October 2020

THE FUTURE OF SCIENCE IN AMERICA:

The Election Issue

leapsmag

SCIENCE & SOCIETY
THE ASPEN INSTITUTE

GOOD

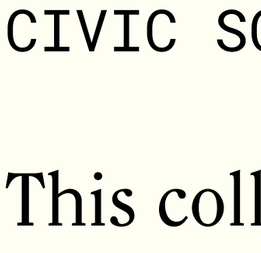
Editors' Note

We need science for our health. We need science for our society. And we need science for our nation. Science endeavors to rigorously investigate and understand the world and universe we inhabit, to generate the basis of new technologies to make our lives more efficient and enjoyable, and to create interventions that can help us live longer, healthier lives. Seventy-five years ago, Vannevar Bush, Director of the Office of Scientific Research and Development, speaking to both scientists and politicians, laid out a vision for what centralized, government-supported science could do "for the war against disease," "for the public welfare," and "for our national security." Indeed, through its federally funded agencies and research institutions, America has long been a leader in these ambitions.

To our dismay, we have witnessed an unfortunate move away from perceiving science as a force for universal progress in this country. Science has become political. Scientific data, evidence, and consensus are often contested, disparaged, and ignored. The fast-striking COVID-19 pandemic and the more slowly moving pandemic of climate change have brought into sharp focus how reliant we will be on science and public policy to work together to rescue us from crisis. Doing so will require cooperation between both political parties, as well as significant public trust in science as a beacon to light the path forward. The course we chart will depend on how America votes on November 3.

Three weeks from a hotly contested election, we present ***The Future of Science in America: The Election Issue***. This magazine explores convergences of science, politics, policy, and the election through 15 lenses: SCIENTISTS, PUBLIC OPINION, GOVERNMENT, TELEVISION, IMMIGRATION, RACIAL EQUALITY, EDUCATION, TECHNOLOGY, VOTERS, EXPERTS, SOCIAL MEDIA, YOUTH, SUPREME COURT, NAVAJO NATION, and CIVIC SCIENCE.

This collection offers wide-ranging perspectives on challenges and opportunities for science as we elect our next national and local leaders. We hope readers of various ages, races, and ideologies will discover how science can be a universal framework for understanding and solving shared problems, and how diverse stakeholders can ensure America stays a global frontrunner. This magazine aspires to promote roadmaps for science as a tool for health, a vehicle for progress, and a unifier of our nation.



Aaron F. Mertz, Ph.D.

Director
Aspen Institute
Science & Society Program

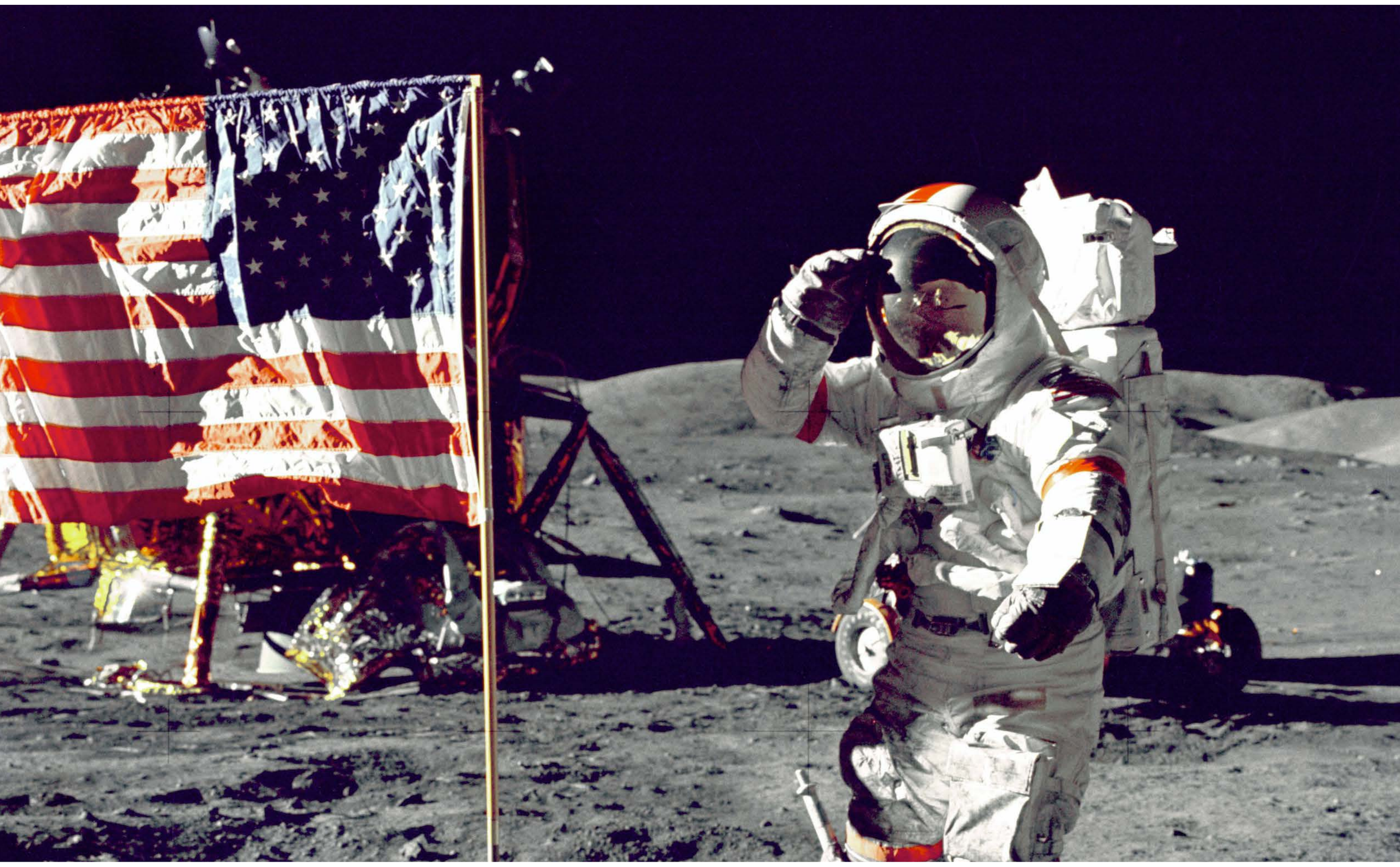
Kira Peikoff, M.S.

