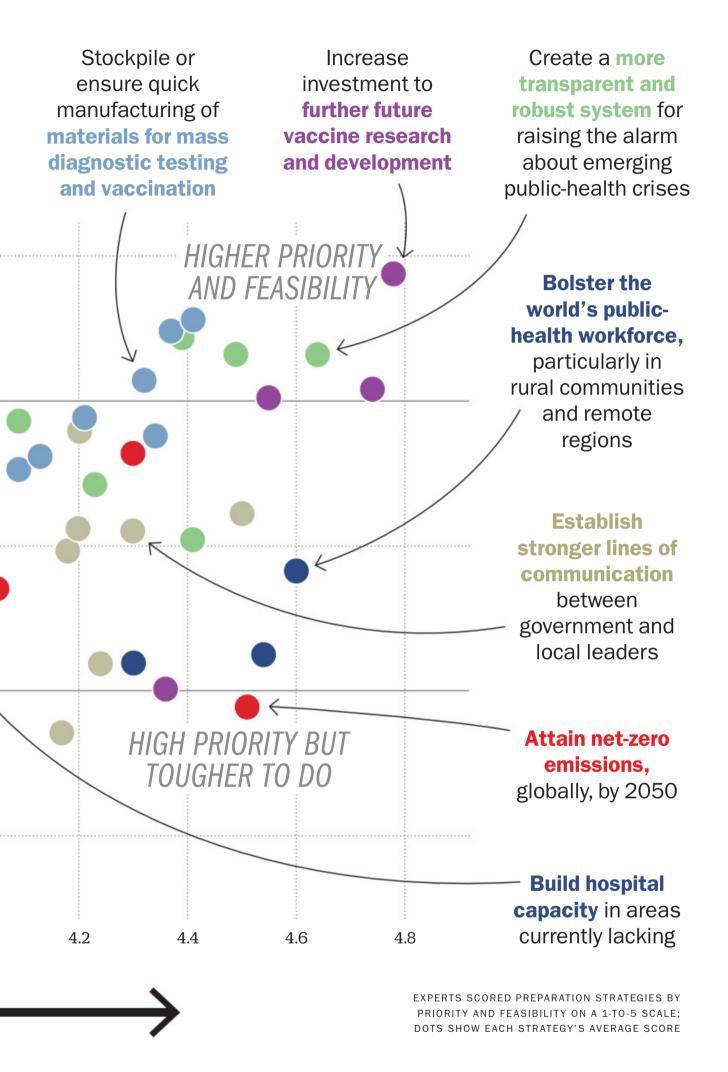






HEALTH EQUITY

LEADERSHIP AND COMMUNICATION



ences surely follow from differences in the disciplines the experts range across.

To capture that essential context, four health leaders previously recognized as TIME100 influencers analyzed the most significant findings. The points they make on the pages that follow not only underscore what we already know—that we could have managed COVID-19 better—but also where to look for the right answers.

Think globally, start locally

BY LEANA S. WEN

Two of the most critical lessons learned from the pandemic are the need for effective national leadership and for clear, consistent communication. Countries that fared well had both in abundance; those that didn't often faltered. The TIME survey results reflect this, with "leadership and public communication strategies" the only category in which every proposal was rated, on average, at least 4 out of 5 for priority. The highest ranking in the category went to "ensuring strong, federally coordinated responses that provincial, state, and local jurisdictions can rely upon for guidance." The importance of this cannot be overstated. In the U.S., it made no sense to have 50 states secure their own supplies of masks and tests, and 50 different sets of rules to contain (or not) the disease.

As a former local health official, I can tell you that local health departments are chronically understaffed and so rely on federal entities to formulate clear goals and evidence-based policy guidance, which empowers those closer to the ground to tailor the specifics to their communities. Being able to point to federal guidelines helps serve as political cover—important when the recommendations ask for difficult actions, such as shuttering businesses and imposing stay-at-home orders.

The TIME survey also identifies global health governance as a top priority, including to "reform the World Health Organization's regulatory authority." Unfortunately, the feasibility of this intervention was rated 2.86. I agree with this low ranking. Any reform at the WHO will be a long and tedious process. Global health governance needs to occur, but meanwhile, individual governments can take matters into their own hands. First, they must rigorously evaluate their country's pandemic response and make necessary investments to improve local, regional and national infrastructure and coordination. Second, they should strengthen international scientific collaborations. Third, willing countries can initiate multinational agreements for transparency, mutual aid and partnership.

Improvements in global public health must begin locally and be driven by leaders who will learn the hard lessons from COVID-19. If we can agree on the key factors that need reform, then we must agree on doing what it takes to prevent another tragedy.

Dr. Wen is a visiting professor of health policy and management at George Washington University and former Baltimore health commissioner



Alarms don't ring themselves

BY RAJ PANJABI

It's no surprise experts responding to TIME's survey ranked bolstering the world's public-health workforce, particularly in rural and remote regions, as one of the top five strategies (out of about 50) to prepare for the next pandemic. Over 115,000 health care workers died from COVID-19, and the world already faced its worst health-worker shortage in history before the pandemic; we need 18 million more by the end of this decade. With doctors and nurses concentrated in cities, the gap is widest in remote rural communities, which has life-or-death consequences for us all. Around 75% of new infectious diseases are zoonotic—pathogens that leap from animals to humans and often emerge in rural areas like tropical forests, where humans are in close contact with animals they hunt, eat, buy and sell. Malaria, Zika, HIV, Ebola and some coronaviruses all likely emerged this way.

Without health workers in rural areas, outbreaks can go undetected for months, if not years. In 2014 I saw firsthand in West Africa how the lack of health workers allowed Ebola to spread like wildfire. In the U.S., understaffed rural health departments struggled to keep up with COVID-19 contact tracing. The next pandemic is also likely to emerge in rural areas, especially as deforestation brings

animals, novel pathogens and humans into closer contact.

