



## Open Source Media Summary

September 5, 2024

### **TRANSPARENCY AND INTEGRITY RISKS IN CHINA'S RESEARCH ECOSYSTEM**

*Jeffrey Stoff, Leslie McIntosh and An Chi Lee | Center for Research Security & Integrity  
September 2024*

Governments and research institutions in liberal democracies espouse and stress the importance of values such as academic freedom, transparency, integrity, and reciprocity concerning the conduct of research and international research collaboration. The G7 Security and Integrity of the Global Research Ecosystem Working Group defined a set of "Common Values of Research Integrity," which included transparency concerning disclosures of researcher affiliations, conflicts of interests, and sources of funding, and honesty regarding proposing, undertaking, reviewing, and communicating research. However, party-state organs and research institutions of the People's Republic of China routinely violate these norms and values that are critical to beneficial research collaboration. No efforts have been made by liberal democracies to systematically identify, catalog, and characterize (or assess) China's practices in a manner that can be shared across the international research community and used to support risk assessments and mitigation.

Read the full article [here](#).

---

### **INTERNATIONAL TALENT PROGRAMS IN THE CHANGING GLOBAL ENVIRONMENT**

*Mark A. Barteau and Sarah M. Rovito | National Academies of Sciences, Engineering, and Medicine  
2024*

The modern United States research ecosystem relies on international interactions and collaborations and foreign students and professionals. The incorporation of such individuals into the U.S.'s scientific enterprise is essential to research excellence and productivity, innovation-based economic growth, and national security. However, attracting global scientific talent to support national research capabilities is of paramount importance to many countries. This study will review foreign and domestic talent or incentive programs and recommend ways to improve the effectiveness of U.S. mechanisms for attracting and retaining the best and brightest scholars, relative to programs and incentives used by the U.S.'s strategic competitors.

Read the full article [here](#).

---

## **CHINA VS THE WEST: SNOW'S 'TWO CULTURE' THEORY GOES GLOBAL**

*Richard Holmes | University World News | August 28, 2024*

In 1959, CP Snow, a British scientist, civil servant and novelist, created a stir with a lecture, "The Two Cultures and the Scientific Revolution". The two cultures were led by natural scientists and literary intellectuals. There was no doubt about where Snow stood with regard to the cultures. Scientists, he said, had "the future in their bones", and he was disdainful of those who were ignorant of the basic laws of physics. He believed that Britain's stagnation after the Second World War was the result of the domination of public life by humanities graduates and the marginalisation of natural scientists. Snow's lecture was met with an equally famous ad hominem blast from the Cambridge literary critic, FR Leavis, which probably did Snow more good than harm. Leavis may, however, have had a prescient point when he talked about how science had destroyed the organic communities of the pre-industrial world. At the time, his nostalgia was largely misplaced. Those who lived in the villages and farms of England had little reluctance about moving, as did my forebears, to the cotton mills of Derbyshire and the coal mines of South Wales, but, looking at a world where every human instinct has become digital media fodder, Leavis might have been onto something.

Read the full article [here](#).

---

## **WHY CAN'T WE JUST LET AMERICAN & CHINESE SCIENTISTS GET ALONG?**

*Denis Simon and Marcus Stanley | RESPONSIBLE STATECRAFT | August 28, 2024*

The Science and Technology Agreement (STA) between the United States and China was the first official agreement signed after the normalization of U.S.-China relations in the 1970s. But now after 45 years, it is under threat. Since it was signed in 1979, the STA has been a cornerstone of bilateral cooperation and the basis for scientific research cooperation between U.S. and Chinese government agencies and universities in areas of basic science like agriculture, clean energy, public health, and the environment. But today the STA — which has twice received temporary six month extensions over the last year — is due to lapse yet again. It may again receive another temporary extension. But there is no mistaking the way the rise in geopolitical tensions between the U.S. and China has cast a shadow over possibilities for research cooperation between the world's two leading scientific and technological powers.

Read the full article [here](#).

---

## **SPRING 2024 REGULATORY AGENDA HIGHLIGHTS**

*Bailey Graves | EDUCAUSE Review | August 27, 2024*

The Biden administration released its Spring 2024 Unified Agenda of Regulatory and Deregulatory Actions (Regulatory Agenda) in July 2024. The Spring Regulatory Agenda is the first report of the calendar year in which nearly all federal departments, agencies, and commissions update the public on the regulatory activities that are in progress and provide target dates for when each regulation will be issued. Footnote 1 EDUCAUSE analyzes the updates to help explain federal agencies' priorities as they relate to higher education information technology. The target dates identified in the Regulatory Agenda are just that. Federal agencies aren't guaranteed to release the identified regulations by those dates. Instead, consider the target dates as rough timelines for when these regulations might emerge.