Editor-in-Chief
LeapsMag

Gabriel Reilich

Head of Content
GOOD Worldwide

The Future of Science in America: The Election Issue is supported by

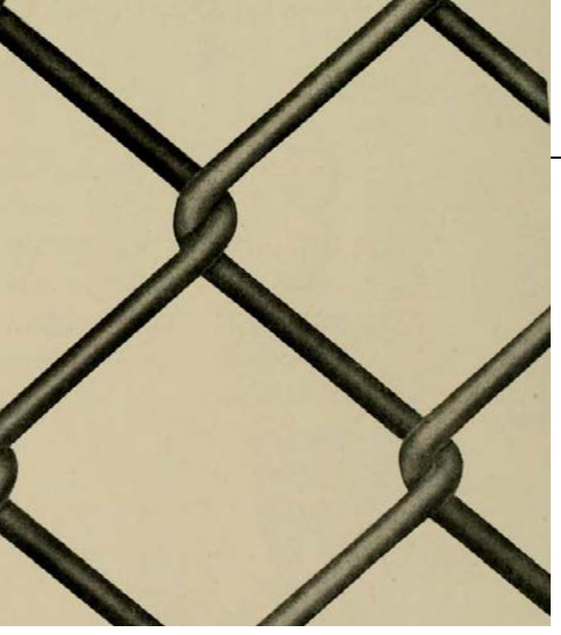


General support for ***LeapsMag*** comes from

General support for the **Aspen Institute Science & Society Program** comes from

Irma L. and Abram S. Croll Charitable Trust

Rick Stamberger

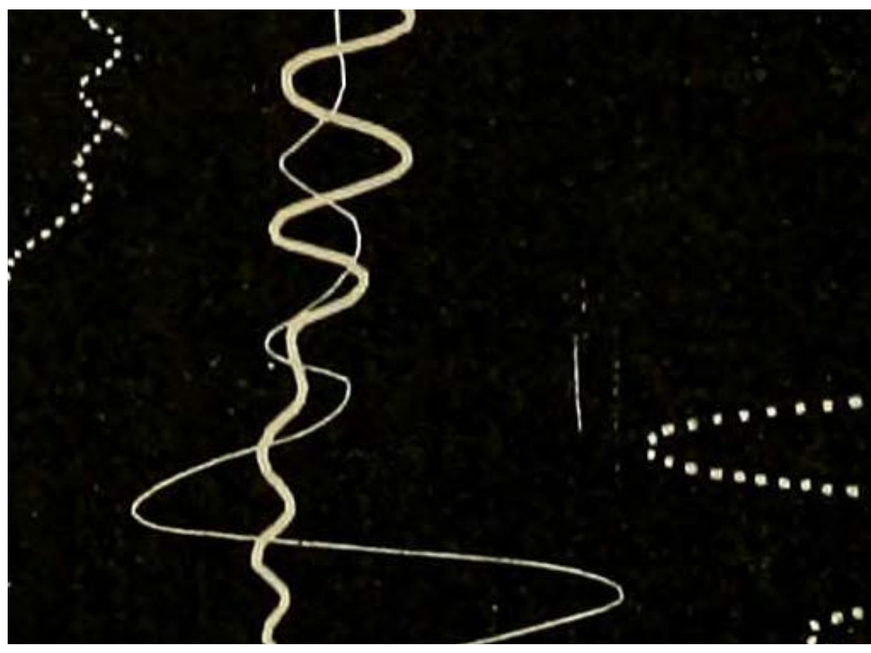


Editors
Aaron F. Mertz, Ph.D
Kira Peikoff, M.S
Gabriel Reilich

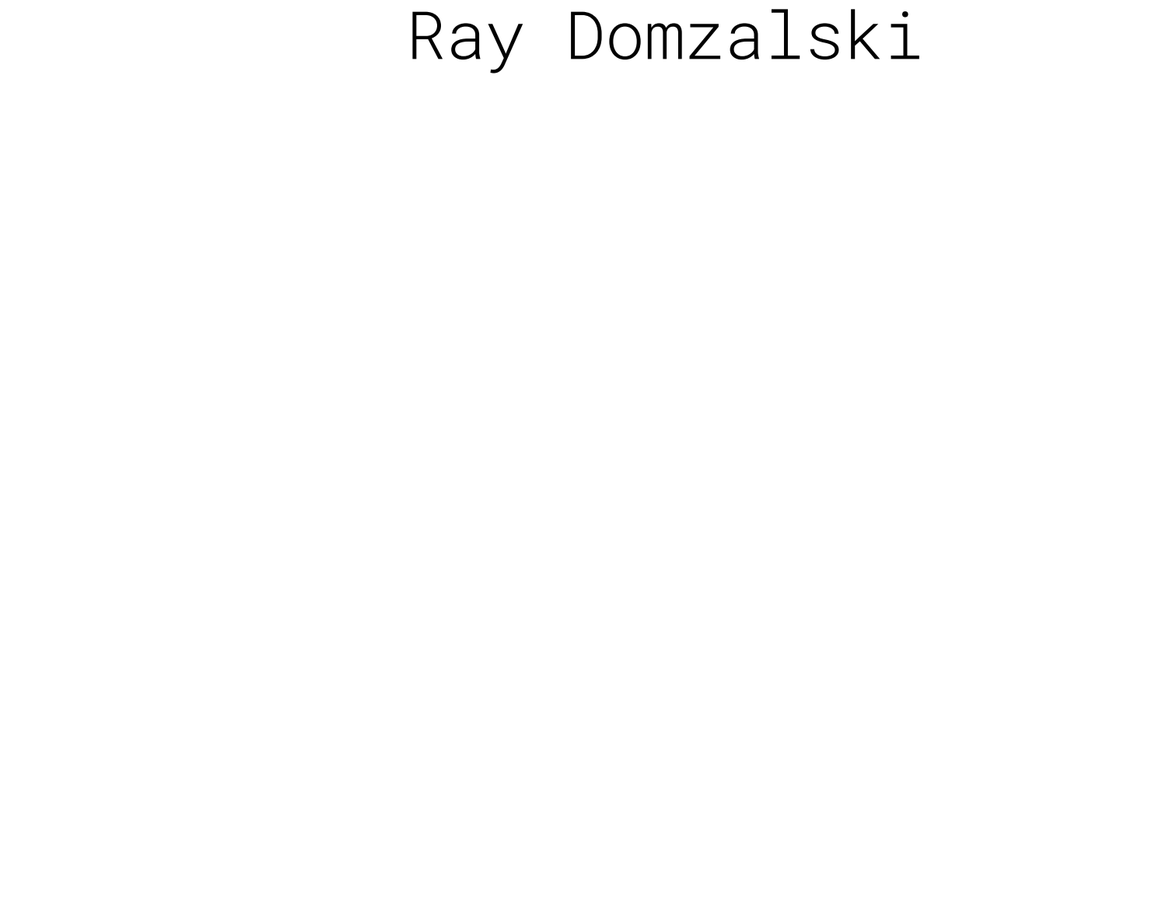
Art Direction & Graphic Design
Tatiana Cárdenas-Mejía

Writers
Annie Reneau
Daniel Cappello
Josephine Johnston
Research!America
Adam Seth Levine
Caroline Buckee
Adnaan Wasey
Aaron Mertz
Garance Choko
Jeanette DePatie
Elle Lett
Gleb Tsipursky
Linda Marsa
Lina Zeldovich

Front & Back Covers
Ray Domzalski



Visuals
Unsplash
Gabe Reilich
Flickr Commons
Aletheia.ai
Sunshine Velasco
Cassell Ferere
Keegan Rice
Navajo Technical University



For partnership opportunities please contact:

kira@goodinc.com
aaron.mertz@aspeninstitute.org

1 SCIENTISTS

Award-Winning Scientists Offer Advice to the Next President of the United States

2 PUBLIC OPINION

National Survey Reveals Americans' Most Important Scientific Priorities

3 GOVERNMENT

The Nation's Science and Health Agencies Face a Credibility Crisis: Can Their Reputations Be Restored?

4 TELEVISION

To Make Science Engaging, We Need a *Sesame Street* for Adults

5 IMMIGRATION

Immigrant Scientists—and America's Edge—Face a Moment of Truth This Election

6 RACIAL JUSTICE

Democratize the White Coat by Honoring Black, Indigenous, and People of Color in Science

7 EDUCATION

I'm a Black, Genderqueer Medical Student: Here's My Hard-Won Wisdom for Students and Educational Institutions

8 TECHNOLOGY

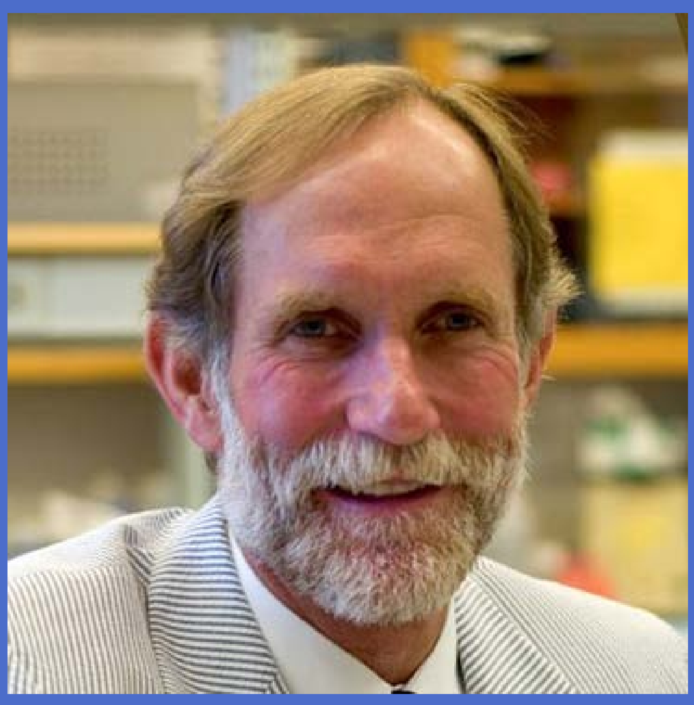
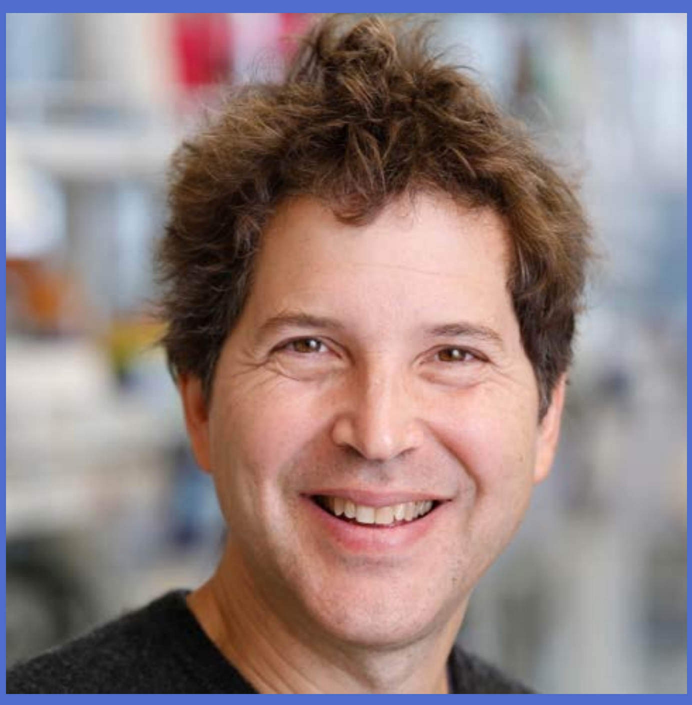
"Deep Fake" Video Technology Is Advancing Faster Than Our Policies Can Keep Up