Preventing the next pandemic depends on a standing army of health workers within communities. At the U.S. President's Malaria Initiative and USAID, we've helped train and equip hundreds of thousands of community health workers across rural Africa and Asia to go door to door to test people with fever for malaria, treat those with the infection and triage those without. That investment has also helped countries fight COVID-19. From Liberia to Thailand, community health workers looking for people with fevers have found people with COVID-19, tracked their contacts, promoted mask use and educated about vaccines.

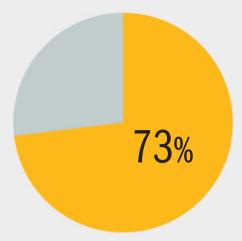
But too many frontline health workers remain unprotected, unvaccinated and underpaid. Like genomic sequencing and vaccines, local public-health workers are global public goods. Investing in health workers keeps us safe and makes our economies stronger. For every \$1 a country invests in community health workers, an estimated \$10 is returned to society, creating jobs and setting us up for a faster way out of the next pandemic.

Dr. Panjabi leads the U.S. President's Malaria Initiative

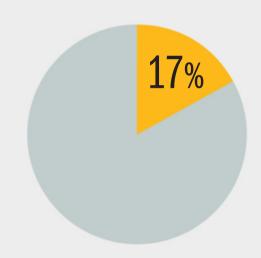
VACCINES TOP THE LIST Percentage of experts who gave vaccine-related strategies the highest priority score 83% 80% 69% 59% 42% **Amend global Boost** Increase Establish a **Equitably** distribute vaccine R&D global patent laws more permanent manufacturing version of manufacturing to share investment COVAX capacity materials technology

THE HARDEST THING WE NEED TO DO

Reaching net-zero emissions by 2050 had the widest gap between impact and achievability. Experts who ranked this strategy as...



Highest priority (5 out of 5)



Highest feasibility (5 out of 5)

SHOTS FOR ALL

BY SETH BERKLEY

To stop the next pandemic, we need to ensure that people everywhere are protected quickly. The good news is, all the necessary elements are feasible and, in many cases, in the works already.

The Coalition for Epidemic Preparedness Innovations (CEPI) was set up with the precise purpose of identifying and investing in R&D for vaccines against emerging infectious diseases with epidemic potential. When it came to COVID-19, with CEPI's and other R&D support as well as industry engagement, the scientific community

WHY CLIMATE MATTERS

BY SUNITA NARAIN

Preventing the next pandemic will require not only investment in infectious-disease prevention and management but also a shift in global development policy more broadly. We are only as strong as our weakest link, and the findings of the TIME survey should be filtered through this perspective. Despite supporting the broad goal of zeroing out emissions, the experts polled said specific land and climate efforts such as modifying food habits and protecting ecosystems were relatively less important and, critically, less feasible than the other categories of pandemicprevention measures. In this time of crisis, we naturally prioritize things that can be done quickly—from scaling up vaccine supply to improving supply-chain logistics. But none of this will endure without policies that focus on providing for the rich and the poor. That's where land use and climate change become essential.

We know today that climate-change impacts are making the poor even poorer—increasingly frequent extreme weather events destroy livestock and property and development investment, force people to migrate and make the world more insecure. We also know current food systems that

depend on intensive animal-farming practices lead to deforestation and the use of valuable land and scarce water resources for livestock feed. That puts the livelihood of many people around the world at risk and also, research has shown, increases the spread of infectious diseases.

Meanwhile, a lack of clean water and sanitation for all compromises our ability to manage infectious diseases. Air pollution from coal and biofuels is impairing lung function—putting people at higher risk for severe symptoms of infections like COVID-19. We cannot ignore these connections just because we find them unfeasible in the short term. The fact is, without equity in health care we will not prevent the next pandemic. We must look at the opportunities we have now that cut across both climate change and public health. If we invest in the livelihoods of the poor by planting trees and securing local food systems, we build resilience while also combatting climate change by sequestering carbon dioxide. These win-win scenarios happen when we put the poor at the center of the solution, and help prevent the next pandemic by making us less divided, less angry and less insecure.

Narain is the director general of the Centre for Science and Environment

rallied, producing the first safe and effective vaccine in record time—just 327 days. Today we have not just one but 15 in use. Increased investment now could get us there even faster next time, particularly given the potential of the relatively new mRNA vaccine technologies that have proved so effective with COVID-19. Not only do these plug-and-play technologies make it possible to identify and develop antigens rapidly, but much of the regulatory testing and approval can be done in advance, even before we know what the threat is.

As for manufacturing, it may be difficult to immediately discern when there are severe global supply shortages, but the world has actually rapidly built up manufacturing capacity during COVID-19. The growth in the past year has been achieved largely through technology transfers, where both the intellectual property and the vital know-how needed to make vaccines are shared by manufacturers.

However, we need to do more. Given the extremely large number of doses needed during a pandemic, export bans of vaccines and essential components and supply bottlenecks have led to a vaccine divide. Currently more than a third of adults in high-income countries have been vaccinated, while fewer than 1% of those in

low-income countries have had their first jab.

It is not distribution channels we are lacking but global manufacturing capacity. We already have highly effective distribution channels, through COVAX and its partners, and have access to enough doses to protect almost 30% of people in lower-income economies by early next year. But through investments now to increase global manufacturing capacity, particularly in emerging economies, and support of technology transfers, the next time a pandemic strikes we can get there sooner.

