

INSIGHTS

U.S. 'Whistleblower' Scheme Hurts Tech Ties with China

Clear Voice 

By LIANG Yilian & HU Dingkun

Recently, the U.S. House Select Committee on China set up a so-called "whistleblower" reporting channel on its official website. It openly encourages American scholars, researchers, and other professionals to report scientific collaborations involving entities linked to China's defense and industrial base. Responding to the move, Chinese Foreign Ministry spokesperson Mao Ning told a regular press briefing that the committee's efforts to suppress and contain China have reached an almost "hysterical" extent.

This assertion is hardly overstated. On social media, the committee justified its call for reports by citing concerns over "research security vulnerabilities" and the "risks" of cooperation with China. As evidence, it pointed to cases in which faculty members from the University of Washington and Texas A&M University co-authored academic papers with researchers from Chinese institutions listed on the U.S. Department of Commerce's entity list. The implication is unmistakable: the committee seeks to sever ties between U.S. researchers and some of China's most important research institutions already under U.S. sanctions. Even co-authoring academic papers, the most basic form of scholarly exchange, now appears to be enough to



A researcher performs genotyping analysis to identify plant genotypes at a laboratory. (PHOTO: XINHUA)

trigger suspicion and reporting.

Labeling such collaboration as "risks" or "vulnerable" is not only misguided but fundamentally at odds with established norms. U.S. export control regulations themselves include a well-defined "fundamental research exemption," under which research intended for open publication is not subject to such restrictions. By this standard, U.S. researchers are fully permitted to engage in fundamental research and publish jointly with institutions on the entity list. Treating these activities as suspect distorts both the spirit and the letter of existing rules.

History offers a sobering warning. Encouraging the reporting of China-related scientific collaboration risks opening

a "Pandora's box" ultimately undermining the very foundations of the U.S. research system and its innovative capacity.

Between 2018 and 2022, the U.S. government's China Initiative conducted sweeping investigations into large numbers of researchers with China ties. The current reporting system mirrors this controversial program and is likely to worsen its negative impact. A study published in the journal *Proceedings of the National Academy of Sciences* found that the initiative contributed to a significant outflow of scientists of Chinese origin from the United States, with departures up by 75 percent between 2018 and 2021. Meanwhile, research by the National Bureau of Economic Research indicates that

investigations by the National Institutes of Health into U.S.-China collaboration reduced research output in affected fields, harming not only American science but also global scientific progress.

Equally concerning is the issue of due process. Even with formal investigations conducted by professional judicial bodies, the China Initiative produced a significant number of flawed or unsubstantiated cases. According to *MIT Technology Review*, by the end of 2021 only about one-quarter of defendants under the initiative by the U.S. Department of Justice were convicted. The committee's reliance on peer reporting — without clear safeguards for verification — raises the risk of aggravating errors, inviting false accusations, and placing innocent researchers under unwarranted scrutiny.

The specter of history looms large. Encouraging denunciations echoes the damage inflicted on the scientific community during McCarthyism in the 1950s. Baseless allegations of political disloyalty disrupted careers and stalled scientific progress, affecting prominent figures like Elvin A. Kabat and J. Robert Oppenheimer. While many accusations were later proven unfounded, the long-term damage to the U.S. research environment proved difficult to reverse.

Ultimately, promoting the reporting of China-related scientific collaboration risks self-inflicted harm. Rather than strengthening national security, it could erode trust, stifle openness, and weaken the very innovation ecosystem it seeks to protect.

China's AI Ecosystem Wins Over Young Experts from Europe

Opinion

By GONG Qian

A group of young international experts from the UK, Austria and the Netherlands took part in an exchange event hosted by the World Association of Young Scientists (WAYS) from April 11 to 17. They visited Beijing and Huai'an in Jiangsu province in east China, toured a number of sci-tech institutions and enterprises, and held in-depth discussions on topics including AI, new materials and biomedicine.

Three participants from the Netherlands shared their observations on China's sci-tech innovation ecosystem with *Science and Technology Daily*.

Outstanding advantages in AI development

In recent years, China's AI industry has been on the fast track with many achievements, particularly DeepSeek taking the world by storm. Friso H. Smedes from the University of Gronin-

gen, Mohammed Ali from Vrije Universiteit Amsterdam, and Petter Reijalt from Delft University of Technology said they use DeepSeek for research due to its effectiveness and favorable price.

