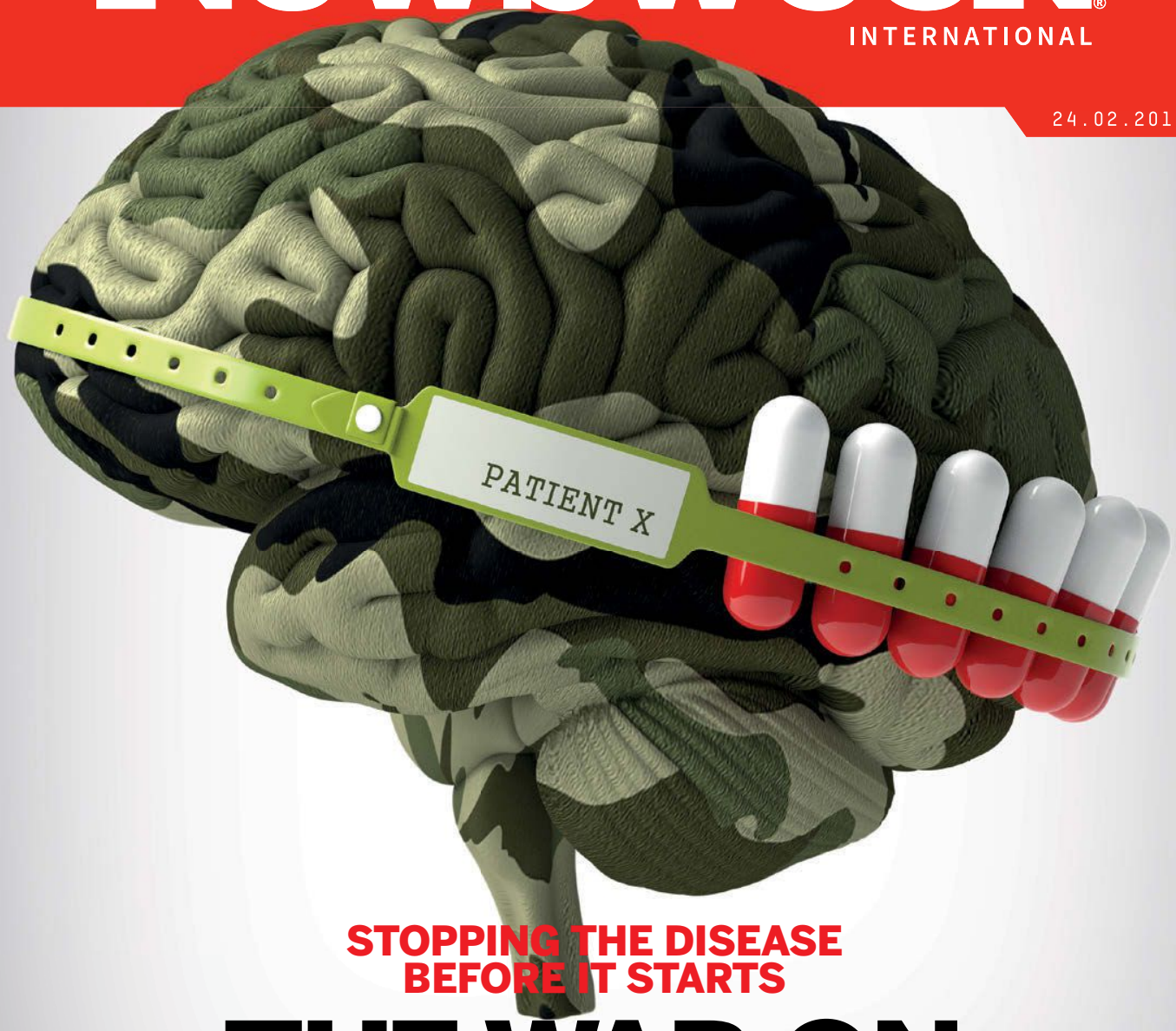
Moscow Murders / Lawyers vs. Trump

Newsweek®

INTERNATIONAL

24.02.2017



STOPPING THE DISEASE BEFORE IT STARTS

THE WAR ON ALZHEIMER'S

ISSN 2052-1081

ABU DHABI DH35
ALBANIA €6.25
AUSTRALIA $11.00
AUSTRIA €6.25
BAHRAIN BD3.5
BELGIUM €6.50
CROATIA HKR70
CYPRUS €6.50
CZECH REP CZK180
DENMARK DKR50
DUBAI DH35
EGYPT E£ 60.00
FINLAND €7.60
FRANCE €6.50
GERMANY €6.50
GIBRALTAR £6.05
GREECE €6.25
HOLLAND €6.50
HONG KONG $80.00
HUNGARY FT1,800
INDONESIA IDR175.00
IRELAND €6.25
ISRAEL NIS35
ITALY €6.50
JORDAN JD5.95
KUWAIT KD3.00
LATVIA €6.50
LEBANON LL10,000
LITHUANIA €8.99
LUXEMBOURG €6.25
MALTA €6.50
MONTENEGRO €8.30
MOROCCO MDH70
NEW ZEALAND $14.00
NIGERIA $3.40C
NORWAY NKR85
OMAN OR 3.250
POLAND PLN28
PORTUGAL €6.50
QATAR QR65
MALAYSIA RM29.50
ROMANIA LEI 42.00
SAUDI ARABIA SR35.00
SERBIA RSD1035
S LEONE SLL30,000
SINGAPORE $11.95
SLOVAKIA €6.50
SLOVENIA €8.50
SOUTH AFRICA R55.00
SPAIN €6.50
SWEDEN SKR60
SWITZERLAND CHF8.50
TURKEY TL17
UK £4.95
US $7.99
ZIMBABWE ZWD4.00

Witness the

DAWN OF TRENDS

Baselworld is the single-most important trendsetting show for the world's watch and jewellery industry. What makes it unmissable is the fact that only here will you find all the key players representing every sector of the industry together under one roof. Baselworld is where the most prestigious international brands unveil their innovations, creations and new collections in the presence of world-class buyers and the global press, all of whom unite here to take the pulse of the market and witness the start of a new trendsetting cycle for the year.

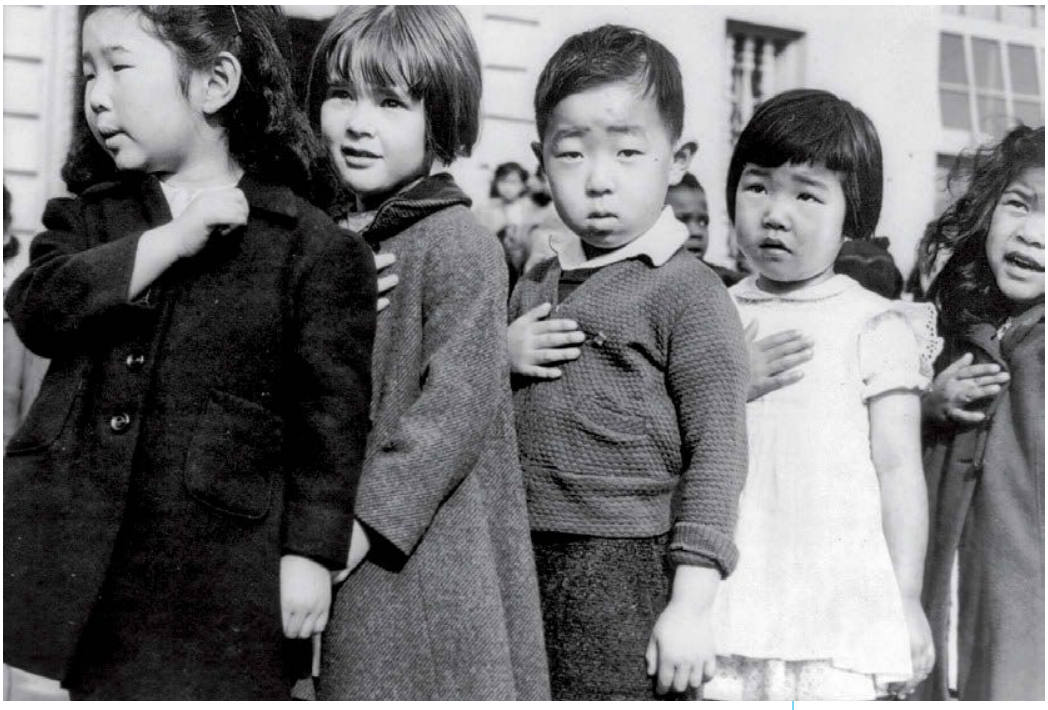
Seize the unique opportunity to experience the interplay of passion and precision to create perfection. We invite you to join us at Baselworld, where you will be awe-struck by the spectacular pavilions, amazed at the new collections, and be amongst those who are a part of history in the making!

See you at Baselworld 2017

BASELWORLD.COM

Newsweek

FEBRUARY 24, 2017 / VOL.168 / NO.07 INTERNATIONAL



DOROTHEA LANGE

\+ **HANDS OF INNOCENCE: Children in San Francisco pledge allegiance in 1942.**

NEW WORLD

WEEKEND

FOR MORE HEADLINES, GO TO **NEWSWEEK.COM**

FEATURES

COVER CREDIT: ILLUSTRATION BY NAEBLYS/SHUTTERSTOCK

Newsweek (ISSN2052-1081), is published weekly except one week in January, July, August and October. Newsweek (EMEA) is published by Newsweek Ltd (part of the IBT Media Group Ltd), 25 Canada Square, Canary Wharf, London E14 5LQ, UK. Printed by Quad/Graphics Europe Sp z o.o., Wyszkow, Poland
For Article Reprints, Permissions and Licensing **www.IBTreprints.com/Newsweek**

DEPARTMENTS

BIG SHOTS

PAGE ONE

Newsweek
INTERNATIONAL

GLOBAL EDITOR-IN-CHIEF
Jim Impoco

DEPUTY EDITOR
Bob Roe

INTERNATIONAL EDITOR
Matt McAllester

MANAGING EDITOR
Kenneth Li

CONTRIBUTING DESIGN DIRECTOR
Priest + Grace

FOREIGN EDITOR
Claudia Parsons

OPINION EDITOR
Nicholas Wapshott

INTERNATIONAL EDITION

EDITORIAL

EXECUTIVE EDITOR **Naina Bajekal**

ART DIRECTOR **Corey Jackson**

CULTURE EDITOR **Isabel Lloyd**

CONTRIBUTING EDITORS **Owen Matthews**
Max Fraser **Tom Shone**
Matt Cooper **Matthew Sweet**
Margarita Noriega **R.M. Schneiderman**
Joanna Brenner **Nicholas Loffredo**
John Seeley **Teri Wagner Flynn**

TRAVEL EDITOR **Graham Boynton**

NEWS EDITOR **Graham Smith**

DIGITAL STRATEGY EDITOR **Siobhán Morrin**

SOCIAL MEDIA PRODUCER **Valeriia Voshchevska**

VIDEO PRODUCER **Jordan Saville**

REPORTERS **Tufayel Ahmed**
Lucy Clarke-Billings **Anthony Cuthbertson**
Teddy Cutler **Conor Gaffey**
Mirren Gidda **Josh Lowe**
Jack Moore **Tom Roddy**
Damien Sharkov

SPECIAL CORRESPONDENTS **Nicholas Foulkes**
Adam LeBor

CONTRIBUTING WRITERS

Ryan Bort
Nina Burleigh
Emily Cadei
Janine Di Giovanni
Kurt Eichenwald
Jessica Firger
Michele Gorman
Abigail Jones
Max Kutner
Douglas Main
Leah McGrath Goodman
Alexander Nazaryan
Bill Powell
Josh Saul
Roberto Saviano
Zach Schonfeld
Jeff Stein
John Walters
Lucy Westcott
Stav Ziv

PUBLISHED BY
Newsweek LTD,
A DIVISION OF
IBT Media Group LTD

CHIEF EXECUTIVE OFFICER
Dev Pragad

PRESIDENT
Alan Press

CHIEF OPERATING OFFICER
Gregory Witham

GENERAL MANAGER
Dave Martin

GENERAL COUNSEL
Rosie McKimmie

CHIEF FINANCIAL OFFICER
Amit Shah

DIRECTOR OF COMMUNICATIONS
Mark Lappin

HUMAN RESOURCES MANAGER
Rob Turner

ADVERTISING

COMMERCIAL DIRECTOR
Jeremy Makin

SENIOR SALES DIRECTOR
Chantal Mamboury

DIRECTORS, IBTAILORED
Pamela Ferrari, Richard Remington

GROUP ADVERTISING DIRECTOR
Una Reynolds

SALES MANAGER
Chris Maundrell

MARKETING + CIRCULATION

SUBSCRIPTION MARKETING MANAGER
Tom Nichols

HEAD OF SUBSCRIPTION OPERATIONS
Samantha Rhodes

NEWSSTAND MANAGER
Kim Sermon

Newsweek / EVENT

1st - 2nd March 2017
The Barbican, London

ARTIFICIAL INTELLIGENCE & DATA SCIENCE

CAPITAL MARKETS

Discover how intelligent machines inform investment decisions

Join data scientists from hedge funds, fintech companies and universities exploring the frontier of artificial intelligence within capital markets.

Selected advisory board members

Prof. Nick Jennings
Vice Provost (Research), Imperial College London

Prof. David Hand
Chief Scientific Advisor, Winton Capital Management

Dr. Sylvain Champonnois
Director, Scientific Active Equity, BlackRock

Prof. Steve Roberts
Director, Oxford-Man Institute & Professor of Information Engineering, University of Oxford

Organised by: International Business Times

Knowledge partner: Imperial College London

Association partner: CAIA Association

Gold sponsor: accenture

Sponsored by: Quantenstein, 2iQ Research, RavenPack

Media partner: hedgeweek, institutionalassetmanager

Community partner: CognitionX

To register please visit aidataconf.com

VADIM GHIRDA/AP

ROMANIA

Social Democrat Unrest

Bucharest, Romania—Thousands of protesters used their phones to project the colors of the Romanian flag during an anti-government demonstration on February 12. About 50,000 people marched in freezing weather on the 13th day of protests that accused the Social Democrat government of trying to weaken anti-corruption laws. Over 500,000 people took to the streets a week earlier, the largest public protests in the country since the fall of Communism in 1989.

VADIM GHIRDA

J. SCOTT APPLEWHITE/AP

USA

Unsigned Opinion

Washington, D.C.—Supreme Court nominee Neil Gorsuch opens a door that had swung shut on his escorts while meeting with Republican Senator Roger Wicker on February 10. Earlier in the week, Gorsuch voiced mild criticism of President Trump, the man who nominated him, calling his comments "disheartening" and "demoralizing," after the president on Twitter called the federal judge who blocked his travel ban a "so-called judge."

J. SCOTT APPLEWHITE

SEAN RAYFORD/GETTY

USA

Home Is Where the Bark Is

Greenville, South Carolina—On January 20, Nazanin Zinouri, a Clemson graduate and an engineer at a U.S. tech company, went to Iran to visit her family. But when she tried to return, Zinouri was one of thousands from seven majority-Muslim countries caught up in President Donald Trump's travel ban. After a federal judge put the president's orders on hold, Zinouri returned to the U.S. on February 6, where her friends—and her dog Dexter—greeted her at the Greenville Spartanburg Airport.

SEAN RAYFORD


WEL
ME
!

ANTHONY PHELPS/REUTERS

NEW ZEALAND

The Tide That Binds

Farewell Spit, New Zealand—It was an uplifting coda to an otherwise tragic week. In two separate incidents, hundreds of whales died after beaching themselves in the shallow waters of Golden Bay at the tip of New Zealand's South Island. Volunteers left on the night of February 11, worried that the hundreds of stranded, surviving whales would meet a similar fate. When they returned the next day, however, most had made it out to sea. "They self-rescued," Herb Christophers, a spokesman for New Zealand's Department of Conservation, told Reuters. "The tide came in and they were able to float off and swim out to sea." Volunteers later helped the remaining animals rejoin their pod.

ANTHONY PHELPS

RESISTANCE ISN'T FUTILE

Forget Democrats in Congress—meet the lawyers leading the real anti-Trump insurrection

BOB FERGUSON was ready. It was the end of January, and the Washington state attorney general had been concerned that President Donald Trump would soon issue a sweeping executive order targeting immigration. A bespectacled former chess champion, Ferguson had been plotting for weeks with various immigrant rights groups in the state about how to combat Trump's first move. Then, on the last Friday in January, the White House issued its now infamous executive order targeting immigration from seven predominantly Muslim countries.

Ferguson was home that weekend but went into his office to work on an appeal. His solicitor general, Noah Purcell, a former U.S. Supreme Court clerk, guzzled coffee from a full-sized Starbucks box in his office, as opposed to the chain's ubiquitous white cup. Within a day, they had lined up two of the state's most prominent employers, Amazon and Expedia, to sign on, and soon they had persuaded a federal judge in Seattle to put the Trump ban on hold nationwide. Just before that ruling, Ferguson told *Newsweek,* "I'm going to keep going where the law takes me."

On February 9, the law dealt the Trump administration a major blow when a federal appeals court panel unanimously denied the Trump administration's request to reinstate its restrictions on the seven countries in question: Syria, Somalia, Yemen, Iran, Iraq, Libya and Sudan. The case may continue to work its way through the courts, and some form of the immigration restrictions might pass judicial review at a later date. But for now, it's Lawyers of the Resistance 1, Trump 0.

The Trump revolution was born out of an explosion of anger at politics as usual, but it may be thwarted by something more banal—the diligent, daily work of lawyers filing briefs, injunctions, suits and complaints. State attorneys general and public interest groups have had some notable successes. Not only did the courts halt the travel ban, but a Trump administration attempt to rescind a Labor Department rule requiring retirement advisers to put their clients' interests first is being

BY
MATTHEW COOPER
@mattizcoop

ANDREW HARRE/GETTY

SHORT FINGERS OF THE LAW: The Trump revolution was born out of an explosion of anger at politics as usual. But it may be thrwarted by something more banal—the diligent, daily work of lawyers.

held up as well. This legal battle on many fronts will test not only the system of checks and balances that's a staple of *Schoolhouse Rock*, but also American judges' willingness to insert themselves into the fray between a galvanized opposition and a president who has a fetish for litigation. If you want to clock the fate of Trump's presidency, watch the courts and the lawyers determined to tie the New York real estate mogul down like the Lilliputians binding the giant Gulliver.

Of course, legal challenges to presidents are nothing new. The Supreme Court stopped Harry Truman from seizing America's steel mills during his labor-strike-prone tenure. Richard Nixon fought all the way to the highest court to keep his Oval Office tape recordings private—a battle he lost and one that led to his resignation. Bill Clinton's impeachment was driven by a private sexual harassment lawsuit that the Supreme Court ruled was permissible. When Clinton prevaricated in that proceeding, Congress began trying to toss him out of office for perjury. And, of course, the executive branch is sued all the time. The Obama administration faced challenges on everything from immigration rules to recess appointments.

The Trump administration is likely to be in court even more than its predecessors. "The courts are going to be a major avenue for checks and balances," says Michael Waldman, who heads New York University's Brennan Center for Justice, a public policy and legal advocacy institute that has tangled with several Republican governors over issues like voting rights. A big reason why is that liberals and Democrats now don't have much recourse when it comes to

COMING TO AMERICA, AGAIN: Ali Vayeghan, left, with Los Angeles Mayor Eric Garcetti. Vayeghan was one of many initially turned away by Donald Trump's travel ban, which a federal appeals court refused to reinstate.

Congress, where both chambers are controlled by Republicans.

We haven't seen the full onslaught of litigation, but more than 50 lawsuits are already in progress. One involves the emoluments clause of the Constitution, which bans government officials from profiting from foreign interests. Two former White House ethics czars, Norm Eisen from the Obama administration and Richard Painter from George W. Bush's White House, are helping lead a lawsuit charging that the president's failure to sell his business interests and put them in a blind trust violates the Constitution. The suit is being filed by Citizens for Responsibility and Ethics in Washington (CREW), and the group enlisted famed Harvard Law professor Laurence Tribe to be part of the legal team.

But the suit illustrates the difficulties awaiting those trying to sue Trump. Courts have been loath to get between the branches of government on a thorny issue like the constitutional gift ban. And it can be hard to find plaintiffs who have what the courts call "standing"—proof that they were harmed by the president's actions. It's not enough just to be a citizen registering a complaint. You have to show that you were personally injured. CREW is arguing in court that having to sue Trump over the gift ban is costing it money by diverting its limited resources from its usual work of chasing government scandal. The court may not buy that kind of reasoning. Finding another plaintiff—say, a major hotel chain that claims it's losing customers to Trump hotels because foreign diplomats want to curry favor with the president—won't be easy.

