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Some Dana-Farber Cancer Institute trustees stood to profit from their philanthropic role

Boston's top cancer center has long supported its trustees who invest in, and run, its startup companies. But after questions brought to them by the Globe Spotlight Team, the trustee board abruptly changed course.

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The trustees of the world-renowned Dana-Farber Cancer Institute serve a vital role. They hire the chief executive, are stewards for its thousands of vulnerable patients, organize big-ticket fund-raisers, and in some cases, give millions of dollars themselves.

While the volunteer board position carries complex demands, it also puts the trustees in direct contact with the institute's doctors and scientists who are on the front lines of the race to cure cancer.

The Globe Spotlight Team has identified at least seven trustees who have personally invested in Dana-Farber startups, including one trustee who cofounded five startups and saw his stock shares in one soar by tens of millions of dollars this fall.

Dana-Farber has long supported its trustees who decide to invest in its research, believing the work of its scientists could be better leveraged into pathbreaking treatments, and profits, with access to the venture capital and financial expertise some trustees could bring.

But it is a practice by trustees that is prohibited at two of the nation's major cancer centers and that raises ethical questions about the appropriate role for leaders of a nonprofit hospital.

And on Wednesday, after Spotlight reporters had been questioning hospital leaders on its investigative findings, Dana-Farber abruptly reversed course and two longtime trustees resigned.

"We continue to refine our approach," trustee chair Josh Bekenstein and trustee vice chair Richard Lubin wrote the Globe, "to ensure that when someone with cancer walks through Dana-Farber's doors, they know they can trust that the entire organization is completely focused on helping them achieve their best possible outcome."

The new policy, they said, bars all trustees from newly investing in or serving as a board member or executive of a company primarily created to license Dana-Farber technology.

Bekenstein and Lubin, in the letter, denied that there had been any trustee improprieties, or that any member of the board had unduly profited from Dana-Farber research.

The Spotlight investigation focused on several potentially lucrative ventures joining trustees' wealth and market expertise to Dana-Farber's scientific findings.

Marc Cohen, a longtime trustee, entrepreneur, and venture capitalist, launched five startups, grounded in Dana-Farber research, between 2008 and this year, raising some eyebrows when he participated in negotiations with the hospital's licensing officials over the financial terms for his first three such firms. For one company that he launched based on Dana-Farber intellectual property, C4 Therapeutics, the value of his shares had gone up by roughly \$85 million as of late September.

C4, based in Watertown, has just started clinical trials targeting multiple myeloma and lymphoma.

Cohen, who made his fortune as a technology entrepreneur, resigned from the board after the policy change, saying he planned to focus instead on advising a Dana-Farber venture philanthropy fund, an initiative he is "incredibly proud of."

The Spotlight Team's examination of publicly available documents identified seven people who were invested in startup biotechnology companies based on the institute's discoveries while serving as trustees.

Also, at least nine trustees have leadership positions in venture capital or other investment firms that have shares in at least one startup born of Dana-Farber research.

Because most of these startups are privately held and not required to disclose investors, the number of trustee-investors could be higher. Dana-Farber officials have declined to give the Globe a full list of trustees who have invested in the institution's roughly 50 startups.

The hospital's engagement in such ventures is, of itself, no surprise. Boston is among the world's capitals in biomedical discovery, an economy of innovation that begins at the intersection of laboratory research and finance, where ideas become companies with dreams of bringing new healing technology to the sick — and profits to investors. It is work that begins with the glimmer of a concept, and often federal research dollars, but eventually needs private financing to bring to market.

Many of the major hospitals in town are engaged in this work, partnering with existing pharmaceutical companies or licensing their discoveries to investors in exchange for cash or a stake in the new startup. But Dana-Farber has been among the most aggressive and entrepreneurial in

pursuing venture capital money, which has helped propel the hospital to a leading place in the world of cancer research — and the hope of capitalizing on it — but also opened it to hard questions.

When pressed by the Globe over the past several months, Dana-Farber officials consistently defended the institute's policy of allowing — even explicitly supporting — trustees who decide to invest in its biotech startups, saying that trustees had been increasingly interested in such a role and that prohibiting the practice would hurt the institute's ability to attract qualified trustees.

But after Globe reporters asked executives and trustee investors for details on this largely confidential practice, board leaders wrote to the Globe Oct. 6 to announce a change in the rules.

