HUGE BOOST FOR US SCIENCE FUNDING INCHES CLOSER TO REALITY

Freda Kreier | Nature | February 4, 2022

The US House of Representatives has approved a bill that could inject tens of billions of dollars into federal research agencies, in a politically charged effort to maintain US leadership in science and technology. The America COMPETES Act is the latest in a series of bills that would, among other things, increase funding to US science in an attempt to keep up with China's growing influence on the world stage. Researchers say, in particular, that a slated budget increase for the US National Science Foundation (NSF), which funds a significant chunk of basic academic research in the country, is long overdue. They are divided, however, over measures added to the bill to keep China at bay, including limits on some foreign funding and talent-recruitment programmes. The bill's passage does not guarantee that more grant money will end up in the pockets of US-based researchers any time soon: lawmakers in the House must now negotiate a compromise bill with their counterparts in the US Senate, which passed its own version of the legislation last year. And although both bills would immediately appropriate funding for semiconductor science, other funding recommendations will need to be approved through the standard federal budget process.

Read the full article here.

NSPM-33 GUIDANCE: KEY CONSIDERATIONS FOR FEDERALLY-FUNDED RESEARCH INSTITUTIONS

Hogan Lovells | Lexology | January 31, 2022

On 4 January 2022, the White House Office of Science and Technology Policy (OSTP) issued Guidance to federal agencies for implementing National Presidential Memorandum 33 (NSPM-33) to strengthen protections against foreign interference in federally-funded scientific research. The Guidance centers on five key areas: (1) Disclosure Requirements and Standardization; (2) Consequences for Violation of Disclosure Requirements; (3) Research Security Programs; (4) Information Sharing; and (5) Digital Persistent Identifiers. We discuss the Guidance's key points and provide considerations for federal grantees and contractors. How did we get here? Over the past few years, inappropriate foreign influence in America's research enterprise has taken center stage. Agencies such as the National Science Foundation (NSF) and the National Institutes of Health (NIH) have introduced vigorous measures to protect US federally-funded research and guard against misappropriation of US intellectual property. These measures have placed enormous pressures on awardee institutions to collect information and disclose to funding agencies potential researcher conflicts of interest, conflicts of commitment, non-US activity, and sources of funding support.

Read the full article here.

FEDERAL RESEARCH AND DEVELOPMENT (R&D) FUNDING: FY2022

Congressional Research Service | January 19, 2022

President Biden's budget request for FY2022 includes approximately $171.3 billion for research and development (R&D), $13.5 billion (8.5%) above the FY2021 estimated level of $157.8 billion. In constant FY2022 dollars, the FY2022 R&D request represents an increase of $10.6 billion (6.6%) above the FY2021 estimated level. Funding for R&D is concentrated in a few federal departments and agencies. In FY2021, five agencies received 93.0% of total federal R&D funding, with the Department of Defense (DOD, 40.1%) and the Department of Health and Human Services (HHS, 27.6%) combined accounting for more than two -thirds of all federal R&D funding. In the FY2022 request, the top five R&D agencies would account for 92.4%, with DOD accounting for 36.7% and HHS for 29.9%. Under the President's FY2022 budget request, nearly all federal agencies would see their R&D funding increase relative to FY2021. The only exception is DOD, which would decrease by $550 million (0.9%) in FY2022 to $62.8 billion.

Read the full article here.

US-CHINA TECH WAR: TOP CHINESE UNIVERSITY PULLS REPORT THAT CONCLUDED CHINA WOULD SUFFER MORE FROM TECH DECOUPLING WITH US

Yahoo Finance | February 4, 2022

A think-tank at China's prestigious Peking University has pulled a report that concluded China would likely suffer more in a tech decoupling from the US. The 7,600-character report was published on the official WeChat account of the school's Institute of International and Strategic Studies on Sunday, and was subsequently shared by Chinese media outlets and analysts. A key finding from the analysis was that both the US and China would suffer from a tech decoupling, but China's losses would likely be bigger than those of the US. The South China Morning Post reported the findings of the study on Monday. Lianhe Zaobao, a Chinese language newspaper in Singapore, and Taiwan's Central News Agency, also covered the report, which was penned by a research team at the institute headed by Wang Jisi, a renowned Chinese scholar in US-China relations. The report was "deleted by the author", according to a message seen on WeChat when trying to access the content on Friday. The institute, which did not provide a reason for removing the report, did not immediately respond to a request for comment on Friday, which was a holiday in China for the Lunar New Year.

Read the full article here.

EU GUIDE TO TACKLING FOREIGN INTERFERENCE FINALLY ARRIVES

Robin Bisson | Research Professional News | January 19, 2022

The European Commission has finally published its guidelines to help research institutions tackle foreign interference, about a year and a half after drafts were circulated among the community. "Raising awareness and implementing preventive measures is key to tackle threats of foreign intrusion," said research commissioner Mariya Gabriel as the guidelines were published on 18 January. The Commission stressed that the guidelines are not binding, billing them as a 'toolkit' to help universities and research institutions develop their own strategies for tackling potential threats from foreign actors, such as theft of intellectual property or reputation damage by association. In December, a Commission official involved in drawing up the guidelines said that they were designed to not put "a lot of additional burden" on organisations, and the guidelines state that recommendations should be integrated "as much as possible in existing structures".