One thing the lawyers of the anti-Trump resistance have going for them: The president has been sloppy. The travel ban from those seven Muslim-majority nations was so poorly crafted that it gave lawyers an opening to block it in federal court. Department of Justice lawyers kept insisting it wasn't a Muslim ban, but on Fox News, former New York Mayor and Trump adviser Rudy Giuliani said the policy emerged from an effort to take the sweeping Muslim ban Trump touted early in the campaign and then make it legal.

In another case, Trump-resistance lawyers found an opening with the administration's carelessness. Trump's executive order declaring that two regulations should be nixed for every new one that is enacted made for a snappy campaign promise, but it runs afoul of administrative law, a somewhat sleepy area of jurisprudence that's likely to get a lot more attention during the Trump years as public interest groups work overtime to make sure that every rule change is legal. "Administrative law is suddenly glamorous," says Jeffrey Rosen, president of Philadelphia's National Constitution Center.

On February 7, the Natural Resources Defense Council, the Communications Workers of America and advocacy organization Public Citizen sued Trump and his new director of the Office of Management and Budget over the two-for-one rule. *Public Citizen v. Donald J. Trump* argues that the president has exceeded his constitutional authority and that the proposed rule would prevent agencies from faithfully executing the laws.

Allison Zieve, who heads the litigation group at Public Citizen, has been astounded by what she jokes is the "wackiness" of the Trump rule-making so far, noting that the administration has ways to scale back regulation that are not so vulnerable to legal challenge. She adds that Trump's efforts to reverse years of safety, environmental and other litigation can be head spinning at times. "We're feeling a little overwhelmed every day," she says.

> ONE THING THE LAWYERS OF THE ANTI-TRUMP RESISTANCE HAVE GOING FOR THEM: THE PRESIDENT HAS BEEN SLOPPY.

After the appeals court upheld the temporary restraining order on the Trump immigration ban, the president chirped in a tweet, "See you in court." Purcell, the Washington state solicitor general, seemed more than eager to take up the president's challenge. And after the decision, Ferguson hailed the victory, saying, "No one is above the law, not even the president. The president should withdraw this flawed, rushed and dangerous executive order which caused chaos across the country. If he refuses, I will continue our work to hold him accountable to the Constitution." N

JUSTIN SULLIVAN/GETTY

GUNS AND MOTHERS

In Yemen, starvation and a bloody civil war are leading some women to join Al-Qaeda

THE FIRST counterterrorism operation authorized by President Donald Trump quickly went awry. In late January, Navy SEAL Team 6 and United Arab Emirates special forces attacked Al-Qaeda insurgents in Yemen, but the militants spotted the approaching Americans and an hourlong firefight ensued. One SEAL died and three others were injured, and Yemeni officials claim that between 13 and 16 civilians were killed—including at least eight women and children.

Those numbers are still being verified, but the dead reportedly included the 8-year-old daughter of Anwar al-Awlaki, the U.S.-born former top operative of Al-Qaeda in the Arabian Peninsula (AQAP). (Al-Awlaki, and later his teenage son, was killed by American drone strikes in 2011.) The girl's photo quickly circulated online, sparking outrage over what many—the Trump administration excluded—consider a hasty and poorly organized U.S. raid.

The civilian deaths were a shocking PR blunder, but part of the reason so many women were killed is that some of them actually squared off against the SEALs. A Department of Defense spokesperson later said they appeared to be trained combatants of AQAP, Al-Qaeda's offshoot in Yemen and Saudi Arabia and one of the group's most dangerous branches. The fate of the female Al-Qaeda fighters made me wonder why they joined such a brutal group. There is no excuse for militants' attacks, of course, but it's important to understand their root causes. That would include ideology but also desperation: Yemen is rapidly running out of resources. When people are hungry and need to feed their kids, they will resort to almost anything.

Not all female militants are driven by poverty—take Italy's Red Brigade, for example—but in Yemen there are few options for survival, and the jihadis often provide food and security. "We are Arab, Muslim and tribal—but very different from other women in the Middle East and Afghanistan and Pakistan," Suha Bashren, a gender specialist with the nongovernmental organization Oxfam, tells me. In Yemen, she says, the law makes few provisions for women outside the family structure. "We have to be attached to men. We cannot stand by ourselves."

There is also hunger. Malnutrition in Yemen is at an all-time high and increasing. In a report published in December, UNICEF said at least one child dies every 10 minutes because of malnutrition, diarrhea and respiratory-tract infections. "If bombs don't kill you," says Norwegian Refugee Council Secretary-General Jan Egeland, "a slow and painful death by starvation is now an increasing threat." Egeland and others are concerned that the two-year-old Yemen conflict is escalating, and according to the refugee council, "more than 17 million Yemenis do not know if they will be able to put food on the table to feed their families." The figures are staggering. The U.N. estimates that 80 percent of the population is in need of aid.

BY
JANINE DI GIOVANNI
@janinedigi

HUNGER PAINS: Malnutrition in Yemen is at an all-time high. In a report published in December, UNICEF said at least one child dies every 10 minutes because of malnutrition, diarrhea and respiratory-tract infections.

AFP/GETTY

The reason the country is in such terrible shape goes back to late 2011, when fighting erupted between the internationally recognized government of President Abed Rabbo Mansour Hadi and Houthi rebel forces representing the Zaidis, a Shiite minority. The conflict has lasted nearly as long as the Syrian civil war, but it has received far less news coverage. Yemen is one of the most troubled countries in the region and will certainly be one a flashpoints in 2017.

The conflict has not only left the country in ruins; it's become yet another messy proxy war. Iran has been accused of aiding the Houthi rebels, and Saudi Arabia—backed by the U.S. and the U.K., among others—has carried out airstrikes with the goal of restoring Hadi to power. And analysts say these aerial attacks have led to the majority of civilian deaths in Yemen.

Even before the conflict, however, Yemeni women struggled. Girls have limited economic opportunities and thus are considered financial burdens by parents. In 2012, I witnessed this when I went to a remote part of the country with Oxfam. We traveled for days through sun-scorched villages, rising at dawn to avoid the heat of the day and bandits on the road. We drove through coastal plains to the Western port city of Hodeida in the Hays region.

In a village of mud huts outside of Hodeida, I met Aisha, a 12-year-old girl who had just been married off to a man in his 30s. She was lovely, shy and tearful, and recently wed. When we tried to talk to Aisha and her mother about putting her into school, they were adamant that marriage was the only way she could survive. "We have no way of feeding her," her mother said. "Her husband can take care of her now." The girl cried a bit and told me that her wedding night "hurt a lot," but she seemed resigned to her new life.

Everyone who studies radicalization knows that education and decreasing poverty mitigate its effects. It's not hard to imagine someone like Aisha being pulled into a jihadi cell because she needs to eat, or because she is being told what to do. If she accepted a forced marriage in order to survive, it's not hard to imagine her picking up a gun for the same reason.

There are many Aishas in Yemen. And Trump's attempt to implement a temporary travel ban on Yemeni refugees (and those from several other Muslim-majority countries) could make it worse. In early February, Hadil Mansoor al-Mowafak, a Yemeni student at Stanford, wrote in *The New York Times* about her fear that the refugee ban would "make terrorism only worse" in her country. "Education is hard to come by in Yemen," she wrote. "Some universities have been destroyed, and others closed down after bombings."

Many have pointed to the irony of Trump's attempted ban coinciding with the disastrous operation in Yemen. "How can the United States kill Yemenis while simultaneously barring civilians from seeking refuge here?" al-Mowafak wrote. Like many others, she worries that the travel ban and the American military presence in the Middle East will quickly help Al-Qaeda recruitment efforts. This, combined with Yemen's persistent poverty and the bloody civil war, bodes ill for the future of the country and the people there—especially the women—who have been subject to years of extreme violence and see no end in sight.

IF SHE ACCEPTED A FORCED MARRIAGE IN ORDER TO SURVIVE, IT'S NOT HARD TO IMAGINE HER PICKING UP A GUN FOR THE SAME REASON.

SPY TALK

PUTIN'S POISON

The poisoning of a Russian dissident is one of more than 30 suspicious attacks linked to Vladimir Putin and his cronies

THE LIST of victims laid at the feet of Vladimir Putin has gotten so long now that you need a chart to keep track of them. Too bad Bill O'Reilly didn't have one in hand when Donald Trump brushed off the Fox News host's remark that Putin and his cronies are "killers."

But a chart is just what the Association of Former Intelligence Officers produced in a recent edition of its quarterly bulletin, *The Intelligencer*. To be sure, AFIO, which represents 4,500 former CIA, FBI and military intelligence veterans, is steeped in Cold War hatred for the Kremlin, but even if its chart is off by half, the list of Moscow's suspected victims would be grimly impressive: There are over 30 names on the list.

Peter Oleson, a former assistant director of the Defense Intelligence Agency, put the list together before longtime Kremlin critic Vladimir Kara-Murza fell deathly ill from poison in a Moscow hospital in February. And before a former KGB general, Oleg Erovinkin, was found dead in the back of his car in Moscow the day after Christmas. Erovinkin was suspected of being a source for Christopher Steele, the ex-British intelligence officer who assembled the notorious "golden shower" memorandum on alleged connections between President Donald Trump's camp and the Russian president.

Steele has gone underground, and considering the number of dissidents, defectors, journalists, disaffected former Putin cronies and rivals

BY
JEFF STEIN
@SpyTalker

who have died under suspicious circumstances since the former KGB colonel came to power 18 years ago, his precaution is well founded, says Oleson: "One or two or three, you could always explain away, but dozens?"

Through the years, poison has felled many a Kremlin critic. On February 2, Kara-Murza, a former Washington, D.C.–based television correspondent active in Russian liberal opposition parties and movements since Putin's rise, was hospitalized. His wife told reporters the diagnosis was "acute poisoning by an undetermined substance." It was the second time Kara-Murza, 35, had mysteriously fallen ill.

Observers were quick to compare Kara-Murza's misfortune to that of Alexander Litvinenko, a disenchanted former Russian security agent poisoned to death by radioactive polonium in London in 2006. Scotland Yard leveled a finger at the Kremlin for the murder of Litvinenko, saying "the evidence suggests that the only credible explanation is in one way or another the Russian state is involved in Litvinenko's murder." Britain demanded Moscow extradite the alleged perpetrator, Andrey Lugovoy, to stand trial, but the Kremlin declined. Lugovoy, who called reports of his responsibility in Litvinenko's death nothing but "invention, supposition, rumors," now has a seat in the Duma, which provides him immunity from prosecution.

Litvinenko, who British intelligence was supporting while he did private work for a business risk-analysis firm, was said to be investigating Spanish links to the Russian mafia when Lugovoy, a former KGB bodyguard, allegedly slipped the polonium into his tea. The context of his murder is plumbed in a heart-pounding new book on the affair, *A Very Expensive Poison: The Definitive Story of the Murder of Litvinenko and Russia's War With the West*, by British journalist Luke Harding.

"Litvinenko wasn't exactly James Bond," writes Harding, a veteran foreign correspondent for *The Guardian* newspaper. "But he was passing British intelligence sensitive information about the links between Russia mafia gangs active in Europe and powerful people at the very top of Russian power—including Putin." Altogether, Litvinenko would say, the Russian president, his ministers and their mobster pals comprise what could only be called "a mafia state." Or, as O'Reilly put it to Trump recently, "He's a killer."

"There are a lot of killers. We have a lot of killers," Trump responded in a remark that seemed to defend Putin and drew widespread rebukes.

It's been impossible to prove Putin had a hand in any of the 30 or so deaths he or his cronies are suspected of carrying out. But there are just so many untimely demises of Russian dissidents, journalists and others that AFIO's Oleson decided to include them all in his list, no matter that foul play was ruled out in some. One such is the odd death of former Putin crony Mikhail Lesin in a Washington, D.C., hotel room in late 2015. Some accounts speculated that he "may have been talking to the FBI to avoid corruption charges," Oleson notes. Police ultimately decided he stumbled and died from acute alcohol poisoning.

"Not that I'm overly suspicious, but he would have been a prime candidate for [assassination], given what he was doing and what Putin has shown that he has done with others," Oleson said. "You have to wonder."

Kara-Murza was still suffering from the effects of his 2015 poisoning—nerve damage on his left side that caused him to walk with a cane—when he fell ill again earlier this month. As with that earlier incident, his doctors say they can't pin down exactly what put him in the hospital again. His wife said she has sent samples of her husband's blood, hair and fingernails to a private laboratory in Israel for analysis.

> "ONE OR TWO OR THREE, YOU COULD ALWAYS EXPLAIN AWAY, BUT DOZENS?"

Unlike many of Putin's victims, Kara-Murza has powerful American friends looking out for him. One of them is Senator John McCain of Arizona, who took to the Senate floor to denounce Trump for vaguely equating Putin's murders with some unspecified American ones. Kara-Murza "knew that there was no moral equivalence between the United States and Putin's Russia," McCain fumed. "I repeat, there is no moral equivalence between that butcher and thug and KGB colonel and the United States of America.... To allege some kind of moral equivalence between the two is either terribly misinformed or incredibly biased."

Former U.S. General Barry McCaffrey called Trump's whitewash of Putin's thuggery "the most anti-American statement" ever made by a commander in chief.

Oleson's list makes the point. Next time, perhaps O'Reilly should hand it to Trump and ask him to name any critics killed on the order of an American president. N

NATASJA WEITSZ/GETTY

CRIME WITHOUT PUNISHMENT: Alexander Litvinenko, a disenchanted former Russian security agent, was poisoned to death by radioactive polonium in 2006.

‘ZOMBIE BOYS IN BLACK MASKS’

Inside the black bloc, the decades-old violent tactic that divides liberals and wreaked havoc at Berkeley

IT WAS THE first black bloc for Neil Lawrence, a third-year undergraduate student at the University of California, Berkeley. He had demonstrated with Black Lives Matter and seen people in bandannas show up at events and smash things. But after the Berkeley College Republicans announced controversial Breitbart News editor Milo Yiannopoulos would be speaking on campus, Lawrence decided it was time for a more aggressive form of protest. “It became clear to me and my close friends that the tone of living in America is changing, and in order to stop being scared, we started organizing,” he says. “I, a transgender Jew, don’t have a problem with violence against fascists.”

Through a friend who was involved in the local Antifa (anti-fascist) group, Lawrence learned activists were planning a black bloc. As a 5-feet-2-inch person who has never been in a fight, he says he wanted the safety that comes from being part of an anonymous mob. On February 1, hours before Yiannopoulos was about to speak, Lawrence and around 150 others gathered off campus where Antifa told them to meet. They got their gear and outfits ready. He was dressed in all black and had a T-shirt wrapped around his face, leaving a slit for his eyes. A person with a megaphone told the group the route they’d be marching, and they set off toward campus. Along the way, they chanted, “No borders, no nations, fuck deportation.” Lawrence didn’t carry anything, but others had flags and projectiles.

Berkeley students had spent weeks planning a nonviolent protest. They gathered outside the venue where Yiannopoulos would be speaking, waving signs and calling for the event to be shut down. And then the black bloc showed up. They clashed with the police and Yiannopoulos supporters. They set fires, threw Molotov cocktails and smashed windows. One of them pepper-sprayed a woman as a reporter interviewed her. Off campus, they vandalized shops and halted traffic. At around 9 p.m., the university canceled the event, but the demonstrations continued for several hours, until those dressed in black slipped into the night. Campus police made just one arrest.

The demonstrators caused an estimated $100,000 in damage on campus, the university said, and an additional $400,000 to $500,000 elsewhere, according to Downtown Berkeley Association CEO John Caner. The school has tried to distance student activists from these more aggressive ones, describing the latter in a statement as “agitators who invaded the campus and disrupted nearly 1,500 peaceful protesters.” Others have said students were among the masked ones. President Donald Trump called the demonstrators “professional anarchists, thugs and paid protesters” and implied that the university should lose federal funding.

BY
MAX KUTNER
@maxkutner

+ **IF YOU HAVE TO MASK: The black bloc activists at Berkeley crashed a nonviolent demonstration, set fires, smashed windows and threw Molotov cocktails.**

ELIJAH NOUVELAGE/GETTY

What people on both sides of this argument need to understand is that black bloc isn't a group; it's just a tactic. Those who do it wear black, sometimes between layers of "civilian" clothes so they can slip in and out of their protester ensembles. They often carry gear that is defensive (masks to protect against tear gas), offensive (Molotov cocktails) or both (a placard that can double as a shield). They attack storefronts and clash with police in a "hit and run" style, University of San Francisco associate professor Jeffrey Paris has written. There is no formal network of people and no set principles, just a belief that demonstrating peacefully doesn't accomplish nearly as much as a flash of rage. A 2008 guide published online by CrimethInc., a network for anonymous collective action, says, "Don't get caught! Stay safe(r) and smash the state!" A black bloc "communiqué" from 1999 says, "A storefront window becomes a vent to let some fresh air into the oppressive atmosphere of a retail outlet.... A building facade becomes a message board to record brainstorm ideas for a better world."

"DON'T GET CAUGHT! STAY SAFE(R) AND SMASH THE STATE!"

The German press coined the term *black bloc* in the 1980s, when activists in that country demonstrated for squatters' rights and other causes. In 1987, *The New York Times* described a German black bloc as "a radical and embittered fringe" that burned cars, smashed windows and hurled bottles and firecrackers. Activists went on to use the strategy in Canada, Brazil, the United Kingdom, taly, Switzerland and, during the Arab Spring, Egypt. In the early 1990s, it appeared in the United States during protests against the Gulf War, and in 1999 it gained traction during a

World Trade Organization conference in Seattle, when activists used sledgehammers, eggs filled with glass-etching solution and other equipment.

The people who use black blocs are generally affiliated with anarchist or anti-fascist movements, whose members often overlap, despite some ideological differences. One activist has said that this country's anarchist movement was "reborn" after that event, and that anarchism now "is always going to be married to the Black Bloc tactic." Though evidence of right-wing activists using the strategy is sparse, Craig Toennies, a member of the anarchist collective Occupy Los Angeles Anti Social Media (OLAASM) and a past black bloc participant, says by email that "black blocs are merely a tactic and can be replicated by anyone, anywhere and at any time."

The Trump presidency has brought more visibility for people who use black blocs. The person dressed in black who punched "alt-right" leader Richard Spencer on Inauguration Day in January was one of them, and many of the 200 or so people arrested that day were too, according to activists. But people have been using the strategy in the U.S. steadily for years, including during the Occupy and Black Lives Matter movements.

Those involved in anarchist and anti-fascist movements emphasize that their efforts go beyond donning masks and breaking things. "A large part of what we do is not put on black clothes and fight the police," says James Anderson, an editor at It's Going Down, an anarchist, anti-fascist and anti-capitalist website. "Most of what we do is actual community organizing," like helping people join unions or advocate around environmental and housing issues.

Toennies agrees, saying, "When I'm organizing my co-workers to resist exploitation by our boss, I don't suggest we wear black to work and smash the place up—although that might be worth considering sometime in the future."

HEROES OR TERRORISTS?

Reaction to the UC Berkeley black bloc has been mixed. Berkeley student Juan Prieto published a blog post titled "In Defense of the Violence at Berkeley," writing, "A peaceful protest was not going to cancel that event.... Only the destruction of glass and shooting of fireworks did that." Alumna Nisa Dang wrote in an opinion piece for the student newspaper, "To people with platforms who decide when a protest should and should not be violent: You speak from a place of immense privilege."

Others on the left condemned the tactics. For Berkeley-area activists, the event was an unwelcome reminder of the divisions black blocs caused during the Occupy movement years ago. "It got really nasty," one Occupy organizer recalled in the *San Francisco Chronicle* after the recent UC Berkeley demonstration. "A lot of my friends and other people dropped out [of Occupy] because they were afraid." Another local activist told the newspaper, "Breaking windows and fighting with police is not what we're about." Journalist Chris Hedges once called black bloc participants "the cancer of the Occupy movement... [who] confuse acts of petty vandalism and a repellent cynicism with revolution." And Scott Adams, creator of the *Dilbert* comic strip, a UC Berkeley graduate school alumnus and a self-proclaimed "ultra-liberal," wrote after the incident, referring to Yiannopoulos, "I've decided to side with the Jewish gay immigrant who has an African-American boyfriend, not the hypnotized zombie-boys in black masks who were clubbing people who hold different points of view."