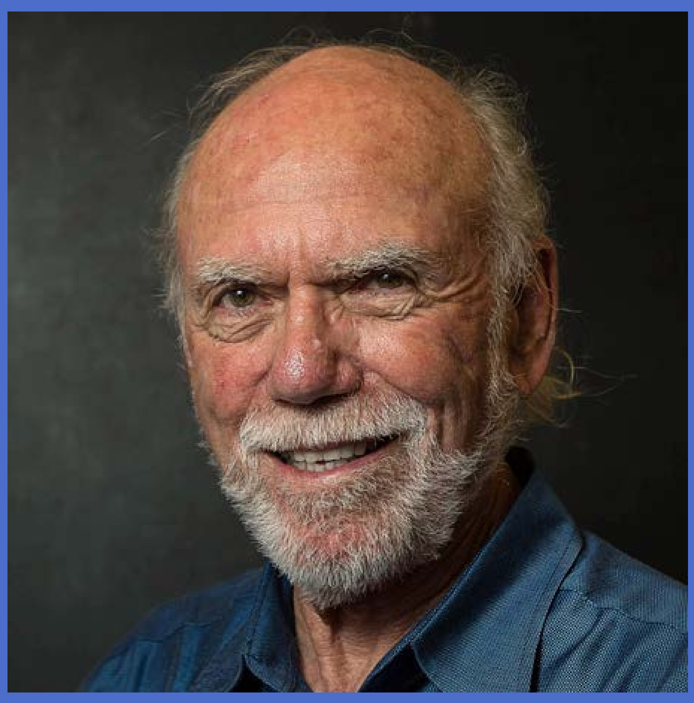
Scientists

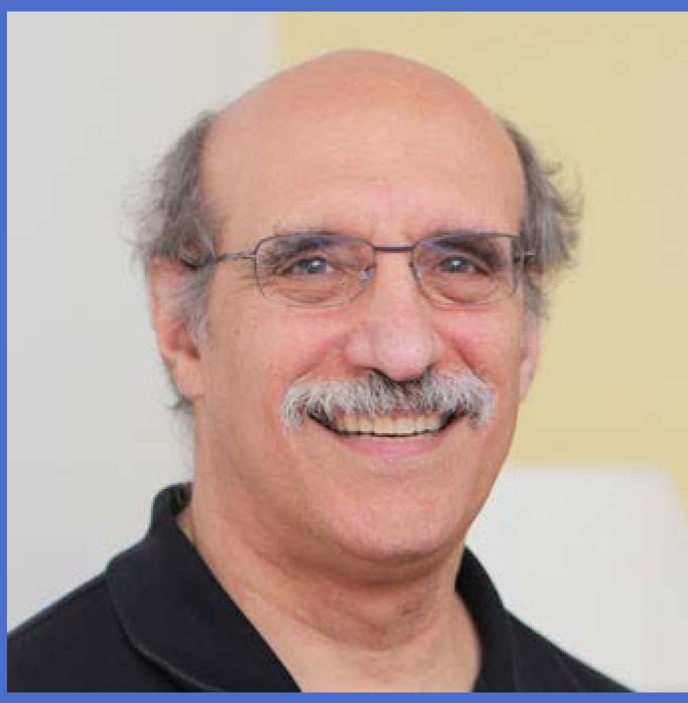
Award-Winning Scientists

Offer Advice to the Next President of the USA

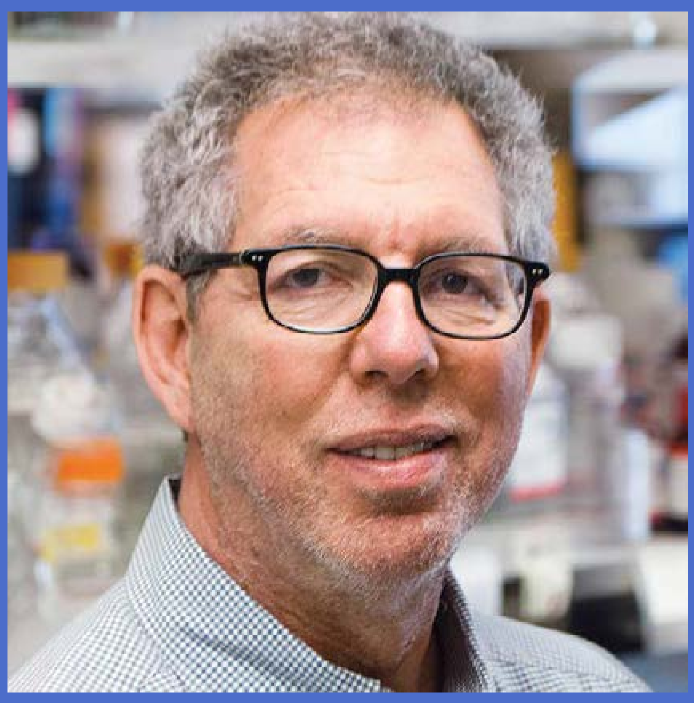
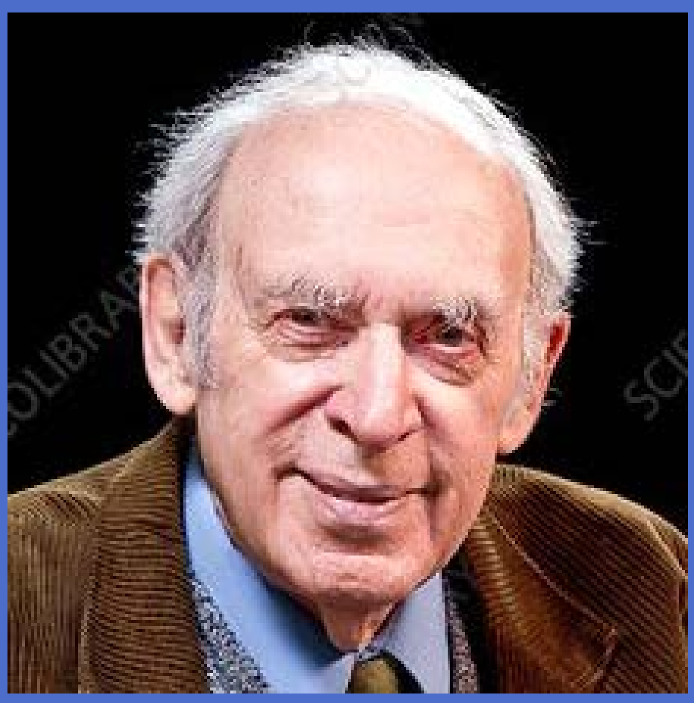
Compiled by Aaron F. Mertz

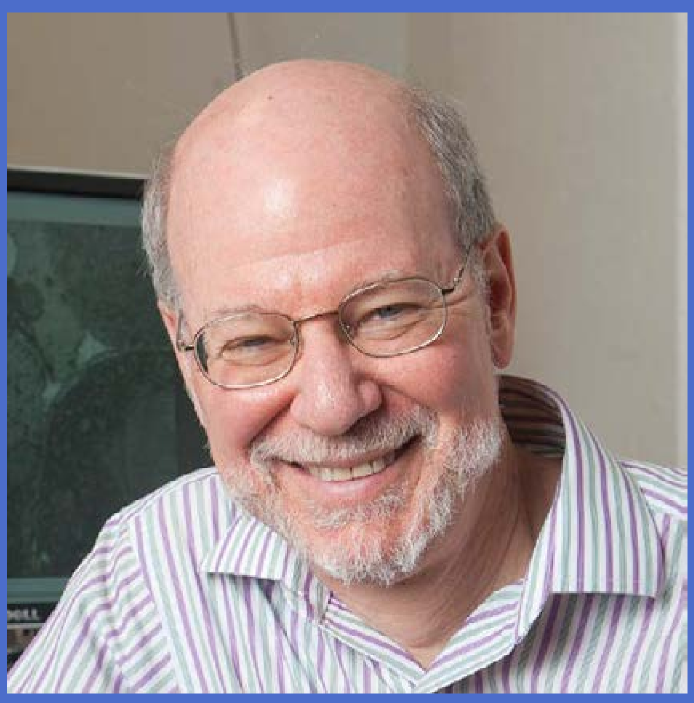
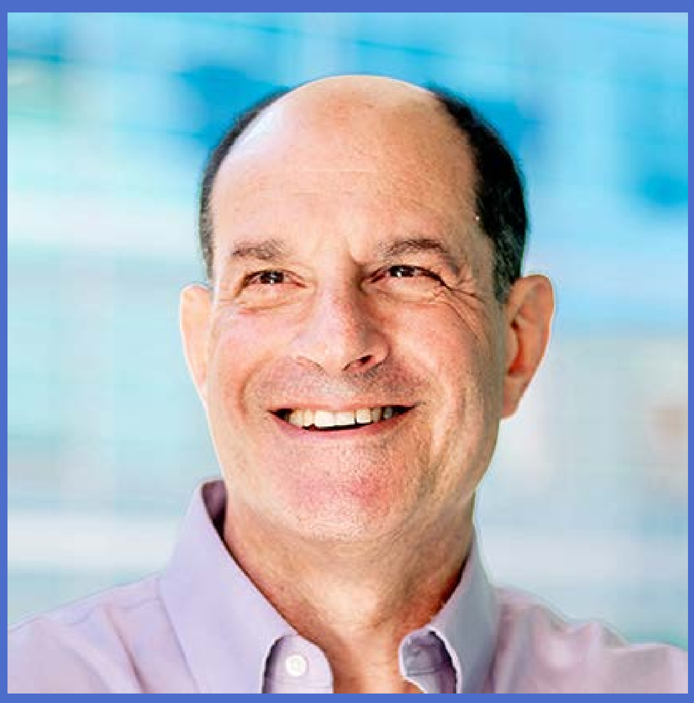







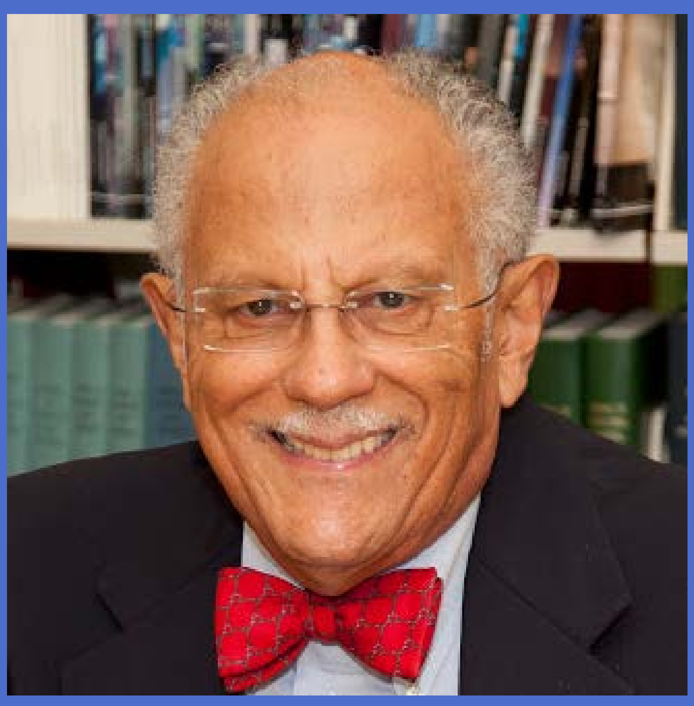



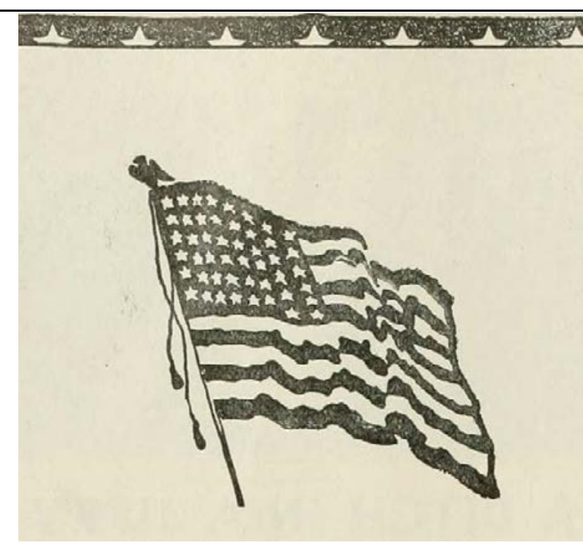








We invited Nobel Prize, National Medal of Science, and Breakthrough Prize Laureates working in America to offer advice to the next President on how to prioritize science and medicine in the next four years. Almost universally, these 28 letters underscore the importance of government support for basic or fundamental research to fuel long-term solutions to challenges like infectious diseases, climate change, and environmental preservation. Many of these scientists are immigrants to the United States and emphasize how they moved to this country for its educational and scientific opportunities, which recently have been threatened by changes in visa policies for students and researchers from overseas. Many respondents emphasize the importance of training opportunities for scientists from diverse backgrounds to ensure that America can continue to have one of the strongest, most creative scientific workforces in the world.

