

**University of Windsor
Senate**

5.10: **Report of the Vice-President, Research and Innovation**

Item for: **Information**

Forwarded by: **Shanthi Johnson**

Research, scholarship, creative activity, and innovation play a pivotal role in shaping the University's local and global influence, reputation, and impact. The research and innovation ecosystem directly impacts our ability to recruit and retain undergraduate and graduate students, and build a robust education and training capacity pipeline. The Office of the Vice-President, Research and Innovation (OVPRI) is committed to inspiring and advancing inclusive research, scholarship, creative activity, and innovation in alignment with the University's institutional strategic plan - *Aspire: Together for Tomorrow*. Our goal is to engage our community, creating strong, meaningful collaborations, actively involving both our internal and external stakeholders. The following provides an overview of the recent activities and initiatives undertaken by the OVPRI.

Shedding light on: Research Partnership, Innovation, and Entrepreneurship

The Research Partnerships office is a strategic unit focused on the development of external collaborations and advancing knowledge mobilization, elevating the profile of the University's research enterprise while identifying opportunities for revenue growth. The following sections outline several of the strategic initiatives, partnership successes, and recommendations for expanding these efforts. The following highlights key initiatives and successes from June to August of 2024:

- Engaged 13 new partners
- Submitted 22 proposals in collaboration with partners
- Secured 11 new awards with a partner, resulting in \$238k in funding from partners
- Executed 14 research contracts
- Filed 4 new patents
- Submitted 1 invention disclosure

Research Partnerships – Creating Ecosystems of Success

UWindsor has built successful ecosystems in key areas through multi-disciplinary collaboration, leading to increased external partnerships and funding.

Example: *Agriculture UWindsor* - In 2022, 40 faculty members were engaged in agriculture-related research. External connections led to increased recognition and funding, culminating in the launch of AgUWindsor in 2024, a possible research institute in the future. This initiative is being co-chaired by Drs. Isabelle Barrette-Ng and Rupp Carriveau. We are now exploring similar initiatives in areas of current and emerging strengths.

Research Partnerships – Strategic Partnerships

Strategic partnerships create mutual benefits for research, student training, and program sponsorship. A focus on a clear value and expectations has been key. Notable partners include:

Magna: \$6.5m in research project (NSERC-Mitacs)
Donation of 'Split Car' (\$100k, faculty and student engagement)

Vitesco: Expected \$2m research project award (\$2m+ and office space at CEI)

NEO Battery Solutions: Signed MOU to expand as its first North American partnership and research collaboration and international collaboration with S. Korean universities.

APMA: Contributing partner to Project Arrow 1, our nation's first fully Canadian electric vehicle for testing. APMA opened its first office outside of Toronto in its history in Windsor (CEI Building in 2024). UWindsor becomes the official partner of Project Arrow 2.0 to launch in late 2024-early 2025 as a key testbed for EV Power electronic components.

Agriculture and Agri-Food Canada: Collaboration on new research opportunities following faculty engagement, as highlighted earlier in this report, creating ecosystems of success.

Investment in these activities to support broader research engagement has continued to provide significant dividends with a multiple on return on investment as a vehicle to increase our research revenue. By increasing our external research revenues, additional funding is available to support our students which provides them with experiential learning opportunities and pathways to careers following completion of their studies.

Research Partnerships – Creating Connection – Visibility and Representation

Visibility and representation are invaluable in securing resources, opportunities and showing support. Sitting on advisory boards, attending association events, or participating in regional events have been critical to enhanced understanding and uncovering emerging opportunities.

Research Security – Securing Research

In 2023, UWindsor became a leader in implementing Canada's Safeguarding Research policies, simplifying processes and streamlining decision making for faculty. Support continues to education and awareness session, individual project level guidance on risks/mitigation, and others by engaging with other academic institutions.

Technology Transfer – Intellectual Property Creation and bringing the Lab to Market

The Association of University Technology Transfer Managers (AUTM) reports that intellectual property commercialization generates millions annually for U15 universities, with even mid-size universities also seeing significant return. UWindsor has a strong roster of intellectual property that comes through invention and discovery by faculty members, but has traditionally lacked the resources for active commercialization and reinvestment.

In 2024, UWindsor was awarded \$300,000 from IP Ontario to build capacity in commercialization of technologies and we are actively hiring a commercialization officer intending to start in early October. The goal of this strategy is to build a pipeline of revenue-generating opportunities that sees the pathway from idea to marketplace clearly identified and actioned. This will encourage more inventors to engage with commercialization as a viable option.

Reimagining Entrepreneurship – Embedding Innovation

Following the closure of the EPICentre in spring, the Research Partnerships team has been working on delivering on our existing program commitments while focusing on creating a more integrated approach to entrepreneurship on campus and in our surrounding ecosystem for the future. Work is in progress to create an entrepreneurship strategy working closely with academic and other units across the campus and our community/industry partners. Recognizing the importance of entrepreneurship programs at leading universities, UWindsor is relaunching its entrepreneurship initiative with a back-to-basics approach. Using a traditional startup model including the business model canvas, the team is hosting a series of discovery sessions with their potential 'customers' to understand what role we should play, what our value proposition is to our campus and to our community, and what key activities should be. The core elements of the new entrepreneurship strategy include:

- Building a grassroots culture of innovation and entrepreneurial thinking
- Embedding our entrepreneurship program into faculties
- Integrating our entrepreneurship program into other partnership activities, creating direct pathways from research initiatives to commercial opportunities

The Research Partnerships office has played a pivotal role in fostering innovation, securing strategic partnerships, and advancing the commercialization of intellectual property. As we continue to build ecosystems of success across multiple disciplines, there is immense potential for further growth in research revenue and external collaborations. Reimagining entrepreneurship at UWindsor offers an exciting opportunity to embed innovation at the core of the University's mission.