Dr. Berkley is the CEO of Gavi, the Vaccine Alliance

A gut check on Alzheimer's risk

It's no secret that the human microbiome has a profound effect on overall health. Now research has gone further than ever before to establish that the trillions of bacteria and other microorganisms that live in the gut play a role in one of the most devastating illnesses of all: Alzheimer's disease. In a study led by researchers at the Istituto Centro San Giovanni di Dio Fatebenefratelli in Italy, investigators looked at lipopolysaccharides, proteins on the membranes of gut bacteria that cause inflammation, as well as at certain short-chain fatty acids, some of which have neuroprotective effects. Using PET scans and blood tests of 89 people ages 65 to 85, the researchers found a higher incidence of amyloid plaques in the brains of those with higher levels of lipopolysaccharides and the bad fatty acids in their blood—and thus in their gut bacteria. Fewer plaques were found in those with the protective fatty acids. The findings point to the possibility of microbiota manipulation as



FAMILY

WHAT KIDS LEARNED FROM THE CRISIS

Too many young generations have been shaped by the global crises they faced—Depression-era poverty, Cold War nuclear fears. Add to them the COVID generation. The virus itself may typically go easier on kids than it does on adults, but the mind of a child is another thing. It's dependent on certainty, safety, the comfort of routine. Take all of that away—shutter schools, keep grandparents at a distance, cancel summer camps—and kids suffer. But as the following stories from young people show, they also grow and learn, gain maturity and wisdom. The virus has been tough; plenty of kids, it turns out, have been tougher.



GROWING
UP FAST

SHANAYA POKHARNA, AGE 12 Memphis

Unimaginable, unfathomable, unforgettable is how I describe 2020. My mother was sick in an isolated room for 20 days. My father, an infectious-disease physician, tirelessly cared for COVID patients, navigating the lack of supplies and finally contracting the infection himself.

The pandemic has matured me by a few years. I learned the virtues of compassion, patience, hard work, selflessness, dedication, gratefulness and passion toward one's profession and family. This experience has made me realize that humans are capable of overcoming any adversities.

Missing friends

ISAIAH MAGALA DESTIN,

AGE 10

Charlotte, N.C.

The pandemic has made me feel a lot of ways—good, sad, weird, but mostly sad. I haven't seen my friends in person. I can only FaceTime them on my tablet. My best friend Leland finally came to visit me a few weeks ago, which was great. But he was the only one who did all year.

Things seem to be getting better with the pandemic. But I feel sad that I don't get to meet my family in Uganda and Florida. To tell you the truth, if COVID-19 wasn't real, I would not be that careful about getting sick. I wish COVID was so weak that it would become like getting chicken pox.





Still recovering ROMAN PETERSON, AGE 14 New York City

Some people think that kids don't get COVID, or that if they do, it's no big deal. In our house, it was a big deal.

I thought the pandemic would be like vacation, but a few days after my



FINDING AN OUTLET

MIRA MCINNES, AGE 12 Leawood, Kans.

I struggle with anxiety and depression, and although I was in a good place mentally when the first wave of COVID-19 cases hit in the U.S., the pandemic created a greater challenge for me.

Up until March 2020, I was seeing my psychologist in person. COVID changed that almost overnight. Although it was weird at first talking to her through a computer screen, I quickly became used to it. I've been able to get the help I need, and I'm grateful for how much she has done for me.

In between appointments, though, I needed to find a way to take my mind off things. So I turned to writing. Over the past year, I've spent several hours most days writing short stories, poems and songs about how I'm feeling and what my hopes for the future are.

Staying unfiltered on paper or on screen has helped me validate my struggles with mental health and allows me to be open and honest with myself in a way I haven't truly been before.

mom was diagnosed with COVID, I got a fever. Doctors told me I had COVID too. My fever lasted four weeks. I lost my appetite and got really bad headaches. Researchers asked me to be in a study. They took my blood and spit and even studied my braces to figure out how long COVID stays on kids' teeth.

I still get "COVID headaches." But I know I'm lucky. The pandemic taught me not to take my health or the opportunity to be with people in person for granted. I now have headaches less often. And our eighth-grade graduation will be in person, the first time we'll be together since COVID began.



Newfound empathy JEREMY LIEW,

JEREMY LIEW, AGE 13 Riverside, Conn. The last year made me comfortable with being uncomfortable. I was uncomfortable being singled out for how I look (I am an Asian American Pacific Islander). A year ago, people looked at me as if I had COVID-19 or brought it to my community. I usually use jokes or magic tricks in awkward moments, but people didn't want to be around me. That made me empathetic to how others feel based on their looks.

I am still uncomfortable, but now I am confident. I appreciate who I am. I am grateful for what I have—my education, health and three annoying sisters. And I believe that people and science can make a difference, maybe with the help of a little magic!



Ecologist in training

ABBY ROGERS, AGE 11 Lahaina, Hawaii

Because I have reactive airways disease, my exposure to people outside of my family was limited. To give me something to do, my aunt recommended scientific livestreams. My new best friends are explorers who educate me on climate change, kelp forests, cotton-top tamarins and more.

The more I've learned,
the more I've wanted to do
something to help make the
world better. I cut down on
single-use plastics, ate less
meat and became an avid
recycler. I have recently gone
back to school two days a week,
and I'm super excited to be
there. I was a little concerned
because my classroom didn't
have a recycling bin, but my
teacher kindly allowed me to
bring one in.

A CLOSE CALL

<mark>NIRAV PANDEY,</mark> AGE 15 Kathmandu

In December, I felt terribly sick. When I reached the hospital, I was gray with fatigue. I stayed for observation and checkups. In the matter of a few hours, my liver, heart and lungs were struggling to keep up. I was shifted to the ICU. Before I was put on the ventilator, I told my parents that I'd be back soon, uncertain if I would ever see them again. My health deteriorated significantly, and there was little hope of my survival. But with the right treatment, I made it back to life, after what seemed an eternity. I greatly respect all frontline workers.

