

WINTER 2018-19

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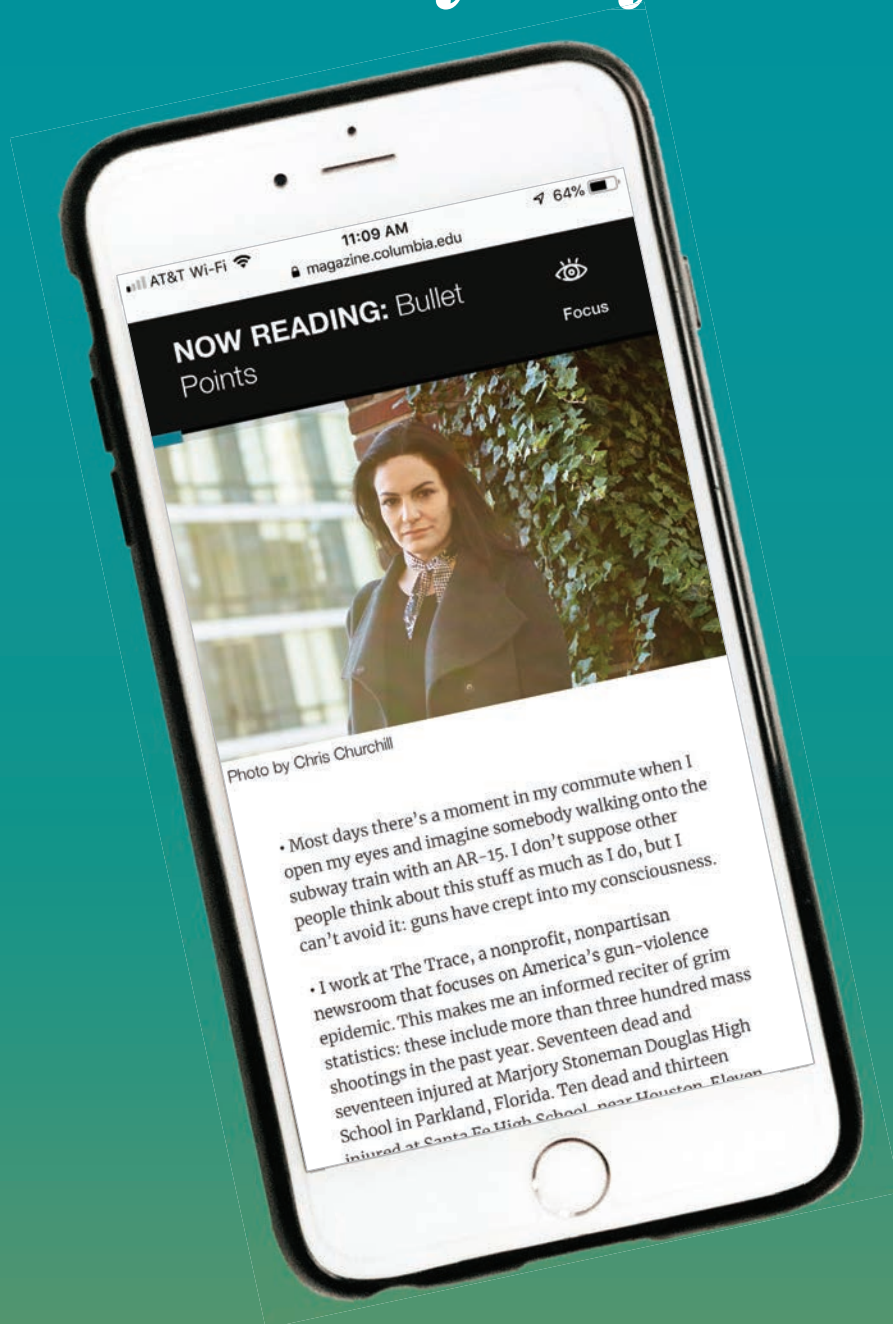
MAGAZINE

COLUMBIA MAGAZINE



WINTER 2018-19

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 **COLUMBIA UNIVERSITY**
IN THE CITY OF NEW YORK



THE VOTES ARE IN

Your Fall 2018 cover story (“Ballot Breakdown”) poses the question, “Is the US electoral system coming apart at the seams?” The answer is no. The founders of our government were amazingly wise, informed of history, and prescient. Their creation of the Electoral College was brilliant, contrary to Ester Fuchs’s claim.

Our federal republic is a union of sovereign states that voluntarily joined together. Most have small populations compared to California, Texas, Florida, and New York. If the Electoral College did not exist, a person might become president just by campaigning in the major population centers, ignoring at least half the states. This would disenfranchise tens of millions, undoubtedly leading to the unraveling of the United States of America.

And contrary to the message of your article:

1) voter-ID laws are perfectly reasonable to ensure that only legitimate citizens vote;

2) voter fraud is reduced by periodically purging voter rolls; 3) it is not “hard for people to vote”; and 4) there is an unprecedented abundance of information readily available about candidates and the issues. The allegation that our voting system is somehow racially or ethnically rigged is tiresome nonsense. How did Obama get elected twice?

Jim O’Brien ’66CC
Maitland, FL

Ester Fuchs says that to abolish the Electoral College would take a constitutional amendment. But the problem can be remedied more simply than that. All that is required is for each state to agree to assign its electoral votes to the winner of the national popular vote. Some states have already agreed to do this, so it is not impossible to imagine the plan succeeding (not every state would have to participate for the change to be effective).

Another option would be to make voting compulsory, thus diluting the impact

of fringe elements who, at present, have a disproportionate effect on the outcome. Such a measure would have a salutary effect at all levels of government, but it is obviously too sensible to be considered.

Bruce Hyland ’66BUS
Califon, NJ

Your cover story says that in the Electoral College, “electors ... pledge to cast their ballots for their party’s candidate.” Actually, only about half the states purport to bind their electors in one way or another. Nor is it clear under the only Supreme Court case to consider the issue, *Ray v. Blair*, that these restrictions are constitutional. Moreover, Congress has always counted the votes of so-called faithless electors that have been certified by states, as it did in January 2017 when a small but significant number of electors did not vote for their party’s candidate.

William Josephson
’55LAW
Brooklyn, NY

FEEDBACK



Your recent issue was transcendent. I very much appreciate the quality of the writing.

Agnes Kelly
’54GSAS, ’93SW
Kingston, NY

I’m truly impressed with *Columbia Magazine*. The stories are well-thought-out, the writing is both fun and professional, and it’s surprisingly good-looking!

Judith Newman
’84GSAS
New York, NY

The last two issues have been extremely good. Keep it up.

Robert F. Mallon ’63PS
Ridge, NY

FEEDBACK

The real problem is not the Electoral College itself; the problem is the winner-take-all system that prevails in all but two states. If every state were to allocate its electoral votes proportionally, following the popular vote in that state, the final outcome would be much less likely to differ from the national popular vote. This can be accomplished without touching the Constitution. It is not an easy solution either, but it is one that is worth a try in our present desperate circumstances.

Alan Huffman '85GSAS
New York, NY

Your outstanding article says that North Carolina took advantage of the Supreme Court's 2013 decision invalidating part of the Voting Rights Act of 1965 to curtail Black voting rights. The article suggests that because of the voting restrictions North Carolina subsequently passed, Donald Trump won the state that Barack Obama had won eight years earlier.

However, the article neglects to mention that Obama lost the state to Mitt Romney in 2012 and that North Carolina had voted for Republican presidential candidates for most of the previous fifty years. I think there may have been other factors involved in Obama's 2008 election win. If you ask me, a major factor was that George W. Bush, the worst president in US history, had cast a pall over every Republican candidate.

Art Scherr '72GSAS
Brooklyn, NY

AMERICAN HERO

I enjoyed reading your article on Pindaros Roy Vagelos (Fall 2018). It is an inspiring story about a man who came from humble beginnings and accomplished much through hard work, dedication, and education. For all his achievements, he has not forgotten his roots and is now giving back to others less fortunate so they too can reach their potential.

This story is indeed the story of America, where immigrants and their descendants have made this country what it is. Given the political chaos at this time, this story is even more relevant. Perhaps a copy should be sent to the current occupant of the White House. He and his administration need some enlightenment.

John G. Scandalios '57CC
Raleigh, NC

As a retired academic in the field of tropical medicine, I was delighted by Paul Hond's splendid article about Roy Vagelos, a man I have long admired. My admiration soared after learning so much more about him.

Barnett L. Cline '58CC
Blanco, TX



LION'S PEN

I want to congratulate you on the article by Julia Rothman ("In the Lion's Den," Fall 2018). It is a charming story with wonderful illustrations. Please extend to Ms. Rothman my sincere appreciation of her work.

Quinn Peeper '90PS
New Orleans, LA

PASSING THE BAR

I enrolled in Columbia College in the fall of 1965, having grown up in a small logging community in rural Oregon and having never been to New York. My high-school education had not prepared me for the rigors of Columbia, and both it and New York were more than a bit overwhelming. My father worked in a sawmill — we also had a small dairy farm — so when he asked me, "Just how in hell are you going to pay for this?," new resources had to be discovered. My answer was to start Columbia Student Bartending Agency ("School Spirits," College Walk, Fall 2018).

I was lucky it took off, with the first customers being professors who used the ten or so of us for small parties. My sophomore year I was asked to head the agency, which I did through the rest of my time at the College and then at Columbia Law. The agency grew to over 125 students, bartending at private parties, mainly on weekends, all over the city. To find new student bartenders, we started an early version of the bartending course described in your article. I am heartened to see that today's course is a little more enlightened, with at least some education on the sane use of alcohol.

KEY TO ABBREVIATIONS

CODE	SCHOOL	CODE	SCHOOL
BC	Barnard College	NRS	School of Nursing
BUS	Graduate School of Business	OPT	School of Optometry
CC	Columbia College	PH	Mailman School of Public Health
DM	College of Dental Medicine	PHRM	School of Pharmaceutical Sciences
GS	School of General Studies	PS	Vagelos College of Physicians and Surgeons
GSAPP	Graduate School of Architecture, Planning, and Preservation	SEAS	Fu Foundation School of Engineering and Applied Science
GSAS	Graduate School of Arts and Sciences	SIPA	School of International and Public Affairs
HON	(Honorary degree)	SOA	School of the Arts
JRN	Graduate School of Journalism	SPS	School of Professional Studies
JTS	Jewish Theological Seminary	SW	School of Social Work
KC	King's College	TC	Teachers College
LAW	School of Law	UTS	Union Theological Seminary
LS	School of Library Service		

The agency provided me with several great advantages. First and foremost, I earned enough to pay the half of my tuition, room, and board (plus flights back home for the summer) not covered by scholarships and loans. Second, although I struggled a bit with the forty hours a week that I put into managing the agency and tending bar, it most certainly helped me focus on my studies for the rest of my time. Third, I got to know the out-of-the-classroom lives of many professors and got to see parts of the city that I would never have otherwise visited. For instance, Professor Zbigniew Brzezinski asked me to bartend at numerous dinner parties at his home over the years, introducing me to an incredible array of scholars and diplomats from the UN and elsewhere. Fourth, it gave me the chance to work in a non-classroom setting with lots of other students, who were fun, bright, and energizing. And fifth (no pun intended), it showed me that I most definitely wanted to become a lawyer and not a bartender (or sawmill worker).

Ed Harnden
'69CC, '72LAW
Portland, OR

INFLUENCING KUBRICK

While hanging out at Columbia, Stanley Kubrick audited Lionel Trilling's modern-literature course ("Kubrick's Columbia," College Walk, Fall 2018). That influenced him enough that he named *Dr. Strangelove's* only fully sane character Lionel Mandrake,

the surname coming from a John Donne poem that was among Trilling's favorites.

And while it is only conjecture on my part, I can't help but associate aspects of the mountains' significance in Kubrick's *The Shining* with Kafka's *The Castle* and Mann's *The Magic Mountain*.

Jack Eisenberg '62CC
Baltimore, MD

FIRST IN FLIGHT

I always enjoy reading *Columbia Magazine* and was intrigued by your Finals quiz on famous Columbia dropouts (Fall 2018). How-

ever, there is a slight error in question 6, which states that in 1932, Franklin Delano Roosevelt became the first sitting president to fly in an airplane. In 1932, FDR wasn't yet president. He flew to the Democratic National Convention in Chicago to accept the nomination in early July 1932 (the first candidate to do this), was

elected on November 8, 1932, and was inaugurated on March 4, 1933. He didn't fly again until January 1943, when he did indeed become the first sitting president to fly in an airplane — to a meeting in Casablanca with Winston Churchill. Otherwise he traveled by train, ship, or auto. Given his inability to walk because of the polio he contracted in 1921, getting on and off the airplane would have been challenging; out of the public view, he was probably carried up and down the steps. In summer 1918, as



Franklin D. Roosevelt, on his way to accept the nomination for president at the 1932 Democratic Convention, peers out of a Ford Tri-Motor plane.

assistant secretary of the Navy, he did take a brief flight in a seaplane while on a visit to France to inspect naval facilities there.

Deborah Gardner
'70BC, '79GSAS
Brooklyn, NY

The author is historian and curator at Roosevelt House at Hunter College.

FAMILY CIRCLE

I was delighted to receive the Fall 2018 edition. It made me think. I cut out and mailed the article about April Tam Smith ("Innovators with Impact") to my twenty-seven-year-old granddaughter. I cut out and mailed the article about P. Roy Vagelos to my fifty-one-year-old daughter; her husband, who graduated from Columbia Business School; and my grandson, who is in his last year at Washington University.

For fifty-five years I've been happy to receive magazines from Columbia, but other than reading about members of my class and those a few years before and after, that was it. Bravo!

Doug Anderson '63CC
New York, NY

I have lived long enough to witness the decline or demise of many a good magazine. I no longer subscribe to *Smithsonian* or *Time*. The only subscription I still have is to *National Geographic*.

I thoroughly enjoyed the last issue of *Columbia Magazine*. Keep up the good work.

Lucian Dressel '65BUS
Carrollton, IL

**QUESTIONS?
COMMENTS?**

WE WELCOME THEM ALL!

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Letters may be edited for brevity and clarity.

COLLEGE WALK

NOTES
FROM 116TH
STREET AND
BEYOND



The Last Waltz, 1978.

THEY SHALL BE RERELEASED

Film series honors SOA professor Ira Deutchman

When Columbia film professors Rob King and Jack Lechner were putting together the program for “NY Indie Guy: Ira Deutchman and the Rise of Independent Film,” they had to make some hard choices. After all, Deutchman, who has taught at Columbia since 1987, was the cofounder of Cinecom and Fine Line Features, and a leading distributor, marketer, and producer of more than 150 movies, including *A Room with a View*, *My Own Private Idaho*, *The Player*, *Short Cuts*, and *Hoop Dreams*. In the end, King and Lechner winnowed the list to seventeen films, a cross section of Deutchmanalia that was shown over nine days this fall in the 153-seat Katharina Otto-Bernstein Screening Room in the Lenfest Center for the Arts.

The retrospective kicked off with *A Woman Under the Influence*, the 1974 feature by indie-film poster boy John Cassavetes, who recruited Deutchman, then a senior at Northwestern, to promote the film in the Midwest. Deutchman hosted a campus screening and moderated a talk with Cassavetes and actor Peter Falk. It was his first gig in the business.

With “NY Indie Guy,” Deutchman was the one in the spotlight. Film lovers came for

panel talks and screenings of *The Brother from Another Planet*; *Sex, Lies, and Videotape*; the Oscar-winning documentary *Harlan County, USA*; and more. On the seventh night, Deutchman and King sat onstage and discussed the thing we call “independent film.” Deutchman, engaging and encyclopedic, slammed the term as meaningless (he prefers “specialty film,” which suggests movies made for niche audiences). He traced the rise of the genre to the 1960s, when Hollywood mediocrity coincided with a generation of young cineastes like Spielberg, Coppola, and Scorsese, who absorbed foreign films and began making arty, low-budget movies.

The series ended on a Sunday night. King, in choosing a finale, had wanted something uplifting and powerful. He knew that Deutchman had worked on two of the greatest rock documentaries ever made: *Stop Making Sense*, Jonathan Demme’s 1984 Talking Heads concert film; and *The Last Waltz*, Martin Scorsese’s chronicle of the 1976 farewell tour of the Band. To really go out with a bang, sonically and emotionally, King felt, it had to be *The Last Waltz*.

Deutchman introduced the film and told the packed house how he got involved with it.

In the early 1980s, he said, he was working for United Artists Classics, searching the studio's library for old titles that — with a good marketing hook — could be dusted off and rereleased into repertory cinemas. Deutchman successfully revived a few UA movies that had fared poorly in their original releases, like *Cutter's Way* (originally *Cutter and Bone*) and Scorsese's *New York, New York*.

One day in 1982, Deutchman got a call from a booker. The Sutton Theater, at Third and 57th, had a one-week hole and needed a film. The booker mentioned that the Sutton had just installed a brand-new Dolby sound system. Deutchman's first thought was *The Last Waltz*, which he had seen repeatedly when it came out in 1978. The hook was clear: come celebrate the Sutton's new Dolby system with *The Last Waltz*!

An invitation-only screening was planned, which Robbie Robertson, the Band's guitarist and main songwriter, would attend. The day of the screening, there was a sound check. "I spent the entire day at the Sutton with Robbie Robertson and a Dolby technician who was tweaking the system,"

Deutchman recalled. "Robbie was not happy. We played the movie several times. No matter how many adjustments were made, he simply wasn't happy with how it sounded. Finally I called Scorsese and told him what was going on, and he said he'd be right over."

"A taxi pulled up in front of the Sutton Theater, and there's Marty. He came in, we put in reel one, he listened for a couple of minutes, then said, 'Turn it up.' The Dolby technician turned it up. Marty listened again, then he yelled, 'Turn it up!' The technician turned it up again. Marty listened and said, 'It's perfect,' and he left."

The screening was a smash, and Deutchman heeded the lesson. He advised the Lenfest audience that *The Last Waltz* would be played at "concert volume," making full use of the new screening room's advanced audio system. The lights went down, and the screen filled with the opening title, which says, in white letters against a black background, "THIS FILM SHOULD BE PLAYED LOUD!" The moviegoers, bathed in an aural and visual glow, stayed pinned to their seats until the end.

— Paul Hond



Ira Deutchman

THE SHORT LIST

LISTEN **Miller Theatre** continues to investigate the quintessentially American art form in its latest jazz series. Saxophonist Rudresh Mahanthappa performs with his Indo-jazz fusion trio on February 9, and bassist Linda May Han Oh takes the stage with her quintet on March 2. millertheatre.com



VENTURE The Columbia Alumni

Association's **Alumni Travel Study Program** combines vacation and education through guided expeditions, often with Columbia faculty. Upcoming trips include "Wonders of the Galápagos" in February, "Sailing the Windward Islands" in March, and "River Life along the Dutch Waterways" in April. alumni.columbia.edu/research-learn/travel-study-trips

BROWSE The magical world of the Ziegfeld Follies comes to life at **Florenz Ziegfeld & Joseph Urban: Transforming Broadway**, an exhibition of drawings, set models, photos, and other memorabilia from the collection of famed set designer Urban. Through February 15 at the Rare Book and Manuscript Library in Butler Library. library.columbia.edu/events

LEARN Audit world-class courses in the arts and sciences, with major discounts offered to those age sixty-five and older. Applications for the spring 2019 semester are open until January 5. sps.columbia.edu/auditing

SEE A forty-two-foot-long pixelated landscape, hand-printed with woodblocks, covers the walls of the Miller Theatre lobby in **Recode II: La Dorada**, from Dominican-American artist Joiri Minaya. The installation, created in partnership with the Wallach Gallery, questions the idealization of tropical places. Through June 28. wallach.columbia.edu/exhibitions/joiri-minaya-redecode-ii-la-dorada

The Forum Sets Sail

A new building makes a splash in Manhattanville

“It’s a miracle,” said architect Renzo Piano ’14HON to dignitaries and guests at the opening of the Forum, a three-story structure of glass, steel, and concrete on Columbia’s Manhattanville campus. “It’s not a small miracle. It’s a big miracle.” Speaking in the Forum’s 437-seat auditorium this past September, Piano was referring not only to the conclusion of a process that began when President Lee C. Bollinger arrived at Columbia in 2002 and identified seventeen acres in West Harlem as the ideal site for Columbia’s expansion, but also to the cross-disciplinary,

cross-cultural partnerships that the Forum promises to foster. “The building,” he said, “is about society.”

The Forum (the name was inspired by the open-air social and cultural hub of ancient Rome) is triangular in shape, one sharp gray vertex looming prow-like over the corner of Broadway and 125th Street. As the symbolic entranceway to a campus without gates or walls, the Forum joins the Lenfest Center for the Arts and the Jerome L. Greene Science Center to complete the trio of Renzo Piano Building Workshop structures in Manhattanville. “When you put

together science, art, and community — it’s huge,” said the architect. “You know, I’m Italian. I get romantic.”

Guests arrived mid-afternoon, entering the Forum’s glass-enclosed public space. They milled amid the white tables and red-orange chairs, snacked on pastries from the Forum’s café, and checked e-mail using the Forum’s free public Wi-Fi. Then they rode the elevators, whose motors and pulleys, like the pipes running along the high ceilings, are exposed, evoking transparency and industry and reinforcing Piano’s notion of Manhattanville as a “factory of ideas.”

In the auditorium, Bollinger, whom Piano called the “driving force” behind Manhattanville, was, like the architect, enjoying the peculiar sensation of standing inside a fully realized idea. The Forum, he said, is his favorite Manhattanville building, “because it stands for something I cherish and believe in. Its name, its identity, and its function within the University — all connote the mind at work, freedom of thought and speech, dialogue and debate, listening and speaking.”

The Forum is home to two new University initiatives, Bollinger said: Columbia World Projects (CWP), which connects academic work with influential outside partners to solve real-world problems, and the Obama Foundation Scholars program, in which a dozen up-and-coming global leaders spend the academic year immersed in projects, including collaborations with CWP.

Confessing to a late-in-life passion for large seagoing vessels, Bollinger said he also loved the Forum “because it feels like a ship.” He quoted from *Moby-Dick* — specifically, Ishmael’s musings on the metaphysical magnetism of the sea and its effects on the dwellers of Manhattan, where “right and left, the streets take you waterward.” Melville wrote that “meditation and water are wedded forever,” and that water embodies “the ungraspable phantom of life; and this is the key to it all.” With the arrival of the Forum, a short walk from West Harlem Piers Park and the gleam of the Hudson River, “we lean further toward the



water,” Bollinger said, “and the key to it all.”

Mary McGee, executive director of the Forum, wearing an orange jacket that complemented the palette of tangerines and marigolds adorning the Piano interiors, touted the Forum’s mission as a civic and intellectual center. She challenged the University to “live up to its promise” of a campus that breaks down academic and social barriers and ensures “access to Columbia’s resources for the community that it inhabits.”