Featuring:

Peter Agre – David Baker – Cori Bargmann
Barry Barish – Jacqueline K. Barton – May Berenbaum
Martin Chalfie – Joanne Chory – Nina Fedoroff
Andrew Z. Fire – Joanna S. Fowler – Jeffrey Friedman
Jerome I. Friedman – Elaine Fuchs – H. Robert Horvitz
David Julius – William G. Kaelin, Jr. – Judith P. Klinman
J. Michael Kosterlitz – Adrian R. Krainer – John C. Mather
Geraldine Richmond – Adam Riess – Randy W. Schekman
George F. Smoot – Thomas C. Südhof
Warren M. Washington – Carl Wieman

KEEP READING

Compiled by Aaron F. Mertz

“The astonishing response of the scientific community to this pandemic shows how much science can contribute and what it can accomplish. The question for the future is: how can we maintain our momentum?”

– Martin Chalfie, Ph.D.,
2008 Nobel Laureate in Chemistry

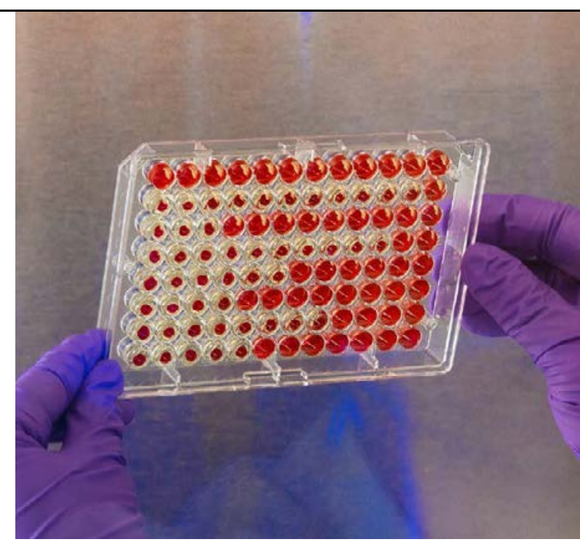
Public Opinion

National Survey Reveals Americans' Most Important Scientific Priorities

By Research!America

“A strong majority of both Republicans and Democrats agree that it’s time to commit to a major new initiative to assure the health, security, and prosperity for the nation.”

— Research!America



A recent survey commissioned by Research!America on behalf of a working group formed to assess America's commitment to science reveals that Americans – across party lines – view science as critically important to solving urgent problems facing our nation. The survey reveals a public mandate for action.

In the survey, overwhelming majorities say science benefits them personally, want America to maintain its global leadership in science, and agree the U.S. is at a critical point for committing to a major new initiative to assure health, security, and prosperity for the nation. One set of findings are of concern, however: Adults aged 18-29 appear to see science as less consequential to our nation's future.

In the remaining weeks before Election Day, readers can reach out to candidates to convey the survey results and urge them to support a science strong future for our nation. The survey clearly shows supporting science is a priority for voters. You can reach candidates through the nonpartisan Vote Science Strong site developed by Research!America and others with links to "tele-townhalls" and social media tools.

KEEP READING

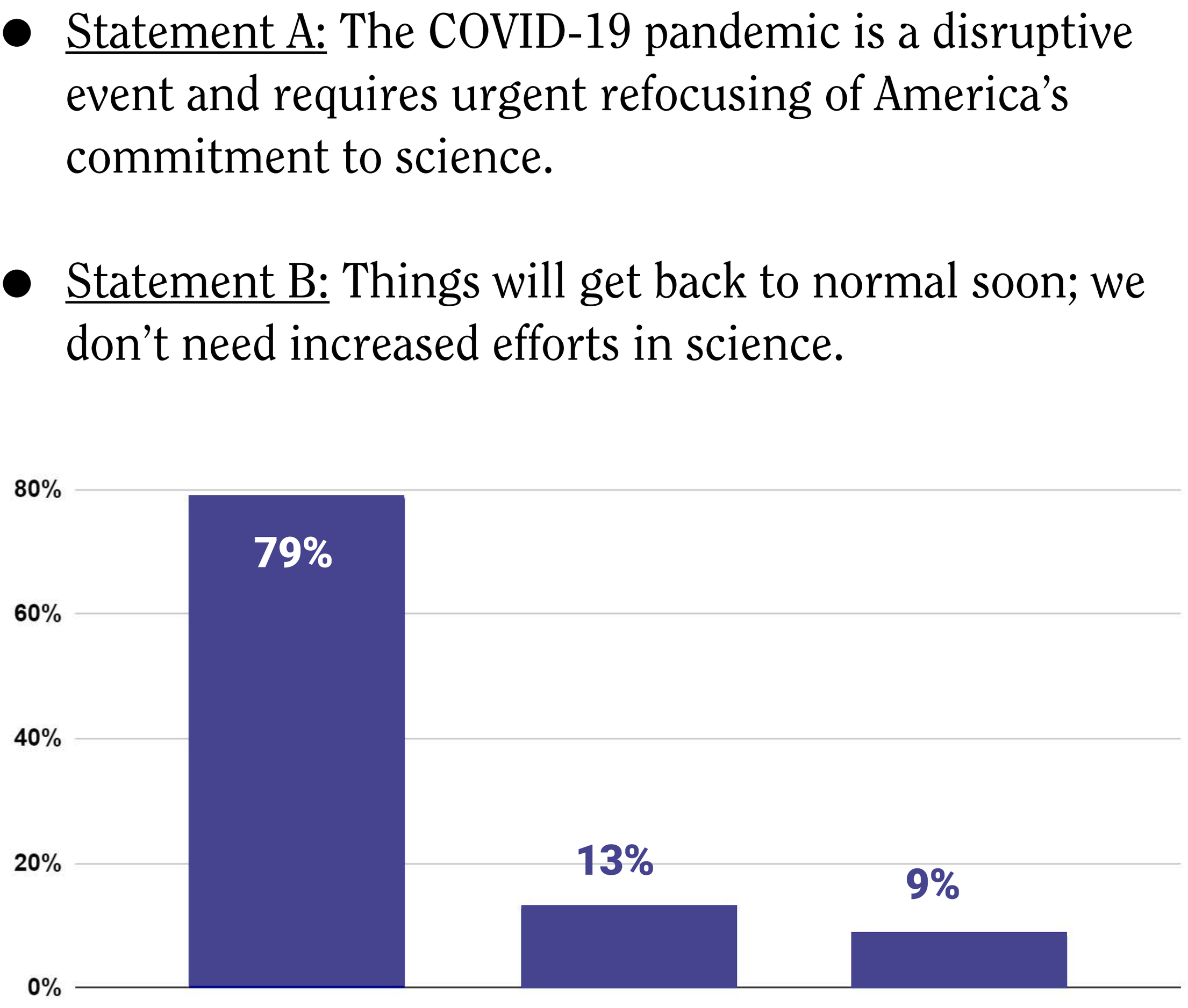
By Research!America

Four of Five Americans Agree: It's Time for an Urgent Refocus on Science

Which statement is closest to your view?

- Statement A: The COVID-19 pandemic is a disruptive event and requires urgent refocusing of America's commitment to science.

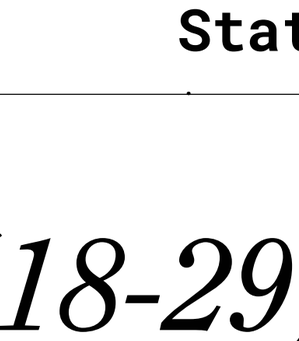
- Statement B: Things will get back to normal soon; we don't need increased efforts in science.



Young people (18-29) slightly less likely (67%) to choose "Statement A".

Chose "Statement A":


91%


75%

IND. 67%

Source: A Research!America survey of U.S. adults conducted in partnership with Zogby Analytics in August 2020.

Government

The Nation's Science and Health Agencies Face a Credibility Crisis: Can Their Reputations Be Restored?

By Linda Marsa

“We’re very frustrated. My colleagues within these agencies, the CDC rank and file, are keeping their heads down doing the best they can, and they hope to weather this storm.”

– Dr. William Schaffner,
Professor of Medicine,
Vanderbilt University
School of Medicine

It didn't have to be this way. More than 200,000 Americans dead, seven million infected, with numbers continuing to climb, an economy in shambles with millions out of work, hundreds of thousands of small businesses crushed with most of the country still under lockdown. And all with no end in sight. This catastrophic result is due in large part to the willful disregard of scientific evidence and of muzzling policy experts by the Trump White House, which has spent its entire time in office attacking science.

One of the few weapons we had to combat the spread of Covid-19—wearing face masks—has been politicized by the President, who transformed this simple public health precaution into a first amendment issue to rally his base. Dedicated public health officials like Dr. Anthony Fauci, the highly respected director of the National Institute of Allergies and Infectious Diseases, have received death threats, which have prompted many of them around the country to resign.

Over the summer, the Trump White House pressured the Centers for Disease Control, which is normally in charge of fighting epidemics, to downplay COVID risks among young people and encourage schools to reopen. And in late September, the CDC was forced to pull federal teams who were going door-to-door doing testing surveys in Minnesota because of multiple incidents of threats and abuse. This list goes on and on.

Still, while the Trump administration's COVID failures are the most visible—and deadly—the nation's entire federal science infrastructure has been undermined in ways large and small.

KEEP READING

By Linda Marsa


Comm.
400+

Television

To Make Science Engaging, We Need a *Sesame Street* for Adults

By Adnaan Wasey

“Here’s how we can design a new kind of television to make science engaging and accessible for a public that is all too often intimidated by it.” – Adnaan Wasey

In the mid-1960s, a documentary producer in New York City wondered if the addictive jingles, clever visuals, slogans, and repetition of television ads—the ones that were captivating young children of the time—could be harnessed for good. Over the course of three months, she interviewed educators, psychologists, and artists, and the result was a bonanza of ideas.