I was diagnosed with pediatric inflammatory multisystem syndrome, a rare and dangerous disease associated with COVID-19. The odds of my getting the disease were less than 0.5%. Through this struggle, I have come to realize how precious life is and the hurdles we need to overcome at every step.



85

COURTESY THE FAMILIES

THE MORE WE CHANGE, THE MORE WE STAY THE SAME

By Jamie Ducharme

THE PANDEMIC HAS, TO understate it dramatically, changed a lot of lives. A childless white collar worker who spent a year at home obviously had a different pandemic experience than a doctor working ICU shifts, or a grocery clerk desperate for adequate PPE, or a single mom struggling to homeschool her kids while supporting them. But each of these people lived differently in 2020 than they did in 2019.

Now, as life inches back toward normal, many are wondering what happens next. Will we still bake sourdough and tend our houseplants when there are once again other things to do? Will we return to our workplaces? Will we ever feel safe shaking hands with a stranger? In short: Will we ever go back to how we were?

Humans are adaptable; when our surroundings and circumstances change, so do we. Mask wearing is one obvious example—something few people in the U.S. did regularly before March 2020 quickly became second nature for many.

After performing these routines for more than a year, they may feel permanent, but Benjamin Gardner, a behavior-change researcher at King's College London, says people may be surprised

by how quickly they adapt to a reopened world. Some pandemic-era habits are already subsiding: a May 25 Axios/Ipsos poll found that 45% of people in the U.S. said they always wear a mask outside the home, down from 58% earlier in the month.

Context (where you are and whom you're with) and reward (the satisfaction gained from an activity) largely dictate whether a behavior becomes a habit, Gardner says. Both will soon change. If you worked from home during the pandemic, maybe cooking for yourself became an enjoyable daily ritual. But your old takeout

habit may return when you're again working in an office and often in need of something quick.

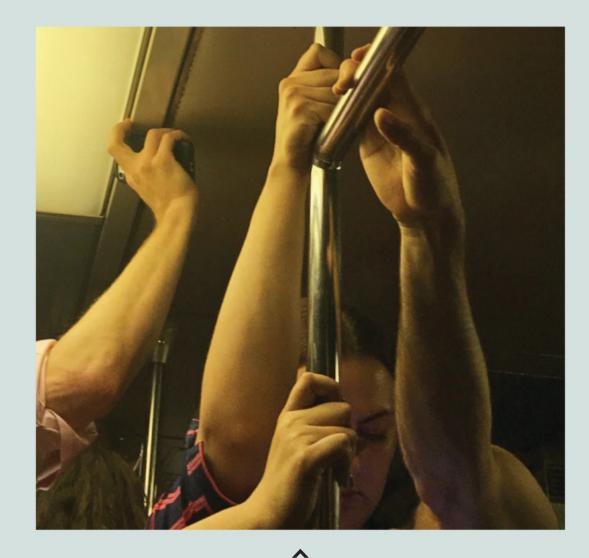
FOR SOME PEOPLE, disruption can cement a change in routine. A 2017 study in the Quarterly Journal of Economics found that after a labor strike kept many commuters from taking the London Underground, about 5% stuck with the alternate transport they'd adopted. When people are forced to change course, at least some find options more appealing than what they were doing before. That helps explain why houses are selling fast and furious as people relocate, and why about half of U.S. workers said in a recent Fast Company/Harris Poll survey that they're considering changing jobs. About 70% of people said in a 2020 Coravin/OnePoll survey that they'd learned about themselves during the pandemic, and more than half felt embarrassed by what they'd previously valued.

Some changes may

be outside our control. A year of stress and uncertainty isn't easily forgotten, says Karl Pillemer, a Cornell University professor of human development. The Great Depression is illustrative: like the pandemic, it was a widespread and long-lasting event that changed the way people lived. And just as many people who lived through the Great Depression maintained values like frugality, the pandemic may leave its own fingerprints perhaps germaphobia, wariness of proximity to strangers or increased comfort with solitude particularly, Pillemer says, for young children learning about the world. Some people may continue to struggle with depression and anxiety, levels of which have skyrocketed.

Nearly every generation has faced traumatic events, from wars to recessions to terrorist attacks, Pillemer notes. After each, some people face long-term psychological effects, but most return to a steady state. "People who go through adversity, especially in later life, develop wisdom, ability to regulate their emotions, resilience," he says.

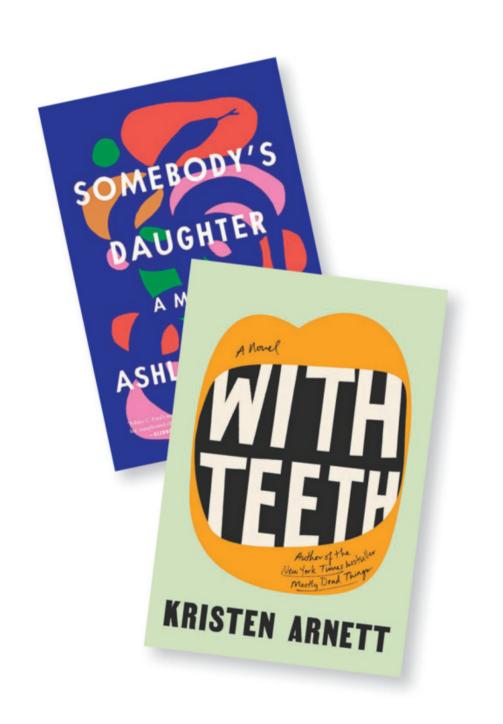
So will we be different after COVID-19? Yes and no. Most people will again socialize and commute and eat in restaurants, even if those things feel inconceivable now. Some will make lasting changes to their lives, both mundane and monumental. And, hopefully, many will hold on to lessons learned—so next time we are faced with difficulty, we may have a better understanding of how to overcome it.



