## RISK AND REWARD

Rajiv Shah heads the Rockefeller Foundation and has worked for the Gates Foundation and in government on critical issues in public health and international development. In his new book, *Big Bets*, he shows how embracing smart criticism—from Bill Gates, for one—and never settling for merely incremental change can pay off.

By Julia M. Klein

was his first one-on-one meeting with Bill Gates, and Rajiv J. Shah M'02 GrW'05 was nervous and excited about presenting his innovative idea for financing global child immunization to his formidable boss.

A high school debate champion, schooled at Penn in both medicine and health economics, Shah figured he was ready.

Gates, the billionaire cofounder of Microsoft, had transitioned to philanthropy with the establishment, in 1999, of the Bill & Melinda Gates Foundation. But his new mission had not softened his famously blunt style.

Gates had scrawled all over a memo that Shah had prepared. "This is the stupidest thing I've ever heard," Gates said during their meeting. ("Actually, there was a little more colorful language than that," Shah told an audience at Penn's Perry World House in October.)

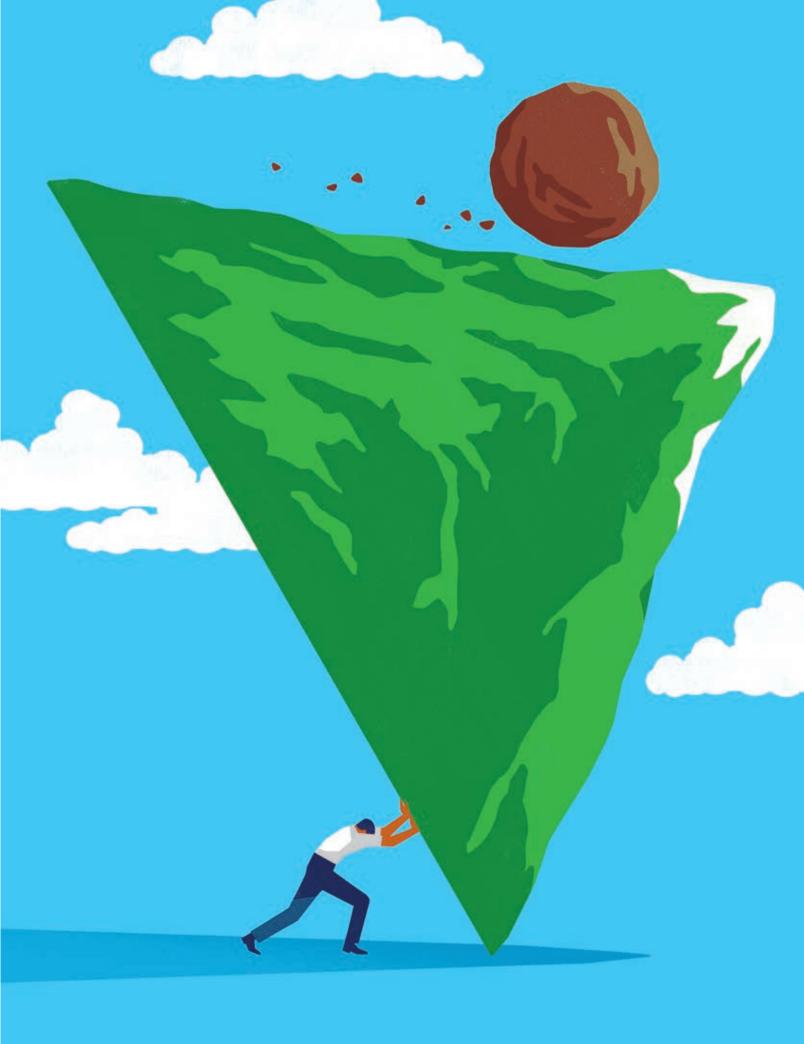
After an hour of heated conversation, Shah wasn't discouraged. Instead, he reports in *Big Bets: How Large-Scale Change Really Happens* (Simon Element), he emerged from the meeting "feeling strangely empowered." Gates's trenchant objections, Shah realized, had offered a "road map" for refining the proposal. "What I needed to do," Shah writes, "was to worry less about Bill's tone and focus on using his list [of concerns] as a path to yes."

Shah's seemingly unflagging optimism may well be his greatest superpower. In *Big Bets*, published in October, he counsels readers to adopt the same practical view of smart criticism. "No might be the

first word on your way to yes," he writes. "Disappointment is a natural reaction, but it's essential to learn to listen for feedback that you can use to keep going."

