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# THE OPEN SOURCE MEDIA SUMMARY

October 19, 2023

## “HOW DOES THIS COUNTRY DO BIG THINGS?”

Arati Prabhakar and Lisa Margonelli | *Issues in Science and Technology* | Fall 2023

Engineer and applied physicist Arati Prabhakar is the director of the White House Office of Science and Technology Policy (OSTP) and—as assistant to the president for science and technology—is part of President Biden’s cabinet. A member of the National Academy of Engineering, Prabhakar began her career in 1984 as a congressional fellow during her time at the Office of Technology Assessment. In 1993 she became director of the National Institute of Standards and Technology, and from 2012 to 2017, she was director of the Defense Advanced Research Projects Agency. For 15 years she was an executive and venture capitalist in Silicon Valley, and she founded the nonprofit Actuate in 2019. In an interview with *Issues* editor-in-chief Lisa Margonelli, Prabhakar discusses the changes in semiconductor policy over the past 40 years, OSTP’s role in the nation’s innovation ecosystem, and why science and technology policy strives to create a future where every child has a path “to flourishing and singing their song.”

Read the full article [here](#).

## STANFORD’S SETTLEMENT WITH JUSTICE DEPARTMENT SHOWS HOW DEEP CHINA HAS ITS CLAWS IN OUR UNIVERSITIES

Paul Moore | *The Hill* | October 11, 2023

Last week, the Department of Justice announced a settlement agreement with Stanford University relating to Stanford’s failure to disclose foreign financial involvement in its research programs. Even as it was forced into this settlement, Stanford was nonetheless successfully applying for significant federal research grants from the Departments of the Army, Navy, Air Force, NASA and the National Science Foundation. Filed in the U.S. District Court for Maryland, the agreement reveals Stanford’s repeated failure to disclose Chinese-funded research agreements in its applications for federal research grants from federal agencies between 2015 and 2020. To wit, Stanford received significant federal research grants while failing to disclose significant research faculty ties with China’s Fudan University. For Stanford, the agreement is a sweetheart deal. It will admit no liability and pay only \$1.93 million to the Justice Department. It also promises to “work with the NSF” on “best practices in the areas of gifts funding research projects” and “current and pending support disclosures.”

Read the full article [here](#).

## **AMERICAN AND CHINESE SCIENTISTS ARE DECOUPLING, TOO**

*The Economist* | October 11, 2023

There are lots of ways to measure China's rise. It is the world's second-biggest economy, its biggest manufacturer and its biggest creditor. In 2021 it passed another milestone. That year, for the first time, Chinese scientists published more papers than their counterparts in America or the European Union (see chart 1). It is not just the quantity that is improving. The Nature Index, run by the publishers of the journal of the same name, tracks contributions to the world's best-regarded health and natural-sciences journals. Chinese researchers rank first in the natural sciences, and second overall. Cause for celebration, no doubt, in Beijing. In Washington, though, the news may have been less welcome. America increasingly dismayed by China's rise—and especially its growing scientific and technological prowess. Under Donald Trump, the previous Republican president, and Joe Biden, the current Democratic one, it has imposed tariffs, rules and subsidies designed to hobble China's high-tech firms while boosting its own. China has retaliated, moving against some big American tech companies.

Read the full article [here](#).

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## **AMERICAN AND CHINESE UNIVERSITIES MUST REJECT CALLS TO DISENGAGE**

*William C. Kirby* | *NIKKEI ASIA* | October 12, 2023

Ours is a world of interconnected universities. Universities are medieval in origin, but the modern research university is young in historical terms and inescapably international. Universities were re-imagined, first in Germany and then across the globe, using German models in the 19th and early 20th centuries. If German universities defined global standards in the 19th century and if American universities came to the fore in the 20th century, are Chinese universities, which have taken lessons from both Europe and America, poised to lead the 21st century? This is a question I have sought to answer in my own research. Today, China has shown an ambition to build more world-class universities than any other country. The 2023 QS World University annual ranking compiled by British higher education analysis company Quacquarelli Symonds placed Peking University ahead of every U.S. Ivy League school except Harvard University. Tsinghua University followed close behind.

Read the full article [here](#).

