Huawei's secret ally in the US-China tech war: A science nonprofit based in DC

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When Optica Chief Executive Officer Elizabeth Rogan traveled to China in November, the prestigious U.S. scientific society she runs promoted the trip internally and on social media. But it omitted a key

stop: her visit to Huawei Technologies Co.'s headquarters, according to communications and documents reviewed by Bloomberg News.

By April, Rogan's under-the-radar meetings at Huawei had become part of a whistleblower complaint about her nonprofit's growing partnership with a Chinese telecommunications giant that's in the crosshairs of U.S. national-security officials.

A review of internal Optica corporate records shows the alliance ran far deeper than publicly known, blossoming over decades even as U.S.-China tensions over technology soared.

The findings expand on a Bloomberg News report in May that Huawei was secretly sponsoring a research competition run by Optica's foundation. That arrangement enabled Huawei to fund millions of dollars worth of cutting-edge studies at U.S. universities without their knowledge, including at schools that ban their researchers from taking Huawei money.

The revelations prompted a congressional investigation and a decision by Washington-based Optica to return the funds Huawei had committed to the program and to remove the company's representation on the panel of judges.

Scrutiny over the funding arrangement has dealt a blow to a partnership that effectively helped Huawei preserve access to a pipeline of top-notch U.S. scientists despite its pariah status in Washington. For example, according to Bloomberg's latest findings, at least three of the six U.S. researchers Huawei secretly sponsored through the Optica competition won Pentagon funding around the same time.

An April 4 complaint, filed to Optica's general counsel by an employee citing the group's whistleblower policy, flagged Rogan's "undisclosed"

visit to Huawei's headquarters and raised concerns about the company's role in choosing which scientists would receive funding through the competition. The whistleblower also alleged the contest risked compromising U.S.-government-funded work, including efforts backed by the Defense Advanced Research Projects Agency, or DARPA.

"I believe that research that is funded by DARPA and other agencies and patents to which the U.S. government has certain rights have been willfully exported to Huawei and therefore the Chinese government" through the competition, the complaint says, without elaborating on that allegation.

An Optica spokesman said that claim is "simply incorrect" and that "no research has ever been provided by or thru Optica to Huawei or any government entity." In an internal communication to staff on June 3, Rogan said the group was "actively reviewing our policies to ensure both best practices and maximum transparency."

A Huawei spokesman said in a statement that the company funded the Optica-branded research competition in order to "motivate young scientists, encourage academic exchange, and promote global knowledge sharing." He didn't address questions about Bloomberg's new findings.

Headquarters Visit

For Optica, a century-old organization that publishes influential scientific journals, the tie-up with a Chinese industrial champion helped it maintain a foothold in a crucial region even as China's rivalry with the U.S. intensified. The society has been increasing its focus on China, its second-largest market after the U.S. and one where it sees untapped potential.

Yet it's a delicate dance, as research by Optica's 24,000 individual

members applies to sensitive areas such as semiconductors—a key battleground in the U.S.-China tech competition, and one where Huawei is a major player.

Rogan's visit to Huawei headquarters came just months after the company's release in August of a new smartphone featuring a 7-nanometer chip whose development U.S. export controls were supposed to foil. In a provocative move, Huawei unveiled the breakthrough while the U.S. official in charge of those controls, Commerce Secretary Gina Raimondo, was visiting China.

The Optica spokesman said the group didn't publicize Rogan's visit because it was "an informal courtesy stop at the end of a two-week trip." He added that Rogan had "already sent two internal communications about trip highlights and a third felt excessive at the time."

Rogan, an accountant who has been the group's CEO since 2002 after previously serving as assistant controller of the John F. Kennedy Center for the Performing Arts, has repeatedly said there was nothing wrong with Optica allowing Huawei to fund the competition. She initially told Bloomberg that some donors preferred to remain anonymous and that there was nothing unusual about the practice.

But, in a June 6 letter to Optica's board, Rogan said that Huawei's funding had "diverted attention from the program's mission to support early career professionals" and that the society would return the company's money.