In Beijing, they visited Kuaishou, one of China's most popular short-video and streaming platforms, where they could watch up close AI development in China. Ali and Smedes were impressed by the company's video generation model that can create complete movies. They were also impressed by its growing scale with over 10,000 employees based in Beijing.

Ali said this size is rarely seen in regular AI companies in the Netherlands, where only oil companies might have such a large workforce. He pointed out that government support is a clear advantage for the rapid AI growth in China. He also emphasized China's 1.4 billion population, with its high number of PhD holders, provides abundant human resources for AI research and innovation.

Reijalt took note of China's massive data centers and computing power supported by a large number of GPUs. Infrastructure such as the large-scale data

centers built by Alibaba, one of China's tech giants, is easily accessible. But that's not the case in his own country.

A well-integrated and supportive ecosystem

Observing a well-integrated system after visiting universities in Huai'an, Smedes said China's sci-tech innovation is "definitely going fast." Here, if a student comes up with an idea, the student can take courses at the AI faculty and try to develop projects.

This interdisciplinarity, combined with a friendly entrepreneurial environment — where people can start companies at universities and receive funding and even housing support — forms a promising ecosystem, he said.

Reijalt was also impressed by China's approach to nurturing talent and its supportive innovation environment. Compared with the Netherlands, where securing funding can be challenging, China offers strong opportunities for people with creative ideas to develop and implement them.

Exchanges foster cooperation
Ali and his team are developing an

AI program for medical triage, designed to assist doctors by automating appointment booking and symptom inquiry through online chat or voice AI. He presented a roadshow in Huai'an to expand his network and understand the local market, and expects to explore cooperation opportunities with Chinese companies.

He stressed that greater communication is essential for deepening sci-tech exchanges among young talents from Europe, the U.S., and China. Young researchers should talk about the challenges they face and the solutions they propose, identify shared concerns, and conduct joint research. Collaboration will accelerate research and development progress compared to working separately.

Reijalt said exchange programs lower barriers for international cooperation by helping participants get to know each other. During the visit, he connected with researchers from Hong Kong and found potential cooperation opportunities. A mix of formal and informal activities, he emphasized, helps strengthen technological exchanges.

Senegal will host the 4th Youth Olympic Games in October-November, the first Olympic event on the African continent. "In our preparations, many Chinese companies are collaborating with Senegal — for instance, Alibaba is providing extensive cloud services for the event," Sall said.

Adrian Thomas, minister of tourism, creative economy and culture of Grenada, emphasized that for developing countries like Grenada, and indeed the entire Caribbean region, digital empowerment is particularly crucial for high-quality development. He commended China's contributions to the development of the Caribbean and the Global South, and China's provision of technical training and assistance in infrastructure construction.

Quoting the proverb, "If you want to go fast, go alone; if you want to go far, go together," Thomas called for unity and cooperation within the Global South to jointly accomplish the digital transformation.

Voice of the World

Chinese Humanoid Robots Boost Global Industrial Progress

Edited by QI Liming

"Flash," Shenzhen Honor Smart Technology Development Co., Ltd.'s humanoid robot capable of autonomous navigation, claimed victory at the 2026 Beijing E-Town half-marathon on April 19, with a time of 50 minutes and 26 seconds. It surpassed the human world record for a half-marathon by nearly seven minutes.

Such amazing performance on the track is a vivid example of the breakthroughs made by China's humanoid robot industry in multiple core technologies. Chinese humanoid robots are rapidly evolving in real-world applications and China now leads the global robot industry.

In this marathon, robots with fully autonomous navigation accounted for approximately 40 percent of the starting teams, a significant increase compared to last year. Some of the high-performing robots have achieved body tilting and smooth curve changes under high-speed conditions.

"It will certainly be interesting to see the progress in the durability of components and battery lifetime compared to last year," said Georg Stieler, Asia managing director and head of robotics at Stieler, a technology consultancy.

China has made significant breakthroughs in the control technology of humanoid robots, especially in autonomous motion control and stability.

Flash has been designed after elite athletes, with its long legs measuring about 37 inches. It also has an advanced cooling system to sustain performance.

"Looking ahead, some of these technologies might be transferred to other areas," said Du Xiaodi, an engineer with the Honor team. "For example, structural reliability and liquid-cooling technology could be applied in future industrial scenarios."