Over the years, Shah's friends and colleagues say he has followed his own advice. "He was a constant reminder about ambition," says Alice Albright, who, as chief financial and investment officer for Gavi, the Vaccine Alliance, was an important ally.

"I was always shooting for the sun and the moon and the stars also," says Albright, now CEO of the Millennium Challenge Corporation, which provides grants to developing countries. "We energized each other about 'Don't take no for an answer, and keep pressing and keep pushing and don't give up.' We egged each other on in a good way."



The "social impact bond" Shah was proposing to Gates involved using conditional, long-term commitments by national governments to bolster vaccine manufacturing and finance bulk buying. It took from about mid-2003 to November 2006 to make the unconventional idea a reality. But by offering money to pharmaceutical companies "securely and all at once," Albright says, the bond issue contributed to worldwide herd immunity against vaccine-preventable diseases—a major step in global public health.

Starting with about \$4 billion, "we were able to succeed in restructuring the global vaccine manufacturing space," Shah said at Perry World House. Less than two decades later, "980 million [more] kids were immunized, 16 million child lives were saved. We took some real risks to do some innovative things that made it possible."

inancing child immunization is only one of the world-shaking tasks the 50-year-old Shah, president of the powerful Rockefeller Foundation since 2017, has taken on. In a career dedicated primarily to public service, he has been propelled by a fierce sense of mission, along with verbal agility, a winningly humble manner, a devotion to data, and a refusal to acquiesce in merely incremental change. Shah bemoans what he calls the "aspiration trap," which he describes in an interview as "settling for the status quo or being willing to tinker around the margins and suggest that that's all we can do-whether it's in reference to the Middle East or child poverty."

About a week after being sworn in as administrator of the US Agency for International Development (USAID), Shah was tasked by President Barack Obama with supervising the US response to Haiti's devastating January 2010 earthquake. It was "a birth-by-fire beginning at the agency," says Margie Sullivan, who later became his chief of staff and chief operating officer. Shah went on to tackle world hunger, the electrical power needs of developing

countries, and the Ebola outbreak in West Africa, among other issues.

After leaving the federal government in 2015, Shah cofounded a private equity firm, Latitude Capital, to help bring power to Asia and Africa, a cause that remains a passion. At Rockefeller, working with partners in both government and industry, he put the foundation's money and clout behind the rollout of rapid testing during the pandemic. He is currently spearheading a range of programs to combat climate change, poverty, disease, and other challenges.

"Raj operates at a very high speed, a very intense pace. He naturally thinks out of the box," says Sullivan. From the start, she says, "he was extremely good externally," including on Capitol Hill and in media interviews. As a more experienced political hand, she says, her role was to help him turn his policy agenda into action. At federal agencies, she adds, "nothing gets done in a very linear fashion. There's just a challenge to effectuating change." Over time, she says, "I think Raj got good at it."

Nishant Roy, a longtime friend who worked closely with Shah at the US Department of Agriculture and USAID, admires his powers of persuasion.

"He truly could move the room to do these big, hairy, aggressive goals. He's really got this unique ability to bring people together," says Roy, now chief communications and impact officer at Chobani, the yogurt company. "He's not one of those people that does it by pulling at the emotional strings. He does it by just really getting you smart about what is going on in the world, and [saying], 'Here's how you can play a role in influencing it."

Priya Vora, recruited by Shah to work at the Gates Foundation, collaborated with him on expanding the foundation's focus beyond global health to areas such as agriculture and microfinance. Now CEO of the Digital Impact Alliance, Vora says she was struck by Shah's "endless curiosity" and "strong data orientation."

One trip took them to rural India and Bangladesh to learn about the impact of providing small loans and other banking services to low-income populations, often women. "At one point," Vora remembers, "he turned to me, and he asked, 'How much money do you think it would cost to make sure that every woman in the world had access to these services?' And we were sitting in a jeep, and we had pens and papers, and we started trying to cost it out."

Shah's book has a chapter, "Ask a Simple Question," on that approach, for which he credits Bill Gates. *Big Bets* also details other aspects of Shah's credo, including a willingness to pursue unconventional alliances, get personally involved, cede control, and experiment, pivot, and persist.

The book is candid, too, about some of his missteps. At USAID, for example, he tried fruitlessly to bring a major dam project, Inga 3, to the Democratic Republic of Congo, an effort that he describes as requiring "the near-perfect alignment of political, economic, and institutional forces."

That never happened. While Shah came to have his doubts about the DRC leadership, as well as a potential partnership with China, he failed to anticipate the impact of US Senator Patrick Leahy's opposition to hydropower. The Vermont Democrat's environmental concerns ultimately scuttled the project. "As I worried about the DRC and China," Shah writes in *Big Bets*, "I had missed the precariousness of the support at home."