It probably won't be long before people crowd onto subways again



This year, the warmest months bring more than sun: crowds are back. And surrounded by people, the solitude of reading feels somehow richer. But whether you're staying in or venturing out, the best new books arriving in June, July and August offer something for every reader, from piercing memoirs to powerful essay collections to gripping thrillers. The warmest months usher in the return of seasoned pros like Michael Pollan and Laura Lippman, and welcome debut authors like Ashley C. Ford and Anna Qu. Between the page-turners and rom-coms, family sagas and potent nonfiction, these books will provide entertainment, distraction and comfort—and will likely teach you something new about the world. Here, the 36 books to read this summer. —AG



JUNE

With Teeth Kristen Arnett

Like her breakout debut, *Mostly Dead Things*, Kristen Arnett's latest novel looks at a fractured family unit, this time focusing on two women as they struggle to raise their son. Samson has been difficult ever since he was a young child, but his juvenile misbehavior gives way to a startling level of hostility in his teenage years. When that aggression hits a breaking point, his parents grapple with the challenges of queer motherhood and marriage as he tests the boundaries of their love. (*June 1*)

Somebody's Daughter

Ashley C. Ford

Best known as a writer and podcast host with sharp pop-culture takes, Ashley C. Ford offers a debut memoir that pulls no punches. Tracking her impoverished youth and adolescence in Indiana, Ford shares her struggles growing up with a single mother as she grapples with her changing body, painful relationships and the truth of her identity, embarking on a poignant quest to find and understand her incarcerated father. (June 1)

The Other Black Girl Zakiya Dalila Harris

Both a blistering satire and sharp social commentary, Zakiya Dalila Harris' debut novel follows Nella Rogers. Nella is the only Black editorial assistant at the fictional Wagner Books, until Hazel-May McCall is hired—setting in motion a strange series of events that leaves Harris' protagonist unexpectedly isolated. Though the two women initially bond, Hazel begins to rise in the ranks as Nella is shut out, all while Nella receives anonymous hostile messages. As the mysteries mount, Harris, who worked as an assistant editor at Knopf before leaving to write

this book, guides us through a thrilling narrative set against the backdrop of the starkly white publishing industry. (June 1)

One Last StopCasey McQuiston

Twenty-three-year-old August has just arrived in New York City with a cynical attitude and barely any luggage—her whole life fits into five boxes. She's a perpetual loner until one fateful ride on the Q train changes everything. August meets a mysterious girl in a leather jacket named Jane, and is instantly smitten. But there's a catch: Jane has been stuck on the subway since the 1970s. Like her debut novel, *Red, White & Royal Blue, McQuiston's latest rom-com bursts with charm, humor and this time a bit of magic. (June 1)*

How the Word Is Passed Clint Smith

Writer and poet Clint Smith thoroughly excavates the pervasive (yet not always visible) legacy of slavery in America in his nonfiction debut, How the Word Is Passed. To delve into this history, Smith uses his hometown of New Orleans as the launching point for an evocative and frank exploration of the American slave trade, mapping the wide-reaching effects of our nation's greatest shame, from Angola—a Louisiana plantation turned prison to lower Manhattan's dark past as a slave-market hub. Through Smith's clear-eyed storytelling, he illustrates just how deeply the consequences of this intergenerational history manifest in the present day, both politically and personally. (June 1)

We Are What We Eat Alice Waters

Chef Alice Waters is often considered the mother of the farmto-table food movement, thanks to her legendary Berkeley, Calif., restaurant, Chez Panisse, which she opened in 1971. Waters remains one of the loudest advocates for sustainability in the restaurant business, and has long championed conscientious consumption. Her new book, We Are What We Eat: A Slow Food Manifesto, is an explanation of that ethos, detailing the problems with fast food and how constant availability has negatively impacted our habits. Waters makes a convincing case that the act of eating is political, with powerful effects on the future of the planet. (June 1)



The Chosen and the Beautiful Nghi Vo

The Great Gatsby's recent copyright expiration means everyone can take their shot at reinventing F. Scott Fitzgerald's legendary story of East Coast glitz and glamour. Nghi Vo's debut novel does so with ample doses of magic and mystery, and is centered on Jordan Baker, who in Vo's telling is a queer Vietnamese woman navigating the 1920s New York social scene. The Chosen and the Beautiful finds Jordan fighting for her place

in this Gatsby-adjacent world as an outsider, a plight that Vo illuminates in heartbreaking specificity. (June 1)

The President's Daughter Bill Clinton and James Patterson

Former President Bill Clinton teams up once more with best-selling author James Patterson for this summer's stand-alone sequel to their 2018 thriller, *The President Is Missing.* This time, ex-President and onetime Navy SEAL Matthew Keating's daughter has been

kidnapped by a terrorist. Through its 500-plus pages, Clinton and Patterson's novel puts their respective expertise to good use in a twisting plot. (June 7)

Dear Senthuran Akwaeke Emezi

Structured as a series of letters to friends, lovers and family, Akwaeke Emezi's searing nonfiction debut is an intimate exploration of the novelist's relationship to their gender, body, family and freedom. Raw and piercing, these short pieces trace Emezi's rise as a literary powerhouse, and outline their intense work ethic amid difficult life events. Together, the letters serve as a self-portrait of a storyteller sharing their fight to survive. (June 8)

Everyone Knows Your Mother Is a Witch

Rivka Galchen

Rivka Galchen's smart, wry novel Everyone Knows Your Mother Is a Witch is a thought-provoking take on the proverbial witch hunt. Drawing inspiration from real historical documents about Katharina Kepler, an illiterate German woman in the 1600s (and the mother of astronomer Johannes Kepler) who was







accused of being a witch, Galchen spins a tale that blurs the line between truth and heresy. Punctuated with sparkling wit and irreverent humor, it taps into the depths of whom we choose to fear and why. (June 8)