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## **AMERICA AND CHINA SHOULD KEEP DOING RESEARCH TOGETHER**

*The Economist* | October 12, 2023

Since Deng Xiaoping and Jimmy Carter struck a deal in 1979, American and Chinese academics have cooperated on scientific research. Like so much else about relations between the two countries, that cooperation is now under threat. As we report this week American and Chinese scientists are writing fewer papers together and the number of Chinese students and researchers entering America has fallen sharply. Now politicians are wavering about whether to renew the Deng-Carter deal, called the Science and Technology Agreement (sta). Republicans want to scrap the pact; Democrats want to renegotiate its terms. It is easy to understand America's fears about boosting China's technological capability, and therefore its ability to wage war. The widespread fear that China has exploited a naive American belief in openness has also sapped the will to work together. China has a long record of ordering Western companies to hand over technologies as a condition of selling into its vast market, and is often accused of intellectual-property theft.

Read the full article [here](#).

## **CHINESE COLLEGE STUDENTS BEING FORCED TO SPY ON US**

*Jeff Seldin | Voice of America | June 18, 2019*

Chinese university students in the United States are increasingly being pressured to act as pawns in the ever-expanding espionage war that Beijing is running against Washington and its allies. The allegation, made Monday by a key U.S. lawmaker, comes as security and defense officials are expressing growing concern over Chinese efforts to exploit Western research and technology. "The overwhelming number of counterintelligence cases in our country now involve Chinese nationals," Senate Intelligence Committee Vice Chairman, Democrat Mark Warner, told an audience at the Council for Foreign Relations in Washington. "The Chinese spy services are literally threatening Chinese families," he said. "If your son or daughter does not come back [from the US] and come back with intellectual property, you the family will be put in jeopardy," Warner said. Warner is not the first to raise concerns about Chinese students in the U.S. This past April, FBI Director Christopher Wray warned Chinese intelligence was using a "societal approach" to stealing research and technological advancements – a plan that included leveraging Chinese students in the U.S.

Read the full article [here](#).

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## **CHINA WAS LONG THE TOP SOURCE OF FOREIGN STUDENTS IN THE U.S. NOW INDIA HAS OVERTAKEN IT.**

*Karin Fischer and Dan Bauman | The Chronicle of Higher Education | October 9, 2023*

Despite a sizable bump in visas issued to Chinese students for the new academic year, for the first time in 15 years China is no longer the top source of international students in the United States. A surge in students from India displaced China from a position it has held since the 2009 academic year. As of September, there were more than 320,000 active Indian student-visa holders, compared with some 254,000 from China, according to a database maintained by the U.S. Department of Homeland Security. India leapfrogged China, despite a 47 percent increase in new F-1, or student, visas issued in China in the critical months of May through August. That's a reversal from 2022, when Chinese visa issuances plummeted during the same period. Nearly 70,000 visas were awarded to Chinese students during the summer months that account for the bulk of F-1 issuances, according to a Chronicle analysis of visa data collected by the U.S. Department of State. Last year, only about 47,000 visas went to Chinese students.

Read the full article [here](#).

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## **TO STAY AHEAD OF CHINA IN AI, THE U.S. NEEDS TO WORK WITH CHINA**

*Paul Scharre | Center for a New American Security | April 18, 2023*

An AI gold rush is underway in the private sector in the wake of ChatGPT, but the geopolitical stakes are even greater. The United States and China are vying for global leadership in AI, a technology that is transforming political, economic, and military power. The U.S. currently leads in AI, but China is rapidly catching up and has declared its intent to be the global leader by 2030. To stay ahead of China in AI, the U.S. will need to work with China. The best competitive strategy for the U.S. is to sustain ties with China in areas where the U.S. benefits disproportionately, such as human talent and computing hardware, while severing problematic ties. U.S. policymakers have been on a steady path to selectively decoupling the U.S. and Chinese AI ecosystems, which are deeply intertwined.

Read the full article [here](#).

