University of Regina

Newsline	Research Security	Week	Oct. 19 - 23, 2026	Source(s)	Research Security Centre
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Executive summary: This week's coverage highlights investments in quantum computing, Arctic science, satellite navigation, and defense research. It also examines international partnerships, espionage, cybersecurity, research security oversight, academic freedom, national research infrastructure, and changing international student enrolment.

Key Points:

1. **Strategic technologies and Arctic innovation:** Ericsson Canada and *Ecole de technologie superieure* (ETS) launched a Mitacs-supported partnership to improve the reliability and scalability of quantum algorithms for telecommunications and train researchers. Xona Space Systems Canada received $15 million toward a $64.8 million Montreal centre for satellite development, manufacturing, and operations. Its low-Earth-orbit Pulsar navigation system would complement GPS, support Arctic operations, defence, and critical infrastructure, and is expected to create about 126 jobs. Canadian researchers are exploring cold-adapted Arctic microorganisms for compounds that may lead to new therapies, using advances in biotechnology and genomics. Separately, the five-year, $5 million NSERC-funded WxAlliance brings together nine universities and eight partners to combine AI and physics-based models for better forecasts of wildfires, floods, storms, and poor air quality.

   Reflection: These projects offer benefits beyond their immediate goals. Researchers should consider sensitive applications, partner interests, and how knowledge or technology may be transferred.

2. **Defence partnerships and espionage risks:** Memorial University's Marine Institute signed a five-year agreement with Finland's Satakunta University of Applied Sciences on Arctic shipbuilding, ice navigation, maritime safety, training, and research. It supports the Canada–Finland–U.S. Icebreaker Collaboration Effort (ICE Pact). The University of New Brunswick joined the transatlantic Marshall Land Research Alliance with Marshall Land Systems, Cardiff University, and the University of South Wales to develop deployable systems, including mobile CT scanners, field hospitals, maintenance facilities, and command centres for military and humanitarian use, alongside technology transfer and staff exchanges. In Denmark, two men were arrested and charged on suspicion of gathering photographs of facilities belonging to drone-defence company MyDefence for a foreign intelligence service; reports suggested possible Russian involvement.

   Reflection: Defence and Arctic research can involve sensitive facilities and dual-use technology. Due diligence, controlled access, and clear agreements help manage risks without preventing worthwhile collaboration.

3. **International research security and academic freedom:** The Pentagon is pressing U.S. universities to limit research ties with Chinese institutions over concerns about intellectual property and technology transfer. Some institutions reviewed or ended partnerships to protect federal funding; others opposed broad restrictions. Separately, the U.S. Department of War reported that audits at 30 universities led to more than 80 actions to end or mitigate relationships with foreign entities of concern listed under NDAA Section 1286; all 30 addressed the findings. In Australia, a survey of over 100 Chinese-Australian academics found nearly three-quarters said security concerns affected their research, and almost 60% had avoided, changed, delayed, or ended China-related collaborations. More than half felt uncomfortable discussing such ties, and many raised concerns about assumptions linked to their ethnicity.

   Reflection: Screening should address identifiable risks, affiliations, and research sensitivity; cnot ethnicity or nationality. Clear guidance can protect research while maintaining trust and academic freedom.

4. **Research infrastructure and international enrolment:** Two Canadian articles highlighted fragmented governance, funding, and coordination of research infrastructure. A Council of Canadian Academies panel warned that the lack of a national strategy threatens competitiveness and sovereignty, calling for dedicated oversight, portfolio-based planning, stable funding, and treatment of major facilities as strategic national assets. Manitoba universities also reported declining international enrolment: down 4.6% at the University of Manitoba and nearly 21% at *Universite de Saint-Boniface*. Study-permit caps and the graduation of large post-pandemic cohorts contributed, alongside local recruitment factors; some institutions offset declines with domestic enrolment.
   Reflection: Coordinated investment and stable research capacity matter for security and continuity. Changes in student mobility can also affect institutions' talent pipelines and long-term planning.
5. **Cybersecurity and wider security threats:** The U.S. National Security Agency urged immediate action on two critical PHP vulnerabilities, called "PHP2Shell," that could let attackers take over unpatched servers without authentication, access data, and disrupt operations. It recommended identifying affected systems, patching, improving monitoring, replacing unsupported software, and disconnecting exposed systems when immediate fixes are not possible. A Council on Foreign Relations analysis of MI5's threat update described growing risks from AI, cyberattacks, coercion, and extremism. The authors supported a whole-of-society response but called for more attention to social media algorithms, online echo chambers, hate crimes, youth radicalization, and digital literacy.
   Reflection: Prompt software updates and coordination across URegina IS, research, and security teams help protect systems and information. Awareness and community resilience matter as well.

Conclusion: Research security works best when risks are identified early and safeguards are proportionate. Clear responsibilities and informed partnerships can protect sensitive research while supporting innovation and international collaboration.