The Ugly CryDanielle Henderson

Television writer Danielle Henderson's moving memoir reflects on growing up Black in a mostly white part of upstate New York, where she was raised by her grandparents after being abandoned by her mother as a child. Simultaneously heartbreaking and hilarious, Henderson dissects her unusual upbringing and her special relationship with her grandmother, offering a powerful examination of the many intersections between family and identity. (June 8)

The Maidens Alex Michaelides

When Alex Michaelides' first psychological thriller, The Silent Patient, debuted in 2019, it skyrocketed to the top of best-seller lists. His follow-up is just as twisty—and involves another suspicious killing. This time, a London therapist learns of the murder of her niece's friend. She thinks a Cambridge University professor of Greek tragedy who is particularly popular with members of a female secret society (known as the Maidens) is to blame. And she quickly becomes obsessed with proving his guilt—a fixation that threatens to upend her whole world, captured in gripping scenes. (June 15)

Blackout

Dhonielle Clayton, Tiffany D. Jackson, Nic Stone, Angie Thomas, Ashley Woodfolk and Nicola Yoon

Six acclaimed young-adult authors collaborate to present six stories of young Black love and heartbreak—that all happen as the power goes out one hot summer night in New York City. *Blackout* is both a short-story collection and a novel of a moment in time, capturing the radiance, joy and possibility of teen romance. (June 22)

Dream Girl Laura Lippman

Gerry Andersen is—or was—a best-selling novelist. But when he's injured and confined to his home, the women of his past and present begin to haunt him in perplexing and increasingly terrifying ways. Lippman, author of the

hit 2019 novel *Lady in the Lake*, reveals a new psychological thriller rooted in a world where changing agency, power and gender dynamics can throw a life off balance. (*June 22*)

Who They Was Gabriel Krauze

Gabriel Krauze doesn't shy away from the brutality of perpetual violence or the stark details of his youth in his autofiction debut, Who They Was, which was long-listed for the 2020 Booker Prize after its initial release in the U.K. In this grim yet gripping coming-of-age tale, Krauze, the son of Polish immigrants, revisits his past in London's street scene, where he was actively involved with gangs, robberies, drugs and shootings—all while completing an English degree at a local university. The shock value is high, but so is the level of pathos imbued in Krauze's text. (June 22)

JULY

Dear Miss MetropolitanCarolyn Ferrell

Fern, Gwin and Jesenia are just teens when they are abducted by the mysterious Boss Man and forced to live in a run-down house in Queens, N.Y. When two of them are discovered and released years later, their neighborhood reels from the shock. Carolyn Ferrell's debut novel weaves present and past in a bold attempt to wring beauty from trauma as the young women—and their community—work to piece themselves back together. (July 6)

This Is Your Mind on Plants

Michael Pollan

In his latest exploration of the enduring relationship between humans and nature, Michael Pollan dives deep into how psychoactive plant chemicals—specifically opium, caffeine and mescaline—impact our brains and cultures. Pollan is a master of breaking down complex science into an engaging story and challenging long-held societal beliefs. His newest offering, which follows his examination of the science of psychedelics in 2018's How to Change Your Mind, aims to unpack our ideas about what constitutes a "drug" and, fundamentally, why we seek them. (July 6)

Fox & ICatherine Raven

It's a familiar story arc: a human becomes best friends with a wild



animal, and life lessons are learned. Yet in biologist and former Glacier National Park ranger Catherine Raven's hands, the story—of isolation and tender friendship with a wild fox—feels new. Alone in rural Montana after completing her Ph.D., Raven finds that her daily fox visitor becomes an unexpected, and necessary, companion. Her memoir reminds us that connection to the natural world comes in many forms. (July 6)

While We Were DatingJasmine Guillory

Ben Stephens works in advertising, and his new campaign stars Anna Gardiner, an ambitious actor who is eager to book her next movie. The two hit it off, and their flirtation gives way to a complicated opportunity for Ben: to help her career, Anna wants to pretend to date and hopes he'll play the part. In detailing the pair's journey—and their undeniable chemistry—romance author Jasmine Guillory spins another dazzling love story. (July 13)

Magma Thora Hjorleifsdottir

It's said that love and hate are separated by a kiss, and this tenuous dynamic is on full display in Thora Hjorleifsdottir's arresting *Magma*—the provocative Icelandic poet's debut novel, which explores the challenges and costs of a young woman's passionate yet toxic relationship. Through Lilja's heady love affair with a fellow student at her university, Hjorleifsdottir explores the subtle, insidious ways in which desire and infatuation can blind one to manipulation, abuse and violence. (July 13)

China Room Sunjeev Sahota

A family saga both sweeping and granular, Sunjeev Sahota's latest novel—partly inspired by his own family history—follows a teenage bride in 1929 Punjab. Along with two other women who recently married brothers, she was consigned to work in the family's "china room" where none were allowed to see the men chosen for them during the day. At night, they met only in the dark. In Sahota's story, set during the early years of the Indian independence movement, the young protagonist's desire to know her husband ends up having irreparable consequences. And there's more: Sahota flashes forward several decades, where his main character's great-grandson is grappling with his own problems. In describing the two story lines, set lifetimes apart, the author examines agency, power and human connection. (July 13)



The Cult of We Eliot Brown and Maureen Farrell

It was the darling of the startup world: a groundbreaking company worth billions on paper and headed by an outwardly charismatic, visionary leader—until it all crumbled in 2019. In *The Cult of We, Wall Street Journal* reporters Eliot Brown and Maureen Farrell untangle the dramatic roller-coaster ride of WeWork, a business that set out to change the world, one co-working space at a time. The book is both a cautionary tale and a juicy investigation into one of Silicon Valley's most-hyped fallen unicorns. (July 20)