## **THE GLOBAL TIMES TRANSLATED MY OP-ED. HERE'S WHAT THEY CHANGED.**

*Dan Murphy | China File | October 10, 2023*

On May 25, 2023, The New York Times published my guest essay "Like It or Not, America Needs Chinese Scientists," on American higher education's engagement with China in the STEM fields. The article was subsequently translated by the Chinese State-run Global Times newspaper without my prior knowledge or permission, appearing both in print and digital forms. The Global Times omitted and altered key parts of the essay. While a few of the changes simply shorten the piece or cut passages that might not be as interesting to Chinese readers, most of the deletions and changes eliminate or blunt criticism of China, altering the tone of the essay. The Global Times also removed all of the links that appeared in my article, presumably because at least some of them led to sites that are generally inaccessible within China. Fortunately, The New York Times also did a complete Chinese translation in both simplified and traditional characters.

Read the full article [here](#).

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## **OPEN GATES TECHNOLOGY TRANSFER FROM CHINESE UNIVERSITIES TO THE DEFENSE INDUSTRY THROUGH JOINT VENTURES**

*Coby Goldberg | C4ADS | June 28, 2021*

In recent years, a growing body of national security literature has highlighted the role that Chinese universities play in the Chinese military-industrial complex. Past research has explored the role universities play in technology transfer into China, and has shed light on which Chinese universities have the most labs sponsored by defense conglomerates or the most graduates working for them. This report builds on that research by developing a methodology for identifying specific individuals at universities with ties to the defense industry, in order to provide a tool for differentiating academics and labs at civilian universities who have ties to the defense industry from those at the same universities who have no such ties.

Read the full article [here](#).

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## **REDUCING INSIDER RISK THROUGH POSITIVE DETERRENCE**

*Andrew P. Moore, Carrie Gardner, and Denise M. Rousseau, Ph.D. | Counter-Insider Threat Research and Practice (CITRAP) | August 2, 2022*

In this article, we describe why and how insider risk management programs (IRMPs) should consider promoting positive deterrence—a set of evidence-based workforce practices promoting the mutual interests of employees and their organization in ways that reduce insider risk. Positive deterrence complements the command-and-control approach that most IRMPs take.[1] A command-and-control approach pressures employees to act in the interests of the organization through organizational controls on their behavior including rules, regulations, technical constraints, monitoring, and response. In contrast, a positive-deterrence approach promotes internal behavioral drivers that motivate employees to willingly behave in ways reducing insider risk. We describe a specific type of positive deterrence—practices that bolster employee perceived organizational support (POS) (Eisenberger & Stinglhamber, 2011).

Read the full article [here](#).

# NSA AND U.S. AGENCIES ISSUE BEST PRACTICES FOR OPEN SOURCE SOFTWARE IN OPERATIONAL TECHNOLOGY ENVIRONMENTS

National Security Agency/Central Security Service | Press Release | October 10, 2023

The National Security Agency (NSA) is joining U.S. federal partners to release cybersecurity guidance to promote understanding of open source software (OSS) implementation and provide best practices to secure operational technology (OT) and industrial control systems (ICS) environments. OSS is software with an open license for anyone to view, use, study, or modify, and is distributed with its source code. The diverse way in which OSS can be integrated into OT products can make it difficult to know whether particular software modules, and their associated vulnerabilities, are present and/or exploitable. Implementation and patching of OSS in OT environments continues to be a challenge due to safety concerns and the potential disruption of critical systems. As the integration of OT and Information Technology (IT) networks increases, the critical infrastructure supporting these networks faces greater exposure to cyber threat campaigns.

Read the full article [here](#).

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# USEFUL RESOURCES

## Safeguarding Your Research

Government of Canada | October 6, 2023

Welcome to Safeguarding Your Research. This website provides information on how to safeguard your research and innovation. Canadian research and innovation are the product of collaborations and partnerships between governments, businesses, and academics - both domestically and internationally - across a wide range of subjects. The Government of Canada recognizes that open and collaborative research is indispensable to pushing the boundaries of science and addressing complex economic and societal challenges. Canada recognizes the importance of Open Science as a driver for greater innovation and inclusion in research and development. Nonetheless, there may be risks involved with research and innovation, including theft, interference, or unwanted transfer of knowledge and results in ways that individuals and teams do not intend. It is important to be aware of potential research security risks and to take the necessary steps and precautions to ensure your work is secure. The Government of Canada is proud to collaborate with academic institutions across the country to bring you guidance on how to safeguard your research.

View the full resource [here](#).

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