THE OPEN SOURCE MEDIA SUMMARY

ASCE
ACADEMIC SECURITY AND COUNTER EXPLOITATION PROGRAM

https://asce.tamus.edu

October 5, 2023

31 INSIDER THREAT STATISTICS YOU NEED TO KNOW IN 2023
Susan Laborde | TechReport | July 2, 2023

Last year, approximately 31% of all data breaches were caused by insider threats, implying that one-third of all data breaches emerged from an insider, a contractor, or an employee. Also, the average cost of an insider threat records a staggering $8.76 million globally. This includes tarnished reputations, legal expenses, and lost data costs. There are various insider threats in 2023, such as malicious threats, unhappy workers, and accidental errors. These pose some of the most neglected but prominent means of insider threats to any organization worldwide. This article will delve into 31 insider threat stats you need to know in 2023. These data, facts, trends, and statistics will help you understand the threats and how to contain them to safeguard your company. According to a Cybersecurity Insiders report, 74% of companies are at least moderately vulnerable to insider threats. It also revealed that the average cost of an insider threat incident in 2023 is $15.38 million. This was understandable, as many malicious insider breaches were caused by employee negligence.

Read the full article here.

WHY SO QUIET? OPPOSING POLITICISATION OF HE IS MANDATORY
Philip G. Altbach and Hans de Wit | University World | September 30, 2023

Perhaps not since the rise of fascism in Europe in the 1930s and the Soviet era in Russia and its satellites have we seen the kind of political pressures on universities that are evident today. In today's politicised world, governments intervene in university life for their own political purposes, seeing academic institutions as useful tools without regard to the norms of academe, or fearing that an independent and critical academe may threaten authoritarian tendencies. Contemporary politicisation is different from the traditional reasons for government involvement in higher education and centres around fiscal problems, policies to expand access or a variety of academic purposes. Of course, politics has always influenced university-state relations, with governments 'steering' policies to reflect political trends and state priorities, but in general respecting autonomy and academic freedom. Even during past periods of fiscal crisis, or when political parties proposed reforms opposed by the academic community, the fundamental values of universities were not violated, with the exception of some isolated authoritarian regimes.

Read the full article here.

SANCTIONS AND EXPORT CONTROLS CONSIDERATIONS FOR HIGHER EDUCATION AND RESEARCH INSTITUTIONS

Ama Adams, Emerson Siegle, Junsuk Lee and Brendan Hanifin | Global Investigation Review
September 29, 2023

Universities and research institutions are dedicated to the development of human understanding, which in the twenty-first century often involves cross-border collaborations, international travel and engagement with peers, faculty and students from around the world. While these activities are an indispensable aspect of academic progress, they can also come into conflict with the national security objectives underlying US sanctions and export controls that restrict the flow of sensitive commodities and technology to parties and jurisdictions of concern. In recognition of this tension, US sanctions and export control regulations incorporate various exceptions and exemptions for academic and research-related activities. However, these carve-outs are not absolute, and their application is heavily fact dependent. Further, universities have been the focus of recent legislative proposals at the federal and state levels that would impose additional restrictions and administrative requirements.

Read the full article here.

PUBLISHING SCIENCIFIC PAPERS WITH POTENTIAL SECURITY RISKS: ISSUES FOR CONGRESS

Congressional Research Service | March 18, 2023

The federal government generally supports the publication of federally funded research results because wide dissemination may drive innovation, job creation, technology development, and the advance of science. However, some research results could also be used for malicious purposes. Congress, the Administration, and other stakeholders are considering whether current policies concerning publishing such research results sufficiently balances the potential benefits with the potential harms. The current issues under debate cut across traditional policy areas, involving simultaneous consideration of security, science, health, export, and international policy. Because of the complexity of these issues, analysis according to one set of policy priorities may adversely affect other policy priorities. For example, maximizing security may lead to detriments in public health and scientific advancement, while maximizing scientific advancement may lead to security risks.

Read the full article here.