Bekenstein and Lubin, who revealed the change, rejected with vehemence any "insinuation or allegation" that trustees have ever put the potential for personal gains above their duty to safeguard the interests of Dana-Farber and, above all, its patients.

But these types of investments by hospital trustees, which have faced little public scrutiny until now, have troubled even some inside Dana-Farber — including on its board.

"This has always been controversial," said one trustee, who did not want to be identified because he was not authorized to talk about board deliberations. "Trustees are not supposed to gain anything from being a trustee. The idea that trustees could make money from research didn't look good to people. But others felt that trustees should be permitted to take a risk on this research."

The Dana-Farber trustees include some of the wealthiest and most influential individuals in Boston and beyond, and their role on the board gives them direct access to some of the institute's top cancer researchers. Many trustees come from the world of venture capital and private equity: Bain Capital, for instance, has five top executives on the Dana-Farber board.

These broader ties have been applauded by some as the reason why Boston has become a vibrant hub of innovation; others, including some rank-and-file physicians, worry that this is contributing to a focus on profit-seeking in medicine that can distract from patient care.

Investing in pharmaceutical startups is far from guaranteed profit — many lose money. But some investors, such as Cohen, have enjoyed generous returns, even when the new treatments didn't pan out.

It can take many years for any scientist's novel idea for a drug treatment to be tested on patients, and then potentially brought to the US Food and Drug Administration for approval. Hospitals engaged in such work typically provide lab space and help pay the scientist's salary, but it takes another infusion of cash, often by an established drug company or a startup based on private investors, to run the costly clinical trials and see if the results merit seeking regulatory approval.

It was Cohen's involvement in negotiations with Dana-Farber on behalf of his startup drug companies,



Marc Cohen (left) and Malcolm Salter had been longtime Dana-Farber Cancer Institute trustees before stepping down from the board this past week. Cohen and Salter, flanking Dana-Farber chief executive Dr. Laurie Glimcher, created a program that invites wealthy individuals to invest in a venture capital fund - if they agree to donate money to support Dana-Farber's research. DANA-FARBER

from around 2008 through 2015, that legal experts say raised conflict-of-interest questions. The negotiations concerned the financial terms on which he licensed Dana-Farber's intellectual property for three of his companies. Legal experts say this may have conflicted with his role as a trustee — as he would be vying to get the best deal for his private companies but also had a loyalty to Dana-Farber.

Cohen, in a 90-minute interview with Spotlight reporters late last month, defended his dealings and said that since becoming a trustee in 2004 he had always followed Dana-Farber's lead on what was and was not allowed.

"Had they said you can't do this, I obviously wouldn't have done it, right? I was looking to them to guide me," he said in the Zoom interview. "I was focused on how do I get this [intellectual property] out there so we can create new therapies for patients."

Later, in 2017, the board adopted a policy that attempted, for the first time, to manage conflicts involving trustees who invest in the institute's startups. The policy specifically barred them from negotiating with Dana-Farber personnel on behalf of a startup, including on licensing deals, as Cohen had done. However, that policy was notable for supporting trustee investments.

He told the Globe in late September that he didn't know about the policy until last year when he reached out to the licensing office regarding another deal with a Dana-Farber related startup.

During the interview, in which he was joined by Dr. Kenneth Anderson, a renowned multiple myeloma researcher at Dana-Farber with whom he has formed several companies, Cohen acknowledged that he knew his personal role in creating startups drawing on Dana-Farber research while a trustee could raise objections. As a result, he asserted that he went out of his way to give Dana-Farber "better-than-market terms in all those deals" when it came to the amount of equity granted to the institute.

He declined to disclose the actual terms.

Bekenstein and Lubin, in their Oct. 6 letter to the Globe, offered some support on this score, saying the

institute received "substantial and fair value" in its licensing deals with Cohen and others.

"The financial arrangements have been consistent with industry standards and previous [intellectual property] licensing arrangements," said Bekenstein, co-chair of Bain Capital, and Lubin, co-founder of the private equity firm Berkshire Partners. "Implications otherwise are not true."

Bekenstein and Lubin declined Globe requests for interviews.