The FloweringJudy Chicago

Feminist art pioneer Judy Chicago reflects on her life and trailblazing career in her autobiography, The Flowering. The 81-year-old artist, whose powerful works include *The Dinner Party* and run the gamut from sculpture to performance, takes stock of a lifetime of now historic experiences that effectively broke barriers in an industry built to favor white men. Combining engrossing, urgent storytelling with illustrations, personal images and a foreword by Gloria Steinem, Chicago relays the story of an artist determined to ensure that women's cultural achievements are permanently valued. (July 20)

Intimacies Katie Kitamura

In Katie Kitamura's thriller of a novel, centering on an interpreter who has recently relocated from New York City to the Hague, it's clear there's more than just language that's being lost in translation. While she works on a controversial war-crimes case at the International Court of Justice, the interpreter soon encounters interpersonal drama of her own after embarking on a passionate affair with a married man and becoming obsessed with the seemingly unrelated violent crime a friend has witnessed. In exploring how one's proximity to power and violence can hold endless repercussions, Kitamura interrogates how our intimacies can change the course of our lives. (July 20)

Goldenrod Maggie Smith

To read Maggie Smith is to embrace the achingly precious beauty of the present moment—a sentiment that is omnipresent in her latest collection of poems, *Goldenrod*. In this volume, the award-winning poet uses the seemingly familiar objects and happenings of everyday life—an autocorrect mistake, a rock from her young son's pocket and a field of the titular goldenrods—as conduits for finding the extraordinary in the day-to-day motions of a routine. In doing so, Smith makes the case that nearly every element in our lives can be part of the divine, if we only take the time to look. (*July 27*)

AUGUST

The Turnout Megan Abbott

In her latest novel of suspense and family strife, Megan Abbott follows a *Nutcracker* season gone wrong at a family-run ballet studio. Sisters Dara and Marie took over the Durant School of Dance several years ago after the tragic death of their parents; now, they run the place with very different teaching styles. When a mysterious accident at the studio leads to the introduction of an unwelcome guest, the intruder's presence has unforeseen aftershocks that play out in Abbott's sharp and unsettling prose. (*Aug. 3*)

Pilgrim Bell Kaveh Akbar

Kaveh Akbar's second collection of poetry, *Pilgrim Bell*, is bracing in its honesty and noteworthy in its steadfast adherence to finding the spiritual in even the most mundane settings. Akbar's mesmerizing dexterity with language is at its most compelling when he is relentlessly pursuing the truth—a hunt that's present in every poem in this volume. Exploring the nuances and contradictions of living in a body and a country that's often at odds with your soul, Akbar demands both veracity and grace in equal measure. (*Aug. 3*)

Playlist for the Apocalypse

Rita Dove

After a year of inconceivable uncertainty and pulsating change, the title of former U.S. poet laureate Rita Dove's new volume of poetry, *Playlist for the Apocalypse*, feels more than apropos. The book, the Pulitzer Prize winner's first collection of new poetry in 12 years, is as much a celebration as it is a study in the resilience of humanity. Musing on the triumphs and challenges of being mortal, Dove seamlessly travels from past to



present, with everlasting hope for our future. (Aug. 3)

Run

John Lewis and Andrew Aydin; illustrations by L. Fury and Nate Powell

The legacy of civil rights icon John Lewis lives on in *Run: Book One,* the first installment of a new posthumous graphic-novel series from the politician and agitator, co-authored by his longtime congressional staffer Andrew Aydin and illustrated by Nate Powell and L. Fury. This new series continues where Lewis and Aydin left off with the graphic-memoir trilogy *The March*, asserting that first you march, then you run. Here, they trace Lewis' story after the passage of the 1965 Voting Rights Act as he begins to transition from an activist on the streets to a politician fighting for change. (Aug. 3)



Something New Under the SunAlexandra Kleeman

In Alexandra Kleeman's Something New Under the Sun, readers will find a darkly satirical reflection of ecological reality. Patrick Hamlin is a forlorn East Coast writer who heads west and is quickly disillusioned by the seedy underbelly of Hollywood. But the real tension emerges when Patrick discovers that his problems are much bigger than his personal life and career, after a turn of events highlights the imminent danger of global environmental collapse. (Aug. 3)

The Family Firm Emily Oster

If the term data-driven parenting intrigues you, then economist Emily Oster's new guidebook to a child's elementary-school years may be just the fit for your family. Oster—a mother of two and a former business-school professor—takes an analytical approach to decisions related to common issues around school, extracurricular activities, independence and more. The result is a guide intended to chart a child's path with less stress and more optimization for healthy habits and future success. (Aug. 3)

Made in China Anna Qu

What would you do if your family put you to work in a sweatshop as a teen? For Anna Qu, a young Chinese immigrant in Queens, the answer was to call child services on her own mother, setting off a series of events that would forever change her life. Qu's debut memoir untangles the knots of her complicated, traumatic past as she learns the truth about her history and reckons with the hopes and constraints of the immigrant experience. (Aug. 3)

Afterparties Anthony Veasna So

In his stirring debut short-story collection, Anthony Veasna So crafts a thoughtful portrait of Cambodian-American life. The characters who populate Afterparties deal with a range of scenarios that force them to confront the intersections of race, sexuality and love. In one story, a child discovers that his mother survived a school shooting. In another, a queer romance with an age gap blossoms between an older tech entrepreneur and a younger teacher with a love for Moby Dick. So, who died unexpectedly last year at age 28, wrote these narratives with care and humor, ushering us into the intimacy of the communities at the book's center. (Aug. 3)