Perhaps a new TV show could teach children letters and numbers in short animated sequences? Perhaps adults and children could read together with puppets providing comic relief and prompting interaction from the audience? And because it would be broadcast through a device already in almost every home, perhaps this show could reach across socioeconomic divides and close an early education gap?

Soon after Joan Ganz Cooney shared her landmark report, "The Potential Uses of Television in Preschool Education," in 1966, she was prototyping show ideas, attracting funding from The Carnegie Corporation, The Ford Foundation, and The Corporation for Public Broadcasting, and co-founding the Children's Television Workshop with psychologist Lloyd Morrisett. And then, on November 10, 1969, informal learning was transformed forever with the premiere of *Sesame Street* on public television.

For its first season, *Sesame Street* won three Emmy Awards and a Peabody Award. Its star, Big Bird, landed on the cover of *Time Magazine*, which called the show "TV's gift to children." Fifty years later, it's hard to imagine an approach to informal preschool learning that *isn't Sesame Street*.

And that approach can be boiled down to one word: Entertainment.

KEEP READING

By Adnaan Wasey


A UNIVERSE OF STORIES
It's all g here.
Thu 08/08
07:43 PM

Immigration

Immigrant Scientists—and America's Edge—Face a Moment of Truth This Election

By Lina Zeldovich

“This election will decide if many of us will see the U.S. as the place to stay and work or whether we look at other countries.”

— Mehmet Doğan,
Physicist,
University of California
San Francisco

When COVID-19 cases were surging in New York City in early spring, Chitra Mohan, a postdoctoral fellow at Weill Cornell was overwhelmed with worry. But the pandemic was only part of her anxieties. Having come to the United States from India on a student visa that allowed her to work for a year after completing her degree, she had applied for a two-year extension, typically granted for those in STEM fields. But due to a clerical error—Mohan used an electronic signature instead of a handwritten one— her application was denied and she could no longer work in the United States.

"I was put on unpaid leave and I lost my apartment and my health insurance—and that was in the middle of COVID!" she says.

Meanwhile her skills were very much needed in those unprecedented times. A molecular biologist studying how DNA can repair itself, Mohan was trained in reverse transcription polymerase chain reaction or RT-PCR—a lab technique that detects pathogens and is used to diagnose COVID-19. Mohan wanted to volunteer at testing centers, but because she couldn't legally work in the U.S., she wasn't allowed to help either. She moved to her cousin's house, hired a lawyer, and tried to restore her work status.

KEEP READING

By Lina Zeldovich

Racial Justice

Democratize the White Coat by Honoring Black, Indigenous, and People of Color in Science

By Garance Choko and Aaron F. Mertz

“Integration does not mean equality if the space being integrated isn’t exuberantly down for the cause.”

— Augusta Uwamanzu-Nna,
Bioengineer,
Brigham and Women’s Hospital,
Harvard Medical School

Journalists, educators, and curators have responded to Black Lives Matter by highlighting the history and achievements of Black Americans in a variety of fields, including science. The movement has also sparked important demands to address longstanding scientific inequities such as lack of access to quality healthcare and the disproportionate impact of climate change and environmental pollution on neighborhoods of Black, Indigenous, and people of color (BIPOC). Making such improvements requires bringing BIPOC into science and into positions of leadership in laboratories, graduate schools, medical practices, and clinical trials. The moment is right to challenge scientific gatekeepers to respond to Black Lives Matter by widening the pathways that determine who becomes a scientist, a researcher, or a clinician.

The scientific workforce has long lacked diversity, which in turn discourages Black people from pursuing such careers. Causes include a dearth of mentors and role models, preconceived notions that science is exclusive to white males, and subpar STEM education. Across race, gender, class, ability, and all other dimensions that inform how an individual navigates the world, from the familial to the global level, seeing role models who resemble you impacts what you strive for and believe possible. As Marian Wright Edelman stated, "You can't be what you can't see"—a truth with ever-increasing resonance since the U.S. is projected to be minority-white by 2045.

KEEP READING

By Garance Choko and Aaron F. Mertz

Education

I’m a Black, Genderqueer Medical Student:

Here’s My Hard-Won Wisdom for Students and Educational Institutions

By Elle Lett

“I viewed my Blackness, queerness, and transness as inconveniences of identity that made my life harder. It was only as I went on to graduate and medical school that I saw how much strength comes from who I am.”

– Elle Lett
M.D–Ph.D. Student
University of Pennsylvania

In the last 12 years, I have earned degrees from Harvard College and Duke University and trained in an M.D.-Ph.D. program at the University of Pennsylvania. Through this process, I have assembled much educational privilege and can now speak with the authority that is conferred in these ivory towers. Along the way, as a Black, genderqueer, first-generation, low-income trainee, the systems of oppression that permeate American society—racism, transphobia, and classism, among others—coalesced in the microcosm of academia into a unique set of challenges that I had to navigate. I would like to share some of the lessons I have learned over the years in the format of advice for both Black, Indigenous, and other People of Color (BIPOC) and LGBTQ+ trainees as well as members of the education institutions that seek to serve them.

*To BIPOC and LGBTQ+ Trainees: **Who you are is an asset, not an obstacle.*** Throughout my undergraduate years, I viewed my background as something to *overcome*. I had to *overcome* the instances of implicit bias and overt discrimination I experienced in my classes and among my peers. I had to *overcome* the preconceived, racialized, limitations on my abilities that academic advisors projected onto me as they characterized my course load as too ambitious or declared me unfit for medical school. I had to *overcome* the lack of social capital that comes with being from a low-resourced rural community and learn all the idiosyncrasies of academia from how to write professional emails to how and when to solicit feedback. I viewed my Blackness, queerness, and transness as inconveniences of identity that made my life harder.

KEEP READING

By Elle Lett

Technology

“Deep Fake” Video Technology Is Advancing Faster Than Our Policies Can Keep Up

By Jeanette DePatie

“This type of fake media is a profound threat to our democracy. Democracy depends on well-informed citizens. When citizens can’t or won’t discern between real and fake news, the implications are huge.”

— Reid Blackman,
CEO of ethics consultancy VIRTUE

Alethea.ai sports a grid of faces smiling, blinking and looking about. Some are beautiful, some are oddly familiar, but all share one thing in common—they are fake.

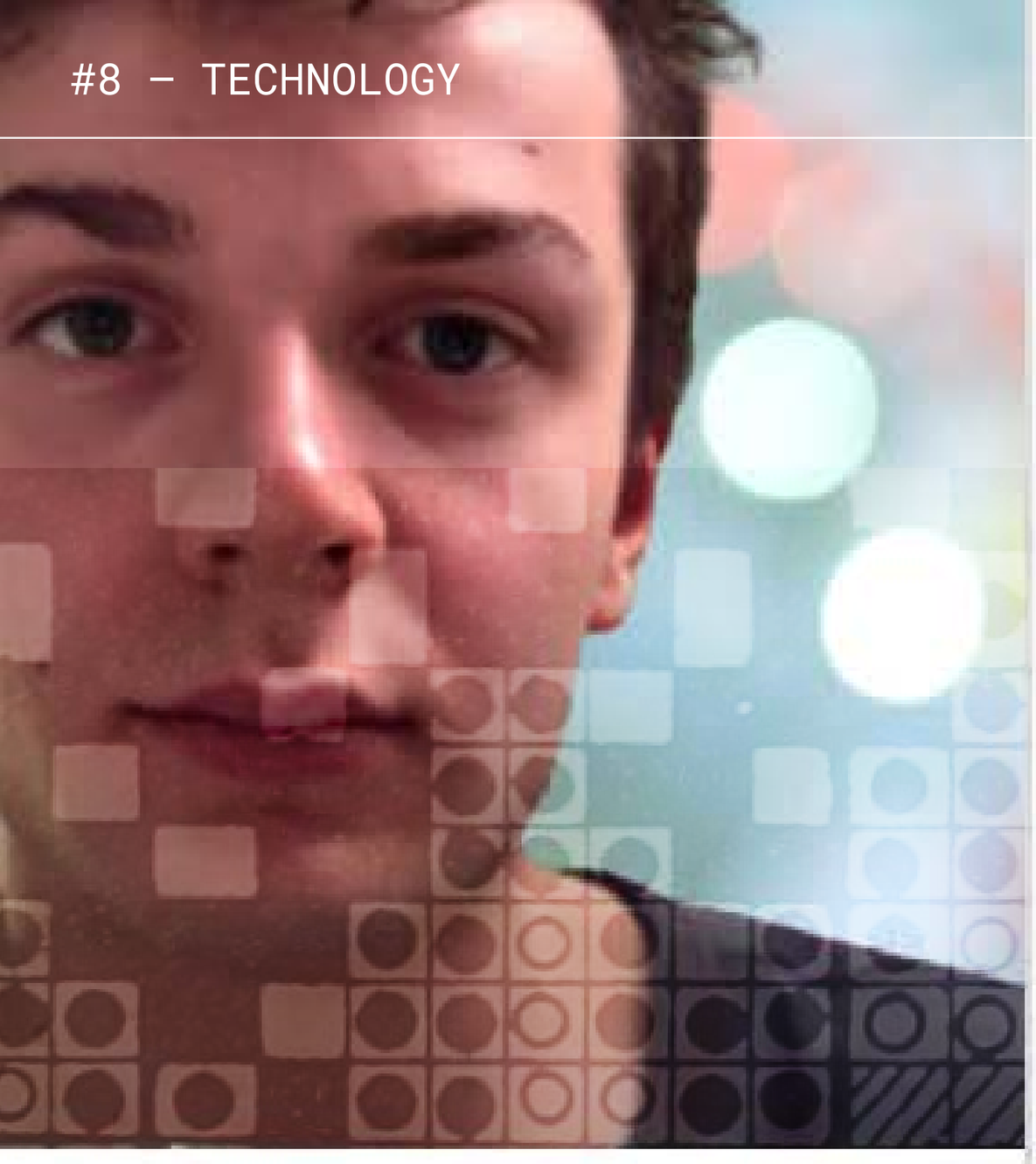
Alethea creates “synthetic media”— including digital faces customers can license saying anything they choose with any voice they choose. Companies can hire these photorealistic avatars to appear in explainer videos, advertisements, multimedia projects or any other applications they might dream up without running auditions or paying talent agents or actor fees. Licenses begin at a mere $99. Companies may also license digital avatars of real celebrities or hire mashups created from real celebrities including “Don Exotic” (a mashup of Donald Trump and Joe Exotic) or “Baby Obama” (a large-eared toddler that looks remarkably similar to a former U.S. President).