OPEN ALL NIGHT: Some studies suggest black bloc actions hurt the causes they support by alienating the general public. The activists violently disagree with that claim.

AYFUN COSKUN/ANADOLU/GETTY

Conservatives have been harsher. Breitbart has called black bloc demonstrators "terrorists...bent on the destruction of the United States of America." Law enforcement views them as opportunists who hijack mainstream protests. "We see folks employ the black bloc tactics en masse like that basically anywhere where you have either a conservative cause, such as what we had with the Milo event in Berkeley, or any time you have a guaranteed media presence, such as political conventions, G-8 summits," says Kory Flowers, a police sergeant in Greensboro, North Carolina, and an expert on extremist groups. "Half of these folks don't know the particulars about the cause."

Stephen Zunes, a University of San Francisco professor who has studied social movements, told the *San Francisco Chronicle* something similar in 2003. "They're basically hoodlums looking for a mass rally to ride the coattails of. They don't have a political agenda. And the worst thing is that they don't have any leaders you can negotiate with."

There is evidence that black blocs hurt nonviolent efforts. A 2015 study published in the journal *Mobilization: An International Quarterly* found that from 1900 to 2006, nonviolent campaigns around the world were more successful than violent ones. A reason is that fewer people are willing to participate in violent movements, leading to fewer resources. There is also less public sympathy for those who use violence. Previous studies had found success in radical movements, but the researchers dispute the earlier findings.

"The folks that argue that these types of tactics were or are necessary are usually thinking of them in tactical terms," says Erica Chenoweth, a professor at the University of Denver who co-authored the study. "They look to the immediate tactical impacts, like did they shut down a talk." But violent efforts are less effective long term, she continues. "They often cost movements a great deal of sympathy and support." They can also harm movements, because after the violence there tends to be more support for leaders who vow to restore law and order, Chenoweth found (and as Trump has done).

Black bloc participants dispute those findings. One of them, who requested that *Newsweek* not print his name because of privacy concerns, says "a diversity of tactics" is necessary. He points to the black bloc in Washington, D.C., on Inauguration Day and the Women's March the following day as an example of how different types of demonstrations should occur. Anderson, of It's Going Down, points to the Indian independence and U.S. civil rights movements as events he believes succeeded because they were largely nonviolent (but also had violent disruptors). "What we're talking about is mass resistance, mass disruption," he says. "We're not saying, Everybody go get a gun and kill a bunch of people."

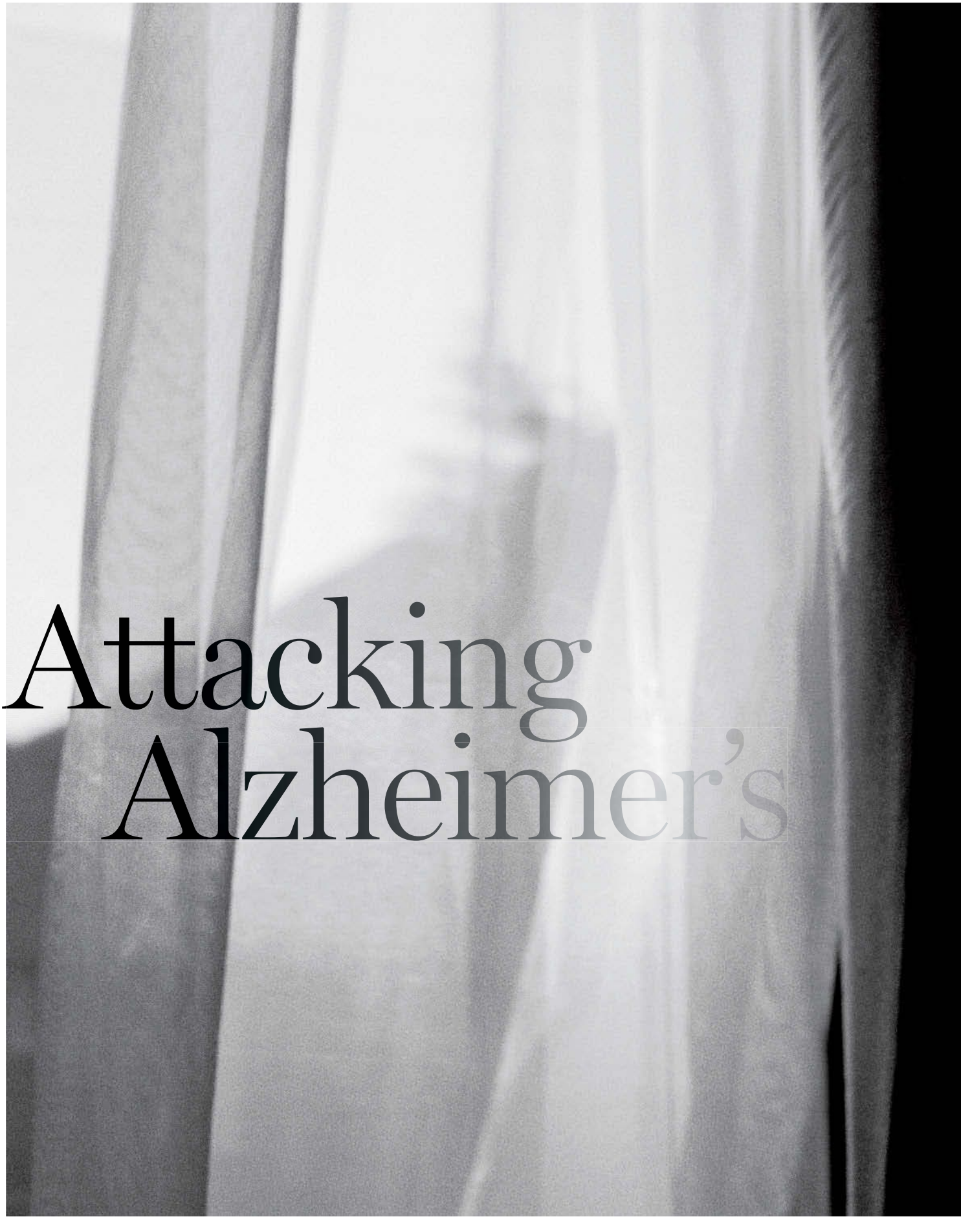
'MORE THAN 100 THUGS'

In the aftermath of the UC Berkeley demonstration, some are wondering where the black bloc folks came from and why police arrested so few of them. University of Utah law professor and former federal judge Paul Cassell wrote in *The Washington Post*, "How is it that after more than 100 thugs organized, well in advance, to invade the campus, and police were alerted to the risk of violence, again well in advance, [almost] no arrests were made the night of the attack?"

> THEY "CONFUSE ACTS OF PETTY VANDALISM AND A REPELLENT CYNICISM WITH REVOLUTION."

Flowers, the expert on extremist groups, says he isn't surprised there were so few arrests. When there are so many people demonstrating, he says, "the priorities change at that point to just protecting lives and property." To arrest a single protester might take multiple officers several minutes, "which is an eternity in the middle of that very, very volatile mayhem." It's unlikely that investigators will be successful identifying any of the demonstrators, he adds, given their disguises.

Anarchists and past black bloc participants say their activities will continue. "As the visibility of fascism has grown," says OLAASM's Toennies, "so too has the visibility of the resistance. People need to know, and I hope that they do know, that there are people like them who are willing to fight back—by any means necessary." N



Attacking Alzheimer's

Researchers have a bold new strategy for beating the dreaded disease: stop it before it starts

BY **ELIE DOLGIN**

THE ANNOUNCEMENT came the day before Thanksgiving, but there was nothing in it to be thankful for: An experimental Alzheimer's drug many thought would slow the disease's steady cognitive decline had failed to make a significant difference in a massive trial of people with early signs of the illness.

Marty Reiswig took the news hard. "I was just sad," he says. "I was really hopeful that it would be life-changing for us." Reiswig doesn't have Alzheimer's disease—he's a 38-year-old real estate agent in good health. But he is part of a large extended family that's been afflicted by Alzheimer's for generations. His Uncle Roy died of the disease. So did Grandpa Ralph. Eleven great-aunts and great-uncles. Dozens of cousins. And now, Reiswig says, "I've got a 64-year-old father who's almost dead of Alzheimer's."

His family is one of around 500 in the world with a genetic mutation that means its carriers will develop Alzheimer's at a much younger age than those without the mutation, for whom the age of onset is typically about 80. For the Reiswigs, those with the gene become sick around their 50th birthday. Other high-risk families can start showing symptoms as early as their mid-30s or, in some cases, their late 20s.

Reiswig decided not to learn his own gene status—there's a 50-50 chance he inherited his father's faulty DNA, and he prefers living with the uncertainty. However, he isn't just idly waiting to meet his fate. Three years ago, he signed up for an innovative drug study that could alter his family's genetic destiny. Once a month, a nurse comes to his home, inserts a needle in his arm and watches as a bag full of liquid slowly drips into his bloodstream.

As with most trials designed to test whether an experimental drug works—even for diseases that are akin to death sentences—Reiswig might be getting a placebo. But there's also a chance his monthly infusions include a drug that could stop him, his family members and others like them from losing loved ones to Alzheimer's. Or, at the very least, delay the disease long enough to give them many more good years, genetics be damned.

The key is early intervention, before symptoms are evident and brain damage is too extensive. "That's how you stop the disease," says Rudy Tanzi, director of the Genetics and Aging Research Unit at Massachusetts General Hospital. "You don't wait."

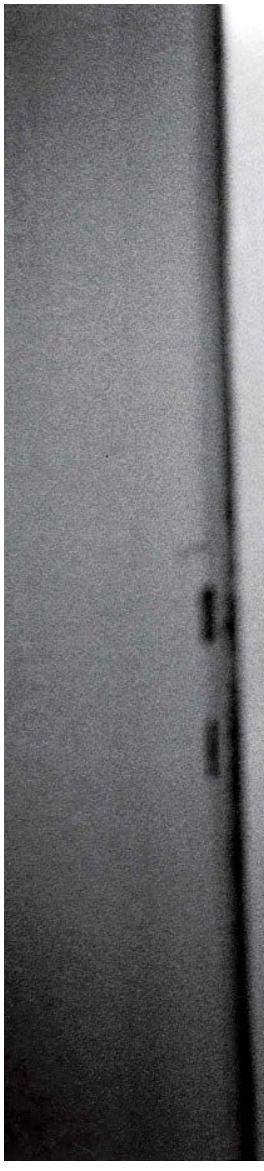
PUSH BACK THE ONSLAUGHT

THIS AGGRESSIVE attempt to prevent Alzheimer's rather than treating it is the most exciting new development in decades, as well as a radical departure for researchers and the pharmaceutical industry. Traditionally, drug companies have tested their therapies on patients who already have memory loss, trouble thinking and other signs of dementia. It's been a losing tactic: More than 99 percent of all Alzheimer's drugs have failed tests in the clinic, and the few that have made it to the market only ameliorate some symptoms. Not a single medicine has been shown to slow the relentless progression of the disease.

But with this new approach, even partial success—an appreciable slowing of brain degeneration—could have a big impact, says Dr. Reisa Sperling, a neurologist who directs the Center for Alzheimer's Research and Treatment at Boston's Brigham and Women's Hospital. If a drug therapy can push back the onslaught of dementia by five or 10 years, she says, "many more people would die of ballroom dancing instead of in nursing homes."

It's a strategy being tested in five big clinical trials that collectively will cost anywhere from $500 million to a whopping $1 billion. But prevention advocates are confident these studies are a worthwhile gamble. "It sometimes doesn't feel like it, because we see failure after failure, but we have made huge progress" in learning from mistakes and designing better trials, says Stacie Weninger, executive director of the F-Prime Biomedical Research Initiative and co-chair of the Collaboration for Alzheimer's Prevention, a coalition of leading

More than 99 percent of all Alzheimer's drugs have failed tests in the clinic.



URSULA MARKUS/SCIENCE SOURCE; PREVIOUS SPREAD: PHOTO ILLUSTRATION BY NEWSWEEK; PHOTO BY MARK HORN/GALLERY STOCK

EARLY DESPAIR: Some families carry a genetic mutation that means they will develop Alzheimer's at a young age. High risk families can start showing symptoms as early as their late 20s.

prevention researchers. "I'm more hopeful now than I've ever been that we can stop this disease."

Success in one or more of these trials matters not only because they may save the lives of the Reiswigs and for many older Americans; they may also save our health care system. Dementia is the most expensive disease to care for, and the number of patients with the condition is expected to explode in the coming years.

Part of the problem with past efforts to tackle Alzheimer's was that therapies were tested on many people who didn't even have the disease, because the only definitive way to diagnose Alzheimer's was through a brain autopsy. That postmortem could reveal the hallmark signs of the disease, but while a person is alive, doctors could make only a best-guess diagnosis—and they were often wrong. That meant Alzheimer's trials were filled with people who had other types of dementia and were never going to benefit from the therapies. In hindsight, it's painfully clear the studies were set up to fail.

The past five years have brought two powerful diagnostic tools that help ensure Alzheimer's therapies are now being given only to Alzheimer's patients. One involves a kind of brain scan known as positron emission tomography, or PET, while the other requires a spinal tap. Both test for the presence of the toxic amyloid protein that forms the sticky brain plaques thought to be responsible for the disease. "Now, with the right tools, we can match the patient population to the anti-amyloid therapies," says James Hendrix, director of global

LIFE BECOMES HER: A new aggressive attempt to prevent Alzheimer's rather than treating it is the most exciting development in the field in decades.

science initiatives at the Alzheimer's Association.

That's what pharmaceutical company Eli Lilly did in its latest trial of solanezumab, the drug whose trial failure before Thanksgiving had so saddened Reiswig. Lilly had previously tested solanezumab in two huge studies, each involving more than 1,000 presumed Alzheimer's patients. After those trials ended in failure, however, the company conducted PET scans and realized that up to one-third of its study subjects didn't have the disease. So Lilly tried again with only people who had confirmed amyloid in their brains. The company also focused on only those with mild forms of the disease. Alas, the third trial was a flop too.

Maybe solanezumab is a bad drug. However, in the trials it did target amyloid as it was supposed to, and it modestly outperformed a placebo by a range of cognitive and functional measures in clinical testing, even if it didn't meet the threshold needed for marketing approval. That's why Sperling and others are holding out hope for another explanation: that solanezumab was simply given too far along in the disease process, after irreparable harm has already occurred in the brain. If that's the case, it might prove more useful if given sooner.

> "People would die of ballroom dancing instead of in nursing homes."

"I'm afraid that even by the stage of very mild dementia, you've already lost 70 percent of the key neurons in the memory regions of the brain," Sperling says. "Ultimately, we need to start treating people before there are symptoms."

Researchers now know that amyloid starts to accumulate in the brain at least a decade or two before the onset of cognitive problems. This stage of the disease is referred to by experts as "pre-clinical Alzheimer's," although few people who qualify for this diagnostic label realize they have a problem. Dr. Jason Karlawish, a geriatrician who co-directs the University of Pennsylvania's Memory Center, describes this as a "real conceptual shift" in our understanding of the disease. "Someday, you won't have to be demented to be diagnosed with Alzheimer's disease," he says.

What's happening in this early stage of Alzheimer's can be likened to the kindling that starts a house fire. Amyloid plaques slowly smolder for years, consuming the neuronal tinder in our brains. By the time dementia kicks in, the fire is raging and it's too late to save the house. Calling in firefighters at that point is a waste of time and money. You need to dial 911 at the first signs of smoke—and the same could be true of when to deliver anti-amyloid drug therapies.

HUNDREDS OF BILLIONS LOST

THREE OF THE FIVE prevention trials are giving drugs to elderly individuals who are still cognitively normal but have a high chance of developing Alzheimer's, either because of elevated amyloid levels in their brains or because they inherited a risk-factor gene called APOE4. In either case, the disease is by no means a foregone conclusion for these subjects.

Not so in the other two studies, which focus on those rare kin groups in which doctors know with certainty, because of gene testing, who will develop Alzheimer's in each family and at roughly what age. One such trial, led by the Banner Alzheimer's Institute in Phoenix, is being done in Colombia because it includes the world's largest known family with a mutation that triggers early Alzheimer's disease. The second study, run by the Dominantly Inherited Alzheimer Network Trials Unit (DIAN-TU) of Washington University in St. Louis, includes the Reiswigs and more than 50 other families like them.

"For us, the hope is that we're going to stave off the damage and delay the onset of symptoms," says Reiswig's second cousin Brian Whitney, who knows he carries his family's Alzheimer's mutation. At 44, he will soon develop Alzheimer's if the therapy he's receiving doesn't work. His hope for a long life hinges on DIAN-TU.

HEALTH ON EARTH: American taxpayers are ponying up tens of millions of dollars for trials as part of the U.S.'s national plan to prevent or treat Alzheimer's by 2025.

FROM LEFT: URSULA MARKUS/SCIENCE SOURCE; JASON REED/REUTERS

DIAN-TU's is a two-in-one study that's testing a pair of different experimental therapies for their ability to keep Alzheimer's at bay. Participants don't know if their getting a placebo or not, but they know which of the two drugs they are receiving otherwise. For Whitney, it's a Roche drug called gantenerumab, and in Reiswig's case, it's Eli Lilly's solanezumab. Both drugs target the amyloid protein behind

Alzheimer's but do so in different ways: Roche's gantenerumab breaks up the amyloid plaques that can spur neuron death; Eli Lilly's solanezumab leaves plaques alone but can mop up free-floating protein to prevent further plaque formation.

Solanezumab thus operates like an outreach counselor who helps take crime-prone youth off the streets of a graffiti-filled neighborhood. If the kids aren't left to form gangs, they won't vandalize the area any further. The drug, by eliminating scattered amyloid, stops the deviant proteins from clumping together and forming additional brain-destroying plaques.

That's the idea, but researchers don't yet know whether a drug that has failed time and again as a treatment for Alzheimer's can prevent it. Some experts remain skeptical. They argue that further studies on anti-amyloid drugs are a waste when what is really needed are new therapeutic strategies—and that anyone who still sees promise in solanezumab because it beat a placebo by some tiny amount is guilty of spin and wishful thinking.

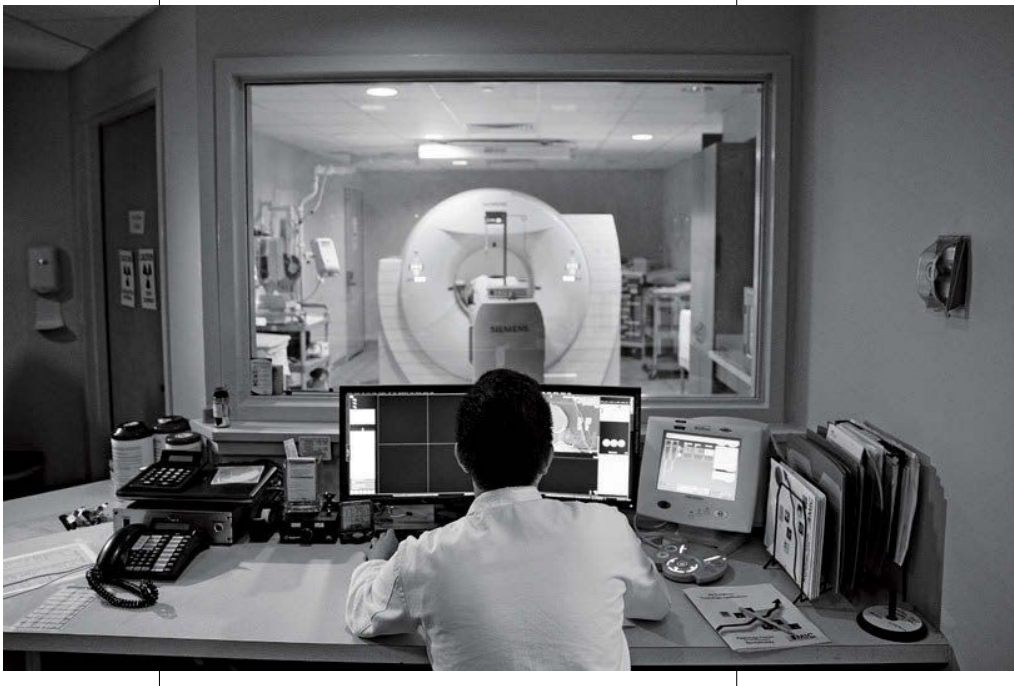
"We're treating asymptomatic people with a drug that has no evidence whatsoever of efficacy," says Peter Davies, a neuroscientist who directs the Litwin-Zucker Research Center for the Study of Alzheimer's Disease at the Feinstein Institute for Medical Research. "You might as well give them aspirin."

