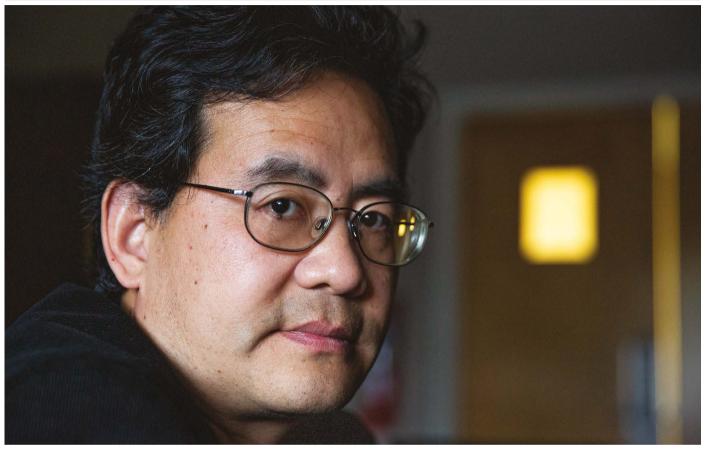
News in focus



Anming Hu is back at work but fears that his time away from the lab will be 'catastrophic' for his career.

'ILOST TWO YEARS OF MY LIFE': US SCIENTIST FALSELY ACCUSED OF HIDING TIES TO CHINA SPEAKS OUT

Acquitted nanotechnology researcher Anming Hu returns to his lab after two years – and is still grappling with the aftershocks of his ordeal.

By Natasha Gilbert

nming Hu walked back into his laboratory at the University of Tennessee (UT), Knoxville, on 1 February for the first time in about two years to find it stripped of research equipment. Gone were the delicate lasers, lenses and voltage metres - worth tens of thousands of dollars - that he and his students had used to conduct their studies.

The nanotechnology researcher spent much of his first few weeks back at work searching for his prized tools. Some he found

in colleagues' offices and labs, other pieces some of them broken – he discovered packed into storage cupboards, he says. Others are still missing.

Hu's tepid return to the university follows a turbulent few years during which he was accused by the US government of hiding ties with China, put under house arrest and, eventually, acquitted of all charges. This string of events occurred at around the same time as the launch of the China Initiative – a US government effort, aimed at countering economic espionage, that frequently targeted academic researchers for failing to disclose

funds from China or partnerships with Chinese institutions.

Hu, a Canadian citizen of Chinese descent, had been working in the United States for more than four years when the FBI first interviewed him in 2018, the year the initiative was launched. Almost two years later, in February 2020, he was indicted for wire fraud and for making false statements about his affiliation with a Chinese university on research grant applications submitted to NASA.

"That is the day I lost everything. I worked hard for years, and it happened in a few minutes," he says.

News in focus

The US Department of Justice (DoJ) announced on 23 February that it was effectively ending the China Initiative, and was replacing it with a broader strategy covering China and several other countries, including Russia and North Korea. Academic researchers and civil-liberties groups had been calling for the initiative to be shut down, arguing that it was racially profiling scientists.

When announcing the changes to the initiative, US assistant attorney-general Matthew Olsen said that his review of the original programme did not find evidence that the DoJ's actions had been racially prejudiced. But he did acknowledge that the programme, as well as several controversial cases that targeted people from China, gave the appearance of bias.

Hu welcomes the end of the initiative, but he would like to see the government held to account for its actions.

"I lost two years of my life," he says. "Who is taking the consequences of that?"

After Hu's indictment, UT Knoxville suspended him and then stopped his pay. Eight months later, the university fired him after he lost his right to work in the United States. Hu's work visa expired in June 2020 while he was awaiting trial, and the US Citizenship and Immigration Services closed his application for permanent residence two months later. During his time in court, the jury was unable to reach a verdict, resulting in a mistrial. In September 2021, a judge acquitted Hu on all counts, finding no evidence that the nanotechnology researcher had committed the crimes he was accused of.

"It is very painful in my heart. The memories are very hard," Hu says.

Under house arrest

Hu was under house arrest for more than a year while awaiting trial. During this time, he relied heavily on his church community to bring him groceries — and even take out his rubbish — because he was not allowed to go outside, he says. Although UT Knoxville had cut ties with Hu, some of his colleagues quietly tagged along with the church group to do the shopping or wave to him from the street. With his wife and two of his children in Canada, he felt isolated and missed his family.

"It made me want to cry every night," Hu says.