Access to trustee investments and market expertise can, as the hospital has contended, expedite research and new treatments, at great potential benefit to desperate patients. But this process of trustee engagement is, nonetheless, largely opaque to patients, who may receive experimental doses of the new drugs, and to the public generally, and it is controversial at some leading US medical centers. It creates potential conflicts of interest at the highest level of an institution and worries about whether trustees' financial interests can influence governance of the hospital, including research priorities.

Some at Dana-Farber believe that the sizable presence of venture capitalists, hedge fund managers, and private equity investors on the institute's board, as well as the investments by some, distorts the institution's sense of its mission.

"At worst, it's pay to play," said one longtime scientist at Dana-Farber, who did not want to be identified because he is concerned about repercussions for speaking out against his employer. "They make donations and get advantages that allow them to capitalize on early discoveries."

The Globe analyzed hundreds of publicly available records, including Securities and Exchange Commission filings, tax filings, and the market data website Pitchbook, and identified seven current or former Dana-Farber trustee-investors.

Among them are Malcolm Salter, a Harvard Business School professor who is now retired and who invested in three of Cohen's Dana-Farber startups: \$150,000 in C4 Therapeutics, starting in December 2015, \$25,000 in Raqia Therapeutics in 2020, and \$25,000 in NextRNA Therapeutics in 2021. His shares in C4 Therapeutics were worth nearly \$650,000 as of late September; that information is not public for Raqia and NextRNA.

Salter, who joined the board in 1998, also resigned this past week after Dana-Farber changed its policy, saying he, like Cohen, will focus on advising the institute's venture philanthropy program.

New England Patriots owner and longtime trustee Robert Kraft, well-known for his philanthropic support for cancer care, helped bankroll at least two of Cohen's Dana-Farber startups. The extent of Kraft's investments was unavailable through public documents. Kraft did not respond to the Globe's questions.

The Globe review also found that three of the trustees who have top jobs in firms that have invested in Dana-Farber startups specialize in overseeing health care portfolios: Phill Gross of Adage Capital Management, and Andrew Kaplan and Christopher Gordon of Bain Capital.

Gross declined to comment, and a Bain spokesman said the firm's Dana-Farber trustees were not directly involved in the decision to invest in these startups.

Dr. Steven Joffe, interim chair of the Department of Medical Ethics & Health Policy at the Perelman School of Medicine at the University of Pennsylvania, said the public may question trustees' motivations in stepping up to make these investments.

"You want them to become trustees because they care about the institution, not because they want to get in on the ground floor of these deals," he said.

Dana-Farber's trustee-investment policies are unusual

Dana-Farber has long stood out when it comes to managing trustee investments: It was the only hospital contacted by the Globe that had adopted a written policy that explicitly supported trustees who decide to invest in its startups. At the same time, however, its 2017 policy also attempted to mitigate conflicts, and additional rules for trustees were added in 2020.

The Globe surveyed the top 10 cancer hospitals ranked last year by US News & World Report, as well as Boston's six other academic medical centers. Spokespeople at five institutions said they have not had trustees investing in hospital startups.

Two major cancer centers, Memorial Sloan Kettering Cancer Center in New York and Cedars-Sinai Medical Center in Los Angeles, prohibit trustees from investing in startup companies.

Boston Children's Hospital also adopted a policy in 2020 that prohibits trustees from investing in spin-off companies "developed by or in close collaboration with Boston Children's in which we have significant equity ownership or participate in company governance," a spokeswoman said.

The Cleveland Clinic and Johns Hopkins Medicine said they have "a few" trustee investors, but they would not provide details. The remainder of the institutions did not respond or said they have no idea whether trustees invest in this way and face ethical conflicts.

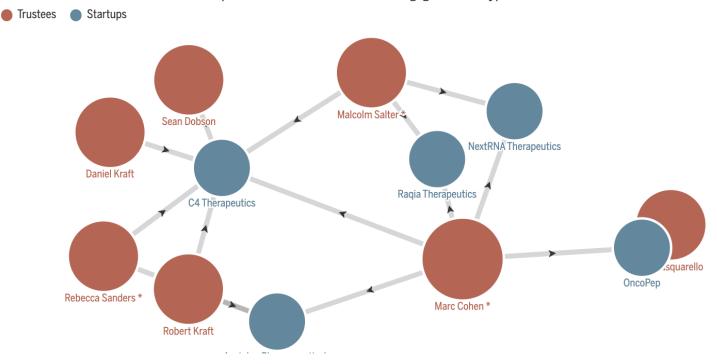
Despite having more than 300 biotech startups based on researchers' discoveries, Mass General Brigham, the parent company of the two hospitals, could not provide a list of trustee-investors because it "does not have a formalized process to track this" practice, said Rich Copp, then a spokesman for the organization. The Globe identified at least one trustee-investor there, Jonathan Kraft, president of the Kraft Group and chair of the Mass General board of trustees, which invested in Spero Therapeutics.