The funding arrangement likely didn't violate Commerce Department regulations blocking technology sharing with Huawei because such rules don't apply to science that's meant to be published, which is what the competition solicits, according to export control experts.

But research security specialists said the arrangement undermines university and U.S. government policies meant to ensure scientists' sources of funds are transparent in order to protect both national security and taxpayer dollars.

Huawei's undisclosed sponsorship caused some competition winners to unknowingly violate bans at their schools on accepting money from the company. It also left some who applied for separate federal funding, such as Pentagon grants, unable to accurately disclose to the U.S. government all of their sources of financial support, which can impact the government's funding decisions.

Even though Optica has since said it will return Huawei's money, prosecutors could still make a case that its foundation is liable under the False Claims Act for causing researchers to file fraudulent information to the U.S. government regarding their sources of funds, according to Paul Moore. Moore is a former chief investigative counsel at the U.S. Department of Education, where he focused on undisclosed foreign money in higher education.

The top Republican and Democrat on the House Science, Space and Technology Committee wrote in a May 16 letter to Rogan that Optica's earlier failure to disclose Huawei's involvement in the competition either showed deep ignorance toward research security or was a "willful strategy to launder funds from Huawei to anonymously bolster the Optica Foundation's reputation and finances."

Optica's spokesman said the group "is confident that we acted properly and in good faith" in its handling of the Huawei funding.

Same scientists

Huawei was able to secretly fund some of the same scientists the

Pentagon and other U.S. agencies chose to sponsor for critical projects around the same time, according to government and university announcements.

These scientists were selected for a DARPA effort to develop light-based computing chips; a study of thermal emission by the Office of Naval Research's Sea Warfare and Weapons Department; and a research project on AI-driven machine vision systems that's part of a group of studies being funded by the CHIPS and Science Act of 2022 and a National Science Foundation initiative on semiconductors.

An NSF spokeswoman said that, while the agency can't comment on individual cases, "we recognize that there exist efforts to lure U.S. researchers and organizations into situations in which they are, potentially unknowingly, failing to comply with federal requirements." She said the NSF "will continue to track and mitigate risks of undue malign foreign influence on the U.S. scientific enterprise."

An Office of Naval Research spokesman said that, at the time the researcher in question made their proposal to the Pentagon agency, the person hadn't yet received the Huawei-funded prize.

In addition, that researcher's university—Vanderbilt—decided to proactively fund the proposal that had been awarded by Optica shortly after Huawei's involvement in the competition became public and before Optica decided to return the company's money, according to the Optica spokesman.

Vanderbilt University said that it made the decision to return the funds to the foundation after it learned that Huawei was the competition's financial sponsor. "We take seriously the federal government's restrictions on Huawei because of national security concerns," the university said in a statement.

DARPA, a Pentagon arm famous for helping develop the internet and stealth technology, in 2021 launched a program to assess the risk of foreign influence on grant awardees. A spokeswoman said it's based on both volunteered and public information.

Longtime relationship

Huawei and Optica began building a relationship years before agreeing on plans for Huawei to anonymously sponsor the research competition.

At the March 2022 board meeting when Optica Foundation directors approved that arrangement, Rogan said Optica and Huawei had worked together for "decades" and that Huawei employees participate in peer reviews for Optica's scientific journals and in planning a major conference managed by the group, according to meeting minutes.

When asked to provide additional information about the origins of the Huawei partnership, the Optica spokesman said Rogan and staff visited the company's headquarters in 2007 and that Rogan got to know the Huawei executive who was a judge for the research competition through their work together on conferences over the years.

Rogan's earlier trip to China would have been five years before the 2012 publication of a seminal report by the House Permanent Select Committee on Intelligence alleging that Huawei posed significant national security threats.

Huawei has also "provided financial sponsorship for several events," the minutes say, including an environmental initiative co-founded by Optica that has as its co-chair a U.S. government chemist with the National Institute of Standards and Technology. The program, called the Global Environmental Measurement and Monitoring Initiative, or GEMM, doesn't mention Huawei on its website.