Read the full article here.

HOUSE PASSES SWEEPING U.S. INNOVATION BILL, TEEING UP TALKS WITH SENATE

Jeffrey Mervis | Science | February 4, 2022

Remember when your mother said you might choke if you crammed too much food into your mouth? In the weeks to come, Democrats in the U.S. Congress will find out whether that warning also applies to their ability to finalize sweeping legislation that promises to double the budgets of the National Science Foundation (NSF) and other key research agencies, pour money into high-tech industry, curb "malign foreign influence" on U.S. research, and root out sexual harassment in academic science. The effort, designed to maintain the country's technological edge over China, took a major step forward today when the U.S. House of Representatives passed the America COMPETES Act. The 2900-page bill must now be reconciled with a similar, comparably massive bill called the U.S. Innovation and Competition Act (USICA) that the Senate passed in June 2021. But ironing out the differences will test the Democrats' razor-thin majorities in each body.

Read the full article here.

RESTRICTING ACADEMIC TIES WITH CHINA IS A 'HUGE, HUGE MISTAKE' WARNS IVY LEAGUE COLLEGE PRESIDENT

Mass News | February 4, 2022

Brown College President Christina Paxson mentioned she's involved that tighter federal authorities scrutiny of hyperlinks with China amongst U.S. universities will hinder analysis and finally undermine the American financial system. "The message that we've been signaling out to the world is 'don't come'—particularly in case you're from China—and I believe that's an enormous, big mistake," Paxson mentioned in an interview with Bloomberg Information journalists on Wednesday. She mentioned she had "a number of issues" about how the course of U.S.-China ties "can probably adversely impression the development of science on this nation and likewise financial improvement of this nation." Federal authorities have launched hundreds of investigations because the institution in November 2018 of the China Initiative, a sweeping effort by the Division of Justice, the FBI, and different federal businesses. A major purpose is to counter Chinese language espionage in America's firms and analysis labs by rooting out spies and halting the switch of knowledge and know-how to China.

Read the full article here.

NEW INITIATIVES TO RECRUIT, RETAIN FOREIGN STEM TALENT ANNOUNCED

Roy Maurer | Society for Human Resource Management | February 1, 2022

The Biden administration announced a series of policy changes designed to attract and retain immigrants with education in STEM (science, technology, engineering and mathematics) fields. The changes include updating the list of academic disciplines that count as STEM, expanding employment opportunities to exchange students in STEM fields, clarifying criteria for "extraordinary ability" visas to include STEM workers and easing the availability of permanent residence for foreign nationals with a STEM background. "The Departments of State and Homeland Security are announcing new actions to advance predictability and clarity for pathways for international STEM scholars, students, researchers, and experts to contribute to innovation and job creation efforts across America," President Joe Biden said in a statement. "These actions will allow international STEM talent to continue to make meaningful contributions to America's scholarly, research and development, and innovation communities."

Read the full article here.

GREEN-CARD EXEMPTIONS FOR PH.D. GRADUATES IN SCIENCE AND MATH

Karin Fischer | Open Campus | February 1, 2022

A U.S. House bill aimed at boosting American competitiveness would exempt STEM Ph.D. graduates from numerical limits on immigrant visas — and require them to pay a supplemental fee to fund scholarships for low-income American students in science and engineering. The measure would effectively staple a green card to the doctoral diploma of qualifiying international students in STEM, a long-held priority of college groups. The green-card exemption would also extend to immigrants who earn STEM Ph.D.s from foreign universities, if they are equivalent. The America COMPETES Act is the House counterpart to Senate legislation passed last year aimed at countering Chinese competitiveness. Like the Senate measure, the bill, which could be taken up as soon as this week, contains a number of new reporting requirements for colleges and researchers engaged in international collaborations. It also provides millions in new federal R&D spending, much of which could go to universities. But the legislation also has some surprising new provisions — for one, it would set up a U.S. government program for the study of Chinese language to replace Chinese-funded Confucius Institutes.

Read the full article here.

STATE HACKERS' NEW MALWARE HELPED THEM STAY UNDETECTED FOR 250 DAYS

Bill Toulas | Bleeping Computer | February 3, 2022

A state-backed Chinese APT actor tracked as 'Antlion' has been using a new custom backdoor called 'xPack' against financial organizations and manufacturing companies. The malware has been used in a campaign against targets in Taiwan that researchers believe spanned for more than 18 months, between 2020 and 2021, allowing the adversaries to run stealthy cyber-espionage operations. According to a report from Symantec, a Broadcom company, shared with BleepingComputer, xPack enabled attackers to run WMI commands remotely, to leverage EternalBlue exploits, and mounted shares over SMB to deliver data to the command and control (C2) server. Details from one attack show that the threat actor spent 175 days on the compromised network. However, Symantec researchers analyzing two other attacks determined that the the adversary went undetected on the network for as long as 250 days. Using custom malware unknown to threat analysts played a key role in achieving this level of stealthiness.