After the speeches, Renzo Piano stepped outside. The sound of drums rumbled in the near distance. Piano, dressed in a blue jacket and cream khakis, gray hair ruffled by the maritime breeze, walked west toward the propulsive, blood-quickening beat and the Lenfest Center for the Arts. There, on the Lenfest plaza, he saw the source of the vibrations: the Marching Cobras, a New York-based drum line and dance troupe. The architect stood at the perimeter and watched as the Cobras aligned in single file and marched, drumming and dancing, along 125th Street, the Forum’s hypotenuse, before streaming into the building.

The guests looked up from their refreshments and conversations as the drummers christened the space with percussive bursts and rolls — the Forum’s answer to a champagne bottle smashed across the bow.

As Bollinger said in his remarks: “This ship is ready for navigation.”

— Paul Hond

Through the Future, Darkly

Martin Rees, British Astronomer Royal, reads the 2050 tea leaves

Sure, it wouldn’t be all butterflies and rainbows, but who could resist hearing Sir Martin Rees, Lord Rees of Ludlow, the bushy-browed former master of Trinity College, Cambridge, and current British Astronomer Royal, prognosticate about our planet in 2050? Alexander Halliday, the director of Columbia’s Earth Institute, had invited Rees to give a public talk based on his new book, *On the Future: Prospects for Humanity*. As two of the UK’s leading scientists, Rees and Halliday go way back. Now it was time to look ahead.

Rees often has to explain that he is an astronomer, not an astrologer. Still, he told the audience in Pulitzer Hall, “even with a cloudy crystal ball, there are some things we can predict.” To wit: the world will get more crowded, and the world will get warmer.

Naturally, this will require adjustments. To feed ten billion people, Rees said, we’ll have to cut our beef intake, since raising cattle consumes huge amounts of water and energy. “We must realize that insects are highly nutritious, and they can be made palatable.” Though bugs and genetically modified crops will bolster the food supply, the doubling of Africa’s population due to increased life expectancy will be, Rees said, a major challenge.

On the climate front, Rees pushed for an international program to hasten research and development on all forms of clean energy and make it affordable globally. Failing that, “there will be pressure for a Plan B,” which could mean “injecting aerosols into the stratosphere to cool the

climate.” (The audience was rooting for Plan A.)

Rees then speculated on the future ethical conundrums in fields like genetic engineering, where uneven standards could result in untold depravities. “I worry that whatever regulations are imposed on prudential grounds or ethical grounds cannot be enforced worldwide any more than drug laws can or tax laws can,” he said. “And that’s a nightmare.” Similarly, Rees foresees conflicts as robots take over legal work, medical diagnostics, even surgery. How “human” will robots become, and what obligations would we have to them?

As an astrophysicist, Rees looks to the heavens for comfort. Ultimately, he thinks, our future lies in space, with private companies leading manned voyages to Mars and, someday, to one of the hypothetically habitable planets in our galaxy. And while it is a “delusion to think that space offers an escape from Earth’s problems,” we should “cheer on these brave space adventurers, because they will have a critical role in spearheading the post-human future” in which people, merging with machines, could evolve into a new species with powers that we “can’t even imagine.”

And this could solve that most vexing problem: a sun that, in 4.5 billion years, will die. “Humans could jump-start a diaspora whereby ever-more-complex intelligence spreads through the galaxy,” Rees said, now peering well beyond the twenty-second century. “There is plenty of time,” he mused, “for that to happen.”

— Paul Hond



IN MEMORIAM LBB

Poets pay tribute to poetry professor Lucie Brock-Broido



S pellbinding. Mesmerizing. Singular. Generous. Empathic. Beguiling. Feral.

These were some of the words poets used to describe Lucie Brock-Broido '82SOA, head of the poetry division at the School of the Arts, who died on March 6 at age sixty-one. The poets assembled at Miller Theatre in October to honor one of their tribe and, in effect, to grapple with a line from her poem "Infinite Riches in the Smallest Room": "What if I were gone and the wind still reeks of hyacinth, what then."

"Losing Lucie has been brutal, upending, cold, and stately," poetry professor Dorothea Lasky told the gathering of family, friends, faculty, and students. "Death is mean, but losing Lucie this unending season has been meaner."

In an evening of trembling voices, colorful anecdotes, laughter, and powerful recitations of Brock-Broido's

poetry, an image arose of a flowing-maned, red-lipped, smoky-voiced, caffeinated, night-stalking, feline-loving, *People*-reading, prank-pulling mother figure, vampire, and sorceress.

"Hearing her voice tonight is fortifying; it's heartbreaking," said Tracy K. Smith '97SOA, US poet laureate and Brock-Broido's former student. "But there's something so eternal. How could she know all those things?" Smith's voice shook. "This small, thin woman contains universes."

Brock-Broido was born in Pittsburgh in 1956. She embraced poetry at thirteen, she once said, "because I felt I couldn't live properly in the real world." She studied with Richard Howard '51CC

at Johns Hopkins and with Stanley Kunitz — "my prophet-teacher," she called him — at Columbia, and became a teacher herself, first at Harvard, then at the School of the Arts starting in 1993. She published four books of poetry in her lifetime. Her last book, *Stay, Illusion*, was a finalist for the National Book Award in 2013, which was the year she received Columbia's Presidential Teaching Award. Lasky remembered her fearlessness as a poet and a teacher: "Don't hold back," she told her students. "Put it all in there. Give yourself away."

Timothy Donnelly '98SOA, the new head of the poetry division, spoke of Brock-Broido's "appetite for gorgeousness" and of the

hours-long, freewheeling phone conversations he'd have with her, in which, at some point, invariably, Brock-Broido would ask Donnelly to guess what she was eating. "It was always some form of pretzel or experimental cracker," Donnelly said. Sometimes it was an apple and Donnelly had to guess which kind. "I feel like I'm still on the phone with Lucie Brock-Broido," he said, "and I'm never hanging up."

"She would sweep into a classroom or a crowded, noisy restaurant with this heightened existence," said poet Emily Fragos '96SOA. "Everything was heightened about her." Fragos recalled having dinner with Brock-Broido in a restaurant and listening to her read her poem "A Lion in Winter," about her beloved Maine coon cat, William, her "male muse," who was dying. "She surrendered completely to the poem. She sank into it the way a musician sinks into a piece of music. You hear feelings; that's all that's left."

Fragos, her voice quavering, addressed her friend. "Lucie, I will love you, I will miss you, for the rest of my life. And you saved my life. I'm so glad I said that to you before you left us." Fragos then prepared to read "A Lion in Winter," from Brock-Broido's 2004 book *Trouble in Mind*. "I don't know if I can get through this — I really don't," Fragos said, but she did.

— Paul Hond

A LION IN WINTER

As long as the lions are rampant, I will stay
With him.

As long as the clouded leopards

Surround the clouded bed with their gold & cirrus
Air, I will be there too. I was reading

When the winter shooed-
Away the fall and whitely lit the oil lamps of early

Dark. The night was turret-shaped in childhood,
A bunch of mint and mane and swale.

What will I be when he is husk
To himself,

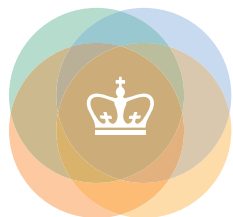
Some flax or ghost of lynx in later winter light.

— Lucie Brock-Broido

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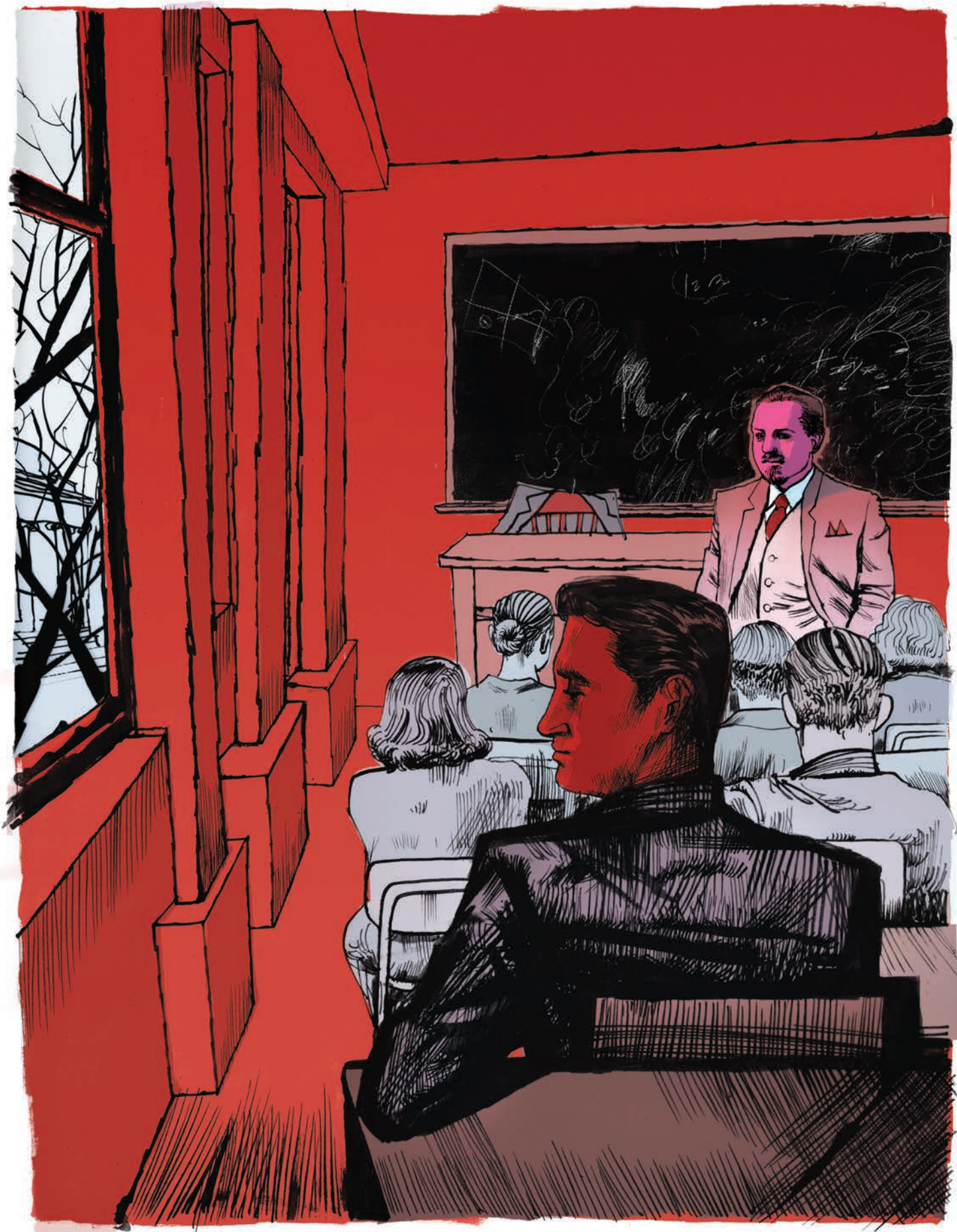
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UPPER WEST SIDE STORIES

The little-known tale of two Columbia teachers and the classes that inspired J. D. Salinger, Truman Capote, Carson McCullers, and a generation of American writers

By Paul Hond

Illustrations by Matt Rota

ON A MONDAY EVENING in the spring of 1939, Whit Burnett, a lanky thirty-nine-year-old writing teacher, walked into room 505 in what is now Dodge Hall carrying a volume by Faulkner. His students were already seated and eager to begin. Burnett, a writer and editor who'd been teaching this course for two years, often read aloud to his class. He knew Bill Faulkner, having published a few of his stories.

Burnett had never set out to be an educator, but with writing courses popping up around the country, working professionals like him were in high demand. The Iowa Writers' Workshop, the country's first creative-writing program, had been founded just three years earlier, and while Columbia was decades away from establishing its own graduate writing program, it offered classes in short fiction and poetry through University Extension, soon to be the School of General Studies. Columbia's course in short-story writing was one of the oldest in the country, dating to 1911.

Burnett was something of a hot ticket on the academic circuit. In 1931, he and his wife, Martha Foley, had founded *Story* magazine, which they still ran, and their acumen for spotting new talent had made their hundred-page monthly a must-read for the big New York publishers. In its first few years, *Story* had featured

debut works by William Saroyan, Nelson Algren, Conrad Aiken, Kay Boyle, John Cheever, Wallace Stegner, and Carson McCullers — an eye-popping list that would soon include Norman Mailer, Jean Stafford, Richard Wright, Joseph Heller '50GSAS, Truman Capote, and Tennessee Williams.

But little did Burnett know, in the spring of 1939, that the writer who would become *Story's* most fabled discovery was seated in the back row of room 505.

He was twenty years old, tall and dark-eyed, a Park Avenue kid who had flunked out of NYU and Pennsylvania's Ursinus College. His name was Jerry, and he was by all accounts a disappointment to his father, a prosperous Manhattan meat-and-cheese importer. Many of Burnett's students would have crawled over broken glass to get into *Story*, but Jerry, slouching in a haze of cigarette smoke, gave no such hints. When Burnett talked about what made a good story, or read aloud from one, or decried "bunk" in fiction and praised honesty, Jerry would just sit there, staring out the window, with its view of the Low Library dome. He didn't seem to be listening, and, strangest of all, he didn't hand in a single story.

But Jerome David Salinger wanted to be a writer — in fact, he *was* a writer, albeit an unpublished one with rejection slips from all the best magazines.

“There’s no question that the young Salinger had literary ambitions,” says Thomas Beller ’92SOA, author of the biographical memoir *J. D. Salinger: The Escape Artist*. “But in the space of this opportunity to impress his teacher, he whiffs. No, it’s worse than that: he doesn’t even take a swing.”

Salinger, having produced exactly nothing in the spring of ’39, signed up again for Burnett’s class in the fall. Beller thinks Burnett’s unaffected manner appealed to the pretense-averse Salinger. “Burnett was an entrepreneur, a badass, an editor, and he did the class for the same reasons anyone would: it felt good to have some affiliation with Columbia, and the money wasn’t bad.” He was not, in other words, overly invested. “His demeanor in the classroom was: ‘This is what I am. This is what I do. I’ll try to be useful to you, and if you get something out of it, great, but I’m not going to kill myself if you don’t,’” says Beller. “I think that was liberating to Salinger.”

Midway through the fall semester, Salinger wrote a letter to his teacher to apologize for his anemic showing. “It was very self-lacerating,” says Beller, who visited the *Story* archive at Princeton to review Salinger’s letters. (In 1987, a federal appeals-court decision in *Salinger v. Random House, Inc.*, upheld Salinger’s right to keep his personal correspondence private, and the letter has not been published.) “This letter, to me, is the Big Bang of Salinger’s career. It’s not unusual for a student to say to a professor, aloud, ‘I let you down.’ What’s unusual in this case is that it took the form of a very elaborate and articulate letter which contained Freudian language about complexes and the ego, saying how he’s been all tangled up and he’s sorry and he’s going to do better.

“Then, immediately after this cathartic confession, Jerry Salinger cracks open like an egg, and J. D. Salinger comes out. He bursts forth with three stories, *bang-bang-bang*, and hands them to Burnett.”

WHIT BURNETT AND MARTHA FOLEY met in 1925, on the copy desk at the *San Francisco Journal*. Foley, who would have her own colorful teaching career at Columbia, was born in Boston in 1897. A barricade-pushing suffragist and socialist, she dropped out of Boston University to be a writer. To make a living, she turned to newspapers, stepping bravely into the hostile stag environment of 1920s newsrooms. Burnett was a reporter and editor, and Foley later recalled their meeting:

“A blond young man on the other side of the desk looked at me and I looked back at him. The *Smart Set*, then edited by Mencken and Nathan, was mentioned. He wrote short stories for it. I told him what I thought of Mencken. He told me what he thought of Mencken. We didn’t agree about Mencken at all.”

Burnett — laconic, introverted, not prone to laughter, and no socialist — was her opposite. But he, too, dreamed of literary laurels. They fell in love and moved to New York, where they worked on the big dailies, and in 1927 they sailed for Paris, getting jobs at the *Herald Tribune*. It was the Jazz Age Paris of Ernest Hemingway and Gertrude Stein and Sylvia Beach, owner of Shakespeare and Company bookstore. Foley met everyone. She loved the city, but when Burnett got a better-paying job in Vienna, she followed him.

In the Austrian capital they worked as correspondents for the New York *Sun*, mingled at the Café Louvre, and wrote and submitted fiction. Then Edward O’Brien, editor of the annual *Best American Short Stories* anthology, sent Burnett a letter saying that one of his stories had been selected for the 1930 edition. Foley was ecstatic: Whit would now get his stories published everywhere! But her optimism was doused by the realization that there were, after all, only a small number of literary magazines. Even the “slicks” — popular magazines like the *Saturday Evening Post*, *Collier’s*, and the *Ladies’ Home Journal* that were printed on

glossy paper, unlike the “pulp” — were cutting back on fiction. That’s when Foley got an idea: what if she and Burnett started their own magazine — one devoted solely to the short story?

No such beast existed, and Burnett was skeptical. They had neither the money nor the equipment to print the thing. But there *was* a mimeograph machine at the foreign correspondents’ club in town that could handle a small print run. Burnett came around. Using their own stories and those written by friends, Foley and Burnett produced 167 copies of *Story* for the inaugural edition in April 1931. They also had a son that fruitful year — David Burnett ’52CC.

Though *Story* paid just twenty-five dollars for a manuscript at a time when the slicks were paying F. Scott Fitzgerald \$4,000, the *Story* in-basket was overflowing. In the magazine’s first two years, eleven of its titles were collected in *Best American Short Stories*. That feat drew the attention of Bennett Cerf 1919CC, 1920JRN cofounder of Random House. Cerf and his partners, see-

That’s when Foley got an idea: what if she and Burnett started their own magazine — one devoted solely to the short story?

ing *Story* as a gold mine for new talent, put up money and brought the magazine to the company's building on East 57th Street. Within a few years, Burnett and Foley would both be teaching at Columbia.

ONE OF THE STORIES that Jerry Salinger handed in to Whit Burnett in the fall of 1939 was "The Young Folks." Set in a house filled with college kids, cigarettes, and Daddy's Scotch, it captures in a simple, dialogue-driven narrative the stumbling longing of swing-era youth. The Salinger fizz — the hard-boiled wit, the knowing observation, the Fitzgeraldian vividness — is in first bloom, as are the rhythms of the idiomatic, *accented* chitchat that Salinger practically *invented*. Burnett liked "The Young Folks" and paid Salinger twenty-five dollars to publish it in the March/April 1940 issue of *Story*.

There can be few moments in a writer's life comparable to getting that first bite from a publisher. Salinger was super-charged. He wrote a shrewdly triumphal letter to Burnett, which the *New York Times* quoted in 1988:

"I'm twenty one, New York born, and I can draw a rejection slip with both hands tied behind me," the letter said. "Writing has been important to me since I was seventeen. I could show you a lot of nice faces I've stepped on to illustrate the point. Now that you've accepted the story I'll tell everyone to waste no pity on the unpublished short story writer, that his ego can cope with people and circumstance, that he is his own worst enemy. Oh, I'll be wisdom itself"

In 1941, Salinger sold "Slight Rebellion Off Madison" to the *New Yorker*. But the story, which introduced a character named Holden Morrissey Caulfield, wouldn't come out until five years later, after the war. By then, Salinger was no longer the same man. Drafted in 1942 and shipped to Europe in January 1944, he was part of the D-day landing and was among the first Americans to enter the just-liberated concentration camps of Dachau. Afterward he checked himself into the hospital for what would now be called PTSD. But through all this he kept writing. He published stories in *Collier's* and the *Saturday Evening Post*, and he sent more than sixty letters to Whit Burnett. In 1944, *Story* ran Salinger's "Once a Week Won't Kill You," for which Salinger, in his author's bio, wrote, "I'm twenty-five, was born in New York, am now in Germany with the Army ... Studied and wrote

short stories in Whit Burnett's group at Columbia. He published my first piece in his magazine, *STORY*. Been writing ever since, hitting some of the bigger magazines, most of the little ones. Am still writing whenever I can find the time and an unoccupied foxhole."

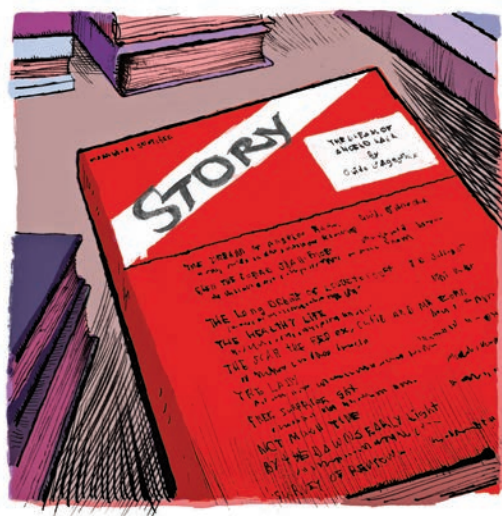
In a letter dated April 14, 1944, Burnett offered to publish a collection of Salinger's stories with *Story's* eight-year-old book-publishing offshoot, Story Press. Salinger was overjoyed. But by the time he returned home in 1946, things had changed. Story Press's partners, the deeper-pocketed Lippincott Company, had nixed the book idea, and it was Burnett's unhappy task to break the news to Salinger. The young writer did not take it well.

"He could not seem to get it through his head that it wasn't Burnett's fault," says Beller. "Soon after that, Salinger published 'A Perfect Day for Bananafish' in the *New Yorker*." In that story, Seymour Glass, a thirty-one-year-old combat veteran and former child genius (he entered Columbia at age fifteen), is vacationing in Florida. After playing in the ocean with a four-year-old girl, Seymour returns to his hotel room, takes out a pistol, and shoots himself in the head.