The chapter on the DRC dam is titled "Know Who You're Betting On." Sometimes, it's clear, Shah's optimism has led him to disregard warning signals that might have deterred others. Another lesson he drew from that experience: "Yes, failure is humiliating, but it's the price of going big. You must be willing to fail."

The book, which Shah has been busily promoting, is itself a philanthropic endeavor. Its proceeds will benefit the Rockefeller Foundation—specifically, the foundation's establishment of a "Big Bets Community" to inspire future changemakers.

The audience for his ideas, according to Shah, ranges from global leaders to the idealistic young. This past fall he appeared at 92NY (formerly the 92nd Street Y) with CNN's Fareed Zakaria, addressed the Council on Foreign Relations, and spoke on several college campuses. One of his stops was at the Harlem Village Academies, a public charter-school network in New York, where he says the students—many of them first- or second-generation immigrants—were eager for his advice.

"What I really wanted to do is give people who wanted to be changemakers in our world a toolkit," Shah says. "And that toolkit starts with setting big, bold, audacious goals for social change, whether that's fighting hunger, or fighting pandemics, or working to expand the reach of vaccination to save child lives. The point was to make that playbook as practical and actionable as possible."

Big Bets, while it stops short of being a memoir, leavens its self-help dicta with anecdotes from Shah's life and career. At the Perry World House event, moderator Katherina Rosqueta, founding executive director of Penn's Center for High Impact Philanthropy, suggested that it doubles as a professional coming-of-age story.

"I don't contest that," Shah said later.
"I wanted to make the point that you didn't have to be a billionaire or a head of state to find a path where you could be a changemaker."

He notes that he "grew up in a pretty normal household in suburban Detroit and, for many years, wanted to be involved in activities related to social change and social justice, but frankly didn't know how. And I think there are a lot of people out there that are like that. So I thought articulating my own challenges, struggles and failures in trying to pivot into a career of social impact would maybe be confidence-building for readers."

orn in Ann Arbor, Michigan, to immigrants from India, Shah was raised in the Detroit suburb of West Bloomfield and attended a magnet public school. His father was an engineer for the Ford Motor Company, his mother a teacher and director of her own Montessori school.



"I grew up in a tight-knit Indian American community," Shah recalls. His parents came to the United States in the late 1960s with educational scholarships, "so from the beginning there was a real commitment to education as a path forward, and high expectations." Influenced by "a shared community aspiration that kids who could, should be doctors and engineers," he remembers sketching auto designs in his school notebooks.

But other forces also were acting on the young Shah. "My family and I faced our share of America's racism—the hateful glances, the slurs, and, when I was a kid, the occasional shoves and punches—that came with being a skinny brown kid growing up in predominantly white communities," he writes in *Big Bets*.

When, in June 1990, the anti-apartheid activist (and later South African president and Nobel Peace Prize winner) Nelson Mandela spoke at Detroit's Tiger Stadium, the 17-year-old Shah watched

the speech on television, mesmerized.

Just months before, Mandela had been released from prison after nearly three decades, and Shah was impressed by both his call for racial equality and his generosity towards his political opponents. "Mandela's visit made me want to do something meaningful with my life," Shah writes, even if he wasn't yet sure what form that impulse would take.

At the University of Michigan, he says, "I actually spent two or three days in the School of Engineering, then transferred," opting instead to combine a pre-med curriculum with an economics major. During a year abroad at the London School of Economics, he met his future wife, Shivam Mallick. (A Harvard Business Schooltrained educational administrator and consultant, she recently cofounded the company 1953 Tequila, named for the year that Mexican women gained the right to vote. The couple have three children and live in Washington, DC.)

Before starting medical school, Shah interned with a doctor named Hanumappa Sudarshan who was dedicated to extinguishing leprosy in the Biligiri Rangana Hills region of India. By the time Shah arrived, leprosy had become rare, and the work mostly involved providing food to hungry patients and children. Beset by heat and mosquitos, Shah writes that he "missed modernity and its comforts." He eventually recognized "that level of sacrifice and service was not something I could do with my life." He also fretted that, in 1993, with 12 percent of the world's population hungry, Sudarshan and his team, however heroic, were "treating only symptoms." Shah wanted to do more.