Read the full article [here](#).

---

## **CHINA-US TENSIONS ERODE CO-OPERATION ON SCIENCE AND TECH**

*Michael Peel and Eleanor Olcott | Financial Times | August 18, 2024*

Rising tensions between the US and China threaten to sever a 45-year-old science and technology pact due for renewal later this month, hindering the superpowers' collaboration in critical areas. Researchers are attempting to work round the strained inter-governmental relationship, with some focusing on less contentious possible areas of co-operation, such as climate change and diseases related to ageing. The struggle to strike a comprehensive multiyear extension to the science and technology accord is a sign of how political problems can undermine frontier research work. The bilateral agreement, signed by US president Jimmy Carter and Chinese leader Deng Xiaoping, has underpinned work in fields including energy, agriculture, civil-industrial technology and disaster management. Disagreements have grown over US restrictions on China's access to semiconductors and Washington's worries about alleged intellectual property breaches and the potential military use of sensitive new technologies. US security officials are also concerned about the potential for academic co-operation to provide avenues for Chinese espionage.

Read the full article [here](#).

---

## **DAVID ZWEIG ON THE ACADEMIC CHILL BETWEEN THE U.S. AND CHINA**

*Andrew Peaple | The Wire China | August 18, 2024*

David Zweig is a social scientist and emeritus professor of the Hong Kong University of Science and Technology. His new book, *The War for Chinese Talent in America: the Politics of Technology and Knowledge in Sino-U.S. Relations*, explains the origins of the current conflict between China and the U.S. over the knowledge imbued within China-born academics and researchers who have chosen to settle in America. In this edited transcript of a recent interview, we discuss his sharp criticisms both of the aggressive efforts in China under Xi Jinping to persuade these scientists to share U.S. technology, and of the Trump administration's China Initiative, whose goal was to break that cycle of technology transfer.

Read the full article [here](#).

---

## **THE GREEN LEAP**

*Brent Crane | The Wire China | August 18, 2024*

In May, the University of California, San Diego dispatched 11 green energy scholars to China on a fact-finding mission. With Chinese colleagues at Fudan University in Shanghai, the American scholars discussed solar supply chains, industrial policy, critical minerals and other topics related to the energy transition. In Hefei, they toured state-of-the-art electric vehicle and battery factories owned by Nio, Volkswagen and Gotion High-tech, the second largest battery manufacturer in the world. But during the trip, what most struck Ilaria Mazzocco, a senior fellow at the Center for Strategic and International Studies, was a simple observation: the number of EVs on the roads. By Mazzocco's estimate, some 40 percent of Chinese cars she saw bore a green license plate, indicating electrification. "Here in Washington D.C., something like one out of ten cars is electric, and they're mostly Teslas," she says. "In China, there were all kinds of different models." What Mazzocco observed anecdotally is born out in the data: Last year, 60 percent of global EV sales took place in China, and just last month — for the first time ever — more than half of all cars that were sold in China were either electric or plug-in hybrids. (In the U.S., about 18 percent of new cars sold are electric or hybrid.)

Read the full article [here](#).

---

## **CHINESE GOVERNMENT HACKERS PENETRATE U.S. INTERNET PROVIDERS TO SPY**

*Joseph Menn | The Washington Post | August 27, 2024*

Chinese government-backed hackers have penetrated deep into U.S. internet service providers in recent months to spy on their users, according to people familiar with the ongoing American response and private security researchers. The unusually aggressive and sophisticated attacks include access to at least two major U.S. providers with millions of customers as well as to several smaller providers, people familiar with the separate campaigns said. "It is business as usual now for China, but that is dramatically stepped up from where it used to be. It is an order of magnitude worse," said Brandon Wales, who until earlier this month was executive director of the Cybersecurity and Infrastructure Security Agency, CISA.

Read the full article [here](#).