THE WEST HAS A MASSIVE CHINESE SPY PROBLEM

David Wilezol | The Hill | September 26, 2023

A bevy of headlines in just the last few weeks concerning Chinese spying should force the West to bolster its China-focused counterintelligence efforts. On Sept. 10, the Sunday Times reported that MI5, Britain's domestic security agency, had arrested a researcher working for the UK House of Commons' China Research Group on suspicions of being a Chinese spy. The 28-year old man, reportedly named Chris Cash, would have had access to many members of the British parliament. While the success of whatever activities he is alleged to have undertaken is unknown, one Whitehall source speculated, "I'm pretty sure he [the researcher] turned some backbenchers from China hawks into being apathetic about Beijing." That wasn't the only news out of the UK. The Times also reported on Sept. 12 that MI5 warned the Conservative Party in 2021 that two potential candidates for Parliament could be agents of China's United Front Work Department (UFWD) — its chief agency for overseas foreign influence and propaganda efforts.

Read the full article here.

THE PRC'S DOMESTIC APPROACH: CSET ANALYSES OF CHINA'S TECHNOLOGY POLICIES AND ECOSYSEM

Owen Daniels | Center for Security and Emerging Technology | September 2023

We identify several high-level, strategic themes from China's domestic efforts to achieve global leadership across numerous emerging technology areas: China's rapid progress in talent development and acquisition. China hopes to overtake the United States in terms of talent acquisition, in areas including STEM PhDs graduated, AI education, and centralized talent tracking programs. Its advances could prove worrisome to long-term U.S. national and economic security and competitiveness. China's unique and evolving tech ecosystem. China's tech ecosystem is evolving to more closely resemble other innovation ecosystems through its rapidly developing patent system and new policy mechanisms. However, it retains unique characteristics, particularly the close linkages among military, private sector, and public sector research under its military-civil fusion policy.

Read the full article here.

THE PRC'S EFFORTS ABROAD: CSET ANALYSES OF CHINA'S TECHNOLOGY POLICIES AND ECOSYSEM

Owen Daniels | Center for Security and Emerging Technology | September 2023

Based on CSET's research, this brief details how the PRC employs strategies abroad to advance its global tech leadership goals. It covers several high-level themes: Leading in research and trying to shape standards. China is increasingly contributing to high-impact research in artificial intelligence (AI), and it aspires to lead in setting global standards for emerging technologies. Backing Chinese companies abroad. The PRC provides Chinese companies like Huawei with resources and backing through subsidies, illicit intellectual property (IP) practices, and other methods, with disregard for global norms and business practices. The government also encourages Chinese companies to invest abroad in emerging technology areas of interest. Acquiring foreign technology and talent. In addition to private sector and illicit practices, China uses official science and technology (S&T) diplomats to acquire technologies on an extensive "wishlist" for China's Ministry of Science and Technology.

Read the full article here.

GLOBAL ENGAGEMENT CENTER SPECIAL REPORT: HOW THE PEOPLE'S REPLUBIC OF CHINA SEEKS TO RESHAPE THE GLOBAL INFORMATION ENVIRONMENT

U.S. Department of State | September 28, 2023

Every country should have the ability to tell its story to the world. However, a nation's narrative should be based on facts and rise and fall on its own merits. The PRC employs a variety of deceptive and coercive methods as it attempts to influence the international information environment. Beijing's information manipulation spans the use of propaganda, disinformation, and censorship. Unchecked, the PRC's efforts will reshape the global information landscape, creating biases and gaps that could even lead nations to make decisions that subordinate their economic and security interests to Beijing's. The PRC spends billions of dollars annually on foreign information manipulation efforts. Beijing uses false or biased information to promote positive views of the PRC and the Chinese Communist Party (CCP).

Read the full article here.

CHINA ON VERGE OF BREAKING INTO WORLD UNIVERSITY RANKINGS TOP TEN

Nick Morrison | Forbes | September 27, 2023

China is on the verge of a historic breakthrough into the world's top 10 universities, according to one of the leading global rankings. Two Chinese universities are now just outside the top 10 in the Times Higher Education's World University Rankings, with its highest placed entry now at 12. This represents a remarkable rise for a country that six years ago had just two representatives in the top 100 and a highest rank of 27. Oxford retains top spot in the rankings for a record eighth year, heading a top 10 that shows little change from last year. And while the U.S. continues to dominate the top end of the rankings, the overall picture is of continuing long-term decline. But it is the long-anticipated rise of China's universities that represents the big story of this year's rankings, well and truly marking their arrival on the world stage.