Fu Yili, a professor of Harbin Institute of Technology, attributed the leap

from "remote-controlled waddling" to the "autonomous running" of humanoid robots to the joint efforts of hardware localization, algorithm optimization, and the development of the industrial ecosystem.

From a global perspective, China leads in terms of overall machine shipments, production capacity, supply chain completeness, and the speed of commercialization. It has become the "mass production and application center" of humanoid robots.

China dominates global humanoid robot installations, accounting for more than 80 percent of the 16,000 units installed worldwide in 2025, according to global technology market intelligence firm Counterpoint Research. Chinese robotics firms are now working to develop the AI software needed for humanoids to match the efficiency of human factory workers.

London-based technology research and advisory group Omdia recently ranked three Chinese companies — AGIBOT, Unitree Robotics and UBTECH Robotics Corp. — as the only first-tier vendors in its global assessment for shipment numbers for general-purpose embodied intelligent robots. They all shipped more than 1,000 units of such robots last year, with the first two shipping more than 5,000 units, the report said.

The expansion of industrial scale implies an increase in the influence of technology. Yang Zhen, an associate research fellow of the Institute of Industrial Economics of the Chinese Academy of Social Sciences, said China is not only the world's largest producer of robots, it has also become an important source of technology.

The number of Chinese patents and enterprises account for over 60 percent of the global total. In the cutting-edge field of humanoid robots, Chinese enterprises' performance is almost "dominant."



◀ The autonomous humanoid robot player Flash crosses the finish line in the E-Town half-marathon on April 19. (PHOTO: XINHUA)

▶ A humanoid robot runs during the E-Town half-marathon on April 19. (PHOTO: ZHAO Weihua / Science and Technology Daily)



Advancing Cooperation Under GDI

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"China is committed to building a community with a shared future for mankind, and making the global early warning system under the framework of meteorological disaster prevention and mitigation benefit more developing countries, especially those in the Global South," Zhang said.

The sub-forum also announced that CIDCA, CMA and the World Meteorological Organization (WMO) signed a memorandum of understanding on promoting the implementation of the GDI.

Celeste Saulo, WMO secretary-general, said in her address at the opening ceremony that China has demonstrated strong leadership in early warning. By working with other developing countries across regions and with WMO support, China is helping to provide early warning systems as a global public good.

"These are exactly the types of partnerships we need."

China has also been advancing international cooperation under the GDI framework in the digital sector.

Zhao Fengtao, vice chairman of CIDCA, said at another parallel sub-forum, development cooperation projects — ranging from fiber-optic backbone networks, e-government systems, and data centers to smart transportation — have been launched in nearly 20 countries and regions to strengthen digital infrastructure.

"These initiatives have injected new momentum into the economic and social development of the participating nations."

In digital sectors such as information and communications, intelligent manufacturing, and green development, over 500 human resources training programs

have been conducted. These efforts have cultivated more than 15,000 professionals for developing countries, helping to alleviate talent bottlenecks in the digital field.

Sengdeun Sayasone, executive vice chairman of the Laos-China Cooperation Committee of Laos, said digital empowerment is not merely a technical issue, but a transformation of development models. Laos and China will deepen digital cooperation, utilizing digital technologies to drive industrial upgrading and promote the synergistic development of digitalization and green initiatives, thereby achieving sustainable development.

Alioune Sall, minister of communication, telecommunications and digital affairs of Senegal, said, China's digital development model possesses distinct advantages and offers Senegal significant insights. The partnership between Senegal and China is robust and development-oriented, and the bilateral cooperation is both close and pragmatic.

AI Weather Alert System for BRI Countries

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To be deployed in six countries and operate stably for more than six months, the project is expected to provide meteorological disaster warning services to approximately 10 million people. A joint laboratory will be established to help BRI partner countries build their local meteorological science and technology capabilities.

The project's core AI models will be integrated into MAZU, the meteorological early warning business platform al-

ready in use in countries such as Pakistan and Ethiopia, and relying on this mature technical foundation, systematic services will be provided to BRI partner countries.

This project is jointly implemented by nine domestic institutions and universities including Lanzhou University, Renmin University of China and the National Climate Center, as well as meteorological departments and research institutes from five BRI partner countries, namely Mongolia, Ethiopia, Cameroon, Tajikistan and Uzbekistan.