Read the full article here.

DRONE COMPANY DJI OBSCURED TIES TO CHINESE STATE FUNDING, DOCUMENTS SHOW

Cate Cadell | Stars and Stripes | February 1, 2022

Chinese dronemaker DJI, a leading supplier of drones to U.S. law enforcement, obscured its Chinese government funding while claiming that Beijing had not invested in the firm, according to a Washington Post review of company reports and articles posted on the sites of state-owned and -controlled investors, as well as analysis by IPVM, a video surveillance research group. The documents show that four investment bodies owned or administered by Beijing have invested in the popular drone brand in recent years, including a state asset manager that has pledged to play a key role in promoting partnerships between private enterprises and the Chinese military. Brendan Carr, the senior Republican on the Federal Communications Commission, which authorizes DJI's equipment for use on U.S. communications networks, labeled reports of the links as "deeply concerning" in an interview.

Read the full article here.

BRITISH UNIVERSITIES COULD 'HELP CHINA BUILD SUPERWEAPONS': OXFORD AND CAMBRIDGE AMONG UNIVERSITIES THAT HAVE 'ACCEPTED £240MILLION FROM CHINESE INSTITUTIONS FOR RESEARCH TO DEVELOP DRONES, FIGHTER JETS AND MISSILES'

Chris Jewers | Daily Mail | February 5, 2022

British universities including Oxford and Cambridge have been handed £240 million from Chinese organisations since 2015, an investigation has found. A number of the Chinese institutions that have donated have links to China's military, sparking fears that joint research with Britain's universities could be helping to build super-weapons for Beijing. The investigation by The Times found that there have been more than 1,000 research collaborations between the UK and Chinese institutes, a number that has more than tripled in six years. Of the total £240 million, £60 million has come from sources that have been sanctioned by the U.S. government for supplying China's forces with military hardware, including fighter jets. The study found that the collaborations have touched technology including that used in rail guns, drones, fighter jets, missiles and other military tech. Additionally, some academics working at Britain's top universities have worked with their Chinese counterparts on sensitive 'dual use' research, The Times reported.

Read the full article here.

UK ACADEMICS INVESTIGATED OVER CHINA-LINKED RESEARCH: REPORT

Al Jazeera | February 8, 2022

Nearly 200 British academics at more than 12 universities in the United Kingdom are being investigated on suspicion of unwittingly helping the Chinese government build weapons of mass destruction, The Times newspaper reported on Monday. The scholars are suspected of unknowingly breaching export laws designed to prevent intellectual property in highly sensitive subjects from being handed to hostile states, the newspaper said, citing an unnamed source. The Times said that the government was preparing to send enforcement notices to the academics who are suspected of transferring research in advanced military technology such as aircraft, missile designs and cyberweapons to China. The individuals could face a maximum of 10 years in prison if found in breach of the Export Control Order 2008.

Read the full article here.

INTERNATIONAL STUDENTS STRESSED OUT BY VISA RULE CHANGES

Yojana Sharma | University World News | February 5, 2022

The general population in the United States barely registers the ins and outs of visa rules and immigration regulations for students from overseas, but for international students themselves, keeping up with the fast-changing immigration landscape – particularly in recent years – is imperative. US immigration rules and international student mobility are inextricably linked, but this is barely acknowledged by US policy-makers and often by universities themselves, says international education expert Rajika Bhandari, who herself arrived in the US as an international student and who went on to become immersed in virtually every aspect of policy and data on international students in the US as a senior researcher at the Institute of International Education (IIE) in New York. "There are now a million international students in the US, but they are largely invisible, an unknown entity" within the country, she said in a wide-ranging interview, noting "a huge gap" in the conversation in the US between the policy perspective and what it is really like living as an international student in the US.

Read the full article here.

RELIANT ON MONEY FROM CHINA, AUSTRALIAN UNIVERSITIES ARE EXPOSED TO GEOPOLITICAL RISK

Nick Lyall | Foreign Brief | June 5, 2018

Chinese students are by far the largest cohort of foreign students enrolled at Australian universities. For the 2016 academic year, Chinese students made up 31.6% of all foreign university students in Australia. And as of October 2017, the number of Chinese university student enrolments totalled 133,325. This cohort has expanded rapidly in recent years, at an average rate of 11% annually since 2002, and injected US$6.9 billion into university coffers in the 2016-17 financial year alone — an increase from the US$5.5 billion of two years prior. By conducting our analysis on this issue through a broad-scope geopolitical lens, Foreign Brief Advisory (FBA) offers the context and perspective necessary to properly understand a latent risk that has become obfuscated by recent public and political discourse regarding China. In our analysis of the geopolitical variables at play in the China-Australia relationship, FBA will provide unique insight into the level of risk the Australian Higher Education sector is truly facing regarding potential threats to the future continuity of Chinese students in Australia. As international education is Australia's third largest export — with the gained export revenue supporting jobs for around 1.3% of Australia's total employed population — it is vital for industry and government to develop a nuanced understanding of the potential future risk scenarios.

Read the full article here.