Naturally, in the midst of the COVID pandemic, the appeal is understandable. Rather than flying to a remote location to film a beer commercial, an actor can simply license their avatar to do the work for them. The question is—where and when this tech will cross the line between legitimately licensed and authorized synthetic media to deep fakes—synthetic videos designed to deceive the public for financial and political gain.

Deep fakes are not new. From written quotes that are manipulated and taken out of context to audio quotes that are spliced together to mean something other than originally intended, misrepresentation has been around for centuries. What is new is the technology that allows this sort of seamless and sophisticated deception to be brought to the world of video.

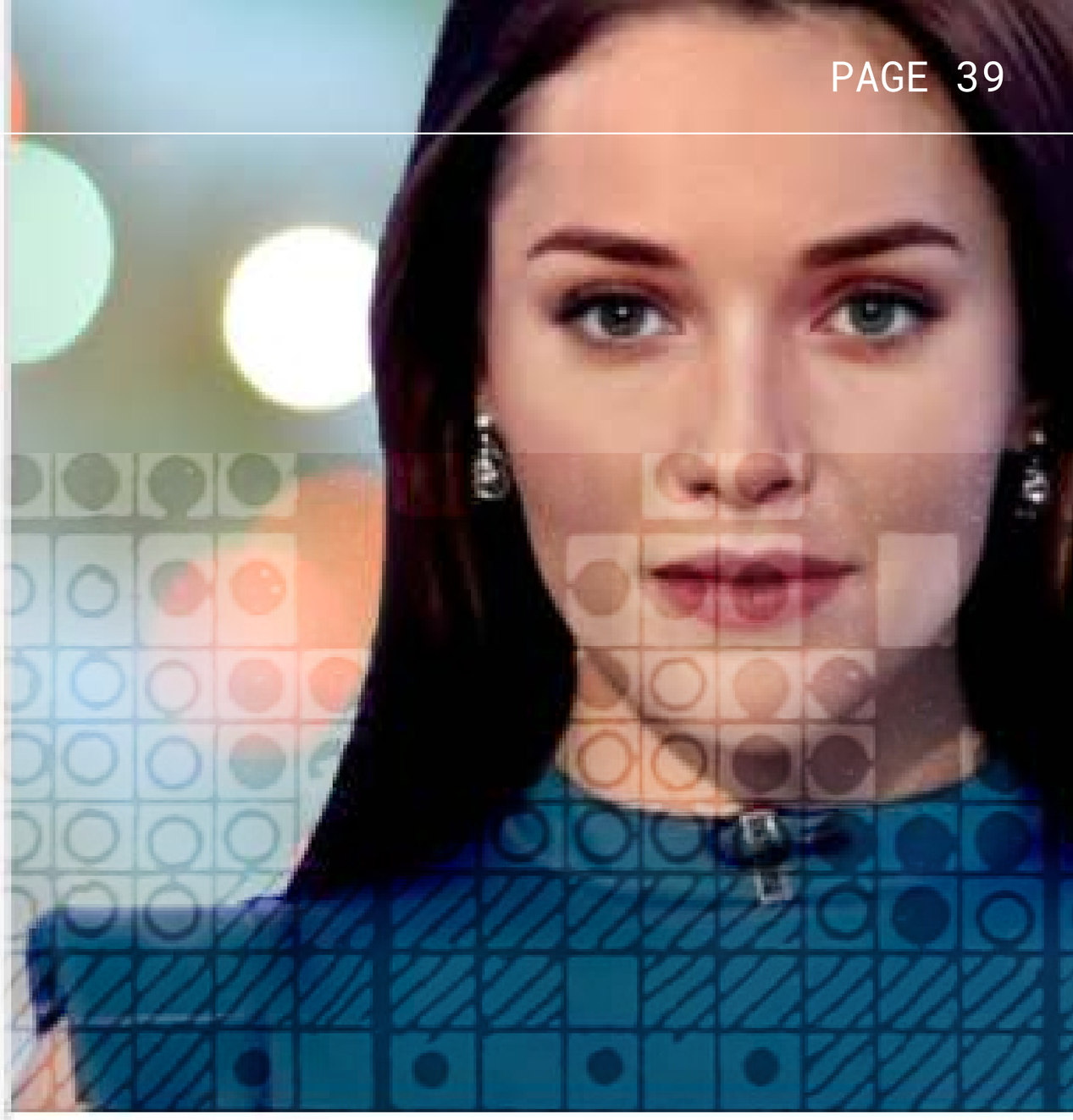
KEEP READING

By Jeanette DePatie



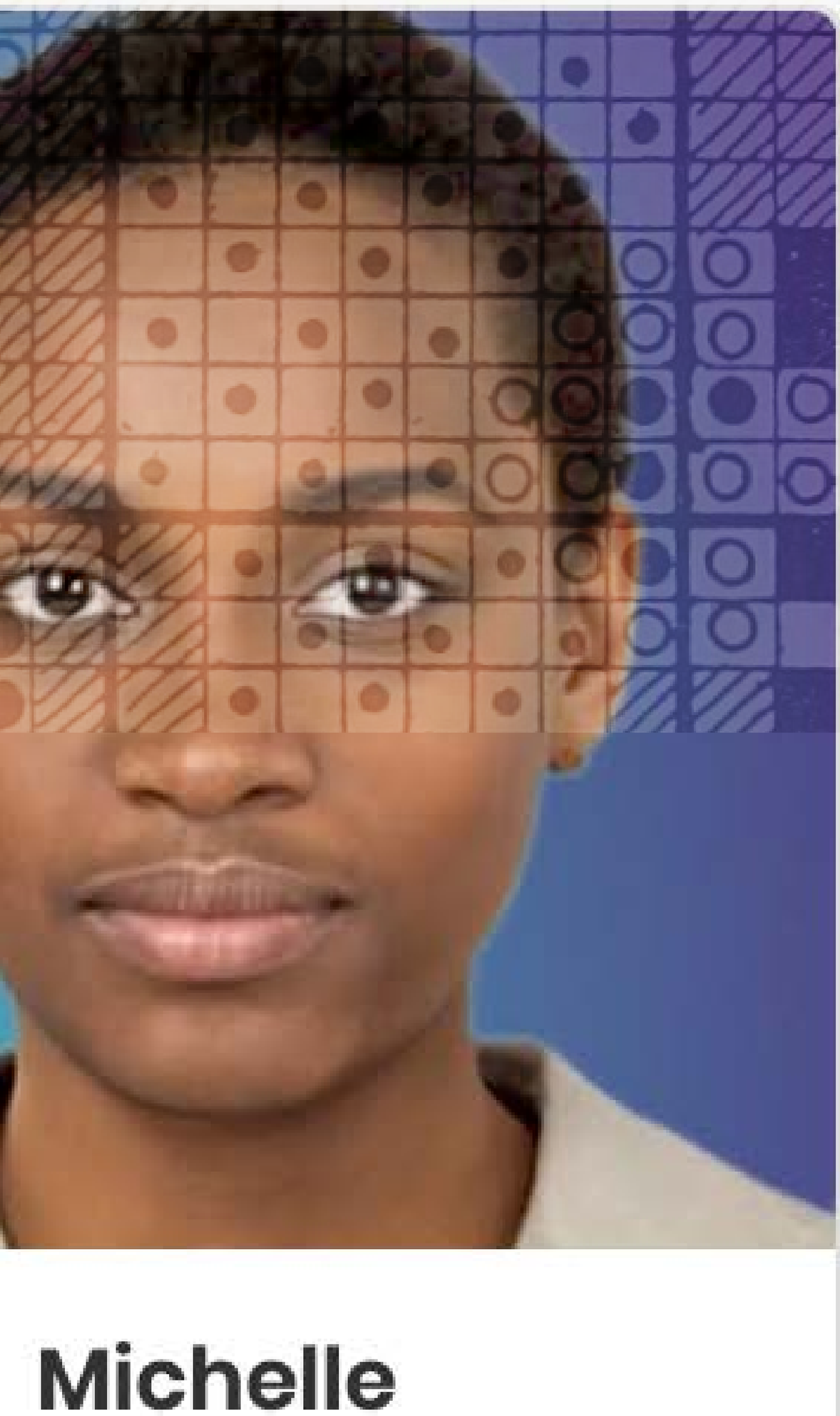
lex Masmej

ook Now - $99



Crypto News And

Book Now - $49



Michelle

ok Now - $399

Eduardo

Book Now - $39

Voters

Mind the (Vote) Gap:

Can We Get More STEM Students to the Polls?

By Randy Dotinga

“Just over a third of STEM college students surveyed said they voted, the lowest percentage of six subject areas.” – Randy Dotinga

By the numbers, American college students who major in STEM disciplines—science, technology, engineering, and math—aren't big on voting. In fact, recent research suggests they're the least likely group of students to head to the ballot box, even as American political leaders cast doubt on the very kinds of expertise those students are developing on campus.

Worried educators say it's time for a rethink of STEM education at the college level. Armed with success stories and model courses, educators are pushing for colleagues to add relevance to STEM education—and instill a sense of civic duty—by bringing the outside world in.

"It's a matter of what's in the curriculum, how faculty spend their time. There are opportunities to weave [policy] within the curriculum," said Nancy L. Thomas, director of Tufts University's Institute for Democracy & Higher Education.

The most recent student voting numbers come from the 2018 mid-term election, when a national Democratic wave brought voters to the polls. Just over a third of STEM college students surveyed said they voted, the lowest percentage of six subject areas, according to a report from the institute at Tufts. Students in the education, social sciences, and humanities fields had the highest voting rates at 47%, 41%, and 39%, respectively.