---

## **GERMANY MULLS NEW RESEARCH SECURITY ORGANISATION**

*Tim Gabel | Science|Business | August 29, 2024*

Last Thursday, more than 20 German and US representatives from science and politics met at the German Research Foundation's (DFG) North America office. The main topic: how research security can be guaranteed in international collaborations without restricting academic freedom. Table.Media spoke to Katja Becker, DFG president, about what Germany could learn from the US approach. Ms Becker, the US recently established a Centre for Research Security, the SECURE Center. What is your impression of the US approach after talking to the experts there? This was of course a central topic during the discussions, which were characterised by great openness and trust. The centre will operate over the next five years and has a total budget of \$50 million. It will provide scientists and institutions with information on potential partners and tools to carry out their own risk assessments. This is also highly relevant for the German system: the flow of information from the state intelligence services to the scientific community must be guaranteed.

Read the full article [here](#).

---

## **EXCLUSIVE: US GOVERNMENT FUNDING YIELDED HUNDREDS OF PATENTS FOR CHINA-BASED RESEARCHERS**

*Michael Martina | Reuters | August 29, 2024*

The U.S. Defense Department, NASA and other government agencies funded research that led to more than 1,000 U.S. patents for China-based inventors since 2010, including in sensitive fields such as biotechnology and semiconductors, data from the U.S. patent agency showed. The U.S. patent data, which was reviewed by Reuters and has not been reported previously, will amplify calls to cancel or renegotiate the landmark U.S.-China Science and Technology Agreement, a cooperation deal that critics say disproportionately benefits Washington's top geopolitical rival. The U.S. Patent and Trademark Office supplied the data this month to the House of Representatives' select committee on China. In June, it asked the agency whether U.S. funding resulted in Chinese breakthroughs, aiming to highlight what it views as the risks of renewing the pact. According to the patent office, the agency granted 1,020 patents from 2010 through the first quarter of 2024 that were both funded at least in part by the U.S. government and involved at least one China-residing inventor.

Read the full article [here](#).

---

## **EXCLUSIVE | CHINA-BORN NEUROSCIENTIST JANE WU LOST HER US LAB. THEN SHE LOST HER LIFE**

*Ling Xin | South China Morning Post | August 30, 2024*

The death of Wu, a prominent researcher at an Illinois university, has put attention again on efforts to pursue researchers suspected of having undisclosed ties to Beijing. For molecular biologist and cancer researcher Bing Ren, Jane Wu was a "true role model". She was warm, caring and inspiring - and guided Ren's decision to make the area of research his life's work. "Dr Wu taught me basic molecular biology skills, and showed me how discoveries were made at the bench," said Ren, who first met Wu in 1993 and worked under her direct supervision at Harvard University. "Dr Wu was the one that opened my eyes to the wonderful world of molecular biology, and convinced me to pursue a career in this field," said the professor in cellular and molecular medicine at the University of California, San Diego. Wu was a prominent neuroscientist at Northwestern University in Evanston, Illinois, and left her mark on many other researchers in both the United States and China before taking her life in July. The 60-year-old former Dr Charles L. Mix Research Professor at Northwestern's Feinberg School of Medicine took her own life in her Chicago home on July 10, according to Cook County records.

Read the full article [here](#).

---

## **NSA'S CHINA SPECIALIST: US AT A LOSS TO DETER CHINESE HACKERS**

*Carley Welch | Breaking Defense | August 29, 2024*

Officials from the National Security Agency and the State Department said they're still struggling to come up with a way to deter a powerful hacking group allegedly backed by the Chinese government and accused of slipping into US critical infrastructure networks. When asked how the US plans to deter the group dubbed Volt Typhoon from future attacks, David Frederick, assistant deputy director for China at NSA replied, "I don't have a good answer to that." "They are trying to position themselves to have an asymmetric advantage in a crisis or conflict. If you look at the cost-benefit from their point of view and just the breadth of targets in the United States and our allies in terms of global networks, they're not going to be motivated to stop," Frederick said at an Intelligence and National Security Summit this week. "So that's a hard problem — how do we get them, sort of thing."

Read the full article [here](#).

---

## **CHINESE EXPORT RULES MAKE COLLABORATION RISKIER, RESEARCHERS WARNED**

*David Matthews | Science|Business | August 29, 2024*

As European universities weigh China collaborations in a darkening geopolitical environment, they also need to worry about whether Beijing's increasingly tough export control rules could deny Europeans access to jointly developed technology, a think tank has warned in a new analysis. The Berlin-based Mercator Institute for China Studies (Merics) has raised the alarm that China has an increasingly sprawling set of tools to stop technology flowing out of its borders, as the country moves from a follower to a global innovation leader. Although not yet extensively deployed, these measures – including export controls on civilian, not just military, technology – could be used by Beijing to prevent strategic knowhow leaving the country, including the results of joint research collaborations. For any technology seen as strategic, or where China has a competitive edge, "you're at risk of being impaired in your ability to access your research and to actually get the research you've done with or in China out of that country," said Francois Chimits, a senior economist at Merics.