In Boston, these investments are occurring in a city where academic medical centers are frequently allies with the turbo-charged biotech industry — in ways beyond trustees investing in startups.

A Globe Spotlight report published in April found that Boston's hospital presidents as a group, including chief executive Dr. Laurie Glimcher at Dana-Farber, worked as paid corporate board members for for-profit drug and

Dana-Farber trustees have stood to profit from the hospital's discoveries

The Globe Spotlight team identified seven trustees who have invested money in the startups, all co-launched by one trustee, Marc Cohen. Dana-Farber officials declined to provide a list of all trustees who engage in these types of investments.



Source: The Globe identified trustee investments through sources such as the US Securities and Exchange Commission, Dana-Farber tax filings, corporate filings, and the market data website Pitchbook.

health care companies far more than their counterparts in other major cities.

Glimcher, for instance, receives \$1.8 million in annual compensation from Dana-Farber and also works as a paid board member at GlaxoSmithKline and Analog Devices, positions in which she receives a total of more than \$300,000 annually in cash and stock.

Glimcher declined to comment for this story.

Those who support the practice of trustees investing in hospital startups argue that these individuals are making a financial gamble and should be allowed to do so as a show of support for Dana-Farber.

Salter, the longtime trustee who taught at Harvard Business School, said he invested in C4 and joined the company's board of directors in 2015 because he was impressed by the company's novel approach to not just inhibiting disease-causing proteins but actually destroying them.

"When I invest in these companies, I don't ask myself how much money I can make. I'm asking myself how much money I can lose? How much money can I lose to support this project?" Salter said during an interview at his Cambridge home.

The 2017 Dana-Farber policy was clear about the potential for "actual or perceived conflicts of interest" when trustees invest. It also pointed out that the practice might be more common at Dana-Farber, in part because it has a large board.

A Globe survey found that Dana-Farber has the largest board among the nation's top cancer centers — a size that some institutional governance specialists say is designed more to boost fund-raising than offer strong oversight. The board includes 62 "governing trustees" who have voting power, and another 100 or so trustees who can attend meetings, join special committees, and participate in forums with Dana-Farber scientists.

Not all trustees have embraced the chance to risk their money on a Dana-Farber startup.

Michael Champa, a retired technology entrepreneur who served as a Dana-Farber trustee from 2009 to 2018, declined the opportunity. "I just didn't see the need to mix my investment activities with my philanthropy," Champa said. "To me they are sort of two different worlds."

In general, the widespread infusion of venture capital and private equity money into cancer research has brought applause but also some unease. Some top hospital researchers worry about how this superheated market may skew clinical research priorities.

Not long ago, Dr. Dan Vogl, a blood cancer specialist and director of the Abramson Cancer Center Clinical Research Unit at Penn Medicine, said a biotech company asked him to review their clinical trial plans. He suggested broadening the criteria for eligible patients, even including those who had previously gotten no benefit from similar drugs. That, he said, is the best way to find out if a drug works in the real world. The company did not see it that way.

^{*} Sanders left the board in 2020; Cohen and Salter left the board in October 2021.

"They wanted to strictly limit which patients could enter to those most likely to have a response," he said. "They needed to be able to show investors the drug would work to get more money in the early stages," for further trials. That, he warned, "can subvert the scientific process."

Marc Cohen: Dana-Farber's active trustee-investor

Among Dana-Farber's outsized roster of trustees, none appears to have been as active as Marc Cohen when it comes to betting on the institution's pioneering cancer research.

A 58-year-old Harvard University graduate who lives in McLean, Va., just outside Washington, D.C., Cohen started making his fortune through a technology company that he and his brother, Alain, founded in the 1980s. OPNET Technologies started as a "tiny garage operation" based on a data network modeling and simulation system that Alain made as a project while a student at the Massachusetts Institute of Technology, according to media accounts.