But the federal government clearly thinks the trials are worthwhile. In addition to funding from drug companies and philanthropies, taxpayers are ponying up tens of millions of dollars for these trials as part of the country's national plan to effectively prevent or treat Alzheimer's by 2025.

The consequences of failure could be dire. Approximately 5.4 million Americans suffer from Alzheimer's, and if no disease-delaying therapies are found soon, that number is expected to nearly triple by 2050, at which point the cost of treating and caring for all those people could top $2 trillion per year, after adjusting for inflation. That's up from $236 billion today. One in every five Medicare dollars is now spent on people with Alzheimer's and other dementias. In 2050, it will be one in every three dollars. And those figures don't even include the hundreds of billions more in lost wages for family members who take time away from their jobs to care for loved ones. It's not a question of a day off now and again. People with Alzheimer's require around-the-clock care—and more than one-third of all dementia caregivers develop clinical depression.

One in every five Medicare dollars is now spent on people with Alzheimer's and other dementias. In 2050, it will be one in every three dollars.

As Gregory Petsko, director of the Appel Alzheimer's Disease Research Institute at Weill Cornell Medicine in New York City, says, "Pretty much every family is going to have a relative affected by Alzheimer's, and that's going to change the way we live, the way we think, the way we plan for our future—everything."



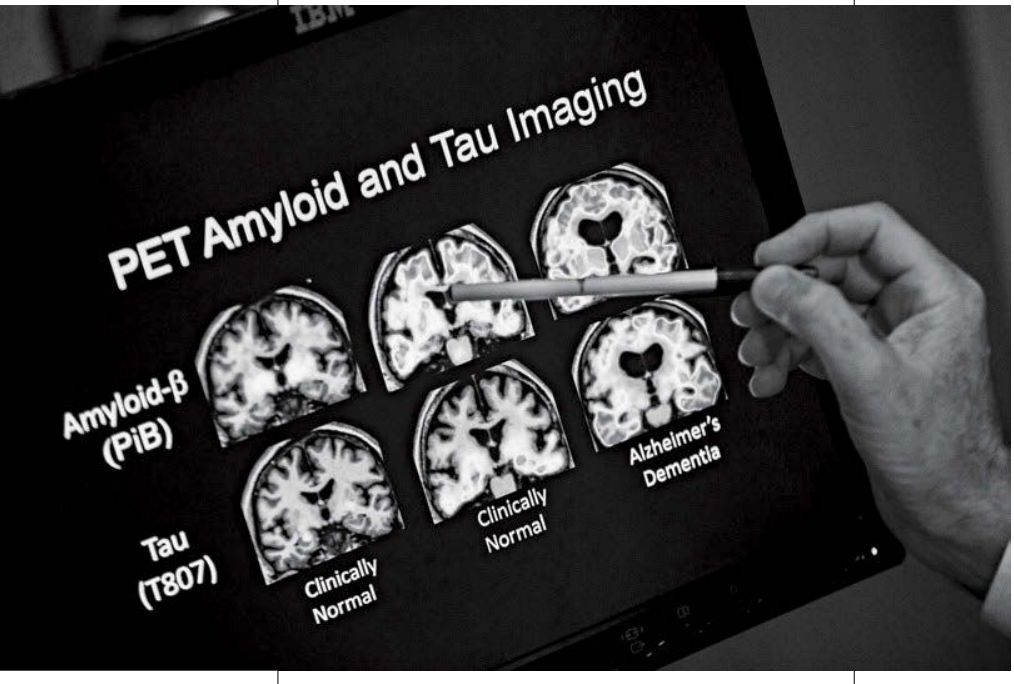
MIND CRAFT: If drug therapy can push back the onslaught of Alzheimer's by five to 10 years, many more people could avoid such an agonizing end.

'I CAN'T FORGET YOUR FACE'

DR. RANDALL BATEMAN had no warning the latest solanezumab trial was going to be a failure. He was racing around the house doing chores in anticipation of a big family dinner last Thanksgiving when he received an early-morning phone call on November 23 from executives at Eli Lilly. "I was extremely disappointed," says Bateman, who leads DIAN-TU.

"But I wouldn't say it was surprising." He'd been saying prevention has a better shot of success than treatment for years.

Another leading prevention proponent is Dr. Paul Aisen, a neurologist who directs the Alzheimer's Therapeutic Research Institute at the University of Southern California. In 2014, Aisen teamed up with Sperling for a 1,150-person trial called A4. Short for Anti-Amyloid Treatment in Asymptomatic Alzheimer's, A4 tests solanezumab for prevention. The drug is given to seniors who have no signs of dementia but do have elevated amyloid levels, as measured by a PET scan of the brain. It is looking for changes over a 39-month period in cognitive function, self-care abilities, brain tissue health and other indicators of Alzheimer's. "We still need to find out what the benefits and risks are" in patients not yet showing symptoms, Aisen says.



EXPENSIVE FAILURE: About 5.4 million Americans suffer from Alzheimer's. If no therapies are found soon, that number is expected to triple by 2050, at which point the cost of care could top $2 trillion.

EVAN VUCCI/AP (2)

The trial asks a lot of its participants. A4 subjects must be willing to come to a hospital once a month for more than three years to receive infusions containing an unproven medicine for a disease they don't have and might not get. There's no guarantee of benefit or even safety. And the trial is not particularly remunerative. Some participants can receive up to $2,480 if they complete all the study protocols, including two PET scans, four MRI scans, two spinal taps and 42 infusion visits. But many do not get any compensation, unless you count parking validation.

None of that dissuaded Jerry Blackerby from taking part in A4. "With my family history, I have expected to have Alzheimer's long before death, and I haven't yet," says Blackerby, 82, a retired technical writer whose mother died from the disease, as did her three siblings. "If I'm going to have it, I want to be involved in the study to try to keep others, especially my descendants, from having to go through the hell I've seen family members go through."

Last December, Blackerby drove more than 100 miles from his home in southern Oklahoma to the University of Texas Southwestern Medical Center in Dallas to receive his first infusion. He will make this same four-hour round-trip trek every month for the next three years.

For Don, a retired insurance agent, the motivation to participate in A4 was his partner, Fran. He first noticed her Alzheimer's four years ago when he arrived at her house expecting a dinner of meat stew, only to find a near-empty pot. "She had remembered the onions," he recalls. "But she had forgotten everything else."

Don (who asked that his last name not be used because he didn't want to come across as self-promotional) tried to enroll Fran in A4, but her disease was too far advanced. Only he was eligible—a PET scan showed he had the hallmark amyloid logjam in his brain. He started getting infusions last fall at Brigham and Women's Hospital in Boston.

On a rainy day in late November, Don, with a plaid-blue shirt sleeve rolled up past the elbow and an IV catheter in his right arm, reminisced about meeting Fran nine years ago at a singles dance at Vincent's Nightclub in the suburbs south of Boston. He's mild-mannered and surprisingly youthful for a 76-year-old, gray-haired grandfather who raised six children on his own after his wife died in a car crash 33 years ago. He beams when he talks about Fran retaining her sense of humor and ability to play tennis, but he turns solemn when he describes how it took four tries to explain to her why he was going to the hospital today. "She knows," he says, "but she forgets."

While he's talking, a nurse comes to deliver the saline flush that always follows Don's infusion. She introduces herself, although Don recognizes her from a previous visit. "I can't forget your face," he says. "I told you, 'You look just like my cousin.'"

The amyloid in Don's brain has clearly not impaired his memory, but it's there. And perhaps

the therapy he is receiving will halt further damage. Or perhaps he will suffer the same fate as Fran. "I worry for myself. I worry for my kids. But I try not to think too much about that," he says. "Right now, I have too many obligations."

GOOD GENES IN NORWAY

AISEN, the A4 investigator, is optimistic about solanezumab as a preventive medicine. In announcing the failure of the drug for symptomatic Alzheimer's at a major scientific meeting late last year, he told a room full of doctors, neuroscientists and drug executives, "I expect the treatment effect to be larger in an earlier stage of disease." Results of the A4 study will be known in 2020.

Until then, Eli Lilly is continuing to support A4 and DIAN-TU, the two prevention trials that include solanezumab, but the company has already signaled that it plans to focus on other therapies. Many academics in prevention research are beginning to consider other drugs too. They are still committed to prevention; they just want to determine which of the anti-amyloid drugs works best.

Last December, Bateman and his collaborators announced they were adding a third drug to the DIAN-TU study, one that blocks the beta-secretase enzyme responsible for producing amyloid. Also,

Aisen and Sperling recently launched a huge prevention trial, called EARLY, which is administering that same beta-secretase-targeted drug to people who, as in A4, are healthy but have elevated amyloid in their brains.

Dr. Roy Twyman, head of Alzheimer's drug development at Janssen, a division of Johnson & Johnson and the manufacturer of the beta-secretase inhibitor

> "I'm more hopeful now than I've ever been that we can stop this disease."

URSULA MARKUS/ THE SOURCE

in the EARLY and DIAN-TU trials, points to a study from Iceland as evidence that the strategy should work. Five years ago, researchers there discovered the first known gene mutation that protects individuals against Alzheimer's. It's extremely rare, found in less than one in 200 people from Nordic countries. Yet those who carry the mutation are about five times more likely to reach their 85th birthday dementia-free.

And what does that mutation do? It impairs the ability of beta-secretase to do its job. "Nature has already taught us a lesson in humans," says Twyman—and it's one that J&J hopes to take to the pharmacy shelf.

Another beta-secretase inhibitor, from Novartis, is one of two drugs included in a prevention study, the Generation trial, run by Dr. Eric Reiman and his colleagues at the Banner Alzheimer's Institute. That study, like A4 and EARLY, is being done with cognitively normal older adults at risk of developing Alzheimer's. But rather than looking for signs of amyloid accumulation, the Generation trial involves volunteers who inherited two copies of APOE4. That increases their odds of developing Alzheimer's about fifteenfold, compared with the general population.

An estimated 2 percent of the population has two copies of APOE4, but few in that select group know it. It hasn't been worth getting tested for this gene because there was little you could do with the results. "Really, for the first time, what to do about it is different," says Dr. Pierre Tariot, the Banner Alzheimer's Institute's director. "You can choose to participate in a trial."

WHAT DO YOU MEAN I'M NOT COVERED?

IF THE DRUGS prove to be effective at preventing Alzheimer's, their success will immediately raise another urgent question: Who's going to pay for them?

Prevention proponents envision a day in which everyone above a certain age—say, 50—would get screened regularly for molecular and genetic risk factors for Alzheimer's. If they test positive, they could start taking a preventive medicine, much as those with high cholesterol today can pop a daily statin to ward off a heart disease. "We will eventually think about treating a much broader population," says Sperling.

But statins cost pennies a pill. Any new Alzheimer's drug would likely cost tens of thousands of dollars per year. Insurance companies may balk at paying that for seemingly healthy individuals, especially because not everyone with elevated amyloid or APOE4 will develop dementia.

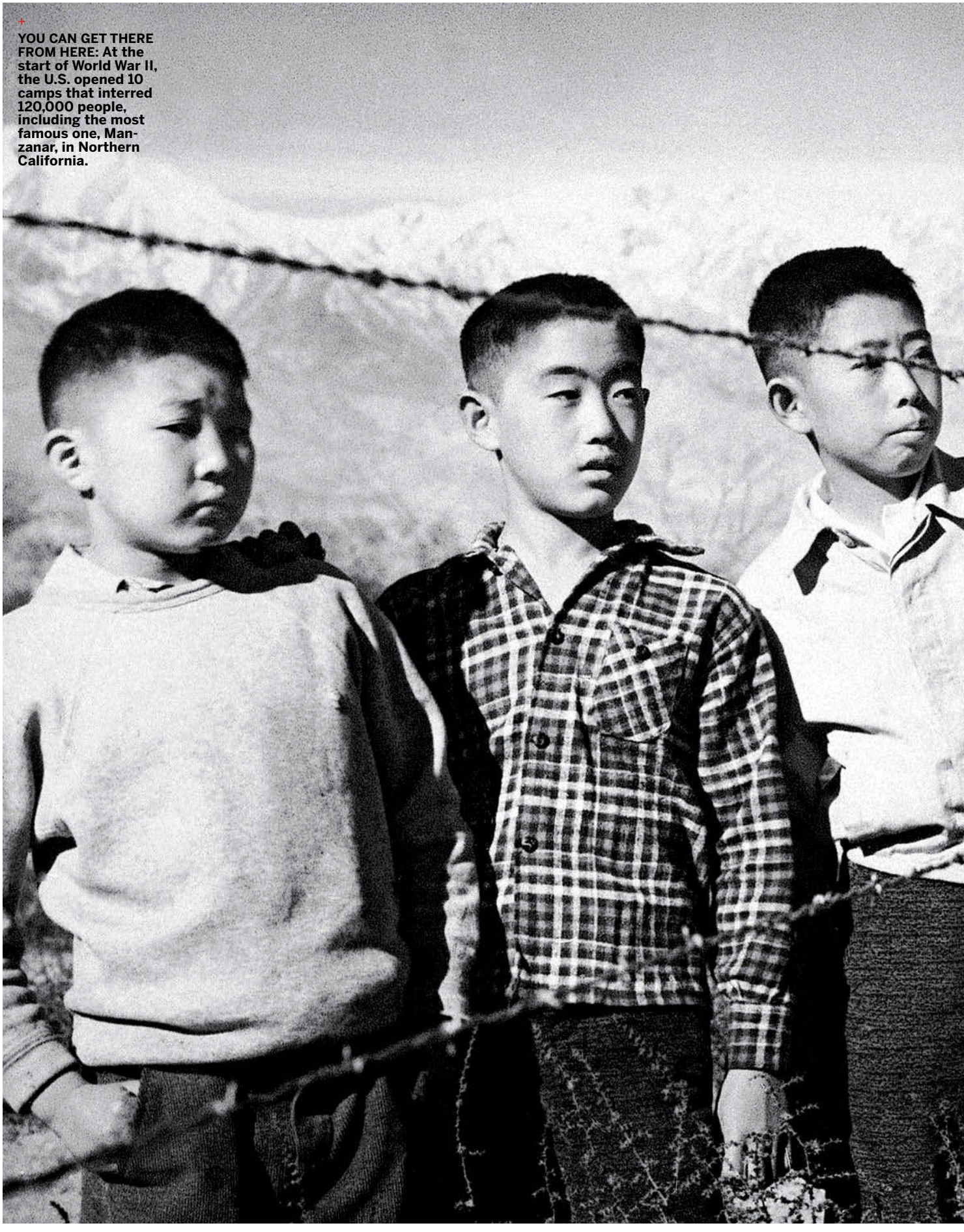
Howard Fillit, chief science officer of the Alzheimer's Drug Discovery Foundation, thinks researchers should focus on treating people with symptoms but halting the disease at the pre-dementia stage when only mild cognitive impairment is evident. Problems with memory, thinking and judgment at that point are more pronounced than for those who experience normal, age-related "senior moments." But most people with MCI are not so far gone that they require constant care. They can keep living independently.

"MCI is the sweet spot in terms of the cost of trials, the cost of drugs and quality of life for patients," Fillit says. "That's still prevention because you're preventing dementia."

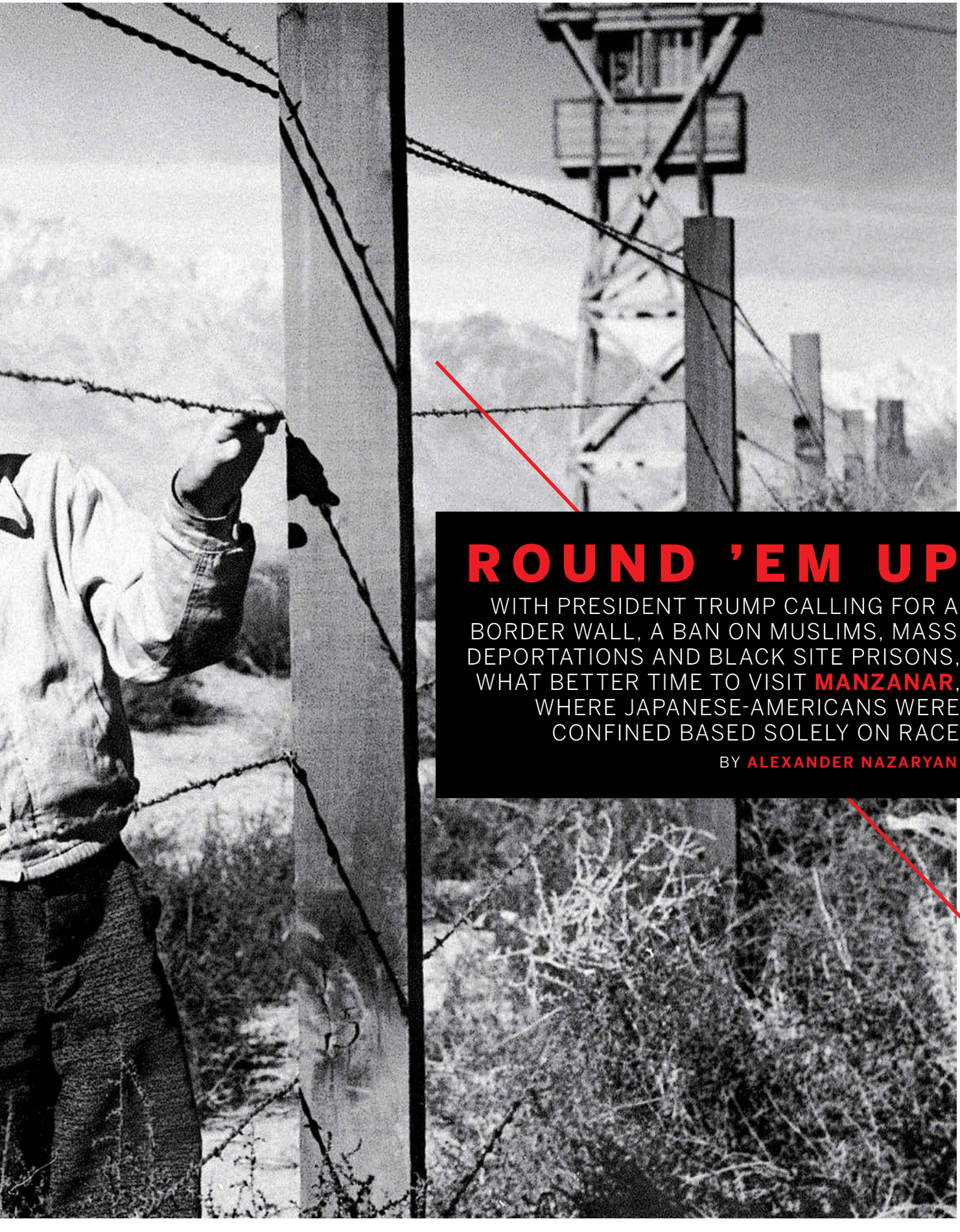
Anyone who's ever had a spouse get lost coming home from the grocery store or a parent unable to write a check might disagree. And so many researchers continue to dream of a time when they can prevent all cognitive impairment. To that end, they plan to start testing drugs even earlier in the disease process, before any amyloid has started to damage the brain. For example, Aisen and Sperling will soon launch a placebo-controlled trial involving people who weren't eligible for the A4 or EARLY trials because their amyloid levels didn't reach the threshold for inclusion. And Dr. Eric McDade, a neurologist involved with DIAN-TU, plans to start treating people with the sure-thing, genetic form of Alzheimer's—families like the Reiswigs and others—even sooner than the current trials allow. "Going as early as possible is really the goal," McDade says.

Developing drugs to prevent Alzheimer's disease could be a discovery of Nobel proportions. There is no guarantee the current trials will succeed, but researchers believe they are getting close to solving what had, until recently, seemed to be one of medical research's toughest challenges.

"It's an exciting time for us," says the Banner Alzheimer's Institute's Reiman. "The hope is that we already have a treatment that can substantially reduce the risk of Alzheimer's. But there's only one way to find out, and that's through these trials that chart new territory." N



YOU CAN GET THERE FROM HERE: At the start of World War II, the U.S. opened 10 camps that interred 120,000 people, including the most famous one, Manzanar, in Northern California.



