The Canadian Security Intelligence Service has warned the country’s universities and research institutions that Beijing is using academic recruitment programs such as its Thousand Talents Plan to attract scientists to China in hopes of obtaining cutting-edge science and technology for economic and military advantage.

The federal spy agency says the Thousand Talents Plan (TTP), which Beijing created in 2008 to identify and recruit leading scientific experts around the globe, is an example of the way China is attempting to get academics to share – either willingly or by coercion – the results of work conducted and financed in Canada so that China doesn’t have to rely only on traditional intelligence-gathering.

John Townsend, the head of CSIS’s media relations, said in a statement to The Globe and Mail that some countries looking to acquire sensitive Canadian technologies and expertise use this non-traditional method of intelligence-collection: recruiting academics who will provide what a hostile state wants, or could be compelled to do so through offers of reward or threat of punishment.

“Academic talent plans are one way to incentivize academics to participate in such activities. While the Thousand Talents Plan is one example, academic talent plans are used by multiple hostile states by other names.”
Mr. Townsend was replying to a question from The Globe about whether CSIS has national security concerns over the Thousand Talents Plan, which recently has become the focus of scrutiny for U.S. law enforcement and Congress.

He said CSIS has spoken to universities and other research institutions about its concerns over this and other foreign recruitment programs after evidence of technology transfer emerged in recent years.

The Globe has found at least 15 Canadian academics who have participated in the Chinese program, including experts in quantum computing, advanced electronics and engineering, vaccines, chemistry and artificial intelligence. All the scholars contacted by The Globe defended the program as mutually beneficial for Canada and China, and said they did not encounter any untoward conduct during their involvement.

The Chinese program provides salaries, research funds, lab space at universities in China and other incentives. A 2016 report by the Conference Board of Canada said TTP funding can be as high as $335,000 for start-up, plus up to $168,000 remuneration per annum. International professors also receive “preferential treatment in terms of medical care, housing, and for foreign nationals, permanent residency and multi-entry visas,” the report said.

China stopped publishing the names of people who have participated in the program in September, 2018, after the U.S. Justice Department began investigating allegations that some scientists illicitly provided China with technology and high-level research funded by U.S. federal agencies.

In November, 2019, a U.S. Senate report, Threats to the U.S. Research Enterprise: China’s Talent Recruitment Plans, described the Chinese programs as a campaign to recruit talent and foreign experts to benefit China’s economic and military development.

The Senate report says participants in the Thousand Talents Plan are asked to sign contracts that require them not to disclose that Chinese institutions will retain the rights to at least some of the intellectual property created by the U.S. researchers.

“The contracts can incentivize members to lie [about their participation in TTP] on grant applications to U.S. grant-making agencies, set up ‘shadow labs’ in China working on research identical to their U.S. research, and, in some cases, transfer U.S. scientists’ hard-earned intellectual capital,” the Senate report said.

The report estimated that China has more than 200 academic recruitment programs.
CSIS’s Mr. Townsend said underhanded efforts to acquire sensitive Canadian technologies and expertise hurt Canada.

“These corrosive tactics, which are done to advance the economic and strategic objectives of hostile states, come at the expense of Canada’s national interest, including lost jobs, revenue for public services and a diminished competitive global advantage,” Mr. Townsend said. “While I cannot discuss specific investigations, I can say that CSIS actively investigates all threats of foreign interference and espionage.”

Canada’s spy agency warned in May that Canadian academics and corporations are at increased risk of espionage or intellectual property theft as agents of China and Russia target research related to COVID-19.

Canadian academics say their Thousand Talents work in China can benefit Canada, helping them identify top Chinese graduate students who can be recruited to come here – at the expense of their own government – and contribute to scientific research.

Andreas Mandelis, professor and researcher at the University of Toronto’s department of Mechanical and Industrial Engineering, enlisted as a Thousand Talents scholar with the University of Electronic Science and Technology of China in Chengdu from 2013 to 2018. He helped build a laboratory there that mirrored facilities at the University of Toronto. He still visits – accommodation and travel expenses paid – to meet and collaborate with scholars.

