

# UNIVERSITY & COLLEGE RESEARCH Policy Briefing



A building on the University of Ottawa campus. Continuous financial support in university and college research is vital, write Dr. Thomas Pulinilkunnil, Ecaterina Cozma, and Dr. Walid A. Houry. *The Hill Times* photograph by Andrew Meade

## The unsung guardians of Canadian dominion, innovation, and prosperity

To fully leverage the capabilities of academic institutions, Canada must adopt a future-oriented research approach by aligning research priorities with national interests.

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Opinion

Canadian universities and colleges influence national priorities; however, their contributions are frequently undervalued.

These institutions serve as hubs for research, innovation, job creation, talent cultivation, and social transformation, thereby fulfilling their educational missions. The effective execution of their research mandates fortifies Cana-

da's strength, independence, and progressiveness. With \$17-billion invested in R&D in 2023, Canadian universities accounted for 35 per cent of the national total.

Research-intensive academic institutions—beyond university campuses—are discovering breakthroughs to tackle real-world issues, progressing in life sciences, health care, quantum computing, net-zero energy, and artificial intelligence. Research conducted in universities and colleges also plays a crucial role in the non-profit sector by tackling critical health and social challenges, thereby improving the quality of life for Canadians and strengthening the nation's social cohesion. As of 2022, Canadian universities and research institutions had supported 875 startups and filed 272 patents.

With the complex global issues that the country faces, improving research capabilities at Canadian universities and colleges is necessary. Research strides will bolster our self-sufficiency and help effectively confront future problems, including natural resource disputes, climate change, and trade barriers.

Nonetheless, academic institutions continue to face persistent challenges in undertaking and sustaining research, including

federal restrictions on international students, domestic tuition caps, and sluggish tri-council grant funding increases. The current financial crisis has compelled universities and colleges across the country to implement hiring freezes, decrease staff, downsize research, discontinue student services, limit programs in essential sectors, and, in certain instances, close campuses. Funding research at the university and college levels is a foundational element that drives academic innovation, enabling institutions to conduct impactful research, develop infrastructure, advance the economy, and foster collaboration for the benefit of society.

However, innovation does not occur in isolation; it originates from people. Continuous financial support in university and college research is vital, not just for the advancement of research initiatives and infrastructure, but also for nurturing and developing talent.

Today's trainee researchers are tomorrow's leaders, safeguarding the Canadian research ecosystem. Universities and colleges prepare the next wave of intellectuals, innovators, and future leaders. Continued funding of university and college research guarantees a strong pipeline of

highly qualified personnel with hands-on research opportunities, fostering innovation and equipping students with the competencies necessary to compete and collaborate in a rapidly evolving international job market, thereby driving economic growth.

Without adequate research funding for trainees and early-career researchers, Canada risks diminishing its global leadership in research. Indeed, students, faculty, and academic institutions are demanding that provincial and federal governments invest in post-secondary education and research aggressively by committing to continually increasing research funding for the core budgets of the federal research granting councils.

To fully leverage the capabilities of academic institutions, Canada must adopt a future-oriented research approach by aligning research priorities with national interests. This involves harnessing the entire range of scholarly expertise to secure this country's autonomy and foster its role as a global leader in advancing groundbreaking innovations across various fields, including biology, biotechnology, pharmaceuticals, quantum computing, artificial intelligence, and climate change.

In a landscape where knowledge equates to power, the research output from Canada's higher education institutions represents an essential asset and a rich resource.

Academic research institutions are not merely centres of learning, but are launchpads for ideas, solutions, innovation, and progress. The national growth and economy are strengthened by impactful research conducted by universities and colleges; hence, they are a critical stakeholder that deserves a spot at the table discussing the Canadian research ecosystem.

By strategizing sustainable investments in research, universities and colleges can lead innovation, augmenting Canada's standing in global research and development, and fostering inclusive prosperity.

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*The Hill Times*