Marc Cohen told the Globe that several family members have died of cancer, sparking his interest in helping to develop potential treatments. His relationship with Dana-Farber began in the early 2000s when development office staff invited him to a presentation for donors and potential donors given by scientists to discuss their research.

One of those scientists was Anderson, the multiple myeloma specialist who would later become a key collaborator of Cohen's in creating startup companies.

"I expressed a lot of interest in how we get these ideas out the door to patients," Cohen said in the interview with the Globe. "There was so much research going on and very little of it going out."

He said he was asked to join the board as a governing trustee in 2004. He also co-chaired the Dana-Farber committee on blood cancers and was a member of the trustee science committee. Both committees host meetings in which trustees have direct access to scientists.

Several years after joining the board, Cohen made his first foray into launching a biotech company with a promising experimental drug developed by top Dana-Farber and Harvard Medical School scientists, including Anderson.

Together, they founded Acetylon in 2008. At least two other trustees were among those who helped bankroll the company in its early days: Robert Kraft, who endowed a Kraft Family professorship given to Anderson, and Rebecca Sanders, a real estate broker who stepped down from the Dana-Farber board last year.

Soon, the company began to test its potential treatments, part of a class of drugs called HDAC inhibitors, praised by one investigator involved in the clinical trials as "closer to a cure" for multiple myeloma.

Other HDAC inhibitors hadn't been widely used due to their toxic intestinal side effects, and Cohen and Anderson hoped Acetylon's drugs could sidestep these harsh symptoms by more narrowly targeting certain enzymes that play a role in cancer.

At the time, the onus fell more heavily on scientists at Dana-Farber to recruit investors to help move their discoveries from the lab through clinical trials. It was a system that gave potential advantages to scientists with personal connections in Boston's venture community, said Anthony delCampo, a consultant who was vice president of Dana-Farber's Office of Research & Technology Ventures from 2002 through 2011.

DelCampo said Cohen's ability to drum up millions of dollars in private investments for Acetylon was something of a miracle coming on the heels of the financial crash, when traditional capital had largely disappeared.

DelCampo said he worked with Cohen on the deal, but that a confidentiality agreement bars him from disclosing the details. But, delCampo said, the terms were as beneficial to Dana-Farber as they would have been had it been done with an investor without connections to the board.

"I was working on behalf of Dana-Farber and getting the best deal possible for Dana-Farber, regardless of the person on the other side of the table," he said.

Cohen said Harvard, a co-licensor with Dana-Farber, "made the ultimate decision in the deal terms," so he had less of a direct conflict.

Anderson, as an inventor, and Dana-Farber stood to make millions of dollars if Acetylon's drugs were successful. Both Anderson and Dana-Farber officials said they were mindful of conflicts of interest, notifying patients in Acetylon clinical trials of the institute's financial interest among other measures.

Acetylon's HDAC inhibitors did not turn out to be the blockbuster treatments Cohen and Anderson had hoped for. A larger drug company, Celgene, eventually bought Acetylon for \$196 million in 2016, with potentially billions in royalty payments if any of the company's drugs became a successful cancer medication. But Celgene soon closed most of the clinical trials.

Dana-Farber received \$5.7 million from the sale, institute spokeswoman Ellen Berlin said in an e-mail, and records show that Anderson was paid \$1.9 million.

Cohen would not say how much he received in the sale. Cohen also participated in negotiations for the licenses from Dana-Farber for two other biotech companies he helped found, OncoPep in 2010 and C4 Therapeutics in 2015. As with Acetylon, these negotiations mostly involved how to divide any profits between the hospital and the startup.

In 2014, the year before he started negotiating for the C4 license, Cohen said he got a call from Dana-Farber's general counsel at the time, Richard Boskey, asking him to modify his role at the institution.

"I had no inkling that this was going to come," Cohen said. "[Boskey] basically said that there was another category called the non-voting trustee, and because I was involved in company formation that it would just be a lot simpler if I transitioned to that new category."

Cohen said he immediately agreed. "My focus isn't to attend meetings, but to help, to figure out how to bring out new therapies to patients," he said.