Prof. Mandelis said academics are treated exceptionally well in China.

“They treat you like a star. In my case, I have had red carpets. I have had … pyrotechnics,” he recalled. Some events include “people clapping and wanting to take pictures with you.”

He said the program does not seek technology transfers, but he is aware of other programs in China that aim to do this.

“There are all sorts of recipients over there who would be willing to get your technology and bring it into the country. I became aware of that. But I personally do not subscribe to that,” Prof. Mandelis said.

“If it’s something that we have developed in Canada, I believe I cannot just simply give it away.”

He said some Chinese university administrators who would like to see this.
“I have had some interactions with other people through another program who were very much eager to transfer technology from the West to the East. I met a dean who came up and said, ‘We want to get terahertz technology here no matter what,’” Prof. Mandelis said.

He said he does not condone this.

“You can say, ‘I am willing to give you what I have,’ or you can say, ‘I don’t think this is fair because the Canadian taxpayer has paid for this.’”

A number of U.S. and Chinese nationals have been accused of lying about their roles in TTP. In January of this year, Harvard University chemistry professor Charles Lieber was charged for allegedly concealing his ties with the TTP and trading knowledge for money. Prosecutors say he set up a lab in China in exchange for hundreds of thousands of dollars from the Chinese government and didn’t disclose the funding to U.S. authorities.

In June, media in the United States reported that the U.S. National Institutes of Health had investigated the conduct of 189 scientists, and 54 either resigned or were fired for failing to disclose financial ties to a foreign talent program.

Jay Bratt, chief of the U.S. Justice Department’s Counter-intelligence and Export Control Section, told The Globe the Chinese talent plans are not illegal, but researchers can cross the line when they share U.S.-funded research or steal technology.

“What is important to realize about the talent plans is they can incentivize those who are recipients of the funds and who are awarded under the talent plans … to engage in illegal conduct or malign activities,” he said. “This is a very large priority of the FBI. The FBI probably does even more outreach than we do with academia and private industry on the threat of what it calls non-traditional collectors.”

Barry Sanders, a theoretical physicist at the University of Calgary, became a Thousand Talents chair in 2013 with the University of Science and Technology of China. He continues scholarly work there even though it’s no longer funded through the program.

He said he has never encountered anything that matches the criticism of the program. “I have never seen anything like that in my experience.” He said the Thousand Talents is of great benefit to foreign academics because, among other reasons, it gives them the means to do more research, which in turn helps Canada.
“If anybody concerned about Canadian security wants to know what I am doing, I tell them. In China, they know this. China knows that whatever I do, I will make sure Canadian authorities know what I am doing – make sure Canada feels safe,” Prof. Sanders said.

“I am loyal to my country; I will do what I can for mutual academic benefit. I will be careful with any lines that I am instructed to be careful about.”

University of Victoria chemistry professor Ian Manners, who also holds a Canada 150 Research Chair, said his experience as a Thousand Talents distinguished visiting professor at Shanghai Jiao Tong University (2018-2021) has been nothing but positive.

He said the TTP is a prestigious fellowship and it allows him to bring students to China to study. Any intellectual property from the research will be shared between the two universities, he said.

“The U.S. has lots of concerns about security and stealing the secrets, and I don’t know the evidence for that, but obviously there is pretty fierce economic competition between China and the U.S.,” he said. “I have never seen any evidence, certainly with my Thousand Talents award, of anything untoward at all. It is basically very fundamental research.”

Prof. Manners said China isn’t doing anything different than other countries that pursue experts to teach and work. Germany, the United States and India, for example, have such programs.

“These things can be all dressed up as being very sinister and stealing ideas and talent, but that is generally what countries do all the time anyway. Canada has programs to bring top people to Canada to benefit from their expertise and talent, and hopefully keep them in Canada,” he said.

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