ROUND 'EM UP

WITH PRESIDENT TRUMP CALLING FOR A BORDER WALL, A BAN ON MUSLIMS, MASS DEPORTATIONS AND BLACK SITE PRISONS, WHAT BETTER TIME TO VISIT **MANZANAR**, WHERE JAPANESE-AMERICANS WERE CONFINED BASED SOLELY ON RACE

BY **ALEXANDER NAZARYAN**

THE DRIVE from the San Francisco Bay Area to Manzanar, the former Japanese-American internment camp in California's remote Eastern Sierra region, takes about seven hours. There is no other way to get there, and there is no way to make the drive shorter. For most of the way, I listen to an audiobook: Rick Perlstein's *The Invisible Bridge*, about the improbable rise of a B-movie actor to the presidency of the United States.

In 1988, the final full year of his second White House term, Ronald Reagan apologized to the 120,000 Japanese-Americans who'd been confined to internment camps during World War II, of which there were 10 around the nation, and of which Manzanar is the most notorious. The survivors of the camps also received reparations, a rare concession by the American government. "Here we admit a wrong," Reagan said. "Here we reaffirm our commitment as a nation to equal justice under the law." The announcement was made in San Francisco, whose Japantown was cleared out by interment, which began in 1942, about three months after Pearl Harbor.

Some of the survivors of the camps, many of them now aged, watched as Reagan, in a mustard-colored suit, apologized for the sins of Franklin Delano Roosevelt.

"I think this is a fine day," the president added.

THREE DAYS before I went to Manzanar, President Donald Trump had ordered a halt on immigration from seven majority-Muslim countries. He did so via executive order, numbered 13769. Manzanar was created via Executive Order 9066, which will turn 75 years old on February 19. The order did not mention the Japanese, but its intention was very clear.

"It's in no way a concentration camp," said one newsreel that showed Japanese-Americans disembarking buses with their suitcases in the high desert of Inyo County, where the rudiments of Manzanar awaited (they would have to build a good deal of the camp themselves).

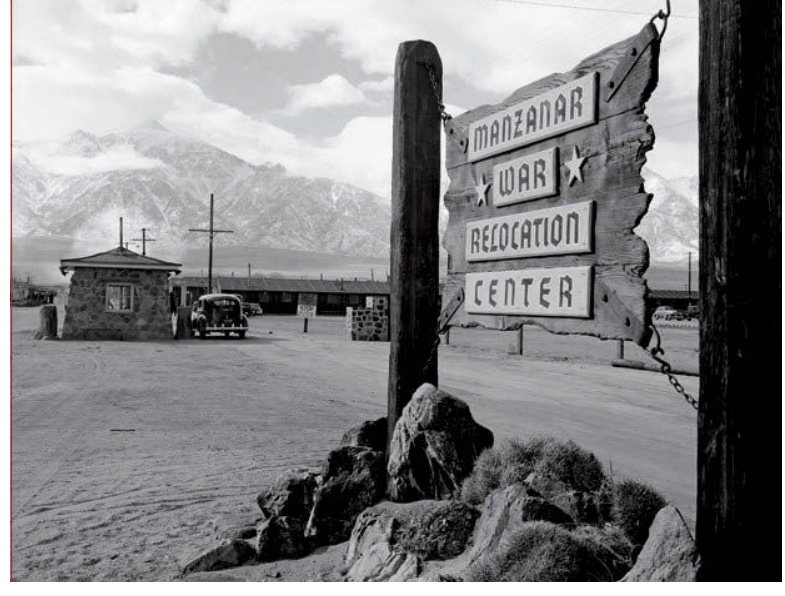
"To be clear, this is not a Muslim ban, as the media is falsely reporting," Trump said as protests to his executive order mounted.

Another newsreel: "They are merely dislocated people."

THE TOWN closest to Manzanar is called Independence, from nearby Fort Independence, erected in the 19th century to protect white settlers from attacks by Native American tribes who may have thought they had some claim to this land, having lived on it for a thousand years, if not longer. Today, there is an Indian reservation called Fort Independence, where Paiute Indians hold on to a shred of what was once theirs. They operate a gas station that doubles as a casino. It appears to be the most successful commercial enterprise for many, many miles.

Inyo County, which hugs California's border with Nevada, is the ninth largest county in the country. It is dramatically beautiful, cradled by the Inyo and Sierra ranges, the light always playing off the mountains in surprising ways. It is also Trump country: Though fewer than 8,000 people in the county voted, they did so overwhelmingly for the Republican candidate.

The sympathies of the local populace are apparent at a coffee shop in Lone Pine, nine miles south of Manzanar. Hearing me approach customers with questions about Manzanar and the Trump immi-



DISLOCATED PEOPLE: The internment camps set up to hold Japanese-Americans were created by an executive order, like Trump's attempt to ban several mostly Muslim nations' immigrants..

RACE WAR: In the immediate aftermath of the attack on Pearl Harbor, the hatred and paranoia regarding Japanese-Americans fueled the drive to violate their rights and lock them up.

gration ban, the proprietor—a burly, mustachioed guy—tells me to shut off my recorder. Satisfied, he returns to watching Fox News, where a blond pundit is defending the travel ban.

At one table, there are several middle-aged men. Each has in front of him an unopened copy of that morning's *Los Angeles Times*. One of them is crunching on an immense carrot partly wrapped in foil.

I ask about Manzanar.

The man with the carrot says he's been to Japan, but not to Manzanar, because.... He doesn't finish the sentence.

The oldest man at the table has a thick white beard. He is hunched over a mathematics textbook, working out what appear to be some pretty complicated network theory problems. He didn't seem to be paying attention, but now he looks up. Manzanar, he says, was "asinine."

He adds that two recent developments have brought him joy: the end of California's five-year drought and the election of Trump.

"[Trump] hasn't put people in **camps** yet. Maybe he will."

I ask the question I've come to answer: Isn't Trump taking us to a place as asinine and profoundly un-American as Manzanar? Will we someday have to build a museum to Syrian refugees at the international terminals of LAX and JFK airports?

No, the amateur mathematician says. The media have got it all wrong. He points at the television screen: "Parrots!" he shouts.

Then he points at the plump copies of the *Los Angeles Times* on the table: "Parrots!"

Finally, he points at me. "Parrot!"

Manzanar is on swath of high desert behind which rise the Sierra Nevada. The wooden guard tower planted in the desert floor looms like an emaciated giant against its immediate surroundings, but it is minuscule against the mountains in the background, covered in fresh snow. *Manzana* is Spanish for apple, and there were

FROM LEFT: ANSEL ADAMS; AP; PREVIOUS SPREAD: THE U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION

NO ESCAPE: The guards at Manzanar patrolled the barbed wire fencing but didn't venture inside, giving the detainees a surreal kind of autonomy.

apple orchards here once. The Japanese prisoners, who were kept at Manzanar for three years, planted their own as well. You can see them on the edge of the camp, dry branches reaching into blue sky.

The camp consists of an excellent series of exhibitions inside the repurposed, barnlike auditorium, which the Japanese prisoners built. Behind the auditorium stand a handful of the 504 barracks where 11,070 people spent World War II. From the outside, the barracks look sort of like those at Auschwitz: low, squat buildings. And the wooden guard tower at the edge of the camp reminded me of Guantánamo Bay, which I had visited for a reporting story a few years before.

Manzanar was not a concentration camp, or a jail, though what it was is hard to say—"internment camp" doesn't quite convey the injustice of confining American citizens without due process. In some ways, life inside Manzanar was shockingly ordinary. Children went to school and acted in cowboys-and-Indians play; adults danced to the tunes of a jazz band named, cheekily, the Jive Bombers. There weren't gas chambers, of course, and the military police who patrolled the barbed wire fencing didn't venture inside Manzanar, giving those inside a measure of autonomy your average Gitmo detainee could never dream of. Yet the ordinariness was circumscribed by an extraordinary abrogation of civil rights.

Also, most of the Japanese-Americans at Manzanar came from Los Angeles or some other relatively urban West Coast settlement. They had no business in the desert, an alien landscape that became part of their punishment.

"There was always the wind," one Japanese-American confined there remembered later. "There was always the wind."

A fear of espionage was the reason given for Japanese internment, just as a fear of terrorism is the reason Trump cites for his travel ban. But there were no spies among the Japanese confined during World

FROM LEFT: CLEM ALBERS; DOROTHEA LANGE

War II. And there has never been a terrorist attack committed by a refugee on American soil.

The obvious lesson of Manzanar is that erring on the side of fear never gets us to that "shining city on a hill" Reagan evoked as he left the White House in 1989.

> "He's making choices based on **fear**, not based on facts, and that's when racism goes rampant."

Yet some disagree, even as they stand in this high desert history classroom. Greg and his wife have come up from Camarillo, in Southern California. "I don't think it was actually the wrong thing to do at the time, given what they knew," Greg says of Manzanar.

He supports Trump's immigration ban: "We have no way of vetting them, so why should we be letting them in?" He makes the point that while the Japanese-Americans confined at Manzanar were American citizens, the people affected by Trump's immigration order are not and are therefore not entitled to constitutional protections.

During the presidential campaign, Trump called Syrian refugees a "Trojan horse," implying that terrorists lurked among them. Most refugees, in fact, are women and children.

The image, however, comes from FDR. He used it during one of his "fireside chats," in 1940, to warn "a nation unprepared for treachery" and thus ripe for exploitation by "spies, saboteurs and traitors." He invoked, as counterargument, the strength of the American project, to which "the blood and genius of all the peoples of the world" had contributed.

"We have built well," Roosevelt concluded.

Twitter helped elect Trump, but it's also the site of strong anti-Trump sentiment. There was, for example, the brave soul who manned the Twitter account at Badlands National Park and, on January 24, sent out several tweets with statistics about our rapidly warming planet.

The Trump administration doesn't believe in climate change, so some White House martinet ordered the Badlands account to go silent. That, of course, propelled those climate-change tweets into hypervirality. Others started parsing the multitude of National Park Service–related accounts for signs of anti-Trump resistance.

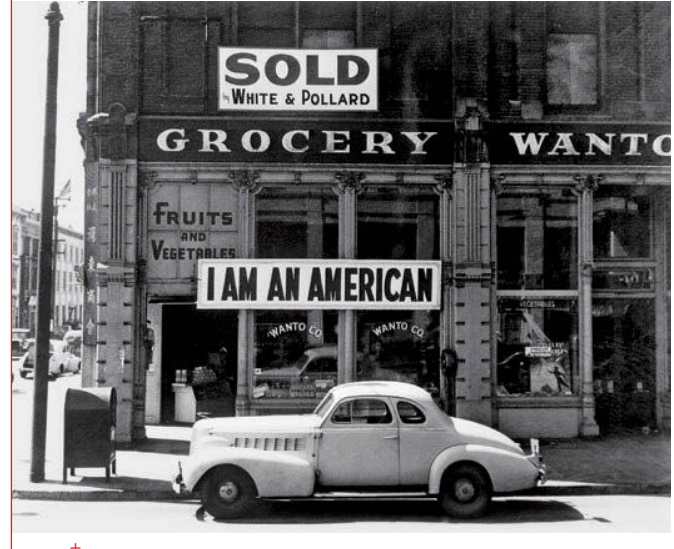
One of the tweets cited for its subtle anti-Trump bent was by the Death Valley National Park account, which sent out this missive on January 25: "During WWII Death Valley hosted 65 endangered internees after the #Manzanar Riot." Most people—myself included—knew nothing about the Manzanar Riot but understood that the tweet was about the powerful protecting the vulnerable.

As I found during my visit to Manzanar, the reference is to a conflict that broke out in 1942, between political factions in the camp divided over how much to collaborate with their American captors. The disorder was quelled by the military police, who killed two inmates. As the Death Valley tweet indicated, some of the internees were taken to Death Valley, and sequestered there for their own safety in a Civilian Conservation Corps campsite called Cow Creek.

The liberal policy site Mic branded the tweet an "apparent act of defiance."

Manzanar does not tweet, and its rangers studiously avoid politics. But they are also obviously aware of what the camp means today, even if they aren't allowed to discuss the obvious parallels. Ranger Rosemary Masters led me on a tour of the camp. Manzanar, she told me, "is a perfect example of what happens when we don't pay attention to the United States Constitution."

Politics seeps in in other ways. The day I visited, a whiteboard celebrated Fred Korematsu, a native of Oakland, California, who tried to avoid internment by hiding but was discovered after three weeks, arrested and imprisoned. California marks Fred Korematsu Day on January 30, which fell this year just three days after Trump signed his immigration order. Google, returning ever so briefly to its idealistic don't-be-evil roots, made Korematsu the subject of a Google Doodle.



SOLD OUT: This sign was posted the day after Pearl Harbor. The store owner, who was "evacuated," was declaring his allegiance and, perhaps, reminding neighbors that he was a citizen with rights.

PROSAIC PURGATORY: Daily life at Manzanar, which wasn't a concentration camp or a jail, was surreally normal, except for the forced dislocation and confinement of the residents.

Korematsu's conviction was vacated in 1983. The whiteboard in Manzanar quoted from that decision: "In times of distress, the shield of military necessity and national security must not be used to protect governmental actions from close scrutiny and accountability."

Manzanar broke its attendance record last year. Masters told me the spike might have to do with a prolific wildflower bloom in nearby Death Valley. A broader upward trajectory, she speculates, might also have to do with the 1998 mandate that all students in California's public schools learn about the internment of Japanese-Americans. Children see the highway signs for Manzanar, she told me, and plead with their parents to stop.

The people who have come on a Tuesday morning in the middle of winter seem to be acutely aware that Manzanar has an even more ominous significance today than it did on November 7, 2016. Now you come here and pretend that this was long-ago ugliness we'd never replicate.

A well-dressed photographer from Los Angeles told me he'd been taking pictures in the mountains but decided he had to come down and see Manzanar because of all the insanity happening in Washington. As we stood in the former mess hall, next to a trapdoor where a cache of sake was once hidden, the photographer marveled at how quickly Trump had moved to accomplish his most extreme campaign promises. If we had a travel ban after two weeks of a Trump administration, how long before we'll have our very own Manzanar, not to mention our own Hiroshima?

Two people cried when I asked about Manzanar. One was a young woman whose children ran through the exhibits as we spoke. Her grandfather had been in an internment camp in Arizona. The family was driving back from Mammoth Lakes when she said, "We need to stop here." Through tears, she called Trump's immigration ban "gnarly." The word, when she said it, had none of its usual laid-back connotation.

Carol Garner also cried. She, her husband and three children were from San Diego. They'd also been visiting Mammoth Lakes and heard about Manzanar from a friend. Now they were standing in a barracks that featured an exhibit about "Question 28" on a federal survey given to all interred Japanese by the federal government. The question asked if the respondent was loyal to the United States and would "forswear any form of allegiance or obedience to the Japanese emperor." Since most of the Japanese were American citizens, they found the question odd, even insulting. Even though answering in the negative could mean deportation to Japan, some did anyway. Explained one internee quoted in the exhibit, "I said 'no' and I'm going to stick to 'no.' My wife and I lost $10,000 in that evacuation.... That's not the American way."

Garner is Chinese-American, and she told me that growing up, she was frequently told to "go home," though she'd never had a home other than the United States.

"He's making choices based on fear," she said of Trump's immigration ban, "not based on facts. And that's pretty much when racism goes rampant." You see it on Twitter today, with Pepe the Frog memes; you saw it during World War II, when Japanese-Americans were widely regarded as spies. "The Japs Must Not Come Back," says one pamphlet exhibited at Manzanar. Next to it is a newspaper excerpt about Wilma Insigne of Walnut Grove, California, who was arrested for threatening to burn down the home of a Japanese family. The family was that of Private Yoshio Matsuoka, "a war veteran who just returned to the United States after spending 10 months in a German prison camp."

To really see Manzanar, you have to use your imagination. Most of the barracks are gone, leaving behind an expanse of sagebrush and sand. It's hard to tell if the debris—twisted scraps of steel, rusted cans—are historical relics or just litter. There are at least 30 intricate rock gardens, testament to the desire of those imprisoned here to re-create a fragment of their culture. There were

"We have the best **camps**. The biggest ever. But people don't appreciate them. SAD."

FRANCIS STEWART (2)

churches, a judo dojo, a hospital and a baseball field, but these are all gone. As impressive as Manzanar National Historic Site is, what actually remains of the camp is not much—it is history effaced.

It is also history displaced. In the four years that followed the end of World War II, the War Assets Administration sold off the barracks of Manzanar, in part as veteran housing. At $300 per barrack, this was a good deal, as long as you didn't mind inhabiting the former quarters of war prisoners.

Today, many of the barracks remain around Inyo County. Several have become part of the Lone Pine Budget Inn, a one-story mustard affair by the side of the highway. For about $60 a night, you can sleep with the ghosts of Manzanar. I tried to find out if the motel's proprietors were aware of this legacy, but nobody answered my knocks at the front office: Many motels in the Eastern Sierra shut down in winter. I spied a sign inside: "We no longer have HBO."

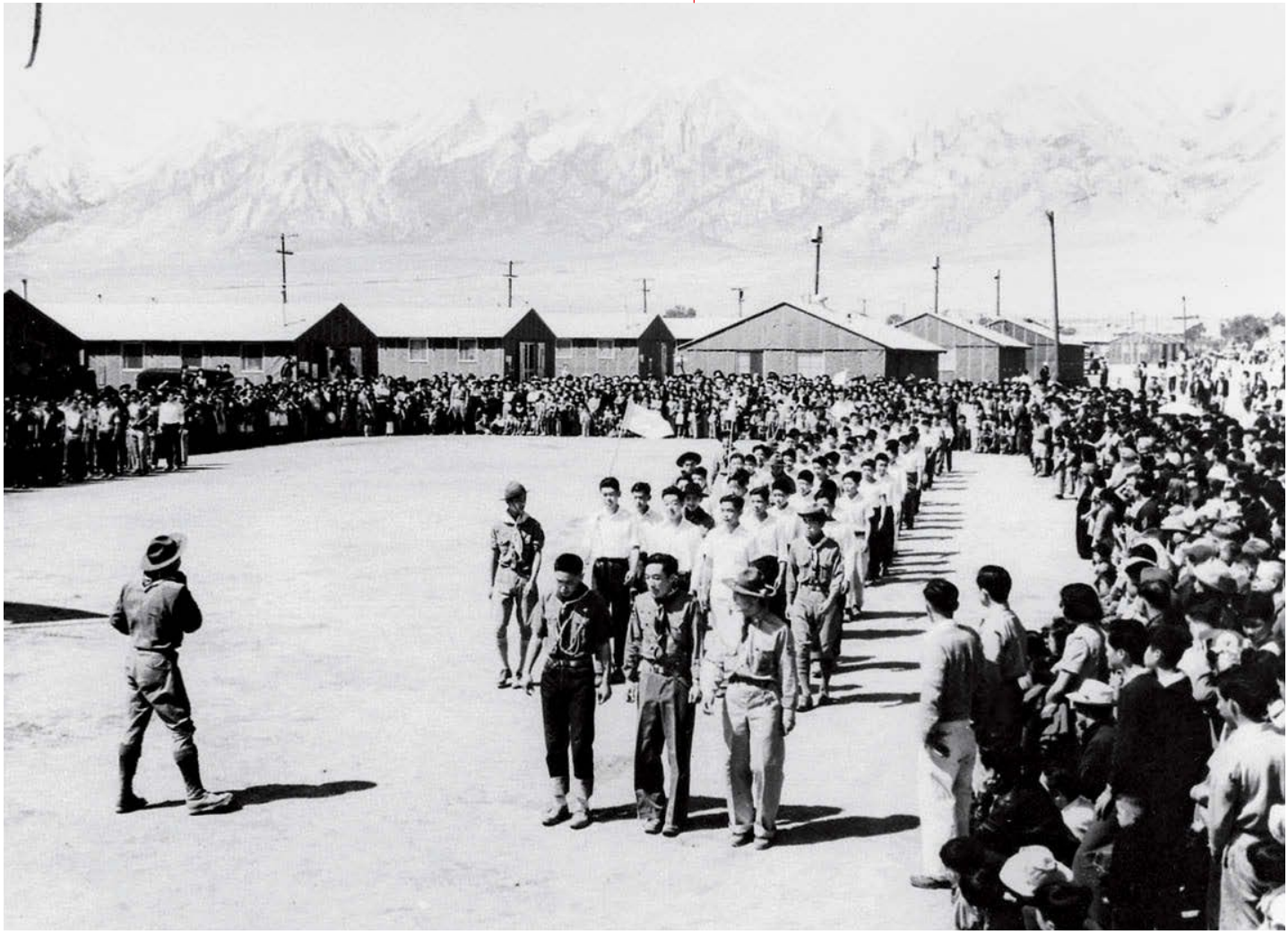
Another barrack became part of a Catholic church in Independence. I saw no sign indicating the provenance of the wood for what was now known as Zegwaard Hall. There was, however, a marble plaque outside the main building of the church, but it had nothing to do with Japanese internment. It read: "In loving memory of all unborn children, victims of abortion."