Read the full article here.

CHINA'S FAKE SCIENCE INDUSTRY: HOW 'PAPER MILLS' THREATEN PROGROSS

Eleanor Olcott, Clive Cookson, and Alan Smith | Financial Times | March 27, 2023

As part of his job as fraud detector at biomedical publisher Spandidos, John Chesebro trawls through research papers, scrutinising near identical images of cells. For him, the tricks used by "paper mills" — the outfits paid to fabricate scientific studies — have become wearily familiar. They range from clear duplication — the same images of cell cultures on microscope slides copied across numerous, unrelated studies — to more subtle tinkering. Sometimes an image is rotated "to try to trick you to think it's different", Chesebro says. "At times you can detect where parts of an image were digitally manipulated to add or remove cells or other features to make the data look like the results you are expecting in the hypothesis." He estimates he rejects 5 to 10 per cent of papers because of fraudulent data or ethical issues. Spandidos, based in Athens and London, accepts a large volume of papers from China, with around 90 per cent of its output coming from Chinese authors.

Read the full article here.

RESEARCH AT RISK: GLOBAL CHALLENGES, INTERNATIONAL PERSPECTIVES, AND CANADIAN SOLUTIONS

Alex Winter, Sara Beach-Valve, Catherine Carbonneau, Graeme Hopkins, and Félix Leblanc
Sage Journals | August 11, 2022

Although traditionally viewed as paragons of international cooperation, research institutions and universities are becoming venues for hostile foreign activity. Research security (RS) refers to the measures that protect the inputs, processes, and products that are part of scientific research, inquiry, and discovery. While RS traces its roots to the 1940s, global economic and research and development competition, the nexus between dual-use technology and military power, a cluster of newly emerging industries, scientific responses to the COVID-19 pandemic, and societal shifts towards digitization, combine to challenge RS in unique ways. With an eye on safeguarding traditional notions of open science, our article refurbishes Canadian RS within the context of emerging challenges and international responses. Detailing the legal, extralegal, illegal, and other ways in which RS is threatened, we use a comparative assessment of emerging responses in the US, Australia, Japan, and Israel to draw lessons for Canada.

Read the full article here.

CANADA SET TO NAME FOREIGN LABS, UNIVERSITIES THAT POSE RISK TO NATIONAL SECURITY

Joanna Chiu | Toronto Star | May 8, 2023

Ottawa is in "advanced stages" of drafting a list of entities that pose a risk to national security, and top universities are prepared to avoid working with these entities despite what could be a loss of $100 million or more in annual research funding from foreign partners.

The list will include foreign-state-connected universities, research institutes and laboratories that are believed to be at "higher risk" of engaging in theft, unwanted knowledge transfers and interference in research, according to government documents reviewed by the Star.

Read the full article here.

UK LOOKS TO REENGAGE WITH CHINA FOLLOWING FIRST MISSION SINCE 2019

Viggo Stacey | The Pie News | September 28, 2023

Leaders are urging the education sector to engage with China, and last week, a group of 20 UK university representatives joined the UK-China Higher Education mission. Speaking with The PIE, director of UUKi Jamie Arrowsmith, emphasised that China "matters for the UK higher education, it matters for the UK". "It's important in terms of recruitment, transnational education and research. Our ambition to go was really trying to reconnect and make those connections that we may be used to have and see where the land lies," he said. The delegation was the largest of its kind to travel to China since 2019, meeting representatives from 44 Chinese universities. "Now is not the time to turn away from China engagement, despite the geopolitical challenges and volatile rhetoric," Leina Shi, British Council China director for education noted.

Read the full article here.

GUIDELINES TO COUNTER FOREIGN INTERFERENCE IN THE AUSTRALIAN UNIVERSITY SECTOR

Australian Government Department of Education | November 17, 2021

The world-class performance and reputation of Australia's university system is intrinsically linked to the globally engaged and open nature of our universities. Universities play a key role in developing new knowledge and technological innovation. This role is vital to Australia's continued prosperity and economic growth. Deep international engagement, underpinned by university autonomy and academic freedom, fosters the sharing and developing of knowledge with the best and brightest minds around the world. The Australian Government supports international collaborations through its programs and policy settings across a wide range of initiatives and portfolios. This crucial global engagement is occurring in an ever more complex and evolving world.