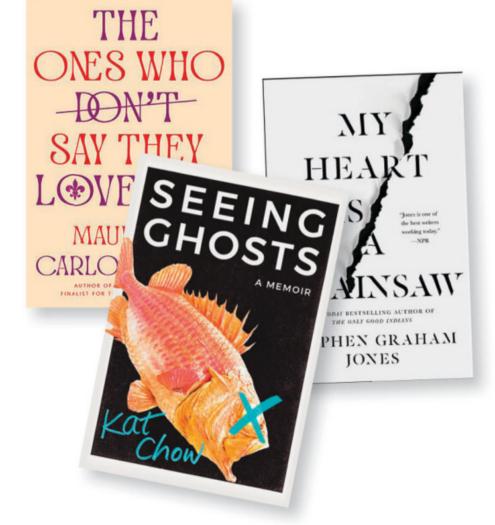
The Ones Who Don't Say They Love You Maurice Carlos Ruffin

The author of We Cast a Shadow sets his new short-story collection in his native New Orleans. Maurice Carlos Ruffin brings us narratives that range deftly in subject and scope, from a story exploring the unexpected kindness exchanged between an Army vet and a runaway teen to a flash-fiction piece about a group of men attempting to access an elderly man's home during Hurricane Katrina. Throughout these stories, Ruffin highlights experiences both specific and universal about people living on the margins, all while capturing the culture and spirit of New Orleans. (Aug. 17)

Seeing Ghosts Kat Chow

Kat Chow dares to explore the lingering dynamics of her family's shared grief in her breathtaking debut memoir, Seeing Ghosts. Born two years after her parents' only son died shortly after birth, Chow has always had a preternatural fixation on death—one that only intensifies when her mother unexpectedly dies of cancer during Chow's adolescence. As she trudges through life in a haze of grief, Chow looks to the past to see how three generations of her family, spanning four countries, have coped with immeasurable loss. It's a bittersweet meditation on how losing the ones we love indelibly shapes the futures of the living, and how we ultimately find healing in the strength of family. (Aug. 24)





My Heart Is a Chainsaw Stephen Graham Jones

At once an homage to the horror genre and a searing indictment of the brutal legacy of Indigenous genocide in America, Stephen Graham Jones' My Heart Is a Chainsaw delivers both dazzling thrills and visceral commentary. Protagonist Jade Daniels, a Native American girl in Idaho, finds refuge from her turbulent home life and her outcast status among her peers in slasher films. Her love of the gloriously gory collides with reality when harrowing incidents begin happening in her small town. But physical carnage isn't the only casualty in the novel—Jones takes grief, gentrification and abuse to task in a tale that will terrify you and break your heart all at the same time. (Aug. 31)

Let's walk together.

It makes things better.



You connect with her, and she connects with what she needs to grow up healthy, educated and safe.

When we all connect, we make things better for millions of children around the world. And their families. And their communities. And their countries. And you.

Come walk with us. Together we can all get to a better place.



6 Questions

Bill Clinton and James Patterson The

co-authors on their second thriller, political tribes and what Donald Trump needs

ou both prefer writing longhand. Is it fair to assume you didn't write The President's Daughter in a shared **Google Doc?**

CLINTON: The first thing we do is we agree on an outline. Then Jim says, O.K., your job is to make sure it's authentic. PATTERSON: We probably went back and forth on the outline half a dozen times. We always want to be fluid with where the story is going.

Are there details about the presidency that President Clinton added that you found particularly surprising?

PATTERSON: A lot about NATO, how NATO used to work and hopefully will work in the future.

CLINTON: I wanted to make sure that people understand when you start killing people—whether you've got bullets up close or dropping bombs in the distance—there's going to be some collateral damage. And those people are people too, and they never get over it.

REPUBLICAN RIGHT IS **BRILLIANT** AT MAKING **EVERYTHING** INTO AN US-VS.-THEM IDENTITY CONFLICT. >

BILL CLINTON

The main thrust of this plot is a former President going on a rogue mission to rescue his kidnapped daughter. President Clinton, did you ever fear that your daughter

Chelsea might be kidnapped?

CLINTON: We try to explain here how Secret Service protection works for former Presidents, and how the kids lose it. After 9/11, I worried.

This book takes a dim view of modern politics. You write: "From Twitter mobs to focus groups, nothing can get done anymore." How do we get back on track? **CLINTON:** If somebody disagrees with you based on

6THE NEW

public-health imperatives call for. Meanwhile the Republicans have clearly decided to double down on the Hatfield and McCoys. Now they want to get it where they can win if they lose both the Elec-

toral College and the popular vote by having a Congress that won't certify the electors. We can write a novel about that down the road.

an agreed set of facts, that's a debate in a

healthy democracy. The new Republican

an us-vs.-them identity conflict. And so

the only thing that matters is whose side

PATTERSON: One of the things about [the

two fictional Presidents] Keating in this

they're good human beings. They stand

ously that's difficult, as Liz Cheney has just

Joe Biden is four years older than both

of you. Would you want to be doing that

PATTERSON: I'm No. 2 in my own house.

CLINTON: He's trying to do what the eco-

nomics of the time call for and what the

up for what they believe in. And obvi-

book and Duncan in the past book is

you're on.

found out.

job right now?

right is brilliant at making everything into

What advice do you have for former President Trump on finding passion and purpose after holding the most powerful office in the world?

> **CLINTON:** You have to find what else you [can] do. George Bush has not only become an artist, he's been faithful with trying to help wounded veterans, and he and Laura have worked to support women in Afghanistan. I'm writing a book about [my post-presidency], so that's my serious book.

PATTERSON: That's your other serious book. The problem with your question is that President Trump does not think this is a post-presidency ... That he isn't President right now.

—TESSA BERENSON





Trusted Wellness Advice



Learn More and Live Well time.com/livewell