At Penn, Shah enrolled in a joint MD/PhD program, focusing on health economics and policy. He would never practice medicine, as it turned out, nor would he complete his doctorate. Yet the Penn experience turned out to be foundational and rewarding. "I enjoyed the cadaver lab," Shah says. "I loved being with patients, and I loved my colleagues, at both the medical school and the Wharton School. It was a really fun and engaging time, if a little hyperactive."

Shah was busy outside the classroom. He volunteered for a group educating West Philadelphia students about the dangers of HIV/AIDS, joined the Progressive Policy Institute in Washington, and started a data-analytics company with a classmate. With Mallick, he founded Project IMPACT, for South Asian American students interested in politics and community service. He was coming to see politics as what he calls a "path to belonging."

One important mentor was J. Sanford "Sandy" Schwartz M'74 GM'75 GM'77, the Leon Hess Professor of Medicine, Health Management, and Economics at the Perelman School of Medicine and the Wharton School ["Obituaries," Jan|Feb 2022]. Schwartz, who died in 2021, was "a North Star" to Shah, encouraging him to take risks. Joanne Levy, now deputy director of the Leonard Davis Institute of Health Economics, and Sankey V. Wil-

liams, who headed the Division of Internal Medicine during Shah's time at Penn, were also key influences.

Williams, an emeritus professor at both the Perelman School and Wharton, says that Shah was focused on goals beyond the practice of medicine. "Save the world' was the uniform theme," Williams recalls. "At that point, you don't know how you're going to save the world. You just know that someone's got to do it, and you want to be the person to give it the best try."

On the cusp of finishing his medical degree, Shah, who had previously worked for Philadelphia Mayor Ed Rendell C'65 Hon'00, applied to become a volunteer on the policy and research team of Vice President Al Gore's presidential campaign, asking only for housing assistance. Twice the campaign turned him down. A third try, after the campaign lost staff by relocating from Washington to Nashville, was the charm.

"My first few months there were really tough," he says. "I was staying in Al Gore's friend's mother's pool house because that was the housing they provided. The first few months, my job was just not very glamorous. It was just driving people to the library, picking them up from the airport." His greatest accomplishment may have been compiling a file on Gore's role in regulating lawn darts. In the book, Shah calls that period "a humiliating slog."

But campaigns move fast, he says, and "you get to quickly demonstrate what you're capable of." He soon became a paid health policy adviser and moved out of the pool house. Shah thought his next stop might be the White House, as a Gore aide. But a US Supreme Court decision, in December 2000, terminated a recount in Florida, and George W. Bush became president.

Shah returned to Penn to finish his medical degree and grad school. But the campaign experience ended up being lucky after all. A friend from those Nashville days landed a job at the nascent Gates Foundation, and pulled Shah in, too. It was a heady place to be, with ample funds to direct toward ambitious goals. At Gates,

Shah held multiple job titles over eight years, including director of agricultural development, director of strategic opportunities, deputy director of policy and finance, and chief economist.

In spring 2009, Shah was tapped to join the US Department of Agriculture as chief scientist and undersecretary for research, education, and economics. He prevailed on his old friend Nishant Roy, a US Air Force veteran working at Goldman Sachs, to join him as a special assistant. "What do I know about agriculture?" Roy protested, before succumbing.

Shah's pitch, as Roy recalls, was: "If we can transform our food system, we can change livelihoods in this country." Shah argued, too, that USDA should lead global food security efforts. He worked closely on hunger and development issues with then-Secretary of State Clinton, and, just months later, she was impressed enough to offer him the post at USAID.

Roy, by then Shah's personal aide, describes pulling him out of a sensitive compartmented information facility, or SCIF, meeting to inform him that President Barack Obama was putting him in charge of the Haiti earthquake response. Obama would be telephoning shortly with the official ask. "I remember vividly that we couldn't even get a cellphone signal because in the Ronald Reagan Building, it's cinder blocks everywhere," says Roy. "We had [the phone] propped up on a window" when the president called.

No sooner had Shah accepted the assignment than the phone went dead. "I remember Shah looking at me really pissed and [saying], 'Did we just hang up on the president of the United States?" Roy says. Seconds later, watching CNN, they saw President Obama announcing the appointment from the White House press room. Roy was on a plane to Haiti that night to start collecting data on the scope of the tragedy, which Shah would use to track the recovery's progress.

Soon after the phone call, Shah showed up early to an Oval Office meeting about Haiti. Ushered in quietly, he overheard then-Vice President Joe Biden Hon'13 ask the president: "Are we sure about putting this guy Raj Shah in charge of this? He's brand-new. He's like thirty-something."