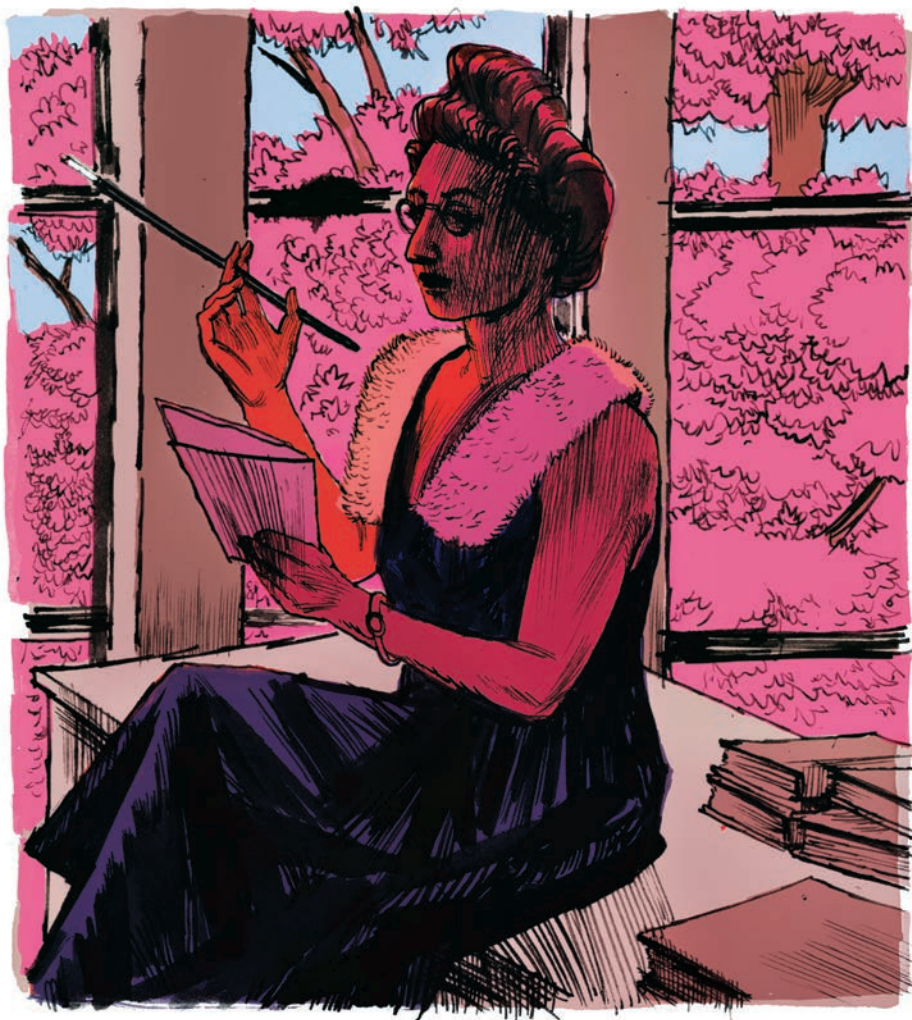
"With that story, everything that came before in Salinger's career was essentially excommunicated," says Beller. "He renounced all the stories he was ready to publish with Burnett and Lippincott so that the official record of his career would begin with these bombshell stories in the *New Yorker*. 'Perfect Day' was a huge deal. 'Uncle Wiggily in Connecticut' was a huge deal. When a Salinger story came out in the *New Yorker* it was like Beyoncé dropping a single. And then, in 1951, came *The Catcher in the Rye*. Meanwhile, Whit Burnett was on the wrong side of this divide."

FOR MARTHA FOLEY, Burnett's most significant student was not Salinger. It was Hallie Southgate Abbett, whose story "Eighteenth Summer" appeared in the March/April 1941 issue. Abbett and Burnett became romantically involved, which prompted a quick and painful divorce. Burnett then married Abbett, who became his editing partner on *Story*.

It was a brutal blow for Foley, but 1941 also brought other changes. Edward O'Brien died in London, and Foley was called upon to finish editing the year's *Best American Short Stories*. It was a job she did assid-



uously and lovingly for the next thirty-seven years. In her role as “the Saint Peter guarding the gates to a short story writer’s heaven,” as she once called O’Brien, she would help shape and reshape American fiction, showcasing newcomers like Saul Bellow, Bernard Malamud ’42GSAS, Flannery O’Connor, Delmore Schwartz, Eudora Welty ’82HON, Stanley Elkin, Thomas Pynchon, Joyce Carol Oates, Donald Barthelme, and many more.



In 1945, Foley began teaching her own workshop at Columbia (Burnett’s class ended in 1943). Among Foley’s students was Truman Capote, who, in his unfinished novel *Answered Prayers*, has the narrator describe meeting his wife “at Columbia University, where I had enrolled in a creative-writing class taught by Martha Foley, one of the founder/editors of the old magazine *Story*.” The actor Anthony Perkins took the class. So did Barbara Probst Solomon ’60GS, who wrote her first novel, *The Beat of Life*, in Foley’s workshop. Foley was “absolutely incredible with her 1920s lorgnette and cigarette holder,” Probst Solomon told an interviewer in

2009. “Carson [McCullers] had been her student, and Martha would drag her in to talk to the class. Carson was sort of shy, so she would drag in Tennessee Williams. At some point Arthur Miller wandered in — who could have more riches than that?”

The Texas writer John Graves ’48GSAS, author of the memoir *Goodbye to a River*, once said that he modeled his own teaching on Foley’s. “She didn’t really teach much.

She just talked, and we had to turn in one thousand words a week.” Manuscripts were placed anonymously in a folder in the library, and students had to read them before the next session. Sometimes the author could be identified through the prose. There were “a lot of antipathies in those classes,” Graves said, “but it was highly stimulating.”

Foley taught her Columbia course until 1966. By then, she had a coeditor for *Best American Short Stories*: her son. David Burnett had been editor, in Paris, of an expatriate literary journal, *New-Story*, which introduced James Baldwin and Terry Southern to American audiences, and in 1958 he joined his mother in scouring the printscape for the pick of the year’s crop. One of their selections for 1965 was “The Application” from *Transatlantic Review*, written by twenty-six-year-old Jay Neugeboren ’59CC.

“Martha read all the stories herself — every short story published in every magazine and literary quarterly,” says Neugeboren, who edited Foley’s post-

humorous memoir, *The Story of Story Magazine*. “She read stories every day until her death.”

NEUGEBOREN MET FOLEY in 1974, when he was writer-in-residence at the University of Massachusetts Amherst. He’d heard that Foley was now living in nearby Northampton and that she had fallen upon hard times. David Burnett had died in 1971 from complications following a drug overdose, and Foley, despondent, had nearly drunk herself to death. Heartbroken, with little money and few possessions, she had left New York and found a furnished apartment in western Massachusetts.

Neugeboren called her, and the two became friends. Stories were what kept her going. “She was full of energy, had a good sense of humor, and she lived and breathed short stories,” Neugeboren says. “She loved writers and loved to talk about writers. But she could barely talk about herself and was forever pissed at Whit. I would say bitter. She didn’t talk about it a lot.”

Neugeboren brought his kids to visit — Foley always had chocolates on hand — and invited her to speak to his writing class at UMass. Foley came alive in the classroom, telling stories about Hemingway and Faulkner and Mencken and Joyce and Sherwood Anderson and Dorothy Parker.

“My students were gaga,” Neugeboren says. “Once, I asked Martha to conduct a class. I gave her the students’ stories, and she was well-prepared. She discussed what she liked about the stories, not what the problems were. That was her way. Students loved it. And Martha loved being around young people.”

WHEN FOLEY DIED in September 1977, Neugeboren took the lead in settling her affairs, including going through her papers, which were in storage in Mystic, Connecticut. Among the remnants: an unpublished novel, a draft of a book on writing, and lots of material for her unfinished memoir.

The memoir, Neugeboren saw, was a remarkable cultural record, written by an unsung heroine of American letters. Someone had to rescue it, and fate could not have supplied a better steward. Neugeboren meticulously assembled and edited the manuscript and wrote the foreword and afterword. Norton published *The Story of Story Magazine* in 1980.

“I loved working on the book,” Neugeboren says. “It was like getting a master class in the history of the American short story.”

WHIT BURNETT CONTINUED devoting his energies to *Story* and appearing at writers’ conferences through the 1950s, but Salinger had not forgiven him for the Lippincott fiasco. Burnett’s intermittent attempts to get in touch with the writer went unanswered. By 1953, Salinger had other concerns. Appalled by the intrusions on his privacy that followed the success of *The Catcher in the Rye*, he moved his family to a wooded tract in Cornish, New Hampshire, closing himself off from the world and becoming, as the *Times* wrote, “the literary world’s most famous recluse.”

In 1964, Hallie Burnett wrote to Salinger, asking him to contribute an introduction to a book celebrat-

ing thirty-three years of *Story* magazine. Salinger, in a stunning turn, obliged. There could hardly be a greater testament to Salinger’s affection for his old mentor. But, as biographer Kenneth Slawenski recounts in *J. D. Salinger: A Life*, Whit rejected the piece, feeling that it was too much about him and the class, and too little about *Story*.

That would have seemed to be the end of it. Burnett died in 1973 of a heart attack. But two years later, Hallie Burnett brought out a book that she and Whit had been developing called *Fiction Writer’s Handbook*. Salinger, who had not published anything in a decade, and despite Burnett’s earlier rebuff, permitted the 1964 essay to be used as the book’s epilogue, under the title “A Salute to Whit Burnett.” It began:

“Back in 1939, when I was twenty, I was a student for a time in one of the present editors’ — Whit

Burnett’s — short-story course, up at Columbia. A good and instructive and profitable year for me, on all counts, let me briefly say. Mr. Burnett simply and very knowledgeably conducted a short-story course, never mugwumped over one. Whatever personal reasons he may have had for being there, at all, he plainly had no intentions of using fiction, short or long, as a leg up for himself in the academic or quarterly-magazine hierarchies. He usually showed up for class late, praises on him,

and contrived to slip out early — I often have my doubts whether any good and conscientious short-story-course conductor can humanly do more. Except that Mr. Burnett did. I have several notions how or why he did, but it seems essential only to say that he had a passion for good short fiction, strong short fiction, that very easily and properly dominated the room.”

J. D. SALINGER, who died in 2010, would have turned one hundred in 2019. He left a complicated legacy as a writer, cultural figure, war veteran, and human being, and his centenary will no doubt be an occasion for remembrances and reappraisals.

Thomas Beller finds it fitting that Dodge Hall, the site of Salinger’s early literary breakthrough, became the seat of Columbia’s School of the Arts. The graduate writing program, established in 1967, is headquartered on the fourth floor. Its classes are held one flight down from the spot where Whit Burnett once read William Faulkner and a young man sat gazing out the window, dreaming of stories to come. 📖

Foley discussed what she liked about the stories, not what the problems were. That was her way.





● BULLET POINTS

Anger. Fear. Frustration. Hope?
A year in the life of a reporter
on the front lines of America's
gun-violence epidemic.

By Jennifer Mascia '07JRN

PHOTO BY CHRISTOPHER CHURCHILL

● **MOST DAYS** there's a moment in my commute when I look up and imagine somebody walking onto the subway train with an AR-15. I don't suppose other people think about this stuff as much as I do, but I can't avoid it: guns have crept into my consciousness.

● **I WORK AT THE TRACE**, a nonprofit, nonpartisan newsroom that focuses on America's gun-violence epidemic. This makes me an informed reciter of grim statistics: these include more than three hundred mass shootings in the past year. Seventeen dead and seventeen injured at Marjory Stoneman Douglas High School in Parkland, Florida. Ten dead and thirteen injured at Santa Fe High School, near Houston. Eleven dead and six injured at the Tree of Life synagogue in Pittsburgh. Twelve dead and twenty-one injured at the Borderline Bar and Grill in Thousand Oaks, California.

● **THESE NUMBERS ARE INCOMPLETE.** Beyond the mass shootings that make the headlines, there is no true, real-time accounting of who is getting shot every day — in bar fights, suicides, accidents, “crimes of passion,” gang killings, and drive-bys. The Centers for Disease Control and Prevention keeps statistics on gun fatalities culled from death certificates, but their figures are two years old. (There were thirty-eight thousand gun-related fatalities in 2016.) And lost in the stats are the physical and psychological wounds of gun violence. Tens of thousands of people are shot each year, and often their injuries are devastating: shattered bones, perforated organs, and spinal-cord and brain injuries. The psychological toll is, of course, all but impossible to calculate.

● **I STARTED COVERING** gun violence nearly six years ago, in the wake of the

attack by a lone gunman at Sandy Hook Elementary School in Newtown, Connecticut. I was an editorial assistant at the *New York Times*, working for business columnist Joe Nocera. Joe had a young child, and the slaughter of twenty first-graders and six educators in their classrooms hit him hard. As a father, he wanted to know how this could have happened. As a reporter, he needed to understand the scale, scope, and impact of gun violence in America. He asked me to find out more.

Since no government agency aggregates this data, I resorted to daily Google News searches and wrote a few lines about every incident in a blog Joe called *The Gun Report*. I usually documented about twenty a day, five days a week. It

was by no means comprehensive: we were missing a lot more incidents than we found. Still, for a year and a half I devoted most of my life to the endless cataloging of gun injuries and deaths in the US. The conclusion that emerged from this work was not surprising. In fact, it was radically simple. As Joe wrote just a year into the project, “The clearest message *The Gun Report* sends is the most obvious. Guns make killing way too easy.”

● **THE TRACE**, the country's only digital news site covering gun issues 24/7, was launched in 2015. I was one of the first staffers. Funded by Everytown for Gun Safety, a nonprofit established after Sandy Hook to advocate for gun reform, *The Trace* was supposed to go live toward



Illegally owned firearms seized by Los Angeles County authorities in 2018.

AP PHOTO / JAE C. HONG



Mark Barden and Jennifer Hensel hold photos of their children Daniel and Aville, who died in the shooting at Sandy Hook Elementary School in Newtown, Connecticut.

the end of June, but we had to bump up the date because on June 17, 2015, a twenty-one-year-old white supremacist murdered nine people at the Emanuel African Methodist Episcopal Church in Charleston, South Carolina.

● **MANY AMERICANS STILL** can't understand why Sandy Hook wasn't the tipping point in the gun debate. Who could argue for the sanctity of the Second Amendment above all else in the face of distraught parents of murdered six- and seven-year-olds?

As it turned out, it was frighteningly easy to dismiss emotional parents as being too compromised by their grief to weigh in on gun policy. Never mind that some of those same individuals were gun owners themselves. Because the shooter suffered from obvious social and emotional issues, the debate was quickly redirected into a discussion of failures in our mental-health system. This was not a gun problem but a psychological problem.

In the end, a coalition of anguished parents wasn't strong enough to counter the NRA. Neither were the deaths of forty-nine victims in the June 2016 rampage at Pulse nightclub in Orlando or the shooting on the Las Vegas Strip on October 1, 2017, where fifty-eight people

were killed and 422 were wounded by bullets, or the massacre of twenty-five people a month later at the First Baptist Church in Sutherland Springs, Texas.

● **I TAKE MY PHONE** to the bathroom because I'm afraid I'll miss an AP alert that's going to tell me there's been another shooting. The one about the Pulse nightclub was posted just before dawn. After these multiple-casualty attacks, I compile photos to accompany eulogies on The Trace's Twitter feed. We started doing this for the victims at Pulse because there were so many casualties and we didn't want the people to get lost behind a number — we wanted to put faces to names. Now I do it after every mass shooting. As I crop the photos, arrange them into a collage, and type out the names, I'm consumed by the feeling that everything has to be perfect. I have so little power over anything; the only power I have is to make sure everyone's names are spelled right.

● **WHEN A MASS SHOOTING HAPPENS**, friends reach out by text or on Facebook. They're looking to me for the horrible details. But they're also looking for clues to the larger narrative that will emerge. For Charleston, it was the gunman posing

with the Confederate flag and the FBI's failure to act on its own information. For the First Baptist Church in Sutherland Springs, it was the use of the semiautomatic AR-15 rifle that had just been used in Las Vegas and the shooter's domestic-violence conviction that the Air Force had never forwarded to the FBI. For the Pittsburgh synagogue shooting, it was the gunman's anti-Semitic, anti-immigrant posts on a far-right social network. That's what they're looking for from me: the takeaway. What's the issue that's been exposed?

● **I GUESS MY BACKGROUND** predisposed me to this line of journalism. Before I was born, my father had served twelve years in prison for gunning down a police informant. Years after his death from lung cancer in 2001, I learned that he'd killed many more people during his time as a drug dealer and mafia associate in Brooklyn and Miami in the 1950s, '60s, and '70s. In an attempt to comprehend how my doting father — who I knew as a genial carpet cleaner — could be a brazen assassin, and how my mother — a former high-school English teacher who'd toiled in violent East New York — could forgive his crimes, I began investigating his past. Shortly before I graduated from the J-school, I turned the story into a Modern Love column in the *Times*. In 2010, I explored it again in a memoir.

And what I found after all this searching was this: guns made it easy for my father to kill people.

● **I HAVE AN ITALIAN LAST NAME**, but my mom was Jewish. My grandmother came here from Ukraine to escape the pogroms. Five days after the Pittsburgh shooting, a group of girls in school uniforms were handing out Shabbat candles outside my office. One of them came up to me and said, "Are you Jewish?" I hesitated. For the first time in my life, I was afraid to answer.

● **I HAVE A COPING MECHANISM**: I sleep all weekend. I try to be comatose as long as I can. But despite my fears and bouts of real pessimism, when people

ask me how I feel about the chances for meaningful political reform, I tell them I'm more optimistic than I was a year ago. The conversations around guns are changing.

● **ON MY WAY TO WORK**, I pass a charter school that boasts “world-class progressive education for the children of Harlem.” While violent crime has dropped significantly in New York City over the last two decades — I’ve heard gunshots maybe half a dozen times in the eighteen years I’ve lived in Harlem — when it does occur, these kids are among the most likely to be exposed to it. They may not encounter as many firearms as their peers in, say, a gun-friendly south Florida suburb, where some families spend Sundays at the range, but it’s a good bet that they see more gun crime.

Which is why when I was passing by the school last February, I stopped in my tracks. Hanging in the window was a floor-to-ceiling bright-yellow poster dotted with figures that resembled chalk outlines of dead bodies at crime scenes. Written on each of these figures was a name and an age: *Meadow Pollack, 18. Helena Ramsay, 17. Alex Schachter, 14.* They were the seventeen victims — fourteen students and three teachers — of Parkland. Around the outlines were messages scrawled in red ink: “Sending

love and strength to the students in Parkland, FL.” “PUT THE GUNS DOWN!” “Keep your head up.”

Until Parkland, I’d never seen children of color in a low-income neighborhood that’s disproportionately affected by gun violence memorialize the mostly white, upper-middle-class victims of a mass shooting. That’s when I knew something was changing.

● **DAVID HOGG**, A SENIOR at Marjory Stoneman Douglas High School, filmed the lockdown that accompanied the massacre at his school on February 14, 2018. The videos, which show Hogg and fellow students hiding in a dark closet and calmly and rationally articulating their fear and fury, quickly went viral. At the time, Hogg wasn’t thinking politically. “I recorded those videos because I didn’t know if I was going to survive,” he told the *New York Times*.

Too young to be ideologues, the teenage survivors didn’t traffic in rhetoric or campaign slogans. What they were expressing was pure, unvarnished emotion. Here were kids fed up with gun violence — and the failure of elected officials to do anything about it. Fueled by that outrage, the Parkland kids set out to reinvent a fifty-year-old gun-reform movement and thrust it into the mainstream.

● **BEFORE FEBRUARY 2018**, the idea that teenage survivors of a school shooting would be able to corral hundreds of thousands of their peers into the street to advocate for gun reform — a political third rail if there ever was one — and manage to dominate a news agenda led by a head-spinning number of domestic and international scandals would have seemed outlandish. But the Parkland teens weren’t easy to dismiss. Unlike the family members who turn to gun-reform advocacy after losing a loved one to a mass shooting, the kids in Florida had lived through one. Like soldiers, they’d seen and smelled and dodged and fled, and reported back that, contrary to the NRA’s argument that “the only thing that stops a bad guy with a gun is a good guy with a gun,” having a firearm would not have prevented a shooting that was over almost before it began.

● **MARCH FOR OUR LIVES**, the March 24, 2018, protest for gun reform organized by the Parkland students, drew 1.2 million people across the US, making it one of the biggest youth protests since the Vietnam War. Veterans joined the call for tighter regulations on firearms. Some of the proposals articulated by the Parkland students (which were later embodied in a manifesto) became Florida law. In fact, a mere three weeks after the shooting, the same Republican-dominated legislature that has permitted an NRA lobbyist to have the final say on gun legislation for the last several decades passed a series of gun laws that incorporated proposals from a group of teenagers.

When has that ever happened? Never, that’s when.

● **SINCE THE MASSACRE**, state legislatures have passed at least fifty gun regulations. Twelve states have enacted so-called red-flag laws, which enable law enforcement, and sometimes family members, to petition a judge to remove guns from potentially dangerous people. The pro-gun governor of Vermont signed into law a slew of gun reforms. And, for the first time in decades, lawmakers are not afraid to campaign on the issue.



New York City students take part in a national school walkout to protest gun violence on April 20, 2018.



People attend the March for Our Lives demonstration for stricter gun control in Washington, DC.

● **FROM THE PERSPECTIVE** of someone who devotes all her time and energy to America's gun-violence problem, the Parkland students have had a major impact. Though they were called "crisis actors" by trolls, their social-media savvy pushed them above the din and nudged the National Rifle Association closer to the fringes. Gun-rights advocates have defined the debate for decades, claiming the moral high ground in their defense of the constitutional right to bear arms. But in the wake of Parkland, the NRA has lost dozens of corporate partners, been cited multiple times for violating campaign-finance laws, and suffered a sharp decline in membership.

● **DURING THE SUMMER OF 2018**, the Parkland survivors started a nationwide voter-registration drive in an effort to build a voting bloc formidable enough to rival NRA supporters. Youth voter registration went up 41 percent in Florida in the six months after the shooting, and a surge has also been recorded across the country. According to one survey, voters eighteen to twenty-nine made

up 31 percent of the electorate in the recent midterm elections, compared to 21 percent in the last midterms, in 2014.

● **THE RECENT MIDTERMS** saw the toppling of more than two dozen NRA-backed candidates across the US. "Overall, this country chose to move in the direction of gun safety," Fred Guttenberg, the father of fourteen-year-old Parkland victim Jaime Guttenberg, tweeted on November 7. Indeed, as this magazine went to press, pro-gun-reform Democrats had gained seven governorships and flipped six state legislative chambers.

Two parents of murdered children won their races after making gun control the centerpiece of their campaigns. Lucy McBath, an African-American businesswoman whose son Jordan was shot six years ago by a white man angry over the loud music coming from his car, defeated her NRA-backed Republican challenger in the race for Georgia's Sixth Congressional District. In Colorado, Tom Sullivan, whose son Alex was one of twelve people gunned down in an Aurora, Colorado, movie theater in 2012,

won a state House of Representatives seat in an upset. "I think what I did is something any father would do for their child," Sullivan, choking back tears, told a local reporter after his victory.