Alisa Lynch, chief of interpretation at Manzanar, told me this: You cannot make people remember, and you cannot make people remember in the way you do. You can only show them what was. They will draw their own conclusions, which no exhibit or display can predict.

Some Inyo old-timers still call Manzanar what it was called during World War II: "Jap Camp."

Inside the work office used by rangers at Manzanar, Masters left me with the guest books from 2016, huge

WORK SETS YOU FREE: The internees had to do most of the work setting up Manzanar, like clearing brush and building the barracks.



volumes signed by visitors to the camp. Many notes left by guests from early 2016 have a pretty familiar, and unsurprising, this-can't-happen-again sentiment, but as the presidential election neared, and the possibility of a Trump victory became real, a darker tone emerged.

A visitor from 2016: "I see the writing on the wall."

This was by a tourist from Los Angeles: "Remember, this was all created by executive order. We need to be vigilant."

Humor works too: "We have the best camps. The biggest ever. But people don't appreciate. SAD."

Later, Lynch sent me a testimonial left on October 30, 2015: "I have been prejudiced all my life against Japanese (75 years). As of today that is gone. I am so ashamed. I cry as I write this. Thank you."

There is a gift shop; there must always be a gift shop. The one at Manzanar is quite good, and you feel even better knowing that your vintage travel poster, rendered into a fridge magnet, is going to support the National Park Service, which isn't likely to see a funding windfall from the Trump administration.

Next to the cash register is a display case with pocket-sized copies of the U.S. Constitution. "This summer, it sold really well," Lynch says with an impressive lack of affect to her voice. A consummate professional, she will not talk politics, so it is fruitless to ask her whether that's because Khizr Khan, a Gold Star father who lost his son in Iraq, held up that same edition of the Constitution at the Democratic National Convention and asked then-nominee Donald Trump, "Have you even read the U.S. Constitution? I will gladly lend you my copy."

> You cannot make people **remember**. You can only show them what was.

There are also copies of *Farewell to Manzanar*, by Jeanne Wakatsuki Houston and James Houston. A native of Los Angeles, Wakatsuki was sent to Manzanar when she was 7 years old. She writes of the "sandy congestion and wind-blown boredom" she witnessed upon arriving at the camp, describing in detail the discontent that led to the Manzanar Riot. A frequent presence on school curricula, *Farewell to Manzanar* has gone through more than 60 printings and sold over a million copies. Yet the University of Illinois also includes it on a list of young adult books that have been challenged for alleged improprieties that might sully the minds of patriotic, freedom-loving American schoolchildren.

I'm going to guess that "Personal Justice Denied: Report of the Commission on Wartime Relocation and Internment of Civilians" is not among the more popular items in the gift store. Published in 1983, it spends 493 pages on the two questions most worth asking of history: Why? And how?

Among the many conclusions it makes, the report notes that there was a widespread belief in the early decades of the 20th century "that the ethnic Japanese would not or could not assimilate to 'American' life and represented an alien threat to the dominant white society."

The report declares that internment was a mistake:

> *In sum, Executive Order 9066 was not justified by military necessity.... The broad historical causes that shaped these decisions were race prejudice, war hysteria and a failure of political leadership. Widespread ignorance about Americans of Japanese descent contributed to a policy conceived in haste and executed in an atmosphere of fear and anger at Japan.*

I genuinely believe that if people took the time to read the reports written by government commissions about the varieties of human evil, error and depredation, the prospects for our civilization would be vastly improved. I know, however, that it is hopeless to wish for a world in which people earnestly read government reports.

I leave Manzanar and begin the long drive over the mountains. Sprint reception is horrible in Inyo County, and FM radio reception isn't much better, so I listen to my Reagan book, which has the Gipper abandoning the liberalism of his younger years for a strident, anti-Soviet, pro-corporate conservatism.

LESSONS: One recent visitor to Manzanar wrote: "I have been prejudiced all my life against Japanese. As of today, that is gone. I am so ashamed.... Thank you."

NO RETURN: The 135 people who died at Manzanar are honored with this memorial, even though some were buried back in the cities, towns or even farms from which they'd been taken.

In South Lake Tahoe, there's finally service again. I have emerged from the internment camp into a gaudy, glimmering strip of Americana. As I fill up my rental car, I scroll through Twitter. This is a gut punch of an experience, my feed full of heartbreaking pictures of children in Syria who thought they were about to become Americans. They will remain refugees while we restore ourselves to greatness.

Manzanar had its own newspaper, the *Manzanar Free Press*. You can buy replica editions at the gift store. I bought three. It is like an ordinary newspaper, but there's a kind of clenched cheer to all the articles—which were published without bylines—that you suspect was the product of official censorship or at least official pressure.

This is from the September 10, 1943, edition of the *Manzanar Free Press*: "After all this is over, when Manzanar is nothing more than a dim memory in the cycle of one's life, the High Sierras will be remembered with fond dreams and not with cynicism or bitterness."

This did not come to pass. Manzanar did not recede in our collective memories. Nor was it burnished by time into something not entirely unpleasant, like one's middle school years. Manzanar is still Manzanar, and it is still with us, even as the creosote crawls over the remnants of the camp, and the winds come off the mountains, stirring up sand, and cars rush past on the highway en route to more glamorous destinations, like Mammoth Lakes. It doesn't matter. Manzanar will remain; Manzanar will not allow us to forget. N

FROM LEFT: FRANCIS STEWART; STAN HONDA

GOOD SCIENCE

VIRAL TRIAGE

A smart scorecard gets doctors ready for the next Ebola outbreak

JOHN MOORE/GETTY

BUYING TIME: Many Ebola victims died simply because of a lack of resources, such as water or dialysis.

BY **JESSICA WAPNER**
@jessicawapner

AS A SCIENTIST collecting data during the Ebola virus outbreak in Sierra Leone in 2015, Mary-Anne Hartley watched doctors agonize about which patients among hundreds to treat first. "How do you know who will deteriorate the fastest?" she says. "You need an objective measure to decide."

After the outbreak, Hartley decided to find that measure. At the University of Lausanne, where she studies infectious diseases, Hartley created a scoring system to calculate the severity of an Ebola case. If the epidemic returns—and experts say it will—this prognostic tool could save lives.

Hartley created two scorecards, one for diagnosis and one for daily rounds of hospitalized patients. Each assigns points for pertinent characteristics, such as age, the amount of virus in the bloodstream (the "viral load"), symptoms and how long a patient had those symptoms before coming to the clinic. The scorecard, published recently in *PLOS Neglected Tropical Diseases*, correctly predicted 97 percent of Ebola deaths at or soon after diagnosis. These tallies could help physicians better allocate their time and extremely limited funds and supplies. "If some of these patients had the benefit of more resources, they wouldn't have died," says Rob Fowler, a scientist at Sunnybrook Research Institute in Toronto, who treated Ebola victims in Sierra Leone, Guinea and Liberia during the last outbreak. In other words, inadequate resources are what make Ebola so life-threatening. Intravenous fluids, oxygen and dialysis, all scarce in West Africa, could keep a patient alive until the body attacks the virus.

Fowler cautions against using this scorecard to categorize patients as "so sick they're destined to die" and emphasizes the value of scoring severity when emotions and other biases could influence medical decisions. "It keeps things more honest," says Fowler.

The World Health Organization expects to grant emergency approval to an Ebola vaccine by mid-2017. But the inoculation will be offered only after an outbreak begins, and the virus could evolve beyond the two strains it now covers. "And it's definitely still out there," Hartley says. "There will be another outbreak."

DISRUPTIVE

MIND YOUR BUSINESS

Snapchat's billion-dollar IPO may be a huge vote for privacy in the age of devious data-sucking

BY **KEVIN MANEY**
@kmaney

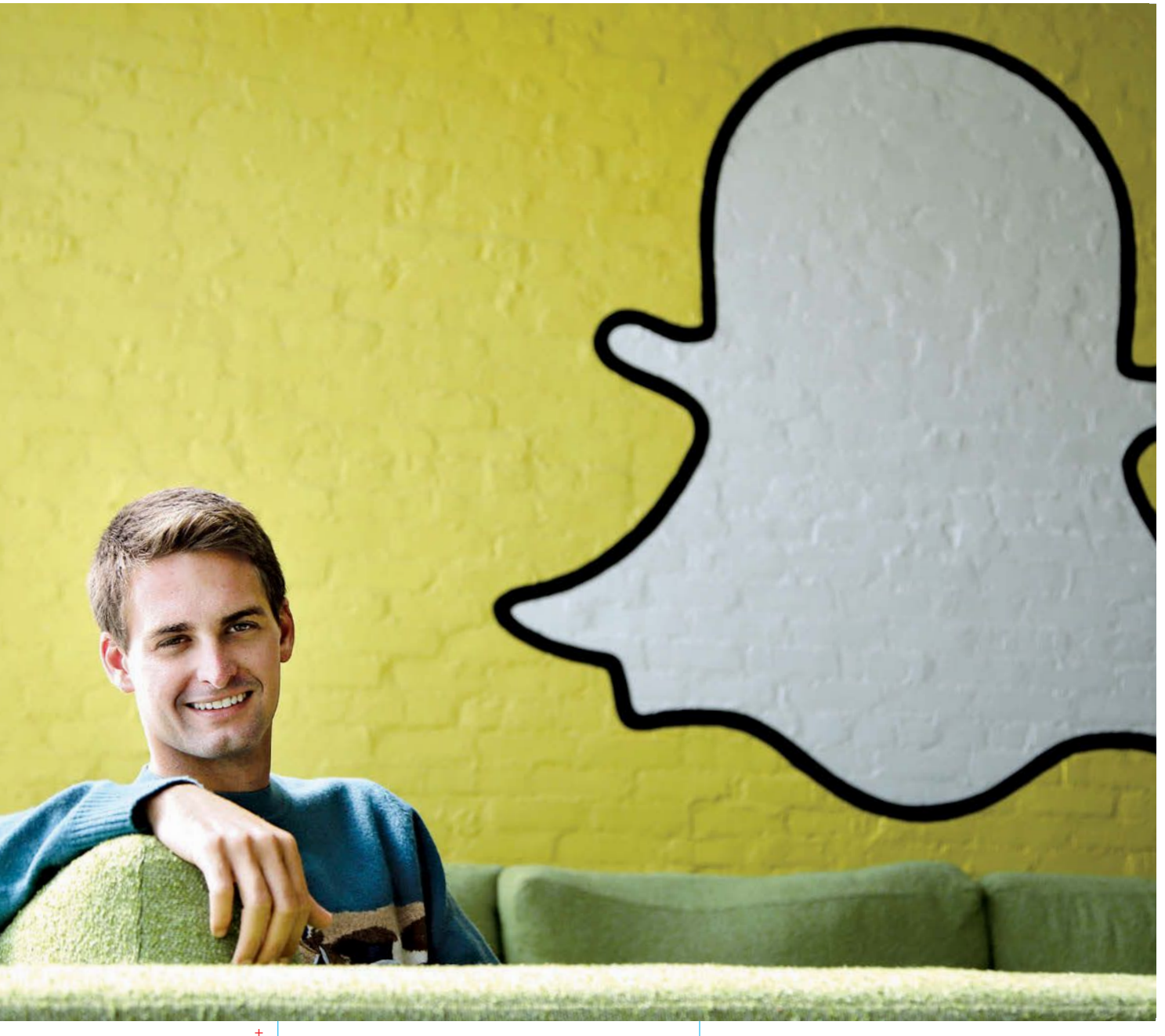
DONALD TRUMP may be the best thing that could happen to Snap's upcoming initial public offering.

It's not just that Snap's Snapchat app stands to gain millions of users as people flee the noxious political cloud that has enveloped Facebook like pollution on a red-alert day in Beijing. There's an even more significant way the new president will help the company: He is stoking fears about an Orwellian surveillance state, and Snap is one of the few social media companies that doesn't base its business model on knowing everything it can about you. So, the thinking goes, a few years from now, maybe you'll be able to enjoy mainstream media on Snapchat absent the worry you'll get a midnight knock on the door.

This might be the year the cost of giving up our privacy gets too high. Until recently, most of us haven't been overly concerned about our digital privacy. We have pretty readily exposed ourselves in order to get cool free services from Facebook, Google and myriad other companies. But new technologies are starting to eat away at our privacy in ways we've never before experienced. And now the Trump administration wants to guard your data like a cat might offer to guard a bird feeder. Trump apparently plans to let security organizations such as the National Security Agency (NSA)—and even scarier entities like Comcast—grab your data and use it just about any way they want.

We're starting to recoil. A Pew Research survey in January found that half of Americans feel their personal information is less secure than it was five years ago, while nearly one-third are not confident the federal government will keep their personal information safe. Normally, people don't act on such fears, but that seems to be changing. AnchorFree, which makes privacy-protection software for consumers, has seen a massive spike in U.S. signups since Trump was elected. It's similar to the surge AnchorFree saw from citizens of Egypt and Tunisia during the Arab Spring.

Key members of the Trump security team—the CIA's Mike Pompeo, National Security Adviser Mike Flynn, Attorney General Jeff Sessions—have indicated they want to extend domestic surveillance. Trump has floated the idea of tracking Muslims with a database. The NSA in January got permission—from the outgoing Obama administration—to share intercepted emails, text messages and phone calls with other U.S. intelligence agencies, and privacy groups fear that change will be exploited by this administration. The new NSA policies "are widening the aperture for abuse to happen, just as abuses are becoming more likely," says Nate Cardozo, an attorney with the Electronic Frontier Foundation. At the same time, Trump's Federal Communications Commission wants to make it easier for internet providers—companies



SNAP, CRACKLE, STALK: Donald Trump is stoking fears of a surveillance state, and Snap is one of the few social media companies that doesn't base its business model on knowing everything it can about you.

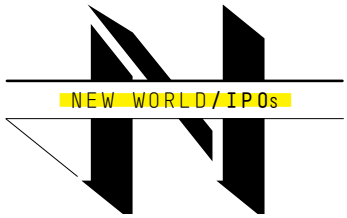
JAE C. HONG/AP

such as Comcast and AT&T—to track your every digital action and use it for marketing.

The government may be the least of your worries. Almost everything the tech industry is building these days promises to deliver amazing new products and services by way of machine learning—that is, machines that learn all about you. You're probably already used to Facebook targeting ads based on your likes and posts, or Google doing the same based on what you've typed in its search box or in Gmail and Google Docs. But that's starting to look like a ketchup sandwich compared with the intricate machine-learning dish the industry is cooking up.

THIS MIGHT BE THE YEAR THE COST OF GIVING UP OUR PRIVACY GETS TOO HIGH.

Software has gotten as good as humans at understanding speech. We're installing all these Amazon Echo and Google Home listening devices in our homes. It's like a voluntary



bugging operation. Supposedly these things only listen after we say a trigger word, like "Alexa," but they could listen and analyze everything said in their proximity. Police and lawyers are beguiled. In a now-famous case, James Andrew Bates was accused of killing his friend, who was found dead in a hot tub in Bates's home in Bentonville, Arkansas. Police noticed an Echo in Bates's house and asked Amazon for the log of everything the device picked up. Amazon refused, and insisted it would only have stored a few seconds of speech after the trigger word. But no doubt this will be the first of many similar legal requests.

TV maker Vizio just got fined for secretly tracking its customers' viewing habits. Mobile apps can track more than you might think. A study co-authored by Carnegie Mellon computer science professor Norman Sadeh found that mobile apps such as Groupon and Weather Channel logged a user's location every three minutes. Photo app Meitu was found to track a user's location, calls made, Wi-Fi connected to. "We've seen massive amounts of tracking," Sadeh says.

(Trump still uses his old Android phone to tweet from the White House. If Sadeh is right, doesn't that make Hillary Clinton's email scandal seem comparatively innocuous? Some genius hacker of a terrorist could probably figure out exactly which toilet he's sitting on while tweeting about *Saturday Night Live*.)

Tech companies like to point out that there are now a gazillion Internet of Things devices deployed. Many of those things—ones you might wear, like a Fitbit, or a connected car or even a Bluetooth sex toy—can relay data about you back to some database. If that's not personal enough, we're now buying cheap DNA tests from Ancestry.com to learn about our heritage or from 23andMe to see whether we have genes that predict cancer or baldness. Again, law enforcement is intrigued. After a murder in Idaho, police identified one suspect by matching DNA samples with Ancestry's database.

Wait till the NSA starts crossing your digital data with your genetic data. Security agencies could gather enough information to intimately know us—what we've said, where we've been, who we know, what we're made of. Same with Google, Facebook, Apple, Amazon and many other tech companies.

At some point, a vast swath of the population is going to realize we've been totally laid bare, and might decide to stop freely giving out personal data. A revolt like that would be tremendously costly to much of the tech industry. You pay for allegedly free services with your privacy, and then the details about you are sold to marketers, which can then precisely target you. If enough people no longer want to play that game, it's lights-out for that business model.

That's why Snap is the IPO of the moment. It is showing that a viable media business can be built without vacuuming up zettabytes of information about every customer. In Snap's filing for its IPO this spring, it said it had 158 million active users last quarter and brought in revenue of $405 million for the year—six times its 2015 revenue of $59 million. The company is growing like crazy. (Disclosure: I'm collaborating on a book with Hemant Taneja of venture firm General Catalyst, an early investor in Snap.)

In fact, Snap might be growing like crazy *because* it doesn't invade our privacy. Snapchat got its start by letting users send photos that quickly disappeared. It then built its business model on the idea that it is unnatural to generate data about everything we do. For thousands of years before the internet, a conversation disappeared the second it was over; no device logged everywhere you walked; when you finished the newspaper, the newspaper didn't know which stories you read.

—

A GENIUS HACKER TERRORIST COULD PROBABLY FIGURE OUT EXACTLY WHICH TOILET TRUMP'S SITTING ON WHILE TWEETING ABOUT "SATURDAY NIGHT LIVE."

Snap's proposition is that it can win your loyalty by giving you back your privacy. In that way, the past might turn out to be the future—and that future will come quickly if we find ourselves hiding from the Trumpstapo.

BREATHE EASY: Researchers have genetically modified cows to be resistant to the bacterium that causes bovine tuberculosis.

MICHAEL DALDER/REUTERS

BRAVE MOO WORLD

A GENE SPLICE CAN CREATE DISEASE-RESISTANT COWS

BY
DOUG MAIN
@Douglas_Main

FOR THE first time, researchers have genetically modified cows to be resistant to the bacterium that causes bovine tuberculosis. This disease is well-controlled in most developed countries, but can be fatal for cattle in developing ones, and can spread to other animals and even people.

Researchers from China's Northwest A&F University used a technique called clustered regularly interspaced short palindromic repeats (CRISPR) to insert a gene associated with tuberculosis resistance into 20 cows, 11 of which lived past the age of 3 months. These animals were more resistant to tuberculosis than animals that weren't modified, and didn't show any unintended consequences of genetic modification. A study describing these findings was published in the journal *Genome Biology* on January 31.

CRISPR is an intensively researched tool developed in the past couple years, which, relative to previous techniques, can quickly and cheaply insert genes into specific locations in an organism's genome. It has been used for all sorts of things, including modifying human embryos in the lab and correcting the gene responsible for Duchenne muscular dystrophy in mice.

In this case, the scientists used a new version of the technique, which inserts a gene into a single snip within one strand of DNA at a desired location in the cow genome. Previously, CRISPR involved the use of a molecular "scissors" that cleaved both strands of DNA. The advantage of this new technique is that it is potentially safer, says Suk See De Ravin, a researcher with the Laboratory of Host Defenses, part of the U.S. National Institute of Allergy and Infectious Diseases, who wasn't involved in the paper. He adds that "further studies to demonstrate the safety of the outcome are necessary," and notes that the ability to raise animals "with improved resistance to infections has the potential to dramatically reduce the overuse of antibiotics in livestock," which is a significant problem.