Read the full article here.

CHINA'S MODEL OF SCIENCE

China Aerospace Studies Institute | Air University | February 7, 2022

On 20 January 2021 newly inaugurated President Biden sent a letter to his science advisor, geneticist Eric Lander, posing five essential questions about how to ensure America's leadership in science and technology for the next 75 years. The letter deliberately invoked a similar letter sent by President Franklin Delano Roosevelt in November 1944 to his science advisor, Dr. Vannevar Bush. Though World War II was far from over, Roosevelt was already starting to look to the future to ensure that the rapid scientific progress made during the war was maintained and directed to address pressing issues at home when peace was achieved.

View the full resource here.

PLA ROCKET FORCE ORGANIZATION

China Aerospace Studies Institute | Air University | October 24, 2022

The PLA Rocket Force (PLARF), formerly known as the PLA 2nd Artillery Force (PLASAF) until 2016, is responsible for the PLA's land-based nuclear and conventional ballistic missiles. The Second Artillery Force was officially established in 1966 and given command of China's small inventory of land-based, regional nuclear missiles. These first-generation missiles were largely categorized as unsophisticated and of limited range and capability. The story of the PLARF/PLASAF, however, has been one of steady and progressive growth in both size and capability, beginning with the development of increasingly longer-range systems through the 1960s and 1970s and, with the introduction of the DF-5 in the early 1980s, the first intercontinental ballistic missile capable of striking the United States.

View the full resource here.

THE PRC STATE AND DEFENSE LABORATORY SYSTEM

China Aerospace Studies Institute | Air University | April 11, 2022

Over the past 30 years, China has developed a vast and complex laboratory system. From an analytical standpoint, at present, laboratories generally fall into one of several categories according to their administrative rankings. They include, in descending order: state-level laboratories, provincial and ministerial-level laboratories, municipal-level laboratories, and university/institute level laboratories Among them, the laboratories at the state level are the nation's oldest and also the most important platforms of innovation, where the most strategic and cutting-edge research takes place.

View the full resource here.

PRC DEFENSE S&T KEY LAB DIRECTORY

China Aerospace Studies Institute | Air University | March 20, 2023

The following directory is Part Two of The PRC State & Defense Laboratory System, a report released by the China Aerospace Studies Institute and BluePath Labs in April 2022. Part One of the report, entitled "The PRC State & Defense Laboratory System: An Overview", described the general structure and organization of the PRC's state research system. It particularly focused on the PRC's Defense S&T Key Laboratories (DSTKL), first established in 1991 as the PRC's highest-level network of defense labs. These labs receive the most funding and conduct what the PRC considers to be its most critical military research.

View the full resource here.

GLOBAL RESEARCH AND DEVELOPMENT EXPENDITURES: FACT SHEET

Congressional Research Service | September 14, 2022

Research and development (R&D) plays a central role in advanced economies in areas such as economic growth and job creation, industrial competitiveness, national security, energy, agriculture, transportation, public health and well-being, environmental protection, and expanding the frontiers of human knowledge understanding.1 Accordingly, companies, governments, universities, nonprofit organizations, and others around the world have made substantial investments in R&D. Since 2000, total global R&D expenditures have more than tripled in current dollars, from $675 billion to $2.4 trillion in 2020.

View the full resource here.

GUIDE TO OPERATIONAL TECHNOLOGY (OT) SECURITY

Keith Stoffer, Michael Pease, CheeYee Tang, Timothy Zimmerman, Victoria Pillitteri, Suzanne Lightman, Adam Hahn, Stephanie Saravia, Aslam Sherule and Michael Thompson
NIST Computer Security Resource Center | September 2023

This document provides guidance on how to secure operational technology (OT) while addressing their unique performance, reliability, and safety requirements. OT encompasses a broad range of programmable systems and devices that interact with the physical environment (or manage devices that interact with the physical environment). These systems and devices detect or cause a direct change through the monitoring and/or control of devices, processes, and events. Examples include industrial control systems, building automation systems, transportation systems, physical access control systems, physical environment monitoring systems, and physical environment measurement systems.

View the full resource here.