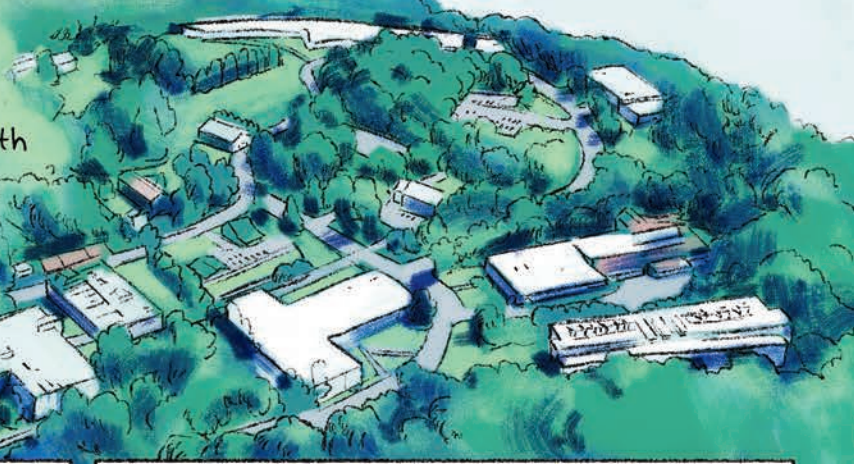
● **IF WE ARE TO DECREASE** shooting deaths in America, we must shift some entrenched attitudes about gun ownership and safety. That will probably take decades. But change is already happening: the Parkland kids have forced many gun owners to reflect on the place of guns in American society. And today's high-school students who are building their political identity around gun reform are tomorrow's college students and parents and elected representatives. Their activism is giving the gun-reform movement its best chance in a generation to succeed, and perhaps one day, when mass shootings are an anomaly and not a regular occurrence, we'll be able to look back and remember exactly when things began to change: on February 14, 2018, at a suburban high school in south Florida, with a massacre that proved to be one too many for our kids to tolerate. 🍷

CORE CURRICULUM

What deep-sea sediment can tell us about climate change

Text by David J. Craig Art by Jackie Roche

In the rural hamlet of Palisades, New York, sixteen miles north of Morningside Heights, scientists at Columbia's Lamont-Doherty Earth Observatory (LDEO) study the planet from the outer reaches of its atmosphere to the depths of its oceans.



Their research is lauded for its insights into our planet's geological evolution, tectonic activity, and climate systems.

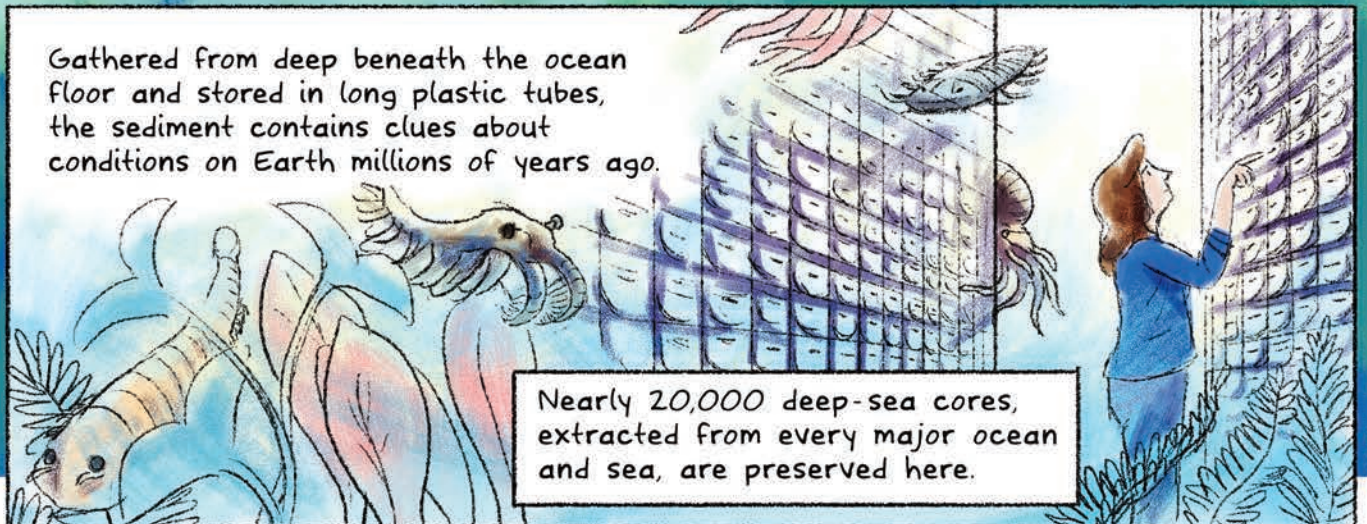


The term "global warming" was coined here!



But LDEO has another, more unusual distinction. It's home to the Core Repository, the world's largest collection of mud.

Gathered from deep beneath the ocean floor and stored in long plastic tubes, the sediment contains clues about conditions on Earth millions of years ago.



Nearly 20,000 deep-sea cores, extracted from every major ocean and sea, are preserved here.

The cores contain answers to essential questions: How has Earth's climate changed over time? Which plants and animals thrived eons ago? And what can Earth's climate history tell us about our planet's future?



Columbia began collecting deep-sea cores in 1947 at the insistence of LDEO founding director Maurice Ewing.



He believed that the cores would provide clues to our geological history.



the Vema

Over the next four decades, the University had two research ships at sea, the Vema and the Robert D. Conrad, and part of their mission was to take at least one core a day.



the Robert D. Conrad



To collect the cores, the scientists used a technique perfected by Ewing.

They lowered a long, hollow pipe to the sea floor and slammed it like a gigantic needle into the ocean bed.

The technique produces cores 20 to 30 feet in length and is still in use today.



New cores arrive at LDEO regularly and are cut into segments.

The sea floor is a rich resource for scientists, says Maureen Raymo '89GSAS.

Everything that lives and dies in the ocean, as well as all of the dust and debris that ever gets blown onto the water, will eventually drift down to the bottom.

It accumulates, layer by layer, with the oldest sediment on the bottom and the youngest on the top.

It's like a tape recorder of what happened on Earth through time.

Raymo, a Columbia paleoclimatologist and marine geologist, directs the Core Repository.

Here's a small sampling of what drifts down to the sea floor.

bits of ash from volcanic eruptions



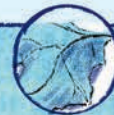
dust blown off arid land



the shells of countless microscopic plankton called foraminifera



bits of leaves



pollen grains from various plants on shore

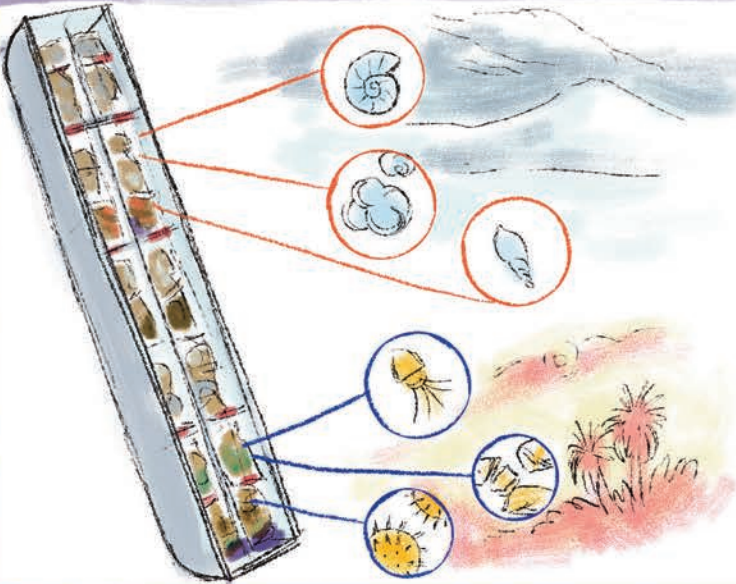


In the 1950s, radiocarbon-dating techniques pioneered by Columbia geologists Wally Broecker '53CC, '58GSAS and J. Laurence Kulp enabled scientists to get more detailed information from the cores.



Sediment that contained shells of marine organisms that thrive only in chilly conditions indicated when past ice ages had occurred.

Remnants of tropical zooplankton, the pollen of heat-loving plants, and minerals blown off arid lands marked warm epochs.



Thousands of analyses by researchers at Columbia and other institutions were done on LDEO's deep-sea cores in the 1960s, '70s, and '80s.

These studies, when taken together with astronomical observations, revealed that Earth's climate changes cyclically in accordance with fluctuations in its orbit around the sun.

The research also showed that a trend of warming temperatures that had begun in the early twentieth century was out of step with natural cycles.



By the 1990s, climate scientists were in broad agreement that the contemporary warming trend was caused by the burning of fossil fuels.



The study of deep-sea cores has helped us understand that what's happening today is quite unnatural.

Columbia scientists have continued to traverse the globe in search of muddy treasure.

And they've proved to be intrepid explorers.

Once, a Columbia ship was attacked by pirates off the coast of Somalia. Everyone escaped unharmed.

Later, another group of Columbia researchers, led by Peter de Menocal '92GSAS, sneaked back into the area to gather sediment.

We turned off our ship's lights and posted lookouts on the bow and stern to scan the water for signs of trouble.

The whole time, we were hearing reports of ships nearby being attacked.



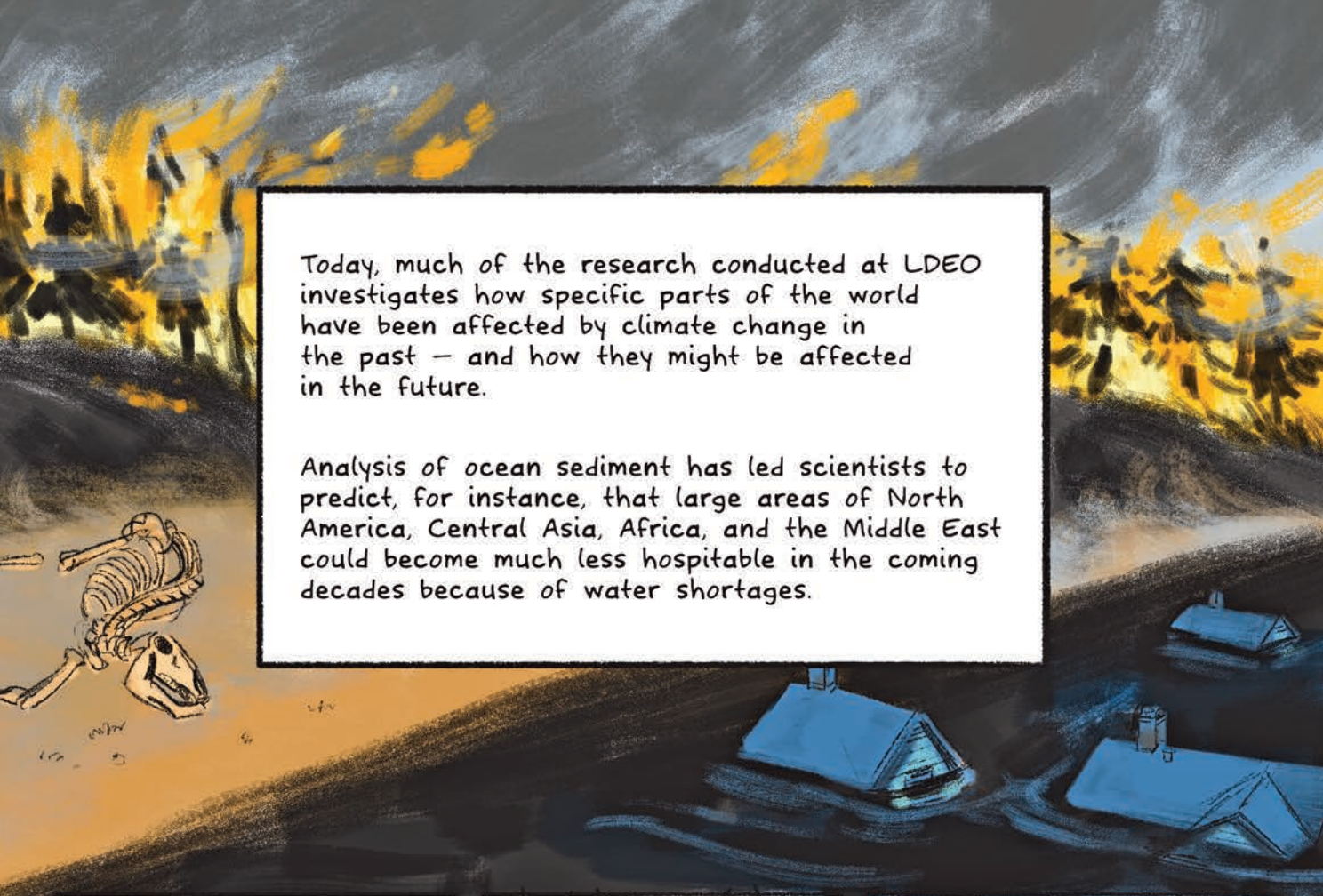
The cores that de Menocal and his colleagues gathered on that trip led to a groundbreaking discovery:



A long period of drought in Africa coincided with ancient humans' major migration from the continent some 65,000 years ago.



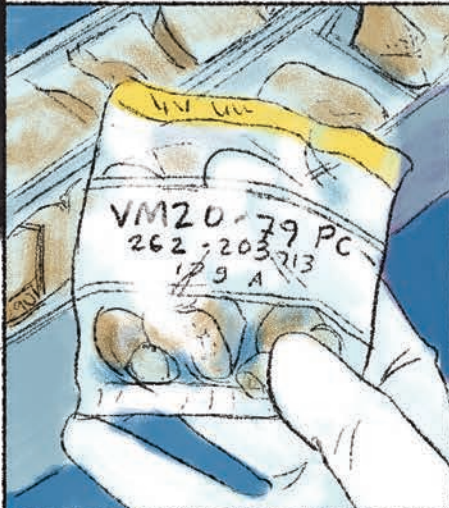
It seems very possible that climate change pushed large numbers of people into Eurasia for the first time.



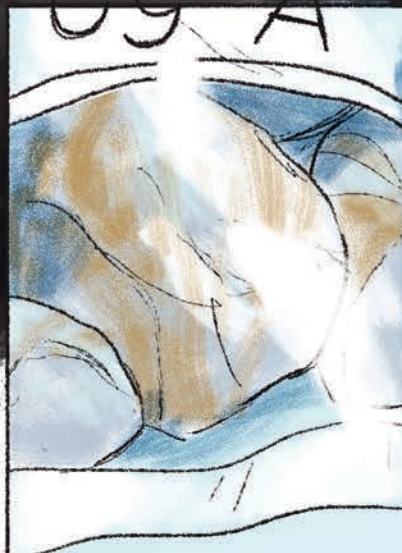
Today, much of the research conducted at LDEO investigates how specific parts of the world have been affected by climate change in the past – and how they might be affected in the future.

Analysis of ocean sediment has led scientists to predict, for instance, that large areas of North America, Central Asia, Africa, and the Middle East could become much less hospitable in the coming decades because of water shortages.

Meanwhile, interest among the larger scientific community in LDEO's deep-sea cores continues to grow.



This year, the repository's staff mailed out approximately 5,000 sediment samples to researchers at other institutions.



Scientists will still be using these cores many decades from now.



There are plenty more secrets waiting to be discovered within these ancient materials.





LEAP OF FAITH

Dancer Michael Novak '09GS has been
cast in the role of a lifetime —
Paul Taylor's successor

BY REBECCA SHAPIRO

When Michael Novak '09GS was twelve years old, he developed a stutter so severe that it rendered him almost mute. Ordering dinner at a restaurant was an impossible task; trying to answer a question in class was torture. "It was awkward, scary, and, most of all, completely isolating," Novak says. "I wanted desperately to communicate, and I couldn't." Novak, who was taking jazz and tap classes after school, soon found that he could channel his frustration into movement. The more he fought to express himself, the better dancer he became. In other words, Novak says, "dance became my voice."

Today that voice is stronger than ever, and Novak has just been given a megaphone to amplify it. Earlier this year, four months before his death at eighty-eight, the legendary choreographer Paul Taylor named Novak, thirty-six, as successor and heir to his modern-dance empire. As artistic director, Novak will head up Taylor's three dance companies — the Paul Taylor Dance Company, which performs only works by Taylor; Taylor 2, a touring company dedicated to showcasing Taylor's work to audiences around the world; and Paul Taylor American Modern Dance, which presents new and historical works by other choreographers alongside Taylor's own. He will also oversee the Taylor archives and the Taylor School in New York.

"And I'll continue to dance with the companies," says Novak, laughing over iced coffee and fruit at a café across from Lincoln Center, where he's about to head into a four-hour rehearsal. "I just might never sleep again."

There's no trace of a stutter left in Novak's speech; in fact, it's almost impossible to imagine him as an awkward teenager. He's confident, funny, and Disney-prince handsome, with frosty-blue eyes, a chiseled jawline, and perfectly sculpted hair. He sits with military posture, even in a casual coffee shop, and rarely breaks eye contact.

Novak joined the Paul Taylor Dance Company in 2010 and quickly became a standout. In his debut season, he was nominated for a Clive Barnes Award (a top honor for young dancers and actors). For the 2018 season, a striking photograph of Novak dancing solo decorated the company's program covers and was featured in its advertising ("frankly, I never thought I'd see myself in the *New York Times* at all, let alone in a full-page ad in tights," he says). He's performed fifty-six roles in Taylor dances, thirteen of which were created for him. Still, for most in the dance community, the announcement of Novak as Taylor's successor was unexpected.

"I think it's safe to say that no one saw this coming, least of all me," Novak says. "For the first few months, I felt a physical wave of shock every time I thought about it."

John Tomlinson, the executive director of the Taylor Dance Foundation, has said that the decision was surprising on two levels. For years, Taylor had said that he had no plans to name a successor at all — rather, he planned to create a committee that would determine the company's artistic future after he died. The foundation pushed Taylor to reconsider, fearing it would be difficult to fundraise for and build excitement around an

organization with such an uncertain path. But many thought his heir would likely be a dancer further into his or her career, who had been with the company longer.

Still, Tomlinson thinks Novak was an inspired choice. "Michael is passionate and articulate about the Taylor repertoire and its contribution to modern dance," he says. "He's a student of dance history and has already demonstrated a deep concern about supporting future choreographers. There's no question that he will leverage this passion, along with sheer talent, dance knowledge, and energy, in working to advance Paul Taylor's vision of American modern dance."

Novak grew up in a suburb of Chicago in a family that appreciated music, theater, and all things creative. His father was "a copywriter, consultant, and fiction writer ... a real artistic soul," Novak says. His mother, the executive assistant to the vice president of a steel company, loved musicals and would sing show tunes with Novak as she cooked dinner ("our favorites were *Phantom of the Opera*, *Les Misérables*, and *Jesus Christ Superstar*," he says). Neither of Novak's parents were dancers, but they were supportive when their son expressed an interest.

"I tried a bunch of team sports and wasn't great at any of them, so I was looking for an outlet for my energy," Novak says. "A dance studio opened near my house, and I started taking classes. It was the right fit from the start."

As Novak worked to overcome his stutter — he credits hours spent with a speech therapist as well as his burgeoning dance career — he grew more confident both in and outside the studio. In high school, he was president of the drama club and earned starring roles in almost every musical, winning an all-state drama award for the role of David in Bob Randall's play *David's Mother*. He also frequently took the train into Chicago for more-intensive dance classes.

At eighteen, Novak enrolled at Philadelphia's University of the Arts, where he planned to major in dance and theater. Though he had a solid background in modern dance, jazz, and tap, Novak quickly realized he would need more training in the fundamentals of ballet if he wanted to dance professionally. He withdrew from University of the Arts and enrolled at the Pennsylvania Academy of Ballet, where the rigors of practices and performances soon took a toll on his body.

"I basically started to develop shin splints immediately and then ended up with stress fractures in both legs," Novak says. "It was excruciating, physically and mentally. I realized that it was in my best interest to quit dancing and take care of myself."

Novak was twenty-three years old and had given more than a decade of his life to dance. Suddenly he had to imagine an entirely new future for himself. "It's not an unusual story for a dancer, but it was devastating nonetheless. I really thought I was never going to dance again," he says. He moved to New York and applied to two nontraditional programs to complete his undergraduate education — New York University's Gallatin School of Individualized Study and Columbia's School of General Studies. Columbia immediately won him over. "I remember going on my campus tour at Columbia, and I just knew," he says. "I thought



Michael Novak (right) and Paul Taylor dancer Eran Bugge in *Promethean Fire*.

“I found myself in a network of artists who were not just creative but also intellectual ... I knew immediately that I had found my kin.”

to myself, this is the soil that I need to root myself in for the next few years.”

Novak was drawn to Columbia’s arts programming as well as the Core Curriculum (“at that point in my life, I was mostly looking for a strong liberal-arts education,” he says). But what really swayed his decision was the school’s large community of dancers, many of whom were in similar places in their careers and lives. “I found myself in a network of artists who were not just creative but also intellectual. People at Columbia thought like me and communicated like me. I knew immediately that I had found my kin.”

Novak entered as a double major in dance and religion and became involved in a new campus group called the Columbia Ballet Collaborative, which was made up of retired ballet dancers. Novak was doing an independent study in choreography, and he focused a semester on crafting a piece for the collaborative. With his injuries healed, Novak started performing with the group and soon assumed the role of artistic director.

Through the collaborative, Novak also started working closely

with two Barnard professors who specialized in dance history — the late Mary Cochran, who chaired the dance department, and Professor Emeritus Lynn Garafola — and decided to cross-register for classes there.

“I remember Michael as a very curious student. He was obviously a talented performer, but he also wanted to understand the context of what he was performing,” Garafola says.

Under Cochran’s and Garafola’s tutelage, Novak became deeply immersed in dance history, eventually dropping his religion major and writing his thesis on dance photographer George Platt Lynes. “It was largely inspired by a series of nude photographs that Lynes took in 1948 of Nicholas Magallanes and Francisco Moncion in a loose interpretation of George Balanchine’s now iconic *Orpheus*,” Novak says. “There’s so much in this one series — fashion, surrealism, nudity, homosexuality, portraiture — and the dancers’ bodies take on a truly mythical status. I argue that Lynes’s work is the most important collection of dance photography of the twentieth century.”



Novak had planned to go on to graduate school, for a master's in arts administration or an MBA. But his legs were getting stronger and less prone to injury, thanks in part to Columbia dance classes. During his senior year, he performed the classic Nijinsky ballet *Afternoon of a Faun*, as produced by Garafola, who was also serving as his thesis adviser.

"It's a complex dance," Garafola says. "It's choreographed as a moving frieze, with the kind of poses you would see on a Greek vase. Michael had both the technical skill and the imagination to infuse the poses with movement. I knew immediately that I had found my faun."