Shah's reaction, again, seems not to have been discouragement. Instead, as he relates in the chapter "Open the Turnstiles," he determined to seek as much help as he could from across the federal bureaucracy. Sullivan says that "the intensity of the interagency coordination" was notable. Shah won't say now whether Biden ever apologized for his assessment—just that he has since provided "extraordinary support and mentorship."

Shah says he made a judgment error of his own during 2011 congressional testimony about a GOP budget-cutting proposal that would have decimated USAID. He estimated that the legislation would kill 70,000 children, a figure he says derived from "real quantitative analysis." But that bald assertion, while cheered by some Democrats, stirred political blowback—in particular from a group of Republicans otherwise inclined to support the agency's humanitarian mission.

In the chapter "Make It Personal," Shah describes how his subsequent "apology tour" led to genuine friendships and alliances with some GOP members. A Hindu among mostly Christians, he was invited to attend the US Senate's weekly prayer breakfast and, in 2014, to deliver the keynote address at the National Prayer Breakfast. The bipartisan friendships were good politics. A USAID program called Feed the Future, which invested in agriculture in developing countries, was codified in the Global Food Security Act of 2016 as a result, Shah says.

David Beckmann, then-president of Bread for the World, says he found Shah not just "brilliant and bold," but receptive to ideas from others. Urged to address the problem of malnutrition in Feed the Future, "Raj listened."

Sullivan lauds Shah's contributions to the Power Africa initiative, aimed at doubling access to power in Sub-Saharan Africa. At the time, "we had very little in federal budget resources we could deploy," she says. "What Raj did, which I think is classic Raj, is he quickly figured out that if we were going to do something big, it was going to have to involve private-sector resources." That led to convening a meeting in Washington between African leaders and CEOs of global energy firms and hiring consultants to help accelerate deals. "It was a creative approach to policymaking," she says.

Shah admitted, during his Penn appearance, that USAID's efforts in Afghanistan, "our largest aid recipient throughout my tenure," were less successful. Though the United States helped eight million Afghan girls obtain schooling, "obviously the project of building a nation state in Afghanistan failed." He added: "You can't build a nation when its leaders aren't striving to build the same nation." Even so, he said he remained "hopeful" that the investment in gender equity would "pay off in the long run."

Shah postponed a planned departure from USAID to manage the 2014 Ebola crisis, once again relying on data, his medical background, and a penchant for experimentation. One innovation, involving the deployment of protectively clad burial teams, dramatically reduced disease transmission. Developed by the Liberians themselves, and backed by USAID funds, "it was a very local solution," Shah said at Penn.

Shah's subsequent private-sector work also was mission-driven. Latitude Capital invested in "low-cost reliable electrification," which Shah calls "the key to addressing poverty and opportunity around the world."

Because of his Ebola experience, Shah was asked, in 2015, to serve on a United Nations panel on pandemic preparedness. That same year he joined the Rockefeller board. In 2017 he was named president of the foundation, succeeding former Penn president Judith Rodin CW'66 Hon'04.

Launched in 1913 by John D. Rockefeller, the Standard Oil magnate, the foundation now has an endowment of approximately \$6 billion. It gave its first grant to

the American Red Cross and has since devoted itself to fostering global health and economic development and combating climate change. (A less savory part of its history, currently being reviewed by the foundation, was support for eugenics research in the 1920s and '30s.)

Shah's big bets terminology is now the language of Rockefeller's website. But the idea, he says, isn't new. The foundation, while styling its mission as "scientific philanthropy," always had grand aims. Its major accomplishments, he says, have included building the infrastructure for community-based public health in America and helping to foster a Green Revolution that increased crop yields and "moved a billion people off the brink of hunger in the '60s, '70s, and early '80s."

"The idea of big bets was really embedded in the narrative of this institution long before I arrived," Shah says. "I think I've helped shape our next big bet, which is investing in renewable energy technology as a vehicle for fighting climate change and as a platform for helping to reach a billion people who are trapped in energy poverty around the world." The foundation plans to spend \$1 billion over the next five years to stem climate change.

There is more to come—in 2024, Shah says, "a big bet around school feeding that seeks to reach the 700-plus million schoolkids around the world and ensure they have adequate nutrition" as well as healthier habits.

Shah's personal goals include becoming "a better judge of character and capacity" of both allies and adversaries. But even as the world plunges into unrelenting wars and political polarization roils countries and campuses, Shah retains his sunny outlook. "We have the tools and technologies and the human force of will to really make positive change happen at scale," he says. "It doesn't all happen right away, but often it's really at times of tragedy that we do extraordinary things. We should keep aspiring to do great things."