KEEP READING

By Randy Dotinga

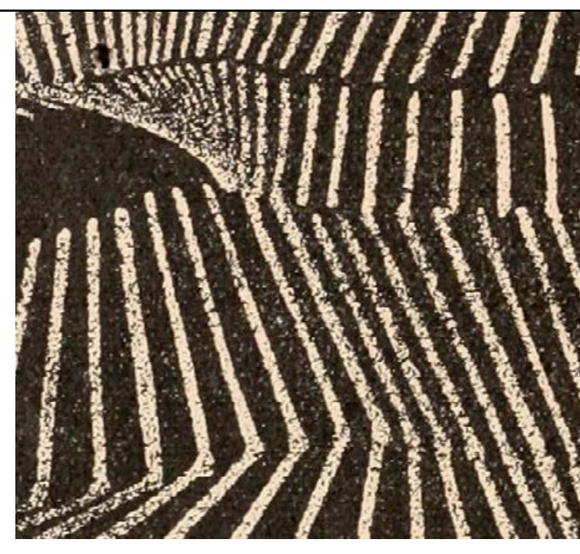
Experts

Who Qualifies as an "Expert" and How Can We Decide Who Is Trustworthy?

By Caroline Buckee

- Patima Tungpuchayakul

“I believe a willingness to say ‘I don’t know’ and to openly describe uncertainties, nuances, and limitations of science are all good signs.” — Caroline Buckee



Expertise is a slippery concept. Who has it, who claims it, and who attributes or yields it to whom is a culturally specific, sociological process. During the COVID-19 pandemic, we have witnessed a remarkable emergence of legitimate and not-so-legitimate scientists publicly claiming or being attributed to have academic expertise in *precisely* my field: infectious disease epidemiology. From any vantage point, it is clear that charlatans abound out there, garnering TV coverage and hundreds of thousands of Twitter followers based on loud opinions despite flimsy credentials. What is more interesting as an insider is the gradient of expertise beyond these obvious fakers.

A person's expertise is not a fixed attribute; it is a hierarchical trait defined relative to others. Despite my protestations, I am the go-to expert on every aspect of the pandemic to my family. To a reporter, I might do my best to answer a question about the immune response to SARS-CoV-2, noting that I'm not an immunologist. Among other academic scientists, my expertise is more well-defined as a subfield of epidemiology, and within that as a particular area within infectious disease epidemiology. There's a fractal quality to it; as you zoom in on a particular subject, a differentiation of expertise emerges among scientists who, from farther out, appear to be interchangeable.

KEEP READING

By Caroline Buckee

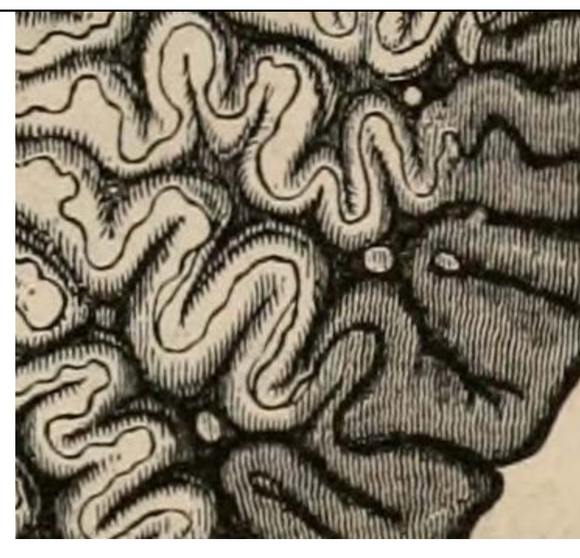
Social Media

Why Your Brain Falls for Misinformation—And How to Avoid It

By Gleb Tsipursky

“Each repetition widens and deepens the trail. Each time you hear the same thing, it feels more true, comfortable, and intuitive.”

— Gleb Tsipursky



Whenever you hear something repeated, it feels more true. In other words, repetition makes any statement seem more accurate. So anything you hear again will resonate more each time it's said.

Do you see what I did there? Each of the three sentences above conveyed the same message. Yet each time you read the next sentence, it felt more and more true. Cognitive neuroscientists and behavioral economists like myself call this the "illusory truth effect."

Go back and recall your experience reading the first sentence. It probably felt strange and disconcerting, perhaps with a note of resistance, as in "I don't believe things more if they're repeated!"

Reading the second sentence did not inspire such a strong reaction. Your reaction to the third sentence was tame by comparison.

Why? Because of a phenomenon called "cognitive fluency," meaning how easily we process information. Much of our vulnerability to deception in all areas of life—including to fake news and misinformation—revolves around cognitive fluency in one way or another. And unfortunately, such misinformation can swing major elections.

KEEP READING

By Gleb Tsipursky

Youth

Youth Climate Activists Expand Their Focus and Collaborate to Get Out the Vote

By Annie Reneau

“Our generation doesn’t look at the environment from a conservative vs. liberal angle. They look at it from an environmental angle. And to most young people, there’s a deep frustration at the lack of action on a lot of issues, but most importantly climate change, because everyone knows it’s a problem.”

– Benji Backer,
Founder,
American Conservative Coalition

For youth climate activists, Earth Day 2020 was going to be epic. Fueled by the global climate strikes that drew millions of young people into streets around the world in 2019, the holiday's historic 50th anniversary held the promise of unprecedented participation and enthusiasm.

Then the pandemic hit. When the ability to hold large gatherings came to a screeching halt in March, just a handful of weeks before Earth Day, events and marches were cancelled. Activists rallied as best they could and managed to pull off an impressive three-day livestream event online, but like everything we've experienced since COVID-19 arrived, it wasn't the same.

Add on climate-focused candidate Bernie Sanders dropping out of the U.S. presidential race in April, and the spring of 2020 was a tough time for youth climate activists. "We just really felt like there was this energy sucked out of the movement," says Katie Eder, 19-year-old founder and Executive Director of Future Coalition. "And there was a lot of cynicism around the election."

Isha Clarke, 17-year-old cofounder of Oakland's Youth vs. Apocalypse, says she was "upset" and "depressed" the following month in the wake of George Floyd's murder. "It was like, I'm already here, stuck inside because of COVID," she recalls, "which is already disproportionately killing Black people and Indigenous people. And it's putting people out of work and making frontline communities even more vulnerable. And I'm missing my senior year, and everything is just crazy—and then *this*."

KEEP READING

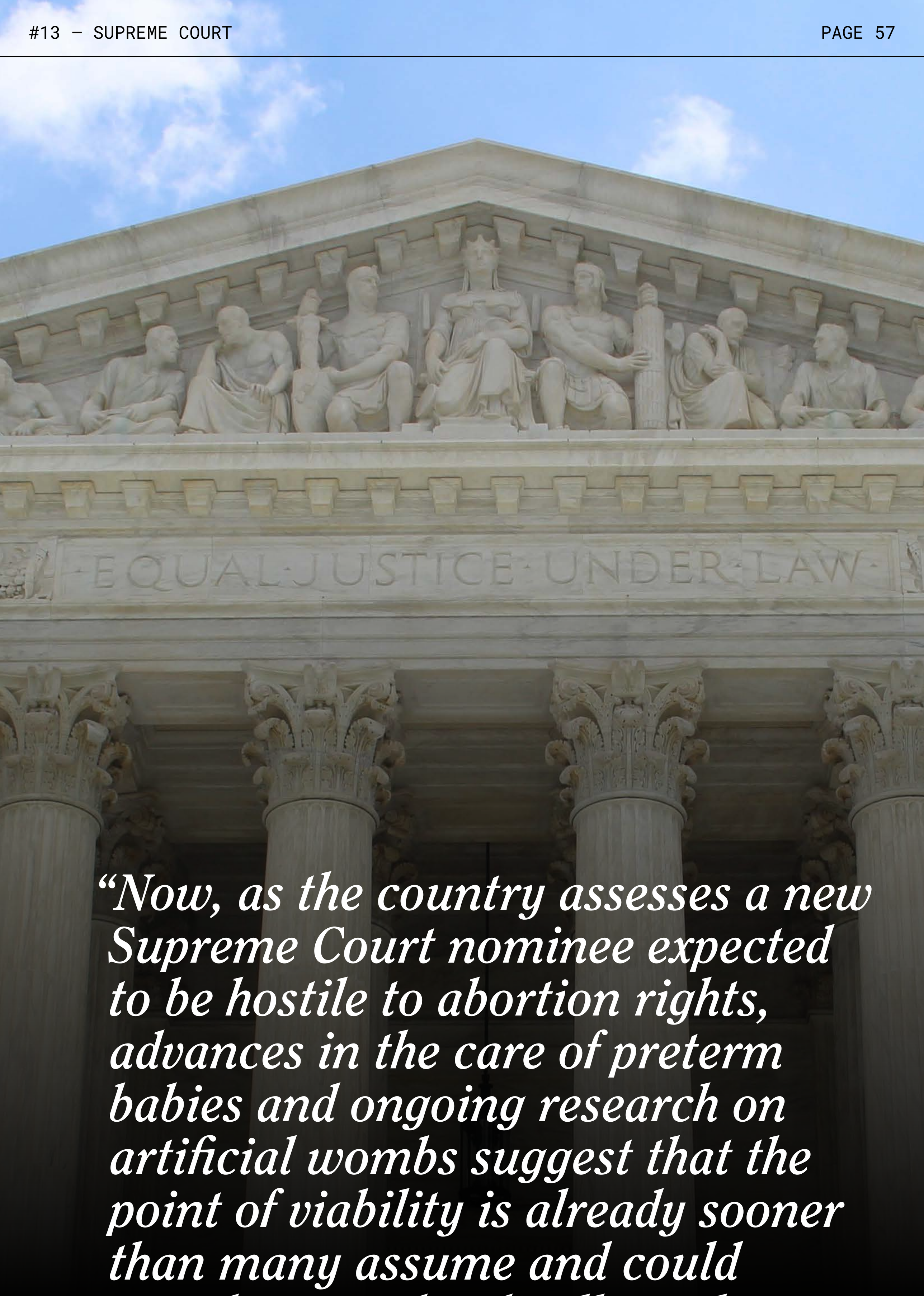
By Annie Reneau

Supreme Court

Abortions Before Fetal Viability Are Legal:

Might Science and a Change on the Supreme Court Undermine That?