For Novak, the performance turned out to be a seminal moment. "I was dancing this incredibly iconic role, in a room full of the world's most eminent dance historians. And I realized that I still might have something left to give," he says. "By the time I graduated from Columbia, I had decided to try to pursue a professional dance career one last time."

Cochran, a former Taylor dancer, thought the company might be a good fit for Novak. At her suggestion, Novak started taking classes at the Taylor School while he was still at Columbia and was accepted into its summer intensive program. "I just fell in love. I couldn't get enough of Paul's movements, of the theatricality — there's an emphasis on line and technique, but there's always the freedom to move," Novak says. "I also really responded to the emotional range of his dances. He has very funny pieces and very dark pieces. And the body of work is so huge that I could spend years growing into it. I'd never get bored."

A spot opened in the company in 2008, the year before Novak graduated from Columbia. He made it to the final round of auditions, but he didn't get the job. "Then there's this awkward waiting period," he says. "You don't know if another spot will open the next year or in five years." While he waited, Novak took whatever work he could find, which was particularly challenging since he had graduated during the biggest economic downturn since the Great Depression. "I was a personal assistant. I taught body-conditioning classes. I was dancing with at least three companies at all times. I taught ballet and jazz and modern," Novak says. "I was twenty-seven, and I was getting tired of scraping together money for health insurance and for student loans. I was craving stability."

In 2010 — sooner than he was expecting — Novak got a call to say that another spot had opened at the Paul Taylor Dance Company. He auditioned again, and this time he was in. Though Novak had been dancing seriously for over fifteen years, he says that joining the company was one of the hardest things he had ever done. The company spends about a third of the year touring, a third rehearsing, and the last third in what it calls the New York season ("I think of New York as our final exams for the year"). Not only did Novak have to master the bulk of Taylor's extensive repertoire, he also had to get used to the lifestyle of a touring dancer: "There are so many things you don't think about. How to dance when you're jet-lagged. How to stretch in an airport when your plane is delayed. How to stick to your nutrition and cross-training when you're in Oman, for example."

“I just fell in love. I couldn’t get enough of Paul’s movements, of the theatricality.”

Novak says he spent his early years with the company watching as many rehearsals and performances as he could. “I’ve always loved watching other dancers,” he says. “Even at the beginning, it never felt intimidating. It was exhilarating to be able to learn from these incredible artists who were now also my peers.”

Though he says that every role he’s performed with the company has made him a better dancer, he has a particular affection for *Fibers*, a dance that Taylor created in 1961. “We performed it in 2013, which was the first time it had been produced since the sixties. The costume was very intricate — a fencing mask with striped panels over the eyes and plastic material around the body. Dancing while I was basically bound by plastic was a completely unique, almost terrifying experience,” Novak says. “But what really made it special was that it was my first ‘Paul role’ — that’s what we call roles that he danced himself.”

Now Novak is stepping into a much bigger “Paul role.” As the company’s first artistic director, he doesn’t have much of a playbook to follow. In fact, he says, it’s unusual for an active dancer with a company to assume such a role; often it’s a former dancer who has already stepped into a management position. Unlike Taylor, Novak does not have any immediate plans to make his own dances. “I do have a background in choreography, but I see myself more as a curator for now,” Novak explains. He says he is planning, programming, and thinking about ways to bring dance to new audiences. As a devoted student of modern-dance history, he’s also excited about resurrecting dances that haven’t been performed in decades. “The first thing I did was to take out all my dance-history books from Barnard and Columbia,” Novak says.

To prepare for his new job, Novak also immersed himself in the Taylor archives, developing a deep knowledge of the company’s nearly seventy-year history. In the first few months of Novak’s tenure, Taylor was his mentor, sitting with him during rehearsals and going over notes on the performance together and meeting at Taylor’s Lower East Side apartment to talk through the 2019 and 2020 seasons.

Since Taylor’s death in August, the weight of Novak’s new role hits him from time to time. Novak had hoped to have more time to spend apprenticing under the renowned artistic director. But Novak says he takes comfort in recalling the way Taylor approached him about the job.

“It wasn’t a question: it was a directive. That signaled to me that he trusted me to do this, and that he believed I could,” Novak says. “Paul Taylor left us an incredible body of work, inspiring generations of artists and audiences with his wit, musicality, humor, and humanity. When I think about the fact that this legendary artist gave over his entire legacy for me to protect and preserve, I really can’t imagine a higher calling.” 🍷



The Science of Healthy Aging

We talked with Linda P. Fried, dean of Columbia's Mailman School of Public Health and an internationally recognized gerontologist, about the secrets to living a longer, healthier, and happier life — and why the graying of America may be a good thing

By David J. Craig



We know the US population is aging. Can you give us a little perspective on this demographic shift?

Today, 15 percent of all Americans are sixty-five or older, and by 2030 that number will reach 20 percent. This isn't a temporary bump caused by the aging of baby boomers. It's primarily the result of major public-health achievements that, over the past century, have added more than three decades to the average American lifespan. Many people are now living well into their eighties or nineties, which means that we have an entirely new stage of life to explore. It's amazing. It's what we always wanted: for everybody to live longer. And yet we've declared it a disaster — "Oh, no, we can't afford it; how terrible to have all these old people around."

So you don't share the concerns of people who warn that this cohort will bankrupt our Social Security and Medicare systems?

It's true that Social Security and Medicare will soon need to be tweaked because

more people are now drawing benefits out of those programs relative to the number paying taxes into them. But the situation can be addressed with some combination of minor tax increases and adjustments in the programs' eligibility ages.

What I find perplexing is the attitude that older people represent a financial burden on society. I see them as a great untapped resource. Psychological research has shown that older people have a strong desire to make a difference in the world. Many of them are eager to remain involved in work or in volunteer activities. So why not connect these large numbers of wise and experienced older Americans with important social initiatives that could use their help?

You designed a nationwide program, the AARP Foundation Experience Corps, that assigns older Americans to serve as tutors in public schools.

Yes, the inspiration came from work I did as a young physician in Baltimore back in the 1980s. I saw a lot of depression, anxiety, and feelings of social isolation

and stroke — are not an inevitable part of growing old, as physicians used to think, but are actually preventable.

How can you prevent them?

The single most important thing a person can do as he or she gets older is to remain physically active. Diet is important too, but physical activity is crucial. Exercise is the closest thing we've found to a magic pill for combating the effects of aging. That's because it works on every physiological system and keeps your entire body fine-tuned. It even stimulates your brain and helps to prevent cognitive decline.

That said, the prevalence of Alzheimer's disease has been rising. Do you think we're prepared as a country?

Unless we invest more money in studying the disease, both as a medical problem and as a public-health challenge, it could be a truly devastating situation. Right now, the US government spends about \$600 million a year on Alzheimer's research, which is less than it spends studying AIDS or cancer and is

a pittance compared to the \$225 billion that the disease is estimated to cost our country annually. Meanwhile, the number of Alzheimer's cases in the US is expected to triple, to sixteen million, by 2050.

Research may point a way forward, though. The Health and Retirement Study, a longitudinal survey funded by the National Institute on Aging, has recently shown that among Americans with high levels of education, rates of Alzheimer's disease have actually plummeted since 2000. Now, the fact that the decline is occurring only among better-educated people is problematic, obviously, but it should motivate us to figure out exactly what resources, activities, and environments protect against dementia. In the meantime, I think we ought to be investing more money in public-health programs that encourage participation in the simple things that we already know are beneficial for long-term cognitive health: reading, learning new tasks, exercising, eating healthfully, and leading an active life.

More and more Americans are working past the official retirement age. Is your faculty studying that issue?

Yes, adults over the age of fifty-five are the fastest growing segment of the workforce, and we've done extensive research on the topic. Older people remain on the job for many different reasons. Some can't afford to retire. Others simply love what they do and want to keep doing it. As scientists, we're looking at the situation agnostically and asking: if an older person chooses to continue working, regardless of her motivations, how can she accomplish that in a way that's beneficial to both her and her employer?

What have you learned so far?

Our research has debunked a lot of myths about older workers. For example, we've found that workers in many industries continue to be productive well past the age of sixty-five and that the wealth of experience they bring into the workplace improves a team's performance. This is true in a range of settings, from white-collar workplaces to production



The sewing-machine-repair shop Sew Right and the spring-manufacturing company Lee Spring are among the dozens of New York City businesses that the Robert N. Butler Columbia Aging Center has recognized for valuing older workers.

lines. One study in a German automobile factory showed that employees on a production line make fewer mistakes if the team is multigenerational.

Are employers getting the message?

Ageism is still a problem in many workplaces, unfortunately. But more and more companies are recognizing the advantages of hiring and retaining older workers. Some big corporations, like CVS drugstores and Fidelity Investments, have recruited older people because they realize that older customers prefer discussing their health needs or retirement plans with people closer to them in age. And many small companies, where staff turnover can be especially disruptive, are hanging on to older workers because they value their institutional knowledge and experience. Overall, the research indicates that the multigenerational workplace is a win-win: good for the companies and good for the workers.

Some have suggested that older workers take jobs away from young people.

That's another myth that's been disproved. In fact, several studies have shown that older workers provide a boost to our economy and create jobs for young people, since they have more disposable income.

One serious challenge that does exist is that companies are often reluctant to pay for their older workers' health-care plans, which tend to be more expensive. I proposed a solution to this in a recent paper: older workers ought to be able to receive full Medicare coverage, which is currently available only to retirees. This would lower companies' health-care costs and encourage them to keep on their older workers.

Are only industrialized nations seeing their populations age?

The same demographic shift is occurring throughout the world. In some ways, the changes will be more difficult for low- and middle-income nations. Many of them lack the robust social safety nets that we have for older people. And some of them have rising rates of smoking,

alcohol abuse, diabetes, stroke, and heart disease, as well as less access to education — all risk factors for frailty, dementia, and other serious health problems that strike people in old age. Many of my Columbia colleagues and I are now collaborating with public-health experts overseas to strategize about how developing nations can best prepare for this transition, based on what we've learned works, or doesn't, in our own countries.

What are some of the lessons you've shared?

There are so many. Some may seem small, but they're important. For example, Mailman School researchers have been looking at how urban infrastructure and public policy can affect the lives of older city dwellers. We've shown that installing more street benches, giving older people free access to public transportation, and inviting them to take classes at local universities and at other institutions through which they can stay engaged can dramatically increase their levels of physical, social, and mental activity, and thereby improve their overall health. These are enormously cost-effective measures that can be implemented in cities around the world.

And then there are larger-scale interventions. My Mailman colleague Kavita Sivaramakrishnan is now working in India, China, and Kenya to understand culturally relevant approaches to long-term-care programs for older people. We believe that expanding such programs is a critical need, because these and many other developing nations are undergoing social changes similar to those that occurred in the US many decades ago, when grown children began moving far away from their parents and so were no longer available to directly care for them in their later years. China has the most urgent need for new approaches, as a result of its one-child policy.

To get back to the US, what work must still be done here?

We are still in the process of defining what we want our lives to look like in our seventies, eighties, nineties, and beyond. While

“Psychological research has shown that older people have a strong desire to make a difference in the world.”

many people are truly happy retiring and devoting their time to family, hobbies, and leisure, others feel the urge to do more. We know this is true because Experience Corps, along with a handful of other nationwide volunteer programs for older people, always has long waiting lists of would-be participants. I'm an advocate for these programs not because I think doing volunteer work is the only way to age healthfully but because I've seen firsthand what it can mean for older people to know that their lives still have a larger purpose. I've sat with retired police officers, plumbers, lawyers, corporate CEOs, and others who, after mentoring children, have looked me in the eye and said things like, “This is the most important work I've ever done.” That conviction inspires them to get out of bed every day, to walk to a nearby school, and to stay physically and mentally fit. And as a result, a child who might otherwise have dropped out of school goes on to graduate. Two lives are changed.

We need to design more roles like this for older people, whether that means having them serve as community health advocates, companions for homebound people, or mentors to younger employees at their companies. We need to stop bemoaning the challenges posed by our population's aging and instead ask ourselves a bold question: how could this transition be great? 🍷

EXPLORATIONS

FRONTIERS OF
RESEARCH AND
DISCOVERY



New smart helmet could spot concussions in real time

This fall, tens of thousands of American football players, from grade-schoolers on up to the pros, will be treated for concussions. Experts suspect that for every player who is pulled from a game and diagnosed, another will have his or her injury go unnoticed, since only those who report feeling ill or display the most conspicuous signs of traumatic brain injury — such as losing consciousness or acting disoriented — are likely to be examined by a neurologist.

In order to detect concussions as they occur, and to help coaches determine quickly and conclusively when players should be taken off the field, a team of Columbia researchers is developing what would be the first wearable diagnostic device for traumatic brain injury. Called the NoMo, the device incorporates electroencephalography (EEG) sensors of the type commonly used in hospitals to measure a patient's brain activity. The sensors, which would ordinarily be taped to the scalp, are instead tucked in between the pads of a football helmet. Upon detecting the distinct

electromagnetic wave patterns of a traumatic brain injury, they will send an alert to a computer on the sidelines.

“Within seconds of a player being hit, everyone will know whether or not he’s suffered a concussion,” says James Noble ’08PH, a Columbia neurologist who designed the technology with Columbia biomedical engineer Barclay Morrison. “This will eliminate a lot of the problems you have now with coaches, athletic trainers, and team physicians having to make fairly subjective judgments about who should be removed from a game to receive a full neurological evaluation.”

The idea for the NoMo was inspired by Noble’s experiences serving as a neurological consultant to collegiate and professional football teams. In that role, he helps the teams’ doctors determine if and when players who have been benched for concussions are fully recovered and battle-ready again. This is a critical decision, since a player who returns to the field and takes additional hits too soon

DAVID BUTLER II / USA TODAY SPORTS

after suffering a concussion is more likely to incur long-term neurological damage.

“Everybody involved in football wants a more reliable way of identifying when these injuries happen,” Noble says. “The culture of the game, at any level, is such that the players are often reluctant to volunteer that they’re hurt. Plus, the symptoms of a concussion can be subtle and hard to spot.”

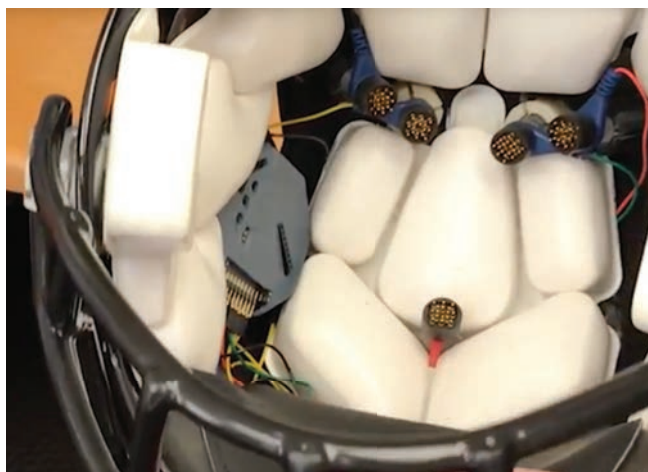
Over the past decade, several other research teams have attempted to create wearable devices to detect concussions. Some have developed accelerometers that, when implanted in football helmets, measure the physical intensity of hits that players endure. The jostling of a player’s helmet has proved to be an imperfect proxy for concussions, though, and the NFL, after

initially planning to use such devices in the 2016 season, ultimately shelved the idea.

“One problem with accelerometers is that a concussion may result from an accumulation of hits rather than from one big one,” says Noble. “Our device is more reliable because it monitors the brain’s actual physiological activity in response to these hits. It will provide a real medical diagnosis.”

Noble and Morrison conducted a preliminary test of the NoMo at a Columbia football practice last year. They found that it successfully recorded the players’ brain waves, but that it must be made smaller to fit comfortably into a helmet. They are currently working on a new version of the device.

Eventually, they say, the NoMo could be adapted for use in a number of contact



EEG sensors inside a football helmet can detect concussions in real time.

sports, including hockey, wrestling, lacrosse, and, if the sensors can be made small enough to slip into a headband, soccer and basketball. Furthermore, they say, the device could be inserted into military helmets to detect when soldiers suffer concussions, either from being knocked off

their feet or from enduring the shock waves caused by explosions.

“The beauty of our design is that it doesn’t matter what causes the concussion,” says Morrison. “If you experience a traumatic brain injury, a red light will go off on a computer and tell someone you need help.”

What fish can teach us about our powers of perception

Scientists have long wondered how our brains tune out the myriad sounds produced inside our own bodies — such as the creaking of bones, the pumping of blood, and the intake of breath — and focus instead on the sounds of the outside world. Nathaniel Sawtell and Larry Abbott, neuroscientists at Columbia’s Zuckerman Institute, have been making strides in solving this mystery. They have identified a section of the brain of the African

elephant-nose fish (pictured below) that recognizes unimportant internal stimuli and summarily blocks them out. Now, in a new study in the journal *Neuron*, they show that when this “noise-cancellation mechanism” is shut off, the fish become hopelessly disoriented. Sawtell and Abbott suspect that a similar mechanism is operating in the human brain and that their research could inform studies of sensory disorders such as tinnitus.

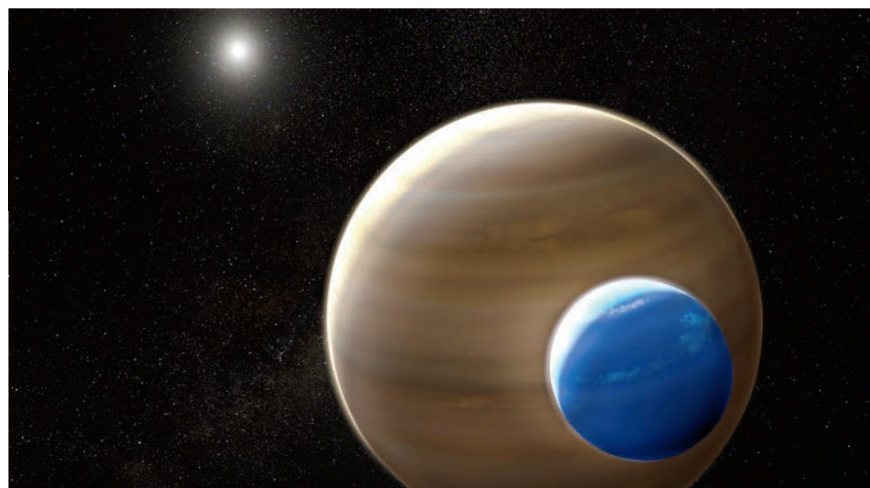


EXPLORATIONS

New flight routes save time but damage health

More airplanes are flying directly over densely populated areas, thanks to airport computer systems that automatically chart the most efficient routes. But a new study by researchers at Columbia's Mailman School of Public Health concludes that the benefits of the reduced flight times are outweighed by the health effects on residents below. Looking at the increase in noise pollution around New York City's LaGuardia Airport since routes were changed in 2012, the researchers determined that people living in certain Queens neighborhoods will lose an average of one year of good health over the course of their lifetimes, due to their heightened risk of cardiovascular disease and other ailments linked to stress.

"Ideally, airports should be built farther away from urban centers," says lead author Peter Muennig '98PH, a professor of health policy and management. "The next-best option is to use flight patterns that send planes over green space, waterways, and industrial areas."



An artist's rendering of a moon (foreground, in blue) orbiting the exoplanet Kepler-1625b.

The hunt for the first exomoon may be over

Discovering a planet outside our solar system is difficult. Spotting a moon orbiting one of those distant planets? Well, that's even harder. It is so tough, in fact, that no one has ever accomplished it.

But soon that could change. In a recent paper in the journal *Science Advances*, Columbia astronomers David Kipping and Alex Teachey report evidence of a moon around a Jupiter-like planet called Kepler-1625b, which is orbiting a star some eight thousand light years from Earth in the constellation Cygnus. With data gathered by NASA's Hubble Space Telescope, the astronomers determined that when the planet passed in front of its star in late 2017, the star's brief dimming was followed by a second, more subtle dip in light. That is consistent, Kipping says, with "a moon trailing the planet like a dog following its owner on a leash."

The Columbia researchers had previously published more tentative evidence of Kepler-1625b's apparent lunar companion. This new study contains higher-resolution data that also suggest that Kepler-1625b is wobbling slightly as it hurtles through space, as would be expected if a moon were orbiting the planet and exerting a subtle gravitational pull from different directions.

Kipping and Teachey say that they will need to observe Kepler-1625b passing by its star at least once more to confirm their findings. (The planet's next transit will occur in May 2019.) But their study has already created excitement among astronomers, not only because it contains the most compelling evidence yet for a moon outside our solar system — a so-called "exomoon" — but also because it suggests that the body orbiting Kepler-1625b is unlike any of the approximately 180 known moons in our solar system. For example, Kipping and Teachey's exomoon candidate appears to be the size of Neptune, which would make it by far the largest moon ever discovered. And based partly on its orbital path, the scientists say that it is likely hot and gaseous, whereas all known moons are cold and rocky.

"This moon would have fairly surprising properties," says Kipping, whose lab's research was the subject of the cover story in the Winter 2017–18 issue of *Columbia Magazine*. "If confirmed by subsequent Hubble observations, the finding could provide vital clues about the development of planetary systems and cause experts to revisit theories about how moons form."

What do retail workers want? Just a little respect

Walmart is the largest private employer in the US, with 1.5 million Americans, or nearly 1 percent of the country's workforce, stocking its shelves, ringing up its customers, and wrangling its shopping carts. The vast majority of these workers receive low wages and few benefits, and not a single one of them is represented by a union. Why has it been difficult to organize workers at places like Walmart?

To answer this question, Columbia sociologists Adam Reich and Peter Bearman undertook an ambitious investigative project, sending teams of student researchers across the United States to conduct in-depth interviews with more than a hundred Walmart employees, surveying thousands more, and even embedding the students in a workers' rights group created by the United Food and Commercial

Workers International Union (UFCW) as it attempted to organize employees. Their findings are presented in a new book, *Working for Respect: Community and Conflict at Walmart*.

In order for workers to act collectively, Reich and Bearman argue, they have to be able to develop trust in one another and come to see that they have shared interests. But Walmart's workforce is unusually heterogeneous, consisting of, among others, teenagers, laid-off factory workers, busy moms, retirees, and the formerly incarcerated, a group that might not feel a natural sense of solidarity. Nor are their working conditions conducive to forming bonds, since their shifts are constantly rotating. And then there is the fact that the Walmart corporation has taken a hard line against union activists in the past, shutting down several stores where its workers attempted to organize.

And yet despite these challenges, Reich and Bearman argue, there is still reason to think that Walmart employees may unionize. In recent years, they point out, an advocacy group run for and by the company's employees, Organization United for Respect, has enrolled thousands of members by providing them information and advice about routine workplace issues, like what justifies a medical leave, what types of tasks supervisors can legally ask employees to do, and how to handle oneself in a disciplinary hearing. The organization has a robust online presence, hosting discussion boards that connect employees from across the country, and it therefore has the potential to build the kind of collective that might challenge Walmart and other major retailers on a national level.