A spokesman for NIST said its scientist "has not received funding from GEMM beyond meeting travel expenses and was unaware of any connection between GEMM and Huawei."

The Optica spokesman said Huawei "made a one-time donation to Optica in 2019 but had no decision-making involvement in how those funds were applied." He said Optica "chose to use the funds for a start-up program to address pervasive environmental and climate challenges." He declined to answer questions about the value of Huawei's 2019 donation.

At the board meeting, the Optica Foundation's executive director said Huawei had "offered" to fund the research competition in late 2021 and that it was "not seeking to design the program, determine selection criteria or choose the winners," according to the minutes. Members then voted unanimously to approve the Huawei donation, the document says.

Huawei's role in contest

Ultimately, however, Huawei did play a role in choosing the contest's winners, and it secured contractual opportunities to engage with them while they conducted their research, documents show.

Huawei participated in deliberations over who would comprise the competition's selection committee, according to a spreadsheet reviewed by Bloomberg. The document assessed credentials of 32 potential candidates and included a column labeled "Huawei recommendation."

Huawei recommended eight of the 32 listed candidates, according to the document. Several, including a Huawei executive, went on to join the competition's 10-person selection committee. Huawei's representation on the panel was ended after Bloomberg's report revealing the company's role as the competition's sole funder.

Huawei's representative was able to maintain contact with the winners, who were obligated to participate in at least two review meetings with the selection committee to "provide updates on progress and receive advice/guidance," according to an agreement reviewed by Bloomberg that awardees were required to sign. The document, which listed the terms and conditions of accepting the prize money, specifies that the meetings "could occur" at three industry conferences in the U.S.

An internal Optica budget document shows that winners also had the option of delivering their final report at an event in China called the Asia Communications and Photonics Conference, known as ACP.

A later budget document describes a plan to send five of the competition's ten winners to ACP in Beijing in 2024. The event is co-organized by Huawei and China's State Key Lab of Information Photonics and Optical Communications.

Glenn Tiffert, a research security specialist at Stanford University's Hoover Institution, said that the obfuscated origins of the funding, the consistency of the supported research with the Chinese government's priorities, and the dissemination activities in China supported by the program such as the ACP conference, reflect the evolution of China's efforts to target overseas talent.

The Optica spokesman said Huawei played no part in the final selection of competition judges and that the document Bloomberg cited with the column labeled "Huawei recommendation" was "an initial list of volunteers for consideration." He said Optica followed the standard process for scoring applicants by randomly assigning proposals to judges.

He said "winners are expected to have review meetings with members of the Selection Committee, but at no point was there any expectation or

requirement for winners to meet directly with Huawei." He called the Huawei- and Chinese state-sponsored conference "an opportunity for our winners to interact at a gathering of like minds."

USC scientist

One of the scientists Huawei wanted on the Optica competition's selection committee was a University of Southern California engineering professor it had funded nearly a decade ago: Alan Willner.

In 2016, prior to many universities deciding to ban their researchers from working with Huawei, the Chinese telecom and its U.S. unit Futurewei funded Willner through two separate research contracts valued at a total of $338,000, according to an internal Huawei document reviewed by Bloomberg.

Willner, who became chairman of the competition's selection committee, has been a member of the U.S. Army Science Board and of the Defense Sciences Research Council, which provided reports to the DARPA director, according to his USC bio.

Two junior scientists from Willner's engineering department at USC have won research funding from Huawei through the Optica competition since it began in 2022. Both of them are on a team that USC in April announced had received the DARPA grant to develop light-based computing chips as part of a four-year Pentagon-funded effort.

USC said in a statement it "places the utmost importance on complying with the letter and spirit of our obligations related to the acceptance and reporting of funding." The statement added the university is "undertaking a thorough review of the awards made to USC researchers from the Optica Foundation."

Willner didn't respond to requests for comment.