Harry Malech, chief of the Laboratory of Host Defenses at the National Institute of Allergy and Infectious Diseases, says having such resistant animals could help reduce the transmission of tuberculosis through milk, which is a significant health problem in developing countries. (The widespread use of pasteurization in the United States and most of the Western world has "pretty much eliminated tuberculosis risk from milk, though the faddish enthusiasm for raw milk and cheeses...has reintroduced that risk," he notes.)

Chuck Sattler, the vice president of genetic programs at a cow-breeding company Select Sires, says the inserted gene is already found naturally in some cattle. The researchers used CRISPR to make changes that could occur with traditional breeding, but much more quickly and in a more specific manner, he adds.

For such transgenic cattle to be approved in the United States, they'd have to be vetted by the Food and Drug Administration. That's cost-prohibitive at this point, Sattler adds. N

PILLORIED

Trump's plans for lowering drug prices sound great for Big Pharma but bad for patients

ON THE last day in January, President Donald Trump met with executives from some of the wealthiest pharmaceutical companies in the United States to discuss the future of their industry. The meeting, closed to the press after opening remarks, included an issue vital to most people not inside the room: the high price of pharmaceuticals. "We have to get prices down," the president said in his introduction. "We have no choice." He suggested several means toward that end, but veterans of the battle to lower drug prices say the proposed ideas are unlikely to accomplish anything—at least not without also harming patients.

Trump wooed the attending CEOs with promises of speeding up the process of bringing new drugs to market and removing regulations that deter companies from manufacturing stateside. "You can't get approval for a new plant, you can't get approval for a new drug," he said. "So we're going to take care of that." The president also said he would "increase competition through bidding wars" to lower prices, though he did not elaborate on this tactic during his public remarks. He also questioned policies that enable other countries to, in his words, pay too little for prescription medications. "We are going to be ending global freeload."

But the likelihood that any of the approaches discussed in that meeting—at least those to which the press were privy—could bring prices down seems low, according to several longtime experts.

Take drug development. Trump said he will be "streamlining the process." Although he did not provide details, he hinted that his yet-to-be-named chief of the U.S. Food and Drug Administration has some plans. One leaked candidate for the post, Jim O'Neill, managing director of invest-

BY
JESSICA WAPNER
@jessicawapner

ment company Mithril Capital, publicly supports eliminating a large part of the drug approval process; namely, Phase II and III clinical trials, which test effectiveness. The rationale is that would shave several years and millions of dollars off a company's investment in experimental products.

But that is unlikely to reduce prices, says James Love, director of Knowledge Economy International, a nonprofit research organization focused on vulnerable populations, because, "the U.S. lets companies charge whatever they want here." In other words, the price does not depend on the up-front investment. And, says Winston Wong, who is a consultant to private insurers, the government lacks the means to force drug companies to lower prices if development costs drop. He adds that pharmaceutical companies are looking for a less rigorous approval process. He also points out that testing for safety only and not benefit—as Phase II and III trials do—could accomplish the opposite goal. "We could potentially be spending more for therapies that are totally useless."

Lowering manufacturing costs won't reduce drug costs, says Mike Kelly, CEO of Kantar Health, a pharmaceutical industry consulting company. "The cost of manufacturing a drug is infinitesimal compared to what it gets priced at," he says. Moreover, the dramatic price difference between branded and generic drugs underscores that point, says Love. Branded drugs are, on average, 32 times more expensive than generics. "There's just no relationship between the price of a drug and what it costs to make."

Kathleen Sebelius, secretary of health and human services from 2009 to 2014, says that without any ability to negotiate or limit prices, the federal government is unlikely to succeed in lowering them. Medicare, the federally funded insurance provider for people age 65 older (and the single biggest drug purchaser in the country), is prohibited by law from negotiating prices. And unlike many other countries, the U.S. has no entity with the power to control prices.

Sebelius also points to the lack of oversight on other aspects of pricing. Improving the laws that surround patents and the loopholes that enable companies to "evergreen" their drugs (that is, extend the patent life without making substantive changes)—as well as preventing unwarranted spikes in generic drug prices (see Martin Shkreli's Daraprim or Mylan's EpiPen) from entering the market—could all promote competition, she says.

None of these measures have been publicly proposed by the Trump administration. To the contrary, the president has repeatedly vowed to curtail government regulation. And although granting Medicare the ability to negotiate drug prices was one of the president's big campaign promises, he has abandoned it. Without the power to limit pricing or more restrictive patent laws, Sebelius notes, it is unclear how the federal government could have any impact on drug costs. "I'm baffled. I have no idea what it is that is intended to actually cause drug prices to go down," she says.

Although Trump insisted he would force foreign countries to pay more for U.S.-manufactured drugs to lower prices, Love believes this is an impossible demand. Many foreign governments have the power to negotiate prices or refuse to make drugs available on the basis of price. That means they can't be easily pushed into paying more. And anyway, says Love, who was integral in bringing $1-per-day AIDS drugs to India in 2001, increasing foreign prices would have no bearing on what Americans pay. "Pharma charges as much as they can, everywhere they can."

> "THERE'S JUST NO RELATIONSHIP BETWEEN THE PRICE OF A DRUG AND WHAT IT COSTS TO MAKE."

He notes that many proposed methods of cutting drug costs would hurt patients in the U.S. and globally, whether through reduced access or diminished scientific scrutiny. His ideas, modeled on how foreign governments control costs, include threatening companies with the loss of their monopoly if prices aren't reduced.

Sebelius emphasizes that, despite the cost and review time, most new drugs emerge in the U.S. But she disputes claims by the pharmaceutical industry that restraining its ability to make a profit would slow innovation. She points out that the money spent on direct-to-consumer advertising of prescription drugs—which federal law made possible in the 1990s and is forbidden in most countries—is recouped through sales and leads Americans toward "purchasing the more expensive drug." Without government intervention, she says, market strategies to force down prices will not work. "They may be fine for companies," says Sebelius, "but they don't benefit consumers in the U.S. or anyplace else in the world."

In short, the changes that many people believe would reduce drug prices are the very ones not on the table—at least not publicly.

RON SACHS/GETTY

DRUG-ADDLED: Industry experts say Trump's proposals to eliminate rules for testing new drugs could put more ineffective drugs on the market.

GETTING BENT OVER BENTGRASS

USDA agrees to not regulate genetically modified grass on the loose in Oregon

THIS IS the story of an Oregon weed that nobody's high on. In two areas of the state, and in nearby Idaho, a genetically modified (GM), weedy grass has spread beyond fields where it was grown by contractors affiliated with Scotts Miracle-Gro, which developed it beginning in the 1990s in collaboration with Monsanto. Over more than a decade, Scotts has spent millions trying and failing to eradicate the plant, known as creeping bentgrass, which is genetically modified to be resistant to the herbicide Roundup.

In mid-January, the U.S. Department of Agriculture's Animal and Plant Health Inspection Service (APHIS) announced it would deregulate the plant. This means Scotts could be free to bring the grass to market, though it has vowed not to do so. It also means the company will no longer be legally required to pay to clean up the grass after 2017, though it has promised to do so.

The move has been opposed by a wide swath of individuals and organizations, and both the Oregon and Idaho departments of agriculture came out strongly against deregulation because of its potential impact on farmers and the environment. Oregon Senator Jeff Merkley also opposed it; spokeswoman Martina McLennan wrote in an email that "uncontained GM crops that escape into neighboring fields or waterways can pose a serious threat to the livelihoods of nearby farmers and ranchers, not to mention being a costly nuisance to the entire community."

Many local farmers fear the grass could get onto their land and taint their crops, which are tested for introduced genes before being sold to China, the European Union and other areas that are averse to genetically modified organisms. If that happens, farmers wouldn't be able to sell their crops internationally, which could be devastating, says Jerry Erstrom, a farmer in southeastern Oregon's Malheur County.

The grass first spread in 2003, in north-central Oregon's Jefferson County, when windstorms blew seeds as far as 13 miles beyond where they were planted and into such areas as the Crooked River National Grassland. In 2010, the grass jumped from fields in Idaho, where the company was growing it, onto land in Malheur County, across the Snake River and into Oregon.

It is now found in irrigation ditches in part of Malheur, where Monty Culbertson, manager of a large irrigation project in the county, says the grass is scattered on about 20 square miles. And it's spread over a similar-sized area in Jefferson County. Jim King, senior vice president of corporate affairs with Scotts, says that last spring the company located 400 locations where the grass is still growing in Malheur, though some local farmers dispute that number, saying it is higher. "We remain confident in the technology [meaning the grass], the safety of the technology, and we don't believe it will have an impact on the environment," King says.

Creeping bentgrass needs a steady supply of water, and for this reason it has been found almost exclusively in irrigation ditches. This presents a problem, however—only Roundup is approved to

BY
DOUGLAS MAIN
@Douglas_Main

MISSION CREEP: Scotts Miracle-Gro has spent millions trying and failing to eradicate creeping bentgrass, which is genetically modified to be resistant to the herbicide Roundup.

CAROLYN KASTER/AP

spray near water, and by design the grass is impervious to this chemical. To eradicate the plant, workers spray it with the herbicide glufosinate in the fall and spring when the ditches run dry.

Farmers and researchers are worried that the grass will spread, and the plant has already produced a seed bank in the soil that's nearly impossible to eliminate. The grass is also capable of hybridizing with at least two others species of grass and can pass on its herbicide-resistant genes. In addition, the seed can be spread by water and wind and by creatures like birds. "The likelihood to me that it's going to spread is highly probable," says Bruce MacBryde, a researcher who worked for APHIS from 2002 to 2009. MacBryde looked into the safety of GM creeping bentgrass when Scotts first approached the agency about deregulating it early in his tenure, before withdrawing the application. At that time, the agency didn't seemed disposed toward deregulation and fined Scotts $500,000 (the maximum allowable by law) in 2007 for the grass's escape in Jefferson County.

The U.S. Fish and Wildlife Service also came out against approving the grass back then, arguing that if it spread to Oregon's Willamette Valley, it could "jeopardize the continued existence" of two endangered plant species and modify the habitat of the endangered Fender's blue butterfly.

But something changed when Scotts applied again for deregulation, which was announced in early 2016. To many observers, that process moved suspiciously quickly. On September 30, APHIS announced the availability of a draft environmental impact statement on the petition, followed by a 45-day public comment period that ended November 14. These comments, most of which were critical of the petition, typically take many months to go through and consider, says Erstrom, who worked in government for more than 30 years.

> THE PLANT HAS ALREADY PRODUCED A SEED BANK IN THE SOIL THAT'S NEARLY IMPOSSIBLE TO ERADICATE.

On December 8, APHIS nevertheless said it had produced a final environmental impact statement, followed by a 30-day comment period. On January 17, it reported that it had come to a final decision: deregulation. "I've never seen an environmental impact statement go through in that period in that time," Erstrom says. "It's unheard of." He and others wonder about the degree to which corporate pressure may have influenced the decision.

Carol Mallory-Smith, a professor of weed science at Oregon State University, opposed the deregulation because of the grass's ability to spread and its potential agronomic impact. "There are growers...who had nothing to do with the introduction of this crop, were not going to gain from it, and yet now they are being asked to take responsibility for controlling it," she says. She worries about this happening with other GM plants or genes in the future. "What's the assurance that this isn't a trend?"

Culbertson, echoing many locals, expressed concern that Scotts won't continue to help clean up the creeping bentgrass because it won't be legally obligated to. In effect, it isn't being held responsible, he says. "I think personally, morally, that's wrong." N

WEEKEND

CULTURE, TRAVEL AND OTHER GOOD NEWS

THE PLACE TO BE

The Hirshhorn Museum, Washington, D.C.

An artist's reflections reach out to the world

YAYOI KUSAMA/DAVID ZWIRNER N.Y.

BRIGHT STAR: Yayoi Kusama's installation *The Souls of Millions of Light Years Away* is on show as part of three new exhibitions devoted to her work.

JAPAN'S BEST-KNOWN sculptor, painter and installation artist, Yayoi Kusama, is having a moment. Or to be more accurate, another moment. Kusama, who suffers from hallucinations and who, since 1977, has chosen to live in a Tokyo psychiatric hospital, first found success in Japan in the 1950s. She built on it in New York in the 1960s, painting naked people with her signature colored polka dots; disappeared from public view in the 1980s—and then bounded back, dressed as a witch and representing Japan with a room full of pumpkins at the Venice Biennale of 1993. Since then, she has shown at institutions from the Museum of Modern Art in New York to the Moderna Museet in Stockholm and, by 2014, was officially—at least in terms of museum attendance—the world's most popular artist. She turns 88 this year, but isn't slowing down: Three exhibitions of her work open in February.

To coincide with its 10th anniversary, the National Art Center in Tokyo is mounting a retrospective that brings together pieces from her early days in New York to the present. A solo show at the Hirshhorn Museum in Washington, D.C., will include six of her *Infinity Rooms*, a series of closed, mirrored installations, filled with thousands of colored LEDs and never-ending reflections, that feel like stepping into outer space. Meanwhile, Sotheby's auction house in London is holding its first major exhibition, "Traumata," a four-room show that will align the themes of psychological violence in Kusama's work with the same themes running through the art of the late Louise Bourgeois.

All three exhibitions showcase Kusama's signature motifs of mirrors, dots and pumpkins. Her repetitive themes are not chosen ad hoc: They are the result of a haunting obsession. This is an artist devoted to her inner life, creating works that reflect her deeply idiosyncratic, almost isolated way of perceiving the world, while still embracing the rest of us. Expect lines to form outside all these shows: Kusama is always worth the wait.—*FRANCESCA GAVIN* N

My Eternal Soul: NAC, Tokyo, Feb. 22 to May 22, NAC.JP; *Infinity Mirrors*: Hirshhorn, Washington, D.C., Feb. 23 to May 14, HIRSHHORN.SI.EDU; *Traumata*: Sotheby's, London, Feb. 23 to Apr. 13, SOTHEBYS.COM

INTERVIEW

Baas Note
Dutch designer Maarten Baas plays a different tune

SETTING YOUR degree show on fire is not, perhaps, a smart move. But that's exactly what the Dutch designer Maarten Baas did in 2002, at the end of his last year at the Netherlands' renowned Design Academy Eindhoven. For his degree-show collection, *Smoke*, Baas took a blowtorch to pieces of secondhand furniture—which included some serious Baroque antiques alongside flea market junk—and then painted the charred results with epoxy resin. Half usable pieces of furniture, half art, *Smoke* was an instant success with the industry: In 2003, the Dutch furniture manufacturer Moooi began producing versions of three chairs and a candelabra, which it still sells today. Before long Baas was torching grand pianos, high-back chairs by Charles Rennie Mackintosh and the classic "zigzag" chair by Gerrit Rietveld, and high-end dealers were keen to sell his limited editions. Baas has been breaking rules ever since—as his first major retrospective, which opens in February at the Groninger Museum in the Netherlands, will attest.

Despite being one of the design industry's most recognizable and collectible names—his pieces are featured in the collections of the Victoria & Albert Museum in London, the Museum of ▸

BY **TOM MORRIS**

BRONZE MEDAL: Baas, with a hand-welded chair from his new collection of art-as-furniture, *Carapace*.

BEN QUINTON FOR NEWSWEEK (2)

Modern Art in New York and the Rijksmuseum in Amsterdam—Baas, now 39, doesn't act obviously high status. Sitting in the sleek showroom of Carpenters Workshop Gallery, his London dealer, he talks quietly, with frequent pauses. He's wearing a slightly squishy-looking hat and his clothes—dark jacket, mustard waistcoat—are sharply styled but muted in color. You sense he'd rather be back in the studio welding metal than here, in a ritzy Mayfair gallery. And he wants to talk about beauty.

Like every Baas collection that followed it, *Smoke* began life as an intellectual concept—finding beauty in change, held in tension with permanence—that slowly took form in three dimensions. "Designers are supposed to make beautiful things," Baas says, "but what is beauty? There are two ways to consider what we believe is beautiful: perfection—like cars, which are very smooth and aerodynamic—or nature, where everything is in flux. In nature, nothing stays forever." By using resin to coat his burned pieces of furniture—their structures blackened, all surface decoration scorched away—Baas sought to first heighten, then preserve an imperfect, natural beauty. "[The collection] gave some fresh air to the design world, it was meant as a big statement on how everything has been done and how we need to make space for new things," he says.

Outside of his one-off projects—like the chair he designed as a response to the jailing of the Nobel Peace Prize winner Liu Xiaobo, or a folding travel seat he made for Louis Vuitton—Baas's career to date splits into four main collections. Superficially at least, it's tricky to identify any one style that unifies them. After *Smoke*, he produced *Clay* (2006), a series of stools, chairs and tables made of synthetic clay, layered over metal frames with frail-looking legs, and painted in bright, primary colors. Their wonky, almost infantile look was at odds with the forceful statement of *Smoke*. "I like that *Clay* came after *Smoke*," Baas says. "It's like burning the fields on which you are going to grow new plants."

After *Clay* came *Real Time*. He launched the collection in 2009 with a series of 12-hour videos of men in overalls alternately painting on, and then wiping out, the hands on a partially transparent clock face. The collection included grandfather-style clocks, with the video footage projected where the face would traditionally be. It reached its apogee in 2016, when Schiphol Airport in Amsterdam commissioned an outsize version of a *Real Time* clock-face to hang from the ceiling of the arrivals hall—featuring a ladder for the imaginary worker to climb up.

Carapace, Baas's newest collection, is named after the hard shell of a tortoise or beetle. Each piece—including an armchair, sideboard cabinet and desk—is made of many small bronze sheets welded together to form a surface that looks a little like it was made from studded Viking shields—though it was in fact inspired by 1950s refrigerators. Their hard, industrial nature conceals the craft behind them: Everything down to the hinges is handmade. "In a way, you could say that *Clay* is the very opposite of *Carapace*," Baas says, "because the *Clay* pieces looked very vulnerable and very exposed. [The two collections are] like the inside and the outside; both need each other."

This is typical of Baas: He talks evocatively about his work, and takes an overall view of his practice. Few other designers can or will do this—most are keener to discuss their latest pieces on the market, rather than previous work. It might be one of the reasons why Baas is so often labeled as an artist rather than a designer. Then too there is the fact that he generally sticks to producing limited-edition works instead of partnering up with major design brands. And although he still lives in the middle of the somewhat cliquey design community in Eindhoven, he seems happiest slightly outside it. Instead of having his studio in Eindhoven, he's set it up on a farm an hour's drive northwest of the city. "I like to be on the periphery. I like to stand outside and do my own thing there," he says. Aptly enough, his retrospective at the Groninger has the title "Hide and Seek."

> "I'VE OFTEN BEEN CALLED A REBEL... AND I DON'T AGREE WITH IT. A REBEL JUST STICKS UP HIS FINGER AND DOESN'T ADD ANYTHING."

BACK IN TOWN

In 2014, after a five-year break from showing at Salone del Mobile, the design world's annual summit in Milan, Baas returned with a solo exhibition. "Baas is in Town" was a circus—an actual circus,

FROM LEFT: ADRIEN MILLOT; BEN QUINTON FOR NEWSWEEK; CARPENTERS WORKSHOP GALLERY; CHRIS VAN KOEVERDEN; LASVIT

with funhouse mirrors and chairs presented on carousels to a trumpet fanfare. Baas made it clear that the display was a commentary on the nature of the design world, and the design world smiled; his show won that year's Milano Design Award for best impact. Passing judgement on the industry was a brave decision—Salone del Mobile is a place where one misjudged move can kill a career. But Baas likes to swerve. His limited-edition *Real Time* grandfather clocks cost thousands of euros, so you can imagine how pleased his high-end customers were when, in 2010, Baas released an app version. For the iPhone. Which cost €0.99. He smiles when I raise this. "I always like to throw some meat to the dogs," he says.

He is not entirely happy with being seen as the industry's non-conformist. "I've often been called a rebel or enfant terrible and I don't agree with it. A rebel just sticks up his finger and doesn't add anything," he says. "I try to make something. The burned furniture is not a middle finger, it's a genuine search for beauty; I hope that comes across." Nonetheless, at this year's Salone del Mobile in April, he'll be rebelling just a little bit—his next collection is a venture into the mass market. "I am working on a series of chairs that are mass produced," he says, "but every piece is slightly different."