But for this to happen, Reich and Bearman say, labor

organizers will have to do a better job of listening to what retail workers actually want. Traditionally, US unions have focused on fighting for better pay and benefits. But what Walmart employees want most, the researchers say, is respect. In interview after interview, they write, Walmart employees told them that what they'd like to see changed about their jobs is to be treated more respectfully by their bosses, to have more say in managing their schedules and prioritizing their duties, and to be granted small freedoms that they're often denied, like having the ability to chat for a few moments with customers they know, to choose when to take a bathroom break, or to display one's nickname on a name tag.

"It's not as if Walmart employees don't want better pay. They do. Many of them are barely scraping by," said Bearman in a recent interview. "But more fundamentally, there is a baseline of human dignity that associates feel they're being denied."

The sociologists recommend that union organizers borrow a page from the US labor movements of the late nineteenth and early twentieth centuries — movements that were driven, they say, as much by workers' desire for clear rules about how bosses should treat them as by concerns about compensation.

"Workers in the late nineteenth century were poor, yes, but they also felt powerless and humiliated when they went to work, and early labor organizations spoke to that situation," says Reich.



Can AI defeat the dreaded tsetse fly?



It may look like an ordinary housefly, but the African tsetse fly is one of the most dangerous insects in the world. The sole transmitter of the infectious disease known as sleeping sickness, which kills thousands of people and millions of livestock annually in sub-Saharan Africa, the tsetse fly has made large swaths of land on the continent uninhabitable.

In recent years, the Senegalese government, in partnership with international aid agencies, has found an ingenious way to fight the deadly pest by breeding the flies in captivity, sterilizing the males with zaps of radiation, and then releasing them into the wild. This has disrupted the tsetse flies' mating patterns and caused many colonies to collapse. The strategy, while effective,

is time-consuming and expensive, since it requires lots of nimble-fingered lab workers to carefully sort male and female flies by hand.

Zelda Moran '17PH, a staff research associate at Columbia's Earth Institute, believes she has found a way to streamline this process. Her innovation stems from a discovery she made in 2015 while working in Vienna for the International Atomic Energy Agency (IAEA), which oversees international scientists working on the Senegalese project. In an effort to study the early stages of the tsetse fly's physical development, Moran invented a near-infrared imaging technique that enabled scientists to peer inside its opaque pupa encasement for the first time. This led her and colleagues to observe that male and female pupae develop on slightly different schedules, with females sprouting wings a day or two before the males.

"We knew that if you could sort the flies during the pupal stage, you wouldn't have to be so delicate with them," says Moran. "We could even automate the task."

Moran has since teamed up with Columbia physicist Szabolcs Marka to develop an artificial-intelligence program that can instantly determine if tsetse pupae contain male or female flies. The next step, they say, will be to create a robotic mechanism that, upon identifying a male pupa moving past on a conveyor belt, will blow a puff of air to separate it from the females.

Moran says that she is currently in conversations with IAEA scientists about building a prototype system that could be incorporated into the tsetse-breeding facility in Senegal. She hopes that her technology, if it proves effective, will enable the IAEA to expand its tsetse-sterilization project and eventually bring it to other African countries.

More crop per drop

India faces chronic water shortages and widespread malnutrition — problems that are expected to worsen as the country's population continues to grow.

But a team of environmental scientists led by Kyle Davis, a postdoctoral fellow at Columbia's Data Science Institute, has found that both challenges could be ameliorated if farmers switched the grains they produce. The researchers, whose paper appears in the journal *Science Advances*, found that India could reduce the amount of water used for irrigation by nearly 33 percent — while improving nutrition — by replacing plots of rice with less thirsty crops like sorghum,

maize, and millet. More moderate improvements in agricultural productivity, the scientists found, could be achieved by replacing wheat fields.

The study may hold lessons for other countries facing severe water shortages, since rice and wheat are among the world's most popular, and most water-intensive, grains.

"While we recognize the economic, social, and cultural challenges involved in making such major changes in grain production, the goal of our work is to help countries think of ways to better align food security and environmental goals," Davis says.



An Indian woman sorts grains from husks.



Molten slag is dumped into a landfill.

Turning dross into gold

The process of turning raw iron ore into steel generates enormous amounts of waste material, called slag, that accumulates in stockpiles where its toxic elements can cause environmental or health problems.

But what if steel companies could recycle that slag, separating out its constituent elements and repurposing them for other industrial uses? A team of Columbia engineers led by Ah-Hyung (Alissa) Park, the director of the Lenfest Center for Sustainable Energy, and Xiaozhou (Sean) Zhou '15SEAS, an associate research scientist in the Department of Earth and Environmental Engineering and the Department of Chemical Engineering, has devised a system to do just that. And next spring, one of the world's largest steel companies, China's Baotou Iron and Steel Group, will implement the team's technology, opening a twenty-thousand-square-foot slag-recycling facility at its flagship smelting plant in Inner Mongolia.

The project aims to eventually recycle all the nearly three million tons of slag that the plant stockpiles annually, turning it into a wide range of chemical and mineral products useful to the paper, plastic, paint, cement, oil, gas, and steel industries. "We even hope to recycle some of the slag that the company has already discarded, which covers almost one square mile of land," says Zhou.

Park and Zhou's technology grew out of their research in carbon capture and sequestration, which involves converting CO₂ into carbonate minerals for storage. Once the researchers realized they could extract calcium carbonate from slag, they were able to develop an ultra-efficient system that pumps the waste through a series of reactors that remove its elements one by one.

The Columbia researchers say that their technology could improve the environmental sustainability of steel production throughout the world. While many other steel companies have begun to recycle some parts of their slag, by mixing their carbonate minerals into cement and paper, the new Baotou facility will be the first to approach a "zero-waste" recycling solution.

"The techniques we've developed have the potential to make iron and steel manufacturing substantially more sustainable, not only in China but globally," says Park.

STUDY HALL RESEARCH BRIEFS

It doesn't pay to be nice

Kind and trusting people are more likely to fall into debt, default on loans, and declare bankruptcy because they tend to care less about money and are therefore prone to making bad financial decisions, finds Sandra Matz, an assistant professor of management at Columbia Business School. Matz's study analyzed personality and financial data from more than three million people.

When "gluten-free" is full of it About one-third of dishes labeled "gluten-free" in US eateries contain traces of gluten, according to a study led by Benjamin Lerner, a researcher at Columbia's Celiac Disease Center. Lerner crowdsourced data from more than eight hundred people who tested some 5,600 dishes in restaurants around the country using handheld gluten-detection devices. He found that pizza and pasta advertised as gluten-free are the most likely to be contaminated.

Safe harbor Myrna Weissman, a Columbia professor of epidemiology and psychiatry, has found that children are less likely to attempt suicide if religion or spirituality is important to their parents.

Votes of despair? Anxiety about rising rates of alcohol- and drug-related deaths and suicide may have helped tilt the 2016 presidential election in favor of Donald Trump, according to a study led by Lee Goldman, the head of Columbia University Irving Medical Center, who is also an epidemiologist. Even when controlling for unemployment levels and other economic factors, Goldman and his colleagues found that support for Trump was strongest in US counties where mortality rates had increased the most sharply over the previous fifteen years.

A cool coat A team of researchers led by Columbia engineers Yuan Yang and Nanfang Yu has created a highly reflective white paint that, when applied to buildings and rooftops, can lower internal temperatures by as much as six degrees Fahrenheit, thereby slashing cooling costs. The paint's reflectivity derives from its unique corrugated texture, which was inspired by the shiny, grooved hairs of the Saharan silver ant.

Outmaneuvering malaria Columbia microbiologists Leila S. Ross and David Fidock have discovered that many people in Southeast Asia carry a genetic mutation that renders a popular malaria medicine, piperazine, ineffective. The discovery is expected to save lives by helping public-health workers identify those who need alternative treatments.

NETWORK

YOUR ALUMNI CONNECTION



Clockwise from top left: dishes from Haku in Hong Kong; Gaggan in Bangkok; Hide in London; Corner House in Singapore.

Around the World in 100 Restaurants

Every June since 2002, a group of a thousand culinary professionals and food critics have gathered in some far-flung, idyllic location — this year it was Spain's Basque country — to vote on a list of the world's hundred best restaurants. For chefs and restaurateurs, a place on the list is a deeply coveted honor. For gastronomes, it's the ultimate fantasy roster. But because the list spans thirty countries and showcases meals that cost more than an average mortgage payment, no one has actually eaten at every restaurant on it. In fact, no one has even come close — except for Paul Grinberg '89BUS.

In 2017, Grinberg ate at ninety-nine of the world's hundred best restaurants. This year, he expects that he'll complete the list — tackling the one that eluded him last year, as well as the few 2018 additions. But Grinberg isn't a food critic or a chef himself — he's a finance executive, based in the Bay Area. And until a few years ago, he wouldn't have called himself an adventurous eater.

"I was actually pretty picky, a total meat-and-potatoes guy," he says. "I didn't know much about restaurants, or care about them. I just ordered steak wherever I went."

While preparing for a vacation to Spain in 2012, though, Grinberg realized that two of the world's top fifty restaurants were in towns that he planned to visit. He decided to make reservations, and, as he says, "a hobby was born." Grinberg says he was particularly taken by the concept of the tasting menu.

"For someone who didn't actually know a lot about food, it was an incredible introduction," he says. "You're putting yourself in the chef's hands. So I was eating things that I never would have ordered."

Grinberg travels frequently for work and takes several international vacations a year, so he started making a point of checking the list whenever he was in a new city. Then he found that he was planning trips around it.



UNDER THE RAINBOW

As a photojournalist covering conflict zones, climate change, and cultural curiosities, John Wendle '07JRN has spent his career traveling the world. In this image he captures a young man galloping across a pasture in Kyrgyzstan. He says it was a rare peaceful moment at the famously brutal World Nomad Games, dedicated to traditional sporting events from Central Asian countries.

"It didn't start out as a goal; I never thought I'd get anywhere near the whole list," Grinberg says. "But eventually, I suppose, my competitive nature took over."

With the top fifty in his sights, Grinberg says, "things got a little weird." On his mission, he's flown twelve hours for a single dinner reservation. He's eaten two dinners in one evening ("I was only in Adelaide, Australia, for one night, and I needed to hit two restaurants"). He ate at ten of France's three-Michelin-star restaurants in a five-day span. And he once ate sushi for so many days in a row that his mercury levels temporarily rose to eight times those of a normal man his age.

"I know this sounds ridiculous, but it isn't always fun or easy. There are some trips where I just can't face the thought of lifting another fork or spoon to my mouth," Grinberg says. To combat the fatigue — and the massive caloric intake — he says that he eats simply at home and works out for up to two hours every day.

In 2017, Grinberg set a goal to visit the full top one hundred. And while most restaurants were helpful with reservations, sometimes even staying open past their usual hours to accommodate Grinberg, there was one that wasn't impressed — Tokyo's Sushi Saito. With only eight seats, Sushi Saito



Paul Grinberg

is notoriously difficult to visit, especially since they only open their reservation line once a month. Grinberg was determined; he worked all his business connections and once recruited sixteen friends to man the phones on a reservation day, but to no avail. After news of his almost-feat started circulating in food media and

beyond, Grinberg eventually did get a reservation — but he was thwarted again. An impending typhoon in Japan, as well as a death in Grinberg's family, made it impossible for him to make the dinner.

The 2018 list was released this past June, and Grinberg now has five additional restaurants to visit; he says he intends to get to them all. And while his nemesis, Sushi Saito, actually fell off the list this year, Grinberg plans to dine there this coming spring so he'll have fully completed both the 2017 and 2018 lists.

"It's my white whale," he says. "The quest won't be complete until I slay it."

— Rebecca Shapiro

ASK AN ALUM: OPERA FOR ALL

Fred Plotkin '80JRN is the author of *Opera 101: A Complete Guide to Learning and Loving Opera* and the lead opera correspondent for WQXR Radio. He regularly appears on NPR to discuss his two passions — classical music and Italian cuisine.

COLUMBIA MAGAZINE: How did you become an opera expert?

FRED PLOTKIN: I've always loved the performing arts. My father was a musician, my mother was an administrator at Lincoln Center, and my stepfather was a manager at Columbia Records. I was a child actor, but I soon realized that I preferred life backstage. I studied Italian Renaissance history and opera production at the University of Wisconsin–Madison, and later I moved to Italy. I studied at DAMS in Bologna — Italy's equivalent to Juilliard — and got a Fulbright to work at the La Scala opera house in Milan. After returning to New York and studying journalism at Columbia, I got a job as a program editor for the Metropolitan Opera House and later became performance manager there.

CM: What type of work do you do now?

FP: Outside of NPR, I consult with opera companies and teach a course at NYU called Adventures in Italian Opera. I'm the opera expert for Times Journeys, which are small-group travel tours organized by the *New York Times*. I also write and lecture about Italian food and have published six books on the topic.

CM: Most operas are more than a hundred years old. Why are they still relevant?

FP: Because they're about us. The tragedy, the passion, the insanity, and the discordant aspects of modern life are all reflected. And some operas, such as Mozart's *La clemenza di Tito*, Beethoven's *Fidelio*, Verdi's *Don Carlo*, and Giordano's *Andrea Chénier*, are very political — they deal with the role of the individual in society and how the decisions of leaders inevitably affect people's lives.



Fred Plotkin in the Teatro at the Italian Academy.

CM: What are your feelings about contemporary opera?

FP: People say there are no good operas anymore, but I think there are fantastic works nowadays. One challenge with modern opera is that it is expensive to produce, because you have to pay royalties to living people. If I had to name one modern masterpiece, it would be *Dead Man Walking* by Jake Heggie, based on the book by Sister Helen Prejean. The opera is able to magnify certain emotions in ways that the book and film versions do not.

CM: What's a great introductory opera?

FP: Verdi's *Rigoletto*, in part because most people already know some of the music. I recently took a friend to see it. She'd never been to the opera before, and she was in tears by the end.

CM: What advice do you have for an opera newcomer?

FP: First, you can't be passive. You have to actively listen to the music as it tells the story. I really believe that if you read the synopsis and then listen and watch without looking at the translations in the projected titles, you engage much more and get a lot more out of it.

Second, turn off your analytical faculties. You don't "understand" opera; you feel it. In our multitasking culture, we hear; we don't listen. We see, but we don't observe. Modern life teaches us to shut off our feelings, but opera activates our emotional potential. People who think it's a frivolous diversion just don't know.

— Julia Joy

Laser Focus

Arthur Ashkin '47CC hasn't exactly let old age slow him down. At ninety-six, he has just won the Nobel Prize in Physics, making him the oldest person ever to be named a Nobel laureate — and he's still actively working.

"I guess I just made it," Ashkin told the Nobel Committee in October. "Because you can't win if you're dead."

Ashkin won the prize for his invention of optical tweezers, which use laser radiation pressure to manipulate particles, atoms, viruses, and other living cells without damaging them. These tools have led to profound breakthroughs in medicine, such as the ability to separate healthy blood cells from infected ones.



Arthur Ashkin in 1947.

Ashkin, who worked at Columbia's Radiation Lab as an undergraduate, earned his PhD at Cornell and spent the majority of his career at Bell Laboratories.

Though he hopes to be able to travel to Stockholm to claim his award, he told the committee that he doesn't plan to spend much time celebrating. "I'm working on something new and important — a paper on solar energy," Ashkin said. "The world badly needs science around climate change right now."

For more on Columbia's Nobel laureates, see our Finals quiz on page 64.

Shop Smarter

Your guide to this year's alumni-produced gifts



Sterling-silver friendship charm

from A Little Peace jewelry, founded by Teresa Saputo-Crerend '87CC, '92BUS. \$85 with chain, \$42 without.



Oxford jacket from Zachary Prell menswear, founded by Zachary Prell '05BUS. \$198.

Community-garden hot sauce from Small Axe Peppers, cofounded by John Crotty '96BUS. Three-pack, \$29.99.



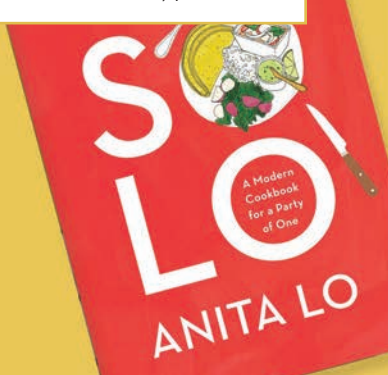
Silk tie from Knot Standard, cofounded by John Ballay '13BUS. \$165.

Candle from Otherland, cofounded by Abigail Cook Stone '16BUS and Sayyid Markar '16BUS. \$36.



Greenpoint backpack tote from Canopy Verde, founded by Linda Wong '03BUS. \$165.

Solo: A Modern Cookbook for a Party of One, by Anita Lo '88CC. Hardcover, \$28.95.



Convertible backpack from Mack Weldon, cofounded by Brian Berger '03BUS. \$148.



Silk pajama top from Alessandra Mackenzie, founded by Alessandra Baker '18BUS. \$275.



4 Alumni Podcasts Guaranteed to Make You Feel Smarter



Recode Decode

Host: Kara Swisher
'85JRN

Silicon Valley's premier journalist sits down with A-list tech and media players and isn't afraid to

ask the nerd gods some very tough questions.



Good Law/Bad Law

Host: Aaron Freiwald
'85CC

A trial lawyer for twenty-plus years and a former investigative journalist, Freiwald offers ample

evidence that the intricacies of law matter to every American. Recent topics include the future of sports betting, cell-phone privacy, and climate-change legislation.



So Money

Host: Farnoosh Torabi
'03JRN

An Iranian-American personal-finance expert discusses investing and entrepreneurship with

top business minds, authors, and influencers and asks them to share practical strategies for money mastery.



Stay Tuned with Preet

Host: Preet Bharara
'93LAW

The former United States Attorney known for his enthusiastic prosecution of public corruption and

white-collar crime (and also for being fired by President Trump) offers his singular insight into the current administration and invites guests to talk about justice, fairness, and leadership.

Extra Credit

Microfinance on demand

It's often said that poverty is cyclical. In order to make money — by starting a small business, for example — you need to borrow money. But to access credit, people need to meet a strict set of financial prerequisites that determine their credit scores, a fact that puts conventional borrowing out of reach for billions worldwide. And so the cycle continues.

"The financial system is closed off to too many people, especially in developing markets," says Shivani Siroya '06PH. "And those are the people that are most in need of small loans."

Siroya, who is the CEO and founder of the microfinance company Tala, became intimately acquainted with this problem while working for the UN Population Fund in India in 2006. In her role analyzing cost-estimation models for local public-health programs, she spent a lot of time with small-business owners.

"I got to know their daily lives intimately. I met their customers. I saw the hundreds of interactions they had every day," Siroya says. "And I realized that a credit score wasn't the only way to assess someone's risk."

Using her own money, Siroya started making small loans — \$300 to \$500 — to small-business owners, looking at different criteria to determine if someone was a good candidate for credit. For example, she knew that one local tilemaker saved 30 percent of her income every month to pay for her son's schooling, demonstrating that she was goal-oriented and disciplined. She lent to another artisan after watching how she balanced her

budget consistently, allowing her to buy materials on the third Thursday of every month.

Siroya returned to New York in 2008 and resumed a career in investment banking, but she says she couldn't stop thinking about the business owners she had met.



Shivani Siroya

She wondered how she could replicate the personal loans she had made on a larger scale. Siroya realized that the observations she had used to underwrite her loans were quantifiable, and that much of the data was right there on her customers' smartphones. "When you pay a phone bill or an electric bill, there's a record on your phone. When you buy a bus ticket or pay a school fee, you get a notification. Even the kinds of apps you use are signals about financial behavior," Siroya says. "My customers might not have had a traditional credit history, but they all used mobile phones."

Siroya, who studied public health and econometrics at Columbia, had no experience working in tech, but she started taking coding classes

and eventually developed an algorithm that uses new data sets to determine people's creditworthiness. The end result was Tala's first product: an Android app — now available in five countries — that allows people to apply for small loans regardless of their financial history.


"It works in real time, using thousands of different data sources to determine risk," Siroya says. "So if you have an Android device and you're in one of our markets, you can apply for a loan and get an instant decision."

Tala, which is funded by a diverse group of investors, has made over nine million loans since 2013, with a 92 percent repayment rate. The average loan is around

\$100 and is generally paid off within a month. Siroya says that her team — now spread across offices in California, Mexico, Tanzania, Kenya, and India, all markets where Tala is active — is constantly trying to tweak the algorithm to ensure that the process is ethical and free of bias. And the company, which has been called one of the world's most innovative startups by both *Fast Company* and *Business Insider*, is growing quickly. Siroya says that it aims to be in at least two more regions by 2019.

"Combating global poverty may sound like a lofty goal," Siroya says. "But with every loan, we feel like we're making a dent."

— Rebecca Shapiro



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NEWSMAKERS

● Writer **Kelly Link '91SOA** won a 2018 MacArthur Fellowship — also called a "genius grant." Link is known for her genre-bending short stories, which blend elements of science fiction and fantasy with realistic depictions of modern life. Link also runs Small Beer Press, which publishes new voices in fantasy and literary fiction.

● Biochemist **Adrian Krainer '81CC** and Columbia pharmacology professor C. Frank Bennett won this year's Breakthrough Prize in Life Sciences. Often called "the Oscars of science," the \$3 million awards are the world's most lucrative scientific prizes. Krainer and Bennett were recognized for their work using RNA splicing to develop new drugs to treat spinal muscular atrophy, a devastating genetic disease found in children.

● **Sigrid Nunez '75SOA** won the National Book Award for her novel *The Friend*. Two other Columbians were finalists: **Diana Khoi Nguyen '12SOA**, for her poetry collection *Ghost Of*, and **Sarah Smarsh '05SOA**, for her memoir *Heartland* (see our review on page 56). Additionally, the National Book Foundation included novelist **Hannah Lillith Assadi '08CC, '13SOA** on its annual "5 Under 35" list.