Read the full article [here](#).

---

## CHINA LEADS IN UP TO 89% OF TECH RESEARCH, STUDY SHOWS

Ellen Jennings-Trace | TechRadar | August 30, 2024

New research from the Australian Strategic Policy Institute (ASPI) shows that China is now leading the way in 57 out of the 64 technologies assessed by its Critical Technology Tracker, which has now been updated to cover the last 20 years. The tracker measures a country's performance based on the high-impact research it produces, specifically looking at the number of publications its institutions released in the top ten percent of cited papers in that specific field. The data studied was from a range of fields, like AI, cyber, defense, and robotics.

Read the full article [here](#).

---

## THE TEXAS A&M UNIVERSITY SYSTEM

*The Research and Innovation Security and Competitiveness Institute*



# USEFUL RESOURCES

## **NIST SP 800-171 TOOLKIT**

*Nichole Arbino, Damon Armour, Bob Barton, Steven Dawson, Nadim El-Khoury, Jay Gallman, Alexander Magid, Laura Raderman, Sarah Robinson, Ken Taylor, John Virden and Carolyn Ellis | EDUCAUSE  
September 16, 2022*

The National Institute of Standards and Technology Special Publication (NIST SP) 800-171 poses a number of challenges—both large and small—for higher education institutions. A working group was convened from the HEISC 800-171 Compliance community group to address the most pressing challenges and provide resources institutions can use in their compliance efforts. In this toolkit, you will find an overview of NIST SP 800-171 and its implications for higher education, questions to ask during project planning, 7 Things You Should Know About CMMC to use when speaking with stakeholders and leadership, and a customizable control evaluation. A compliance template created by Common Solutions Group has also been included.

View the full resource [here](#).

---

## **ASPI'S TWO-DECADE CRITICAL TECHNOLOGY TRACKER**

*Dr. Jennifer Wong Leung, Stephan Robin, and Danielle Cave | Australian Strategic Policy Institute  
August 28, 2024*

The Critical Technology Tracker is a large data-driven project that now covers 64 critical technologies spanning defence, space, energy, the environment, artificial intelligence, biotechnology, robotics, cyber, computing, advanced materials and key quantum technology areas. It provides a leading indicator of a country's research performance, strategic intent and potential future science and technology capability. It first launched 1 March 2023 and underwent a major expansion on 28 August 2024 which took the dataset from five years (previously, 2018–2022) to 21 years (2003–2023). Explore the [website](#) and the [broader project here](#). Governments and organisations interested in supporting this ongoing program of work, including further expansions and the addition of new technologies, can contact: [criticaltech@aspi.org.au](mailto:criticaltech@aspi.org.au)

View the full resource [here](#).

---

## **AGENCIES ALERT HEALTH SECTOR OF IRANIAN AND RUSSIAN CYBER THREATS**

*American Hospital Association | August 30, 2024*

The FBI, Cybersecurity and Infrastructure Agency and the Department of Defense Cyber Crime Center Aug. 29 issued a joint advisory to warn of Iranian-based cyber actors leveraging unauthorized network access to U.S. organizations, including health care organizations, to facilitate, execute and profit from future ransomware attacks by apparently Russian-affiliated ransomware gangs. The Iranian group, which is associated with the Government of Iran, has conducted a high volume of cyberattack attempts on U.S. organizations since 2017 and as recently as August 2024.

View the full resource [here](#).

---

# FBI ISSUES URGENT RANSOMWARE ATTACK WARNING—DO THESE 3 THINGS NOW

Davey Winder | Forbes | August 31, 2024

Organizations have been warned that a new ransomware gang has been responsible for hundreds of successful cyberattacks since February 2024. In an urgent joint advisory published August 29, the U.S. Federal Bureau of Investigation along with the Cybersecurity and Infrastructure Security Agency confirmed that organizations across almost every conceivable industry sector have been targeted by the RansomHub ransomware-as-a-service actors.

View the full resource [here](#).

---

## THE TEXAS A&M UNIVERSITY SYSTEM

*The Research and Innovation Security and Competitiveness Institute*