Once he had finished building his legal defence, Hu dived into unpaid work to help to distract him while he awaited trial, he says. He reviewed around 400 research papers and wrote 6 research papers of his own, including some on nanojoining — a technology used to link nanometre-sized building blocks to manufacture nanodevices and systems. He also finished writing a book on laser manufacturing and 3D printing. But he fears that the two-year gap in his laboratory research will be "catastrophic" for his career.

Others accused under the China Initiative also worry about the personal and professional toll. Gang Chen, a prominent mechanical engineer at the Massachusetts Institute of Technology (MIT) in Cambridge, told *Nature* in an e-mail that the US Congress should hold the FBI and DoJ to account for their treatment of researchers. Chen was arrested in January 2021 for allegedly failing to disclose on grant applications that he had ties to China and had received funding from Chinese institutions — charges the DoJ later dropped.

Chen wrote in an editorial in *Science* that MIT openly supported him after he was arrested, and says that other universities and funding agencies should also stand up for faculty members who are wrongfully prosecuted (G. Chen *Science* 375, 797; 2022). This strikes a chord

"I need to get back my reputation. I need to let other people see I didn't do anything wrong."

with Hu, who did not feel supported by his university or his funding agency.

According to court documents from Hu's trial, UT Knoxville knew of evidence from 2014 onwards that showed Hu was not hiding his affiliations with Chinese institutions. For instance, Hu submitted a letter to the university in 2016 disclosing his collaboration with a researcher at the National Synchrotron Radiation Laboratory in Hefei, China. He planned to include the letter in his application materials for a NASA-funded grant proposal. Hu worked with this researcher on nanostructure characterization.

A university employee requested that Hu remove the letter from the application because it would violate an assurance document the university was submitting stating that the proposal had no restricted ties to China, the court documents say. A 2011 US law prohibits NASA from funding collaborations with China or Chinese businesses.

The university also gave Hu inconsistent advice about what links to China were allowed when applying for NASA funding; for example, on one occasion the same university employee wrote to Hu in an e-mail that, as UT Knoxville understood it, the NASA restrictions didn't apply to its faculty members, staff members or students, the court documents show.

Hu also submitted a letter outlining his collaboration with the Beijing University of Technology (BJUT) to a researcher at NASA's Jet Propulsion Laboratory (JPL) in Pasadena, California, who was a subcontractor for NASA. Hu collaborated with a scientist at BJUT on nanomaterial development. However, the JPL researcher told Hu that he would not include the letter in the application package, because

the collaboration was not permitted under the NASA restrictions, court documents say.

When asked for comment by *Nature*, the NASA Office of Inspector General replied: "It is our policy not to comment on or generally acknowledge investigative activities conducted by our office."

That the university did not openly defend him during his case particularly stung, Hu says. "They cannot throw the professor under the bus. They should have taken their responsibility."

Tyra Haag, a spokesperson for UT Knoxville, told *Nature* in a statement that the university "followed its policies and processes" throughout the Hu case, and supported his efforts to resolve his immigration status once the case was over. Now UT Knoxville "is providing support for him to restart his career and his research" and is "grateful and pleased to welcome him back to the faculty", the statement says.

Rebuilding his reputation

After Hu's acquittal, faculty members at UT Knoxville campaigned for the university to rehire him. The university helped Hu to apply for a temporary work permit, reinstated him as a tenured professor and gave him US\$300,000 to help him restart his research. He will spend some of the money on repairing and replacing his equipment. But Hu says that the university has not yet apologized to him.

He also says that NASA has told him he can reapply for funding, but that he doesn't have any immediate plans to do so. From now on, he will be careful who he collaborates with and where he seeks funding from, he says.

Hu ultimately decided to return to UT Knoxville because he felt it would help to show that he wasn't guilty and that he didn't deserve to be penalized for the mistakes of others, he says.

"I need to get back my reputation. I need to let other people see I didn't do anything wrong," he says.

For the time being, Hu wants to focus on his research, including new plans for projects on nano-robots. He also hopes to use his position at the university to get the word out about how situations like his can arise — and to prevent it from happening to others. In addition to speaking to the media about his experiences, Hu plans to speak at events and to advocacy groups. He doesn't want others to suffer as he has, he says. He warns other researchers that they "need to be very careful".

The China Initiative might have ended, but Hu says he will be looking out for changes in the way researchers of Chinese descent are treated, and whether law-enforcement agencies, including the FBI, are held accountable for their actions.

"I would like to see that the DoJ respects academic freedom and encourages normal international collaboration and exchange," Hu says. "We should be alert that this does not mean that the prosecution goes underground."