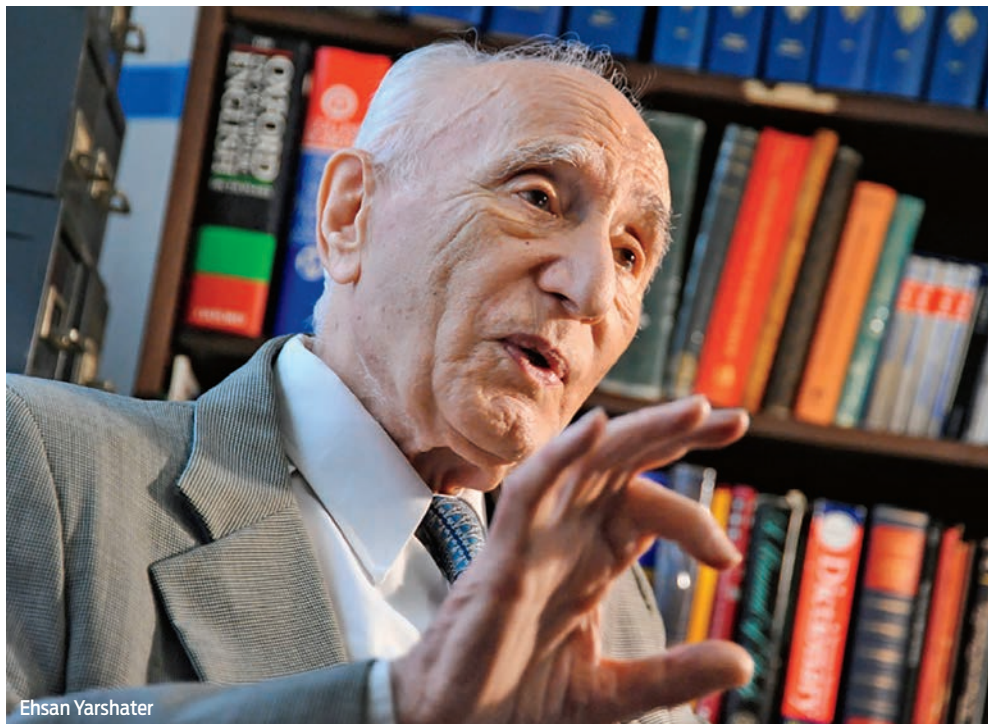
● **Leyla Martinez '18GS** was selected for a Soros Justice Fellowship and will use her stipend to continue her work as an advocate for criminal-justice reform. Martinez, a formerly incarcerated mother, founded an organization that supports students affected by incarceration.

● The Alliance for Justice honored attorney **Roberta Kaplan '91LAW** at its annual gala. Kaplan is best known for representing Edith Windsor in the case that toppled the Defense of Marriage Act, and she is also a cofounder of the Time's Up Legal Defense Fund, which provides legal support to women in sexual-harassment cases.

● **Elissa Slotkin '93SIPA** was elected to the United States House of Representatives, unseating a Republican incumbent in Michigan. During the Obama administration, Slotkin worked as an analyst for the CIA and as an assistant secretary of defense.



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Ehsan Yarshater

Ehsan Yarshater Center for Iranian Studies endowed with \$10M gift

Columbia has received a \$10 million gift from the Persian Heritage Foundation to endow the Ehsan Yarshater Center for Iranian Studies, formerly known as the Center for Iranian Studies. The center has been renamed in honor of its founding director, a longtime Columbia professor and leading historian of Iran. Yarshater died on September 2 at the age of ninety-eight, just two weeks after the gift and the center's renaming were announced.

The gift will enable the Yarshater Center to continue to advance the field of Iranian studies through its scholarly publications, which include the fifteen-volume *Encyclopaedia Iranica*, a book series

on Persian art, and critical editions of Persian texts.

"I am deeply honored as well as delighted to witness the creation of the Ehsan Yarshater Center for Iranian Studies," Yarshater said in a statement shortly before he died. "It is a source of great comfort to me that through the support of the Persian Heritage Foundation and the stewardship of Columbia University such internationally acclaimed projects as the *Encyclopaedia Iranica* and *A History of Persian Literature*, as well as many other future projects, will find a secure home at the Yarshater Center."

Born in 1920 in Hamadan, Iran, Yarshater was educated in Tehran and London before

coming to teach at Columbia in 1958. The first full-time professor of Persian studies at an American university in the post-World War II era, Yarshater launched the Center for Iranian Studies here in 1968. In 1972, he began work on the *Encyclopaedia Iranica*, which (though still unfinished) would become the center's most prominent achievement. Now overseen by Columbia historian Elton Daniel, the encyclopedia features thousands of entries written by some 1,600 scholars. The *New York Times*, in its obituary for Yarshater, called it "a magnum opus of Iranian history and culture that helped transform the modern understanding of Persian civilization."

REPORT ADDRESSES GENDER AND RACE DISPARITIES AMONG FACULTY

A two-year study on the status of women and underrepresented minority faculty at Columbia — one of the most thorough examinations of gender and racial equity ever undertaken by an institution of higher education — has resulted in a set of proposals for closing salary gaps, spurring academic advancement, and improving the overall work environment.

The 145-page report, drafted by the Policy and Planning Committee of the Faculty of Arts and Sciences, was released in October.

Among the report's findings is that Columbia has a lack of diversity in senior leadership of academic departments and centers; insufficient transparency about how important decisions are made; and unclear policies and decision-making processes. It also found evidence of disparities in workload and salary for women and underrepresented minorities, and a persistent problem of harassment and discrimination.

Some of these issues were addressed even before the report was finalized, but others “will require concerted and dedicated efforts over time,” says Maya Tolstoy, interim executive vice president and dean of the Faculty of Arts and Sciences, who oversaw the writing of the report. The recommendations range from tangible changes, such as immediately correcting salary inequities, to promoting broader cultural shifts.

President Lee C. Bollinger, in a letter to the Columbia community accompanying the report, wrote that he is “deeply grateful to the Arts and Sciences faculty for engaging in this careful self-examination, for identifying where we are falling short, and for pointing out where we must direct our efforts as a University.”

Adds Tolstoy: “One of the things that’s important about this report is that this is not merely a Columbia problem: it’s an academic problem at many universities. I hope this will help change the conversation in higher education.”



ALBRIGHT REMEMBERS HAVEL

Former US secretary of state Madeleine Albright ’76GSAS, ’95HON visited campus this fall to honor the late Václav Havel ’90HON, the Czech playwright and political dissident who led his country’s anti-communist revolution and subsequently served as its first democratically elected president. Albright unveiled a bust of Havel — a gift to Columbia from the Václav Havel Library Foundation — and discussed the relevance of his legacy today. She said that Havel, who came to Columbia as an artist-in-residence for two months in 2006, “was a relentless advocate on behalf of civil and political rights for all people.” He celebrated his country “without falling into the trap of chauvinism,” she said. “Instead of ideology or politics, he stressed the obligation we all have to each other.”

For video, visit worldleaders.columbia.edu.

NEW INSTITUTE WELCOMES 15 INAUGURAL FELLOWS TO PARIS



Reid Hall

This fall, Columbia’s new Institute for Ideas and Imagination welcomed its first cohort of fellows, a group of fifteen eminent scholars, writers, and artists from around the world, to Reid Hall in Paris. The fellows, who have come together for a yearlong residency, include a sound and video artist from Nigeria, a composer from Syria, a philosopher from France, and writers from Malaysia, the UK, India, and China, along with a number of Columbia scholars in the arts, humanities, and sciences.

“By forging a closer bond between scholarship and the creative arts, we are seeking to engage with other ways of thinking about

the world and our place in it,” says Mark Mazower, a Columbia historian and the institute’s founding director.

The Institute for Ideas and Imagination, a University-wide initiative, was created to promote intellectual innovation and intercultural dialogue. Based at Columbia’s Reid Hall, which is also home to one of eight Columbia Global Centers, it will host workshops, conferences, and public events.

“The quality of the opening group of fellows gives us enormous hope that this experiment will prove to be seminal,” says President Lee C. Bollinger.

BULLETIN

CROSS-COUNTRY RUNNERS ARE CHAMPS (AGAIN!)

On a cold and rainy October day at Princeton's West Windsor Fields, the Columbia women's cross-country team won its second straight Ivy League Heptagonal Championship title. Seniors Erin Gregoire and Libby Kokes, junior Katie Wasserman, and sophomore Allie Hays earned All-Ivy team honors. "It was a great run for us," says head coach Dan Ireland. "We have an entirely new team this year, so we weren't sure what to expect. We thought if we worked hard, we could defend our title. I'm really proud of them."

In the men's race, junior Kenny Vasbinder was the first to cross the line for Columbia, claiming ninth in the field overall and earning a spot on the All-Ivy team.



CAMPUS DINING RANKED #1

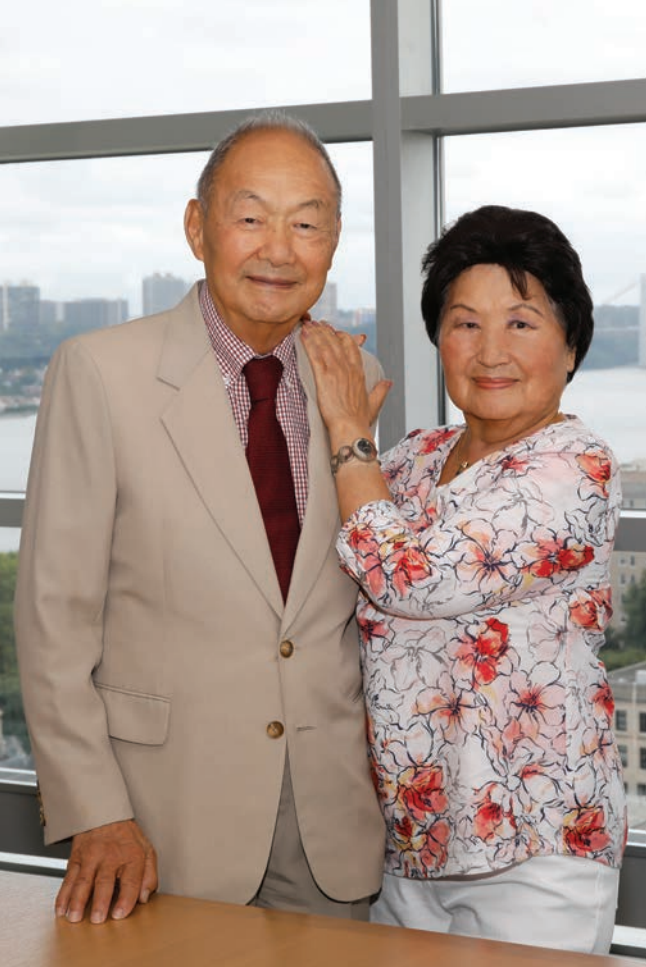
Columbia's campus dining was recently judged by the *Daily Meal* to be the best in American higher education. The popular food website annually surveys more than two thousand colleges and ranks their dining halls based on the quality and variety of their offerings, their sustainability practices, and the community-building events they organize. The site's editors praised Columbia's chefs for "consis-

tently proving to their students that the 600 menu items served on campus daily are just as good as, if not better than, anything else New York City has to offer." They also noted that more than half the food served in Columbia's dining halls is locally sourced, that a registered dietitian is available for one-on-one consultations with students, and that the University makes significant donations to food pantries.

GIVING DAY RAISES \$20.1 MILLION

The University's annual Giving Day this year raised a record \$20.1 million for financial aid, research, athletics, and other programs, exceeding last year's total by nearly \$5 million. The twenty-four-hour fundraising drive, held on October 24, also shattered records for participation, with donors in all fifty states and sixty-three countries contributing a total of 17,103 gifts. The schools with the highest alumni-participation rates were the College of Dental Medicine, Columbia College, Barnard College, Columbia Business School, and Columbia Engineering.

Mealtime at John Jay Dining Hall.



“With the gift annuity we not only get great returns, but a tax deduction as well. Best of all, the remainder will go to support Columbia.”

—OMAR '59SEAS AND CAMELLA WING



Honor a connection to Columbia with a gift that pays you income.

Omar and Camella Wing recently established a gift at Columbia that will make payments to them for life, with the balance going to support scholarships at the Fu Foundation School of Engineering and Applied Science. Giving in this way has also earned them entry into the prestigious 1754 Society.

Does your giving meet your income needs? Contact the Office of Gift Planning at 800-338-3294 or gift.planning@columbia.edu to discover ways to support Columbia while securing an income stream for you and/or a loved one.

BOOKS

Heartland

By Sarah Smarsh '05SOA (Scribner)

Perhaps no group has been more scrutinized over the last two years than the white working class. Countless op-eds have decried the myopia of coastal elites who, safe in their liberal bubble, fail to understand the “flyover country” that elected Donald Trump. For some, America’s cultural and political reckoning seemed to come out of nowhere. But as journalist Sarah Smarsh '05SOA writes in her powerful, vitally relevant book *Heartland*, “You can go a very long time in the country without being seen.”

Smarsh was born in rural Kansas in 1980 — the dawn of a decade that would be marked by Reagan’s trickle-down economics, welfare cuts, and the early stirrings of the housing crisis. The timing of her birth, she writes, “meant that my life and the economic demise of American workers would unfold in tandem. But we couldn’t see it yet out in the Kansas fields.” Her family’s fears were more immediate: Would her grandfather’s aging farm equipment get him through the harvest? Would there be enough money to put gas in the car or pay for childcare?

Smarsh writes smartly and often poetically about the chaos that poverty creates. She was shuffled between divorced parents and grandparents, following them to wherever they could find jobs. Still, compared to previous generations, her life was relatively stable. Smarsh’s mother lived in forty-eight different places before giving birth when she was eighteen; her grandmother married seven times and seemed to traverse the entire Midwest in her quest for a better life for herself and her children.

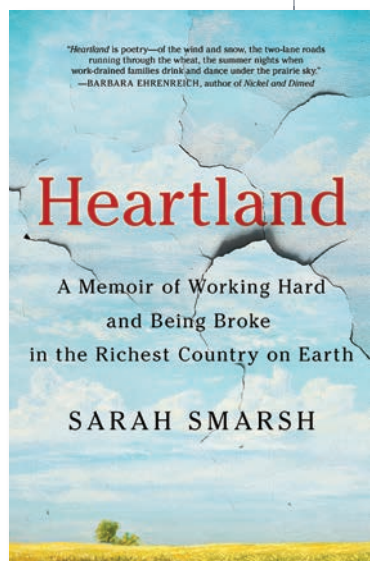
Central to the family ethos was work — endless, often backbreaking work. Smarsh’s grandfather farmed 160 acres of land, moonlighted as a butcher, and still had to collect and sell aluminum cans to make ends meet. Her father, a skilled contractor, eventually took a job delivering cleaning solvents, which resulted in chemical poisoning and years of

debilitating psychosis. To be broken physically while working was just a part of life, Smarsh writes, one exacerbated by the fact that few have access to health care. “It’s a hell of a thing to feel — to grow the food, serve the drinks, hammer the houses, and assemble the airplanes that bodies with more money eat and drink and occupy and board, while your own body can’t go to the doctor.”

If the book revolves around one question, it is this: how did Smarsh get out? After five generations of Smarshes lived in poverty with no escape route in sight, how did a member of the sixth end up with a graduate degree from Columbia, a down payment for a house, and a memoir nominated for a National Book Award? There is, of course, no single answer, but Smarsh posits some theories. She was raised in part by two supportive male role models — her father and grandfather — a rarity in a family that often fell victim to dangerous men. She avoided the trap of teen pregnancy. And yes, she was exceptionally talented and worked exceptionally hard. She was the first in her family to attend college, and when she matriculated at the University of Kansas, she did so with a merit scholarship and three jobs lined up. Without both those things, she insists, college would have been an impossibility.

Despite Smarsh’s impressive self-determination, *Heartland* serves as a nuanced challenge to, if not a direct rebuttal of, the conservative fetishization of personal responsibility reflected in popular books like J. D. Vance’s *Hillbilly Elegy*. The author is keen to show that poverty is not the result of lethargy and bad choices, and that the American dream is not necessarily attainable for anyone who works hard enough. And while *Heartland* is less of a political treatise than *Hillbilly Elegy*, politics and the consequences it has on the Smarsh clan are a powerful undercurrent to every family story.

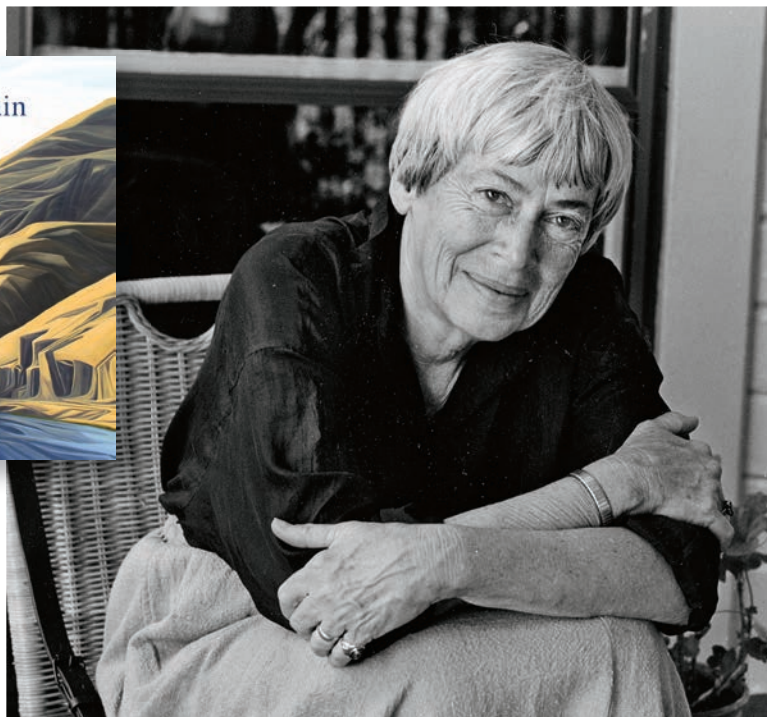
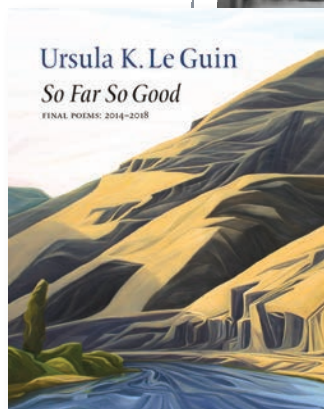
Most members of Smarsh’s family are Republicans, which, she explains, is for them a matter of pride — even when it means voting against their best interests. “People on



welfare were presumed 'lazy,' and for us there was no more hurtful word," she writes. "Impoverished people, then, must do one of two things: Concede personal failure and vote for the party more inclined to assist them, or vote for the other party, whose rhetoric conveys hope that the labor of their lives is what will compensate them." Smarsh bought into this idea as a teenager, joining the Young Republicans and campaigning for George W. Bush. It was only in her junior year of college that her perspective began to change. Studying sociology, she writes, she began to see her circumstances in a new light: "Study after study ... plainly said in hard numbers that, if you are poor, you are likely to stay poor, no matter how hard you work."

America feels more divided than ever before — politically, racially, socioeconomically — and while Smarsh doesn't purport to know how to solve this problem, she's a wise and eloquent guide to at least understanding its complexity. It's also notable that Smarsh didn't begin writing in November of 2016; rather, this book is the result of fifteen years of research into her family history. And that history, with Smarsh's clear-eyed narration, makes obvious what many op-eds seem to have missed: Trump's election, and the seismic political chasms that have followed, didn't come from nowhere. It was the inevitable result of deep fault lines that have existed in America for generations.

— Rebecca Shapiro



So Far So Good

**"It is good to
have an end
to journey
towards; but it
is the journey
that matters,
in the end."**

— Ursula K. Le Guin

Ursula K. Le Guin '52GSAS was best known for her science-fiction and fantasy novels, which transported readers to other worlds while also asking important questions about life on Earth. But Le Guin was also a prolific poet, and two weeks before her death in January 2018 she finished the manuscript for *So Far So Good*, a collection that serves as an appropriate capstone to her important career.

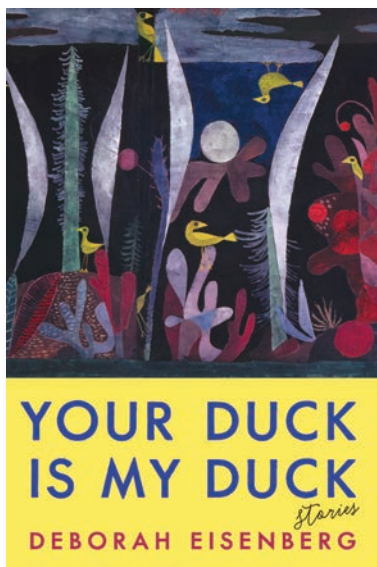
Fans of Le Guin's fiction will recognize some familiar themes in *So Far So Good* — particularly, reverent odes to animals (mythical and real) and the unfathomable mysteries of the natural world. But perhaps most profound are Le Guin's meditations on aging, and on the relationship of soul to body. It's clear from these new poems, including "How It Seems to Me," that Le Guin was facing death not only with resolve but with wonder.

How It Seems to Me

In the vast abyss before time, self
is not, and soul commingles
with mist, and rock, and light. In time,
soul brings the misty self to be.
Then slow time hardens self to stone
while ever lightening the soul,
till soul can loose its hold of self
and both are free and can return
to vastness and dissolve in light,
the long light after time.

Your Duck Is My Duck

By Deborah Eisenberg (Ecco)



Deborah Eisenberg, a professor of writing at Columbia's School of the Arts, is a rarity among fiction writers: one who sticks strictly to short stories. But as her passionately devoted fans would say, with stories like hers, who needs novels? With *Your Duck Is My Duck*, her much-anticipated fifth original collection and the first since 2006's *Twilight of the Superheroes*, Eisenberg again proves that short fiction can be equally complex, fulfilling, and engrossing.

Eisenberg's style is idiosyncratic and notoriously difficult to describe. It slides in and out of tenses and points of view. It can be meandering, ambivalent, and pastiche-like, and yet it is ultimately precise, penetrating, and morally unambiguous. She is often hilarious and always surprising. The opening sentence of the title story is a pretty good distillation of her voice: "Way back — oh, not all that long ago, actually, just a couple of years, but back before I'd gotten a glimpse of the gears and levers and pulleys that dredge the future up from the earth's core to its surface — I was going to a lot of parties." At one of

these parties, the narrator, a painter in a creative slump, runs into a wealthy couple who whisk her off to their "beach place" on an unnamed tropical island, where they seem to gather an odd array of friends, business associates, and artists. One of them, a puppeteer, explains to the narrator that the island has descended into poverty because the wealthy couple has bought up most of its arable land. His work in progress is, fittingly, an allegorical show featuring donkeys, bats, and serfs who mount an insurrection against an evil monarchy that is secretly controlled by an even more evil corporate empire. (Yes, it's depressing, the puppeteer says, but "I mean, these are the facts.")