By Josephine Johnston



“Now, as the country assesses a new Supreme Court nominee expected to be hostile to abortion rights, advances in the care of preterm babies and ongoing research on artificial wombs suggest that the point of viability is already sooner than many assume and could soon be moved radically earlier in gestation, potentially providing a legal basis for earlier and earlier abortion bans.”

— Josephine Johnston

Viability—the potential for a fetus to survive outside the womb—is a core dividing line in American law. For almost 60 years, the Supreme Court of the United States has struck down laws that ban all or most abortions, ruling that women's constitutional rights include choosing to end pregnancies before the point of viability. Once viability is reached, however, states have a "compelling interest" in protecting fetal life. At that point, states can choose to ban or significantly restrict later-term abortions provided states allow an exception to preserve the life or health of the mother.

This distinction between a fetus that could survive outside its mother's body, albeit with significant medical intervention, and one that could not, is at the heart of the court's landmark 1973 decision in *Roe v. Wade*. The framework of viability remains central to the country's abortion law today, even as some states have passed laws in the name of protecting women's health that significantly undermine *Roe*. Over the last 30 years, the Supreme Court has upheld these laws, which have the effect of restricting pre-viability abortion access, imposing mandatory waiting periods, requiring parental consent for minors, and placing restrictions on abortion providers.

KEEP READING

By Josephine Johnston

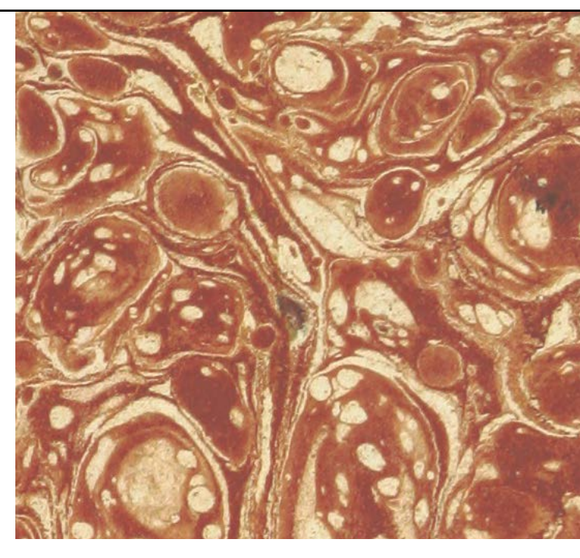
Navajo Nation

An Environmental Scientist and an Educator Highlight Navajo Efforts to Balance Tradition with Scientific Priorities

By Daniel Cappello

“One of the biggest challenges for us is how we make sure there’s a connection between the students who want to go into science and how they can continue to contribute to Navajo communities—to their parents’ and grandparents’ way of life.”

— Elmer Guy, Ph.D.
President,
Navajo Technical University



The global pandemic has made it impossible to ignore the stark disparities that exist within American communities. In the past months, journalists and public health experts have reminded us how longstanding systemic health and social inequities have put many people from racial and ethnic minority groups at increased risk of getting sick and dying from COVID-19. Still, the national dialogue noticeably lacks a general awareness of Indigenous people's needs and priorities, especially in the scientific realm.

To learn more about some of the issues facing often-overlooked Indigenous tribal communities, we sought the perspectives of two members of the Navajo Nation: Nonabah Lane, Director of Development of New Mexico Projects at Navajo Power and the founder of Navajo Ethno-Agriculture, a farm that teaches Navajo culture through traditional farming and bilingual education; and Elmer Guy, Ph.D., president of Navajo Technical University, the first university to be established forty years ago on the Navajo Nation that today stands as a premier institution of higher education focusing on a balance between science and technology and traditional culture.

KEEP READING

By Daniel Cappello

Civic Science

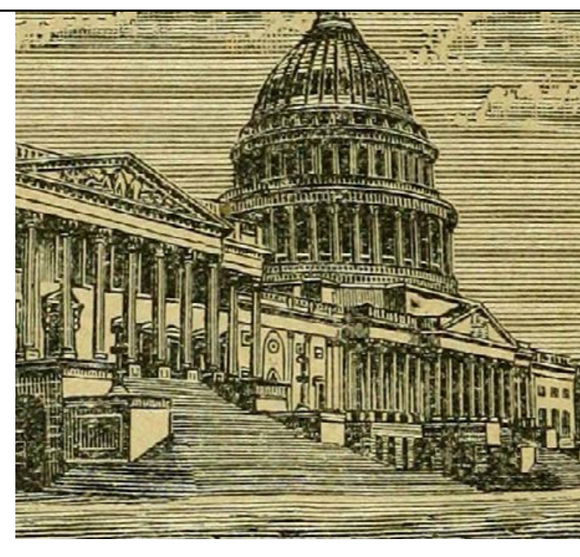
Want to Strengthen American Democracy?

The Science of Collaboration Can Help

By Adam Seth Levine

“When do diverse individuals choose to work together in the first place? How can we design institutions that encourage beneficial collaborations to arise and thrive? And what outcomes can occur?”

— Adam Seth Levine



American politics has no shortage of ailments. Many do not feel like their voice matters amid the money and influence amassed by corporations and wealthy donors. Many doubt whether elected officials and bureaucrats can or even want to effectively solve problems and respond to citizens' needs. Many feel divided both physically and psychologically, and uncomfortable (if not scared) at the prospect of building new connections across lines of difference.

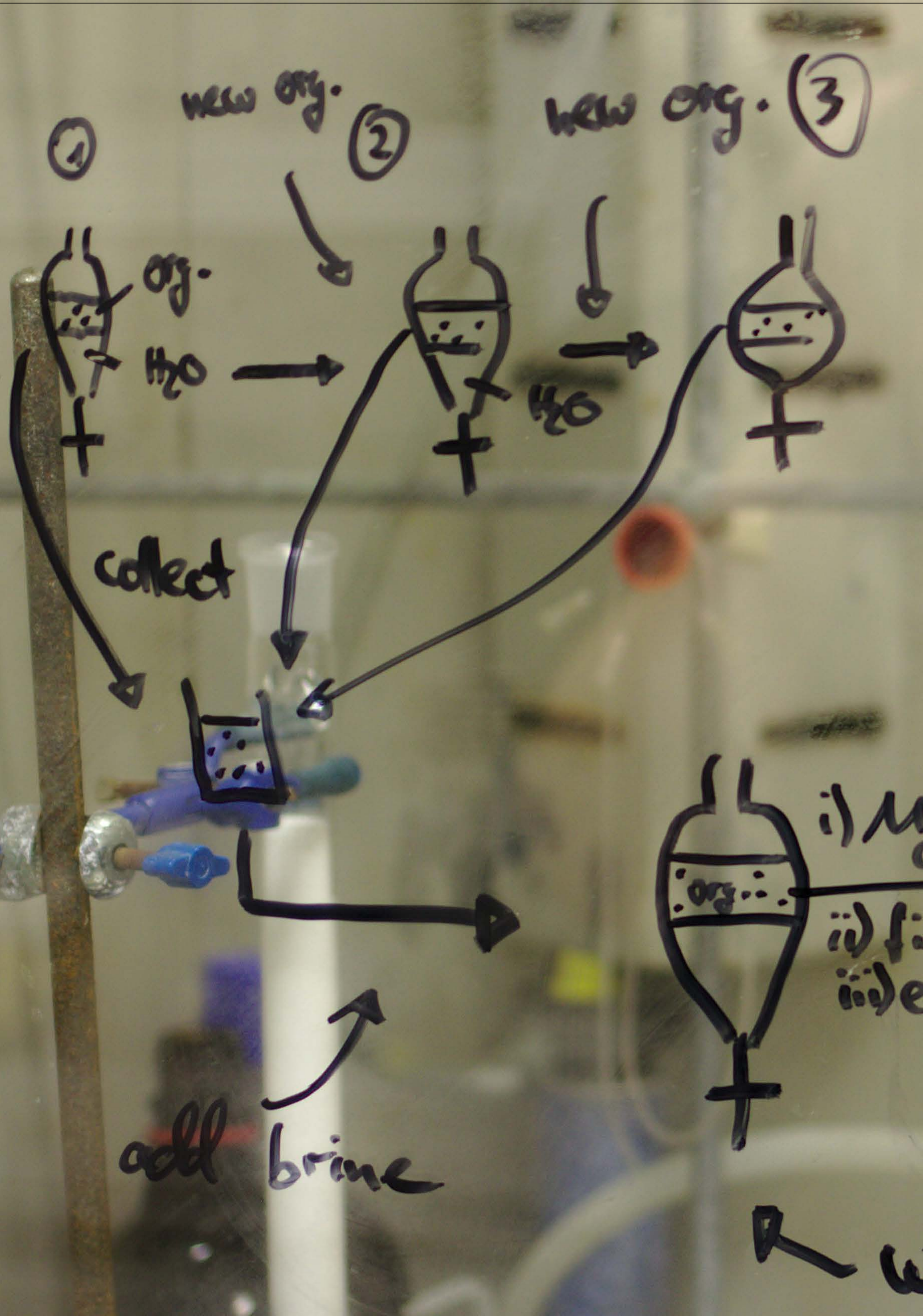
Strengthening American democracy requires countering these trends. New collaborations between university researchers and community leaders such as elected officials, organizers, and nonprofit directors can help. These collaborations can entail everything from informal exchanges to co-led projects.

But there's a catch. They require that people with diverse forms of knowledge and lived experience, who are often strangers, choose to engage with one another. We know that strangers often remain strangers.

That's why a science of collaboration that centers the inception question is vital: When do diverse individuals choose to work together in the first place? How can we design institutions that encourage beneficial collaborations to arise and thrive? And what outcomes can occur?

KEEP READING

By Adam Seth Levine


1
new org.
2
org.
H2O
collect
new org.
3
H2O
add brine

f(1x)=26+c²(2/3×2x)
H³
Cl
COHI
R
R
NH3
z²+1E=0.005
(2/3×2x
NH3
membran
protein
R2
R1
OH
a