The coming retrospective has offered an opportunity for Baas, after 15 years of being "slightly different," to reflect. What has that been like? "Strange. Because I'm still playing, I still feel like a child," he says. "I'm always curious for the next step." Whatever direction that takes him, the industry—and his customers—will be watching.

Maarten Baas: Run & Hide: Carpenters Workshop, London, to Mar.3; **CARPENTERSWORKSHOPGALLERY.COM**
Hide & Seek: Groninger Museum, Netherlands, Feb. 18 to Sept. 24; **GRONIGERMUSEUM.NL**

+
HARD SHELL: A *Carapace* chair and desk (*just seen*) in situ with their designer at his London dealer this January.

BUYING BAAS

He has designed rugs for Nodus, cutlery for Valerie Objects and ceramics for Pols Potten, but it's furniture that really defines Baas. Here are three pieces to consider.

Smoke Cabinet
A burned, limited-edition piece that's redolent of Baas's dry—or *droog*—Dutch sense of humor. (2013)
PoA; **CARPENTERSWORKSHOP-GALLERY.COM**

More or Less Chair
Steel-framed dining chairs for the Dutch industrial furniture brand Gispen, with a randomly cut plywood seat. (2011)
Set of two, €695 ($739) wholesale; **GISPEN.COM**

Das Pop Chandelier
Lights that make you laugh: hand-blown bulbs from glass specialists Lasvit, with almost comical, molded clay arms provided by Baas. (2014)
From £16,250 ($17,270); **LASVIT.COM**

+

SUPER MAN: Nicholas Hoult, photographed by Mario Testino in Los Angeles in 2013 for *VMAN* magazine.

COFFEE TABLE

Gender Balanced

THE PERUVIAN photographer Mario Testino believes that high fashion's perception of the male is too limited: "We're taught as we grow up that masculinity is defined by ways of standing, moving, speaking," he tells *Newsweek*. "But the most masculine people can cry or be metrosexual." Testino attempted to change perceptions in 2015, with the limited edition, hardback release of *Sir*, a collection of his work charting the evolution of masculinity in the past 30 years. Just 1,000 copies were printed, at €750 euros ($799) each; now he's released a new and more affordable paperback edition. "XL" the website warns, and it is that: 504 pages of male glamor that weigh in at about 9 pounds. But the book is worth hulking home: Testino's images can be both tender and revealing, and not just physically. Yes, there are naked bodies, but also souls on show, like a shot of young soldiers in Moscow that captures their moving combination of pride and bullish joy. His portraits of performers—Nicholas Hoult (*above*), Josh Hartnett, Michael Fassbender—are particularly playful. Why does he think that is? Because, he believes, of how actors can "take themselves lightly. When you're good, you're good; you don't need to pretend."—*TUFAYEL AHMED*

SIR
By Mario Testino
Taschen
Out now
€59.99 ($64)

BEDSIDE TABLE

Peter Bazalgette finds empathy on stage

"My favorite books tend to be those that make me laugh—*Catch-22*, by Joseph Heller, or *Joseph Andrews*, by Henry Fielding—as sharing in a joke is an empathetic activity. There is a lot in my book, about how empathy can strengthen society, that deals with laughter. But two of the works I discuss in it are about something darker: empathy as it relates to racism.

"One is *Uncle Tom's Cabin* by Harriet Beecher Stowe, which made the point to 19th-century Americans that black and white people were equal; it is credited with helping Abraham Lincoln get the support he needed to fight the Civil War.

"The other is Lolita Chakrabarti's 2012 play *Red Velvet*, about Ira Aldridge, a black actor whose casting as Othello in the early 19th century prompted widespread protest. It is about the failure of empathy, which could be said to be the origin of racism. Primatologist Frans de Waal, who und that some primates have a near-human ability to empathize, says that we've evolved to love people in our own circle and hate those outside it. So you could argue that the empathy instinct makes us loyal to our own communities, and hostile to others. Literature, on the other hand, can help us empathize with people who are different from us—that is truly civilizing."
—*AS TOLD TO ELIZA GRAY*

Peter Bazalgette's *The Empathy Instinct* is out now at £16.99 ($21).

MARIO TESTINO

IN THEIR WORDS

Read It and Weep
Yiyun Li turns despair to good ends

I ONCE, very briefly, met Yiyun Li. It was in the authors' yurt at the Edinburgh Book Festival in Scotland and I was struck by her beautiful smile. Among the writers rushing manically to their speaking and signing sessions, she looked serene. So the darkness in *Dear Friend, From My Life I Write to You in Your Life*, her new book of essays combining personal memoir with her reflections on literature, came as a shock.

Born in China in 1972, Li spent a year in the army before moving to the U.S. as an aspiring immunologist when she was 24. It was her discovery of the work of the Irish novelist William Trevor, and later her friendship with him, that persuaded her to abandon science for writing. She has since made her name as the author of two novels, *The Vagrants* and *Kinder Than Solitude*, and two short-story collections. Among the prizes she has won are the Guardian First Book Award and the Sunday Times Short Story Award, and *Granta* included her in its list of 21 Best of Young American Novelists in 2007. But while writing *Dear Friend*, she gave up fiction completely.

"I don't cry over my childhood," Li says, speaking on the phone from Iowa. "But I do notice where it's left me." For the two years before embarking on her latest book she was in and out of the hospital, overwhelmed by "the violent wish that I had never been born," battling depression and suicidal urges. "There is this emptiness in me," she writes in the opening essay of the book. "All the things in the world are not enough to drown out the voice of this emptiness that says: You are nothing."

Li doesn't dwell on the roots of her despair, but the book makes frequent dark references to her mother, whom she describes as "a family despot, unpredictable in both her callousness and her vulnerability." She refuses to have her work translated into Chinese, preferring that her mother not read it. Her parents, who still live in Beijing, do not know she has written this book.

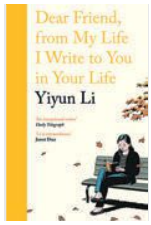
Now that Li is "better," I ask, can she consign her years of depression safely to the past? "Often people think that with experiences there's a before and after," she answers. "But I don't think 'after' is all that real. Clinically, I'll always have to watch out."

The purpose of these essays, she says, is to record her thinking, and to ask herself questions, though for some—like "is suffering selfish?"—she has found no answer. The essays have also helped her explore how her reading—of writers including Søren Kierkegaard, Stefan Zweig and Katherine Mansfield—has brought her consolation. While Li is adamant that books can't answer questions, she writes of the solace she found, in her bleakest moments, in the company of "dead people and imagined characters."

Is she apprehensive about the publication of this book—about making public her most private thoughts? Yes. But at the same time, she says, "I don't want people to feel they have to walk around me like I'm a fragile egg. I want to put them at their ease. I want them to understand that this is not really a book about myself and that if it speaks to them, it's because some of my thoughts are ones they have had too."

—*MAGGIE FERGUSSON* N

OUT OF THE DARK: Li, who grew up in Communist China in the 1970s, has struggled with depression—but "I don't cry over my childhood," she says.



DEAR FRIEND, FROM MY LIFE...
By Yiyun Li
Hamish Hamilton
Feb. 23
£14.99 ($19)

FROM TOP: HAMISH HAMILTON; PHILLIPPE MATSAS

THE SCREENING ROOM

It's Murder Out There

Reese Witherspoon leads a pack of killer moms in HBO's new comedy

ANYONE WHO thinks premium cable television is awash in testosterone should feel well disposed toward *Big Little Lies*, the new series from HBO. Adapted from Liane Moriarty's darkly funny best-seller from 2014 about competitive women and abusive marriages, it stars Nicole Kidman, Reese Witherspoon and Shailene Woodley as three mothers whose children all attend the same kindergarten in Monterey, California. Think of the show as a riposte to Tony Soprano, Walter White, Don Draper, or any other of the anti-heroes whose pockmarked psyches have held us in thrall these past few years. What the Bada Bing! strip club was to Tony and his boys, the kindergarten drop-off is to these power moms—an arena for alpha females staking out their territory in a bloody turf war.

Jane (Woodley) is the single mom, new to the area, whose son Ziggy is accused of bullying by another mom, Renata (Laura Dern). "Isn't there due process for a first grader?" asks Madeline (Witherspoon), a blond busybody in spike heels. But Ziggy's defenders and accusers are soon lining up—and, as frequent flash-forwards make clear, the battle will end with real bloodshed: a dead body at a school fundraiser. Meanwhile, a series of witnesses give to-camera interviews that act as a curtain-twitching Greek chorus. "Things never blow over when Madeline gets involved: They blow up," opines one of these commentators. "We still don't know the truth about Jane," offers another.

Are the battles of these women being set up as a cliquish comedy, or is the show intent on opening a genuine jugular? Moriarty's book had the feline purr of good gossip, but its grimmer elements felt depthless, the characters all froth and dark secrets with little in between. David E. Kelley, the veteran television writer and creator of *Ally McBeal* and *Boston Legal*, airlifts the action of the novel from suburban east-coast Australia to northern California, and it seems a smooth enough transition, acquiring extra resonance in the wake of a U.S. election decided by antipathy toward America's coastal elites. You want elites? In *Big Little Lies* you get to see them in their natural habitat, trading barbs between yoga sessions, wine tastings and board meetings. And yet something about Moriarty's plotting has not survived the transplant. Dern launches her accusation of bullying with little in the way of backup—there are no witnesses to Ziggy's alleged behavior—yet her claims proceed to cleave the school, and the community, wholly in two.

The characters inspire first our envy, then our pity, at intervals so precise you could time them with

1. HBO 2. HAYLEY MADDEN/REDFERNS/GETTY

MOTHER GOAD: Shailene Woodley, Reese Witherspoon and Nicole Kidman as the three alpha females in *Big Little Lies*.

a stopwatch. Woodley wears the pained, patient expression of a woman whose backstory will not show until episode 4, while Nicole Kidman is spaced out and Stepford Wife-ish as Celeste, who Instagrams perfectly curated images of her two young sons and hedge-fund husband—until we finally find out what's eating her, at which point the performance clicks.

Witherspoon, on the other hand, simply guns it in unstoppable comic-meddler mode. Her playground know-it-all is like an adult version of Tracy Flick, Witherspoon's high-school bossyboots from 1999's *Election*, and is a performance that seems to be in a different show from Kidman's wan victim. As Madeline, she collects grudges like moss: "I can't even keep track of the number of fights you start," says her second husband, Ed (Adam Scott). "Somebody ought to invent an app." By the end of the first few episodes, Madeline has a three-front war on her hands: with Dern; with the local council over a play featuring foulmouthed puppets; and with her first husband, a good-looking flake named Nathan (James Tupper). He's now onto his second wife (Zoe Kravitz), a lithe young yoga teacher who, according to Madeline, probably delivers "mint-flavored, organic blowjobs."

The fur flies, teeth are bared, but the question remains: Is the series driving at anthropological satire, or will it take the off-ramp to domestic abuse and murder? Witherspoon's performance, together with all those wagging tongues, suggest the former, but Kidman's drawn, haunted performance leans toward the latter. The first few episodes have the luxury of being able to punt. Director Jean-Marc Vallée fills the gap with lots of arty shots of sea foam and a feel-your-pain soundtrack including Stevie Nicks and Neil Young, but Kelley's script will eventually have to decide between the two. I hope he lets one of these momma grizzlies summon a real roar. —*TOM SHONE* N

Big Little Lies begins Feb. 19 on HBO, Feb. 20 on Showcase, and in March on Sky Atlantic.

RADAR

A new dawn for Sun Kil Moon

MARK KOZELEK (*below*) the American singer-songwriter who produces albums of dreamy, dolorous folk-rock under the name Sun Kil Moon, gives music journalists heartburn. They post anguished, hand-wringing articles with titles like "The Mark Kozelek Problem," "My Favorite Singer Is a Jerk" and "Mark Kozelek and Feminist Guilt: Why I Won't Boycott Sun Kil Moon." Their problem is reconciling Kozelek's sometimes loutish behavior—trolling rival band the War on Drugs as "beer-commercial lead-guitar shit," or telling audience members, "All you fucking hillbillies, shut the fuck up"—with the beauty of his music.

A Kozelek song is instantly recognizable. Nestled within a hypnotic, eddying weave of finger-plucked nylon-string guitar, Kozelek delivers stream-of-consciousness updates on whatever's been going on in his life recently. This might include his waning fitness as he approaches 50, a visit to see a sick friend in Ohio, looking after an aging cat or buying gas—all sung in a faraway falsetto that speaks to prairie lonesomeness and slackerish disaffection. Imagine Holden Caulfield fronting a garage band and you're close.

In "Sunshine in Chicago," the second track on *Among the Leaves* (2012), Kozelek looks back to his days as part of Red House Painters in the early 1990s, "when we had lots of female fans, and...they all were cute; now I just sign posters for guys in tennis shoes." Expect a similar mixture of minimalism, sourness and shaggy-dog song titles from his new double CD, *Common as Light and Love Are Red Valleys of Blood*. Written on tour, the songs capture Kozelek's reactions to events of the past year, from mass shootings and the U.S. election, to the passing of David Bowie and Muhammad Ali. The *annus horribilis* of 2016 may have found its elegist.—*TS* N

Common as Light and Love Are Red Valleys of Blood is out Feb. 28; CALDOVERDERECORDS.COM

"White Rhino, Namibia" Maroesjka Lavigne

BY
MATTHEW SWEET
@DrMatthewSweet

THE WHITE rhinoceros. Two and half tons of sinew and heft. Nature's armored personnel carrier, built for conflict on rough terrain. Unarguably weighty and muscular. Unarguably there.

This photograph, though, wants to contest the issue. It was taken two years ago in Etosha National Park, Namibia, by the Belgian photographer Maroesjka Lavigne. She thought it would probably take ages for any animal to reveal itself. But suddenly, there it was. *Ceratotherium simum*. A specimen of what conservationists like to call charismatic megafauna, 10 feet from her lens.

Lavigne wanted to make eye contact, but the rhino had ideas of its own. And when she pressed the shutter, the milky sky, the pale earth and the dry, white mud on the flanks of the beast conspired to produce a strange effect.

THIS RHINO IS DISAPPEARING. IT'S TURNING FROM A SOLID OBJECT INTO AN ABSTRACTION.

This rhino is disappearing before our eyes. It's turning from a solid object into an abstraction, a ghost.

Lavigne went to Namibia in search of nothingness. She found it in the dunes and the salt pans; a landscape still waiting for Vladimir and Estragon to turn up, never mind Godot. She was trying to recapture a sensation that she'd once experienced while photographing the volcanic wastes of Iceland. "A place where nature is more important than people," she says. "It's a very powerful feeling." It has become, she confesses, a kind of addiction.

This species of white rhino is in relatively robust health: 20,000 roam in the wild. But its northern cousin is at the vanishing point: Just three survive, on one reserve in Kenya, under 24-hour armed guard.

"Can you imagine," asks Lavigne, "a world without those animals?" It's scarily easy. Her picture seems to portend it. The image it brings to me is this: a child, in some distant future, finding this photograph in a book, because that's where animals live. Gazing upon its horns and haunches, the calcified ground, then turning the page, hoping to see a similar creature. A unicorn, perhaps.

Archival pigment print: 60 x 90 cm, or 75 x 110 cm, both editions of 6; PoA from ROBERTMANNGALLERY.COM

MAROESJKA LAVIGNE/ROBERT MANN GALLERY NEW YORK

RavenPack

INSIGHT FOR THE DATA-DRIVEN PROFESSIONAL

FINANCE
REPUTATION MANAGEMENT
DATA JOURNALISM

Newsweek EVENT SPECIAL

GET $10K

WORTH OF RAVENPACK DATA

JUST ASK US AT THE EVENT

ARTIFICIAL INTELLIGENCE & DATA SCIENCE

CAPITAL MARKETS

1st - 2nd March 2017
The Barbican, City of London
aidataconf.com

Self Service Data

CURATED DATA
Custom datasets you can download that track information about major issues of public interest

DATASET BUILDER
Select only the records you want for specific entities and filter by different analytics available over time

WEB APIs
Programmatically add RavenPack data into business services and proprietary applications

Visualization

CUSTOMIZE AND SHARE DASHBOARDS

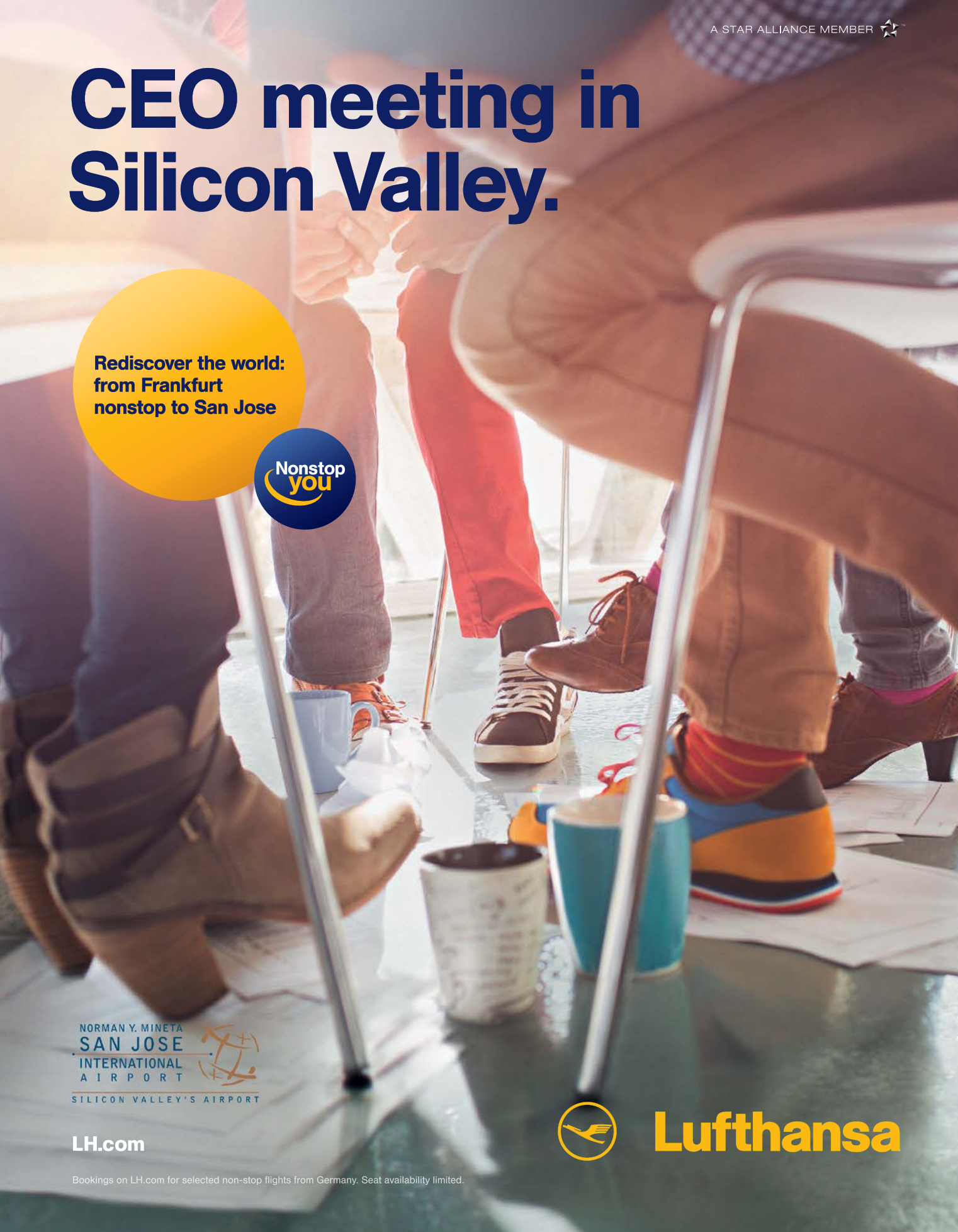
TRACK KEY EVENTS IN REAL-TIME

CHART SENTIMENT AND MEDIA BUZZ

BUILD VIEWS OF IMPORTANT ENTITIES

FIND TRENDING TOPICS

DRILL DOWN TO THE UNDERLYING CONTENT


A STAR ALLIANCE MEMBER
CEO meeting in Silicon Valley.
Rediscover the world: from Frankfurt nonstop to San Jose
Nonstop you
NORMAN Y. MINETA SAN JOSE INTERNATIONAL AIRPORT
SILICON VALLEY'S AIRPORT
LH.com
Lufthansa
Bookings on LH.com for selected non-stop flights from Germany. Seat availability limited.