The story's title derives from a purported Zen koan drunkenly, and inaccurately, invoked at dinner by the husband of the host couple. He reminds the team of accountants and lawyers he has inexplicably gathered at his beach house that if the deal they're working on falls through, he owes them nothing. "Don't think for a moment that if the boat is scuttled, I'll throw you my rope. I'm sure you all recall the Zen riddle about the great Zen master, his disciple, and the duck trapped in the bottle? ... Everyone recall the master's lesson? *It's not my duck, it's not my bottle, it's not my problem?*"

That duck hovers in the background of all six stories in this collection, particularly "Merge," its tour de force. Here, Eisenberg takes on the subject of language itself — "the tool that doesn't work," in one character's estimation. Told mostly in flashbacks, "Merge" immerses us in the intersecting lives of three New Yorkers living in the same apartment complex: Keith, fresh out of Princeton and now living on \$10,000 he's stolen from his father, a brutal captain of a scorched-earth industry; Celeste, an idealistic young woman

with whom Keith falls unexpectedly in love; and Celeste's neighbor Cordis, an elderly former bookstore owner. We also hear about Cordis's beloved husband, a self-styled archaeologist bent on discovering the origins of language, who disappeared twenty years earlier during an excavation. (Among his theories, a sound bite that could be used to sum up many stories in the book: language is "amenable to many uses, but it developed to serve the pressing demands of malice, vengefulness, and greed — humanity's most consistent attributes.")

Desperately in need of money, Keith takes a job as Cordis's personal assistant, and while working there, he grows close to Celeste. Keith is burdened by the theft of his father's money and finally decides to confess to Celeste, just as she is about to leave for a work project in Slovakia. She cuts off ties with him, and in her absence, Keith loses his resolve to be free of his father and drifts back to the dreadful man's dubious protection. Cordis becomes more and more frail. And several harrowing passages in Celeste's voice reveal that she has fallen gravely ill in Eastern Europe. These achingly real characters struggle to express their better selves and connect with one another, but they often mangle the attempt or let the opportunity slip away. Words fail; the reader's heart breaks.

Heartbreak, in fact, is an inescapable theme in this volume, amid the cascades of perfectly imperfect sentences, the chuckle-inducing insights, the spot-on characterizations of contemporary mores, the unblinking intelligence, the profound (but rarely overt) political engagement, the fierce yet tender humanism. We inhabit a world that's "producing perpetually increasing awfulness from rock-bottom bad," and trapped ducks are everywhere. Those ducks, Eisenberg insists, are *our* ducks.

— Lorraine Glennon

READING LIST

New and noteworthy releases

CRASHED by Adam

Tooze Ten years after the economic crash of 2008, Columbia historian Adam Tooze reexamines the complex factors that led to the crisis and the ways that the ensuing period of recovery has shaped the economy and governance not just of America but of the world. Comprehensive and impeccably researched, the book makes a compelling case for how the Wall Street debacle has influenced most major world events — from Ukraine's destabilization to Brexit and the rise of Trump. Along the way, Tooze asks two important questions: Was the crisis inevitable? And is it over?

THOSE WHO KNEW

by *Idra Novey* '00BC, '07SOA The epigraph of Idra Novey's second novel reads like a haunting haiku: "In the aging port city / of an island nation / near the start of the new millennium." It's fitting for Novey, who has spent most of her career as a poet. But with this electric, deeply feminist story, she proves herself equally adept at fiction. In *Those Who Knew*, a woman named Lena suspects that a powerful man is responsible for a terrible crime. Lena also has personal experience with the man, and knows that speaking out could come with dire consequences — a timely parable for the #MeToo era.

THE BIG FELLA by Jane

Leavy '74BC, '76JRN From 1979 to 1988 — a time when women sportswriters were almost unheard of — Jane Leavy covered tennis, baseball, and the Olympics for the *Washington Post*. Since then, she's written best-selling biographies of Mickey Mantle and Sandy Koufax; now she turns her attention to another legend: Babe Ruth. Though Ruth looms large (literally and figuratively) in the American imagination, almost nothing was known until now about his childhood, or about his fascinating relationship with sports agent Christy Walsh. Leavy draws on more than 250 interviews, as well as a trove of previously unreleased documents, to create this warm portrait of an American icon.

COME WITH ME by Helen

Schulman '86SOA Life is full of countless decisions, big and small, and at some point most of us wonder what would have happened if we had made different choices. Helen Schulman's mind-bending new novel, a look at the terrifying potential of technology in the spirit of *Black Mirror*, makes this thought experiment real. Schulman, the author of the *New York Times* bestseller *This Beautiful Life*, follows Amy Reed, the newly minted PR chief at a Silicon Valley startup that allows people to explore their "multitudes" — the planes on which all their alternative life choices play out simultaneously.



THE CURSE OF BIGNESS

by *Tim Wu* Columbia Law School professor Tim Wu is known for coining the term "net neutrality," referring to the idea that data should be treated equally by Internet service providers in order to prevent tyranny by the small group of companies that give us access to that data. With this book, Wu pivots from that concept to talk more generally about extreme corporate concentration, in which global industry is controlled by a small group of giant firms. Wu argues that what Supreme Court Justice Louis Brandeis called "the curse of bigness" in 1914 is again a major threat, and warns that we need to return to the "trustbusting" values of the mid-twentieth century in order to address growing income inequality.

LIFE IN CULTURE edited

by *Adam Kirsch* Lionel Trilling '25CC, '38GSAS was a giant of American literary criticism and a pillar of intellectual life at Columbia College for over fifty years.

Now Adam Kirsch, a Columbia professor of American studies, has collected 270 of Trilling's letters (skillfully culled from thousands written between 1924 and 1975), giving us rare insight into the man behind the ideas. In this fascinating volume, we become privy to Trilling's courtship of his wife; to his battles with depression; and even to some salty exchanges with rivals and former students (Allen Ginsberg '48CC, to name just one).

THE KENNEDY

DEBUTANTE By *Kerri Maher* '04SOA Few American families have been chronicled as thoroughly as the Kennedys. But one figure is still relatively unexplored: JFK's sister Kathleen "Kick" Kennedy. In her heartbreaking debut novel, Kerri Maher imagines Kick's years as a rebellious debutante in London during World War II. Central to the drama is a star-crossed romance with a Protestant aristocrat — an impossible choice for the Catholic Kick.

Lost Children Archive

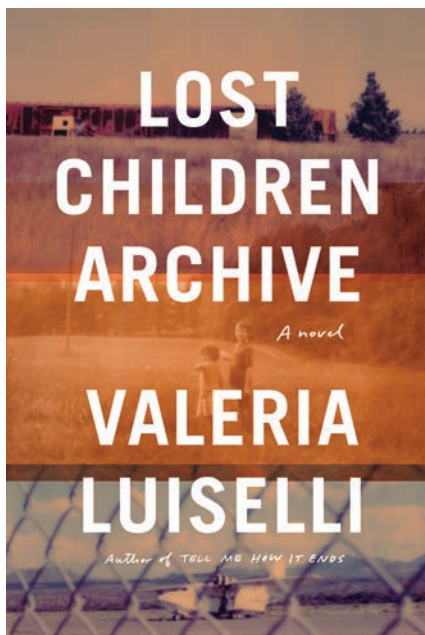
By Valeria Luiselli '15GSAS (Knopf)

Each year tens of thousands of unaccompanied migrant children cross the southern border of the US to confront an immigration system that is at best ill-prepared and at worst unapologetically hostile. Valeria Luiselli '15GSAS knows that system well. Her 2017 book *Tell Me How It Ends: An Essay in Forty Questions* detailed her experience volunteering as an interpreter in immigration court, helping lawyers determine which children might be eligible for relief.

The book was a passion project for Luiselli, a brilliant young novelist who already had a stack of literary accolades under her belt, but the nonfiction format had limits. As she writes in the opening chapter, “The children’s stories are always shuffled, stuttered, always shattered beyond the repair of a narrative order. The problem with trying to tell their story is that it has no beginning, no middle, and no end.”

Now *Lost Children Archive*, Luiselli’s first work of fiction written in English, retells the stories of migrant children so that we might truly fathom their suffering and acknowledge that the roots of the immigration crisis are buried deep in our culture. The author — who was born in Mexico, grew up in South Africa, and has made her home in New York — gently prods us to look at America from a wider perspective, across generations, through an array of characters and locations, and through multiple dislocations and relocations, including her own.

But first Luiselli asks us to begin with the myriad negotiations of family life. The novel opens in a car, with a husband, wife, son, and daughter (we are given pronouns, not proper names) driving from New York City to Arizona. The couple, both Mexican, met at Columbia University, where



As the drama unfolds, the author skillfully weaves together narratives that span multiple generations, perspectives, and cultures.

they were working on an oral-history project. Now he wants to relocate to Arizona to research a documentary about the Apaches. Her life is in New York, where she volunteers as an interpreter and plans to record children’s stories in immigration court. Their marriage slowly floundering, they set off on the iconic American road trip hoping to find clarity.

They leave New York with boxes full of research materials: reference books, newspaper clippings, maps, photos, government reports. All are carefully

organized and annotated. Their final destination is the Chiricahua Mountains in the heart of Apacheria, a place, according to the husband, “where the last free peoples on the entire American continent lived before they had to surrender to the white-eyes.”

That the couple is traveling south, in the opposite direction from the migrants, suggests this is not a summer jaunt but a form of katabasis, or descent into the underworld. This theme is underscored by the books the husband has packed for the journey: *Heart of Darkness*, *The Cantos*, *The Waste Land*, *Lord of the Flies*, and Cormac McCarthy’s *The Road*. The last, an audiobook, is, to the couple’s frustration, automatically cued up so that each time they turn on the player a voice intones “When he woke in the woods in the dark and the cold of the night he’d reach out to touch the child sleeping beside him.”

It’s an appropriate reminder that children are the lodestone of this novel. Not just the boy and girl in the car but the migrant children whose stories are in the news and the Apache children whose legends are retold by the husband. The wife also reads aloud from *Elegies for Lost Children*, a book she says is loosely based on the Children’s Crusade, in which thousands of children traveled alone across Europe in 1212 in the hope of reclaiming Jerusalem for Christendom.

As the family journeys into the desert, the stories of all these dislocated, undocumented, and brave children intertwine. The boy and girl wander off into the desert and are lost. They meet a group of migrants and spend the night with them before reuniting with their parents in Apacheria. As the drama unfolds, the author skillfully weaves together narratives that span multiple generations, perspectives, and cultures, creating a conclusion that might best be described as a spectacular singularity.

Luiselli is an erudite writer, and the novel is an interrogation of many literary texts and techniques. The elegies that the wife reads aloud each allude to literary works about voyages, but the influences are seamlessly embedded, not showy. Indeed, as the author says in her endnotes, "I'm not interested in intertextuality as an outward, performative gesture but as a method or procedure of composition." Nevertheless, Luiselli's wit and her references to sources as diverse as Paul Simon; Ezra Pound; Susan Sontag '77GSAS, '93HON; R. Murray Schafer; Laurie Anderson '69BC, '72SOA, '04HON; and Sally Mann offer regular jolts of insight and delight.

Lost Children Archive gives us a deeper look into the lives of migrant children, while reminding us that this is a story that has been told before and will need to be told again. In Luiselli's retelling she suggests that neither her first documentary approach nor her fictional approach has successfully reclaimed and revealed the children's lives, but both texts have helped expose the darker forces that enveloped them. "That recognition and coming to terms with darkness is more valuable than all the factual knowledge we may ever accumulate," says the narrator. "Stories don't fix anything or save anyone but maybe make the world both more complex and more tolerable. And sometimes, just sometimes, more beautiful."

— Sally Lee

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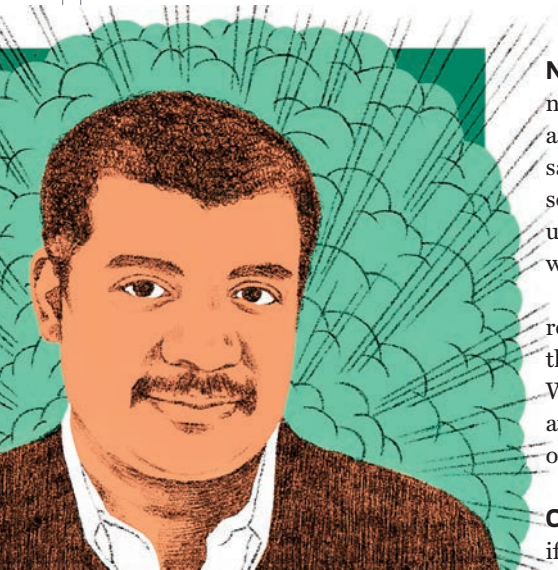
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Star Wars

Neil deGrasse Tyson '92GSAS, the astrophysicist and host of television's *Cosmos*, discusses his new book, *Accessory to War: The Unspoken Alliance between Astrophysics and the Military*, cowritten with Avis Lang



Columbia Magazine: You make the case that science and the military are uneasy business partners. How is space linked to war?

Neil deGrasse Tyson: We have shared interests. One of the earliest, best examples is Galileo, who perfected the telescope in 1609. We think of him as an astrophysicist calmly looking up at the night sky. We don't think of him as empowering the Venetian military. But Galileo helped the military before he observed the sun, moon, and stars. Have a look, he said. You can see a ship ten times farther away than you otherwise could. You can identify whether the flag is friend or foe. The military commissioned him to make a slew of telescopes.

It's a two-way street. We look over the picket fence at the military, and they do the same. We both gain at the end of the day.

CM: How do scientists feel about contributing even indirectly to war?

NDT: I can say that most of us would not work on a project that had direct application to war. But a side of us says: wait a minute. If war invented something I can use, then I'm going to use it. Because I can do better science with it.

And if I publish research in a peer-reviewed, publicly accessible journal, the military can take whatever it wants. We can't control it. It's public domain at that point. So that's why we're curiously complicit.

CM: Would science receive less funding if not for the potential military applications?

NDT: Yes. That's true, no matter the science. That has always been true. We'd still get funding, but the really big funding goes to the military. For example, we now have a very good understanding of the origin of the moon. This is relatively modern knowledge, gleaned from data brought back from our visits to the moon. But why did we go to the moon? Oh, we went because we wanted to beat the Russians. We had a military motivation to go into space. Do you know how many scientists went to the moon? Take a guess.

CM: I think we had one, didn't we?

NDT: One person (Harrison Schmitt). He was on Apollo 17, which was the last NASA mission to the moon. So clearly going to the moon wasn't about science. It was about other things. But we got science done on it.

CM: How does President Trump's proposed "Space Force" tie into all this?

NDT: Just because it came out of Trump's mouth does not mean it's a

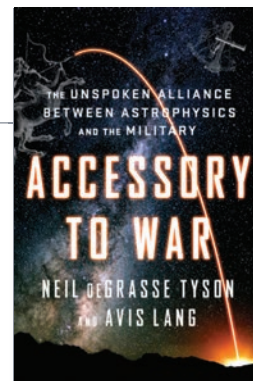
crazy idea. There's already a space force, controlled by the Air Force, called the Air Force Space Command. Its mandate is to prepare for conflict in space and cyberspace. Maybe some generals are completely happy with that, and I don't need to second-guess what they judge to be the most efficient way to run their operation. But if you did spawn the Space Force from the Air Force, I'd throw in a couple of things. I'd throw in asteroid defense — I mean, why not? — and maybe do something about the debris that's in orbit. That poses a hazard, a security risk. So I would boost their portfolio in sensible ways.

CM: Regarding our national investment in science, are we keeping up with other countries, especially China?

NDT: The answer is no in almost every way, except for the total amount of money we're spending on the military. Our annual military budget is greater than the sum of those of all the rest of the developed nations in the world. There was a day when your military strength was measured by how many soldiers you had, how many fighter jets you had, how many naval vessels you had. But if someone's going to attack us via cyberwarfare, or someone's going to render us blind by taking out our GPS satellites, you need a different kind of army. You need an army that knows computers. You need an army that knows how to use a joystick. You need a geek army. You need people who are science-literate.

The nature of conflict is changing. And you are going to need access to that kind of intellectual capital to engage the future of warfare.

— Bill Retherford '14JRN



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FINALS

Test Your Medal

Since 1901, when the first Nobel Prizes were bestowed, Columbia faculty and alumni have racked up a mountain of gold from Scandinavia. If you can ace this Nobel quiz, you deserve a medal yourself.

1. Columbia President Nicholas Murray Butler 1882CC, 1884GSAS won the 1931 Nobel Peace Prize for his work strengthening the international court at The Hague. With whom did he share the prize?

- a) Jane Addams, social-work pioneer
- b) Cornelia Sorabji, Indian social reformer
- c) Valeria Parker, physician and suffragist

2. Physicist Julian Schwinger '36CC, '39GSAS, '66HON won the 1965 Nobel Prize for his work on quantum electrodynamics. He also shared which major science award in 1951, the first year the prize was offered?

- a) Albert Einstein Award
- b) Enrico Fermi Award
- c) I. I. Rabi Award

3. In 2009, Barack Obama '83CC became the fourth US president to win the Nobel Peace Prize. The first was Theodore Roosevelt 1899HON in 1906. What did Roosevelt win for?

- a) opening up the Panama Canal
- b) negotiating an end to the Russo-Japanese War
- c) establishing the US Forest Service

4. In 2004, two Columbia scientists, Richard Axel '67CC and Linda B. Buck, shared the Nobel Prize in Physiology or Medicine for identifying a family of genes that govern what?

- a) the olfactory system
- b) the vestibular system
- c) the auditory system

5. Seven Columbia alumni have won the Nobel Prize in economics. Who was the first, in 1971?

- a) William Vickrey '47GSAS
- b) Simon Kuznets '23GS, '26GSAS, '54HON
- c) Milton Friedman '46GSAS

6. Robert Millikan 1895GSAS, winner of the 1923 Nobel Prize in Physics for his work on the photoelectric effect, was the first Columbian to do what?

- a) appear on a postage stamp
- b) become president of the American Physical Society (founded at Columbia in 1899)
- c) earn a PhD in physics from Columbia

7. George Wald '28GSAS, '90HON won the 1967 Nobel Prize in Physiology or Medicine for his discovery that the retina contained traces of what vitamin?

- a) vitamin A
- b) vitamin B₂
- c) vitamin C

8. When thirty-one-year-old Tsung-Dao Lee won the Nobel Prize in Physics in 1957 for his work on elementary particles, he became the second-youngest Nobel laureate ever. He was also the youngest person to do what?

- a) win the Enrico Fermi Award
- b) become a full professor at Columbia
- c) become home secretary of the National Academy of Sciences

9. Leon Cooper '51CC, '54GSAS, '73HON won the 1972 Nobel Prize in Physics for his work on superconductivity. What TV character was named in part for Cooper?

- a) Sheldon Cooper on *The Big Bang Theory*
- b) Mark Cooper on *Hangin' with Mr. Cooper*
- c) Leon the chameleon on *Animals*

10. In addition to Axel and Lee, eight current Columbia faculty have won a Nobel Prize. Match their names with the six Nobel fields: (1) peace, (2) physics, (3) physiology or medicine, (4) chemistry, (5) economics, and (6) literature.

- | | |
|--------------------|-------------------|
| a) Horst Störmer | e) Martin Chalfie |
| b) Eric Kandel | f) Orhan Pamuk |
| c) Joseph Stiglitz | g) Edmund Phelps |
| d) Joachim Frank | h) Robert Mundell |





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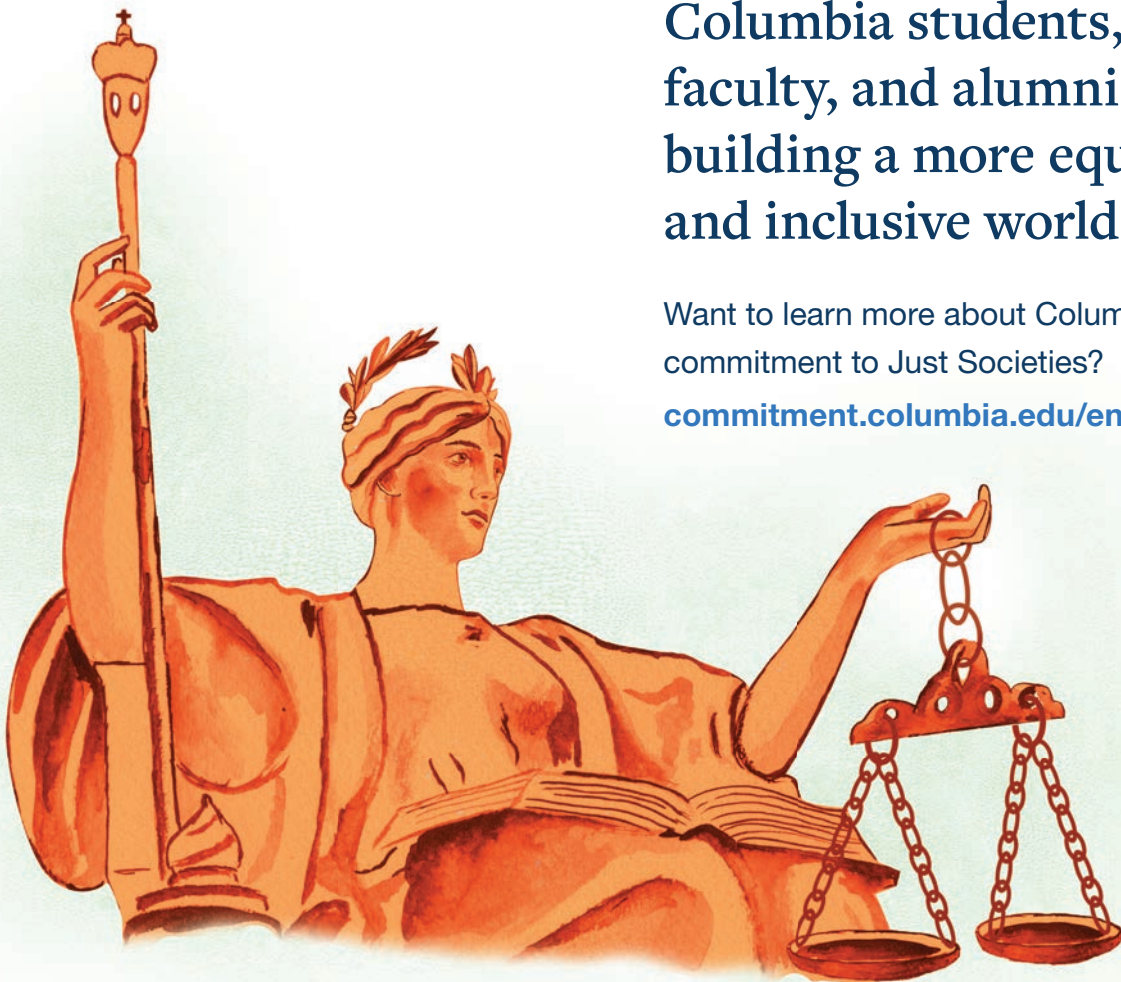
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