This scenario involving a trustee with conflicting roles in negotiations raises red flags among health care law experts. "This is not an ethically ideal way to do this," said Harvard Law School professor Glenn Cohen.

Douglas Mancino, a health care lawyer in Los Angeles who represents nonprofit organizations including hospitals, said that a trustee negotiating this type of deal is legally permissible if the institution can show the trustee did not obtain the license for less than market value. But these investors can put up a tough fight, he said. "Venture capitalists in my experience extract a pound of flesh."

In the end, though, these types of insider negotiations can look suspect, Mancino said, and "should be subject to heightened scrutiny," such as hiring an outside consultant to value the intellectual property and requiring other trustees, not just hospital staff, who might feel intimidated by a trustee, to approve the deal.

Cohen declined to answer questions about his personal investments in each of the companies and how much he has gained or lost.

Dana-Farber officials also said the Acetylon clinical trials conducted at Dana-Farber were reviewed by a special External Safety Monitoring Board, composed of specialists not affiliated with the institution.

And a conflict-of-interest management plan prohibited Anderson, who directs the Jerome Lipper Multiple Myeloma Center at Dana-Farber, from "participating in, overseeing, or taking part in any decisions about this trial," spokeswoman Berlin said.

The trials at Dana-Farber were, instead, conducted by Anderson's close colleague, Dr. Paul Richardson.

C4 Therapeutics becomes popular among trustees

Another Dana-Farber startup company launched by Cohen attracted significant interest from trustees or their investment firms. In 2015, he incorporated C4 Therapeutics and soon after secured the license to Dana-Farber technology developed in the field of targeting disease-causing proteins for destruction.

With this license, the company was able to woo tens of millions in investments.

Federal securities filings show that more than a dozen Dana-Farber trustees have financial connections to the company, either through direct investments or through their investment firms. Salter joined as an early board member — he said because the company included his sister's disease as one of its targets — and has seen the value of his investment in the company soar.

The Globe estimates that Cohen, himself, invested no more than \$14 million of his own cash along the way. His shares were worth nearly \$100 million as of late September, not including the substantial value of his stock options. Cohen, in an interview, did not dispute the Globe's calculations.

C4 Therapeutics ended its licensing agreement with Dana-Farber last year, and Berlin said the institution sold its stock in the company earlier this year for \$29 million.

Underscoring its support for trustee-investments, Dana-Farber included in its 2017 policy a reference to a special fund designed for high-wealth individuals — then-called the Gemini Fund — that would enable trustees, as well as others, to invest in a for-profit fund, as long as they first contributed to a philanthropic fund.

This fund was the brainchild of Cohen and Salter and was more than 10 years in the making, they told the Globe.

The executive committee argued that this plan would ameliorate the potential for conflicts of interest because trustees would not choose the specific research and companies that would receive those funds.

Gemini evolved into a partnership between Dana-Farber and MPM Capital that launched in 2017. MPM manages a \$100 million venture capital fund designed to invest in startups from Dana-Farber and elsewhere, and the hospital manages a \$26 million philanthropic fund that investors must donate to in order to participate.

But in keeping with the general secrecy around trustee investments, Dana-Farber would not share details on which trustees have put their own money in the funds.

Cohen acknowledged that he participated, explaining that he needed to "put my money where my mouth is" when pitching the funds to other investors, but he declined to share the size of his contribution. "It's personal," he said.

Salter said he couldn't afford the \$250,000 minimum for the investment fund, in tandem with the \$125,000 minimum for the philanthropic funds. "I'm not in that category," Salter said.

Dana-Farber policy reversal a significant shift

The new policy that prohibits trustees and their immediate family members from making new investments in startups based on Dana-Farber technology, among other restrictions, marks a major shift.

It will also impact dozens of trustees who help run investment firms that in some cases have substantial biotech portfolios. The new policy says they must "take appropriate steps" to ensure that confidential information they learned on the Dana-Farber board isn't used to make investment decisions.

Bekenstein and Lubin asserted that Dana-Farber has long shown strong oversight in managing trustee conflicts of interest.

"When potential conflicts of interest arise, we have managed them diligently, based on strong policies and oversight, and we regularly review these policies to ensure that they are aligned with our commitment to our patients and the independence of our research," they wrote.

Deirdre Fernandes of Globe staff and researchers Maysoon Khan and Jeremiah Manion also contributed to this report.