## University of Windsor Senate

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

Item for: Information

Forwarded by: Chris Houser

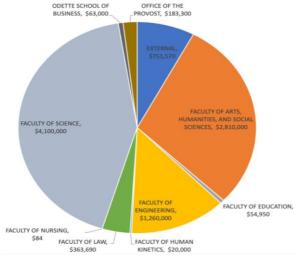
1. Research, scholarship, and creative activity are critical to the reputation of the University of Windsor and have a significant influence on our ability to recruit and retain undergraduate and graduate students. Reports from the Office of the Vice-President, Research and Innovation will include quarterly statistics on research activity, including new awards, submissions, publications (November meeting), and the activity of ORIS (December meeting).

## **New Research Awards (Summer 22)**

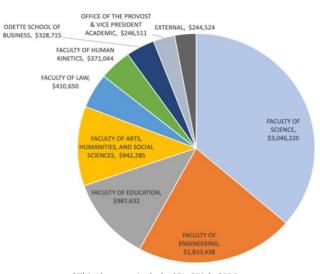
## **Grant Submissions (Summer 22)**

<b>Total Awards</b>	96		
Cash Awards	\$9.66 Million		
<b>In-kind Awards</b>	\$27 K		
<b>Total Award</b>	\$9.69 Million		

**Total Submissions** 130 **Funding Requested** \$8,388,019



\*Many grants are multi-year and the funding listing extends across several years.



\*This does not include CFI, CERC, CFRF, which will appear in the new quarter.

The awards received in Summer 2022 includes \$2,490,050 in funding to Dr. Charlene Senn (CRC in FAHSS) for IDEA<sup>3</sup>, an evidence-based sexual assault resistance intervention for undergraduate women adapted for internet delivery.

- **2. Institutional Funding Applications:** In summer 2022, the University of Windsor submitted major institutional funding applications that represent the large funding requests by the University of Windsor:
- 1. Canada First Research Excellence Fund (CFREF), \$267,000,000:

UWindsor is leading a pan-Canadian consortium of 11 universities from coast to coast, seeking funding for a very large-scale, pan-Canadian initiative focused on automobility and automotive engineering entitled FuturE Car. The project lead and Scientific Director is Dr. Narayan Kar, Professor, Department of Electrical and Computer Engineering; Tier 1 Canada Research Chair in Electrified Vehicles; and Director, Centre for Hybrid Automotive Research and Green Energy (CHARGE). FuturE Car has five thematic areas and four research pillars (thrusts) that embrace the impact of electric and electrified vehicles (EVs) on mobility, society, and climate policy; security and safety; battery chemistries and materials; energy sources and integration; EV propulsion and drives; thermal management; and light-weighting and crash worthiness within an inclusive ecosystem that prioritizes EDI and Indigenous initiatives and engagement with Indigenous communities. Funding being requested through the CFREF program is \$140m, with approx. \$47 m of contributions from private



sector partners, and \$80 m in contributions from the University of Windsor and our partner universities.

2. Canada Foundation for Innovation (CFI) – Innovation Fund, \$75,500,000.

UWindsor is the lead institution on a pan-Canadian initiative that engages 18 universities from coast to coast. The proposal includes funding for and installation of a Compact Accelerator for Neutron Scattering (CANS) in Windsor, as well as funding for access to international neutron facilities. The proposal is led by Dr. Drew Marquardt, Associate Professor, Department of Chemistry and Biochemistry, and President of the Canadian Institute for Neutron Scattering. The CANS infrastructure will enable boron neutron capture therapy, a new therapeutic modality for refractive cancers, including brain cancers, that are not readily treatable by surgery, and will also provide a local source of the fluorine isotope, <sup>19</sup>F, for the synthesis of <sup>19</sup>F-fluorodeoxyglucose (FDG), the radiochemical required in PET scanning. This represents an important collaboration with our ongoing partnership with the hospital.

- 3. Canada Excellence Research Chair (CERC) Search: The University of Windsor has conducted a successful search and is in the process of applying for a CERC in Automotive Engineering for the Future. The focus of the Chair will be in battery materials. The CERC program offers universities award values of up to \$8 million over eight years to support world renowned researchers and their teams to establish ambitious research programs at Canadian universities.
- 4. Canada Research Chair (CRC) Searches and new Strategic Allocation Model: CRCs are an opportunity to invest in existing and emerging areas of research strength, and thereby enhance the reputation of the University of Windsor. Tier 1 CRCs are opportunities to support outstanding researchers acknowledged by their peers as world leaders in their fields, while Tier 2 CRCs are opportunities to support exceptional emerging researchers, acknowledged by their peers as having the potential to lead in their field. There are currently four vacant CRC positions and two more expiring in 2023. The OVPRI will be initiating five CRC searches this academic

CRC	Status	Agency	Tier
Vacant	Search in Progress	NSERC	2
Vacant	Initiating Search	NSERC	1
Vacant	Initiating Search	SSHRC	2
Vacant	Initiating Search	NSERC	1
Oliver Love	Expiring	NSERC	2
Shijing XU	Expiring	SSHRC	2
Catherine Febria	Starting Renewal	NSERC	2
Jennifer Willet	Starting Renewal	SSHRC	2
Aaron Fisk	Starting Renewal	NSERC	1
Charlene Senn	Starting Renewal	CIHR	1
Ning Zhang	Active	NSERC	2
Narayan Kar	Active	NSERC	1
Hugh MacIsaac	Active	NSERC	1

year. To meet the Tri-Council equity targets, these searches will be restricted to women and gender minorities, persons with disabilities, Indigenous peoples, and racialized persons.

In consultation with the Deans and in parallel with the Aspire Strategic Plan development, the University of Windsor is adopting a more strategic approach to the allocation of CRCs to complement existing and emerging research areas. Once finalized, the identified areas of existing and emerging research will be used as the foundation for the development of a Strategic Research Plan by the next VPRI. The new CRC plan will also include expectations of the CRCs to be visible research leaders on campus and in the community, and ensure that their research, creative, and scholarly work is strengthening the reputation of the University of Windsor nationally and internationally.

- 5. **Internal Research Chairs:** The number of CRCs is based on the last three years of Tri-Council funding. While we expect to increase the number of CRCs as our Tri-Council funding increases, the limited number of research chairs limits our ability to increase research, enhance reputation, and build community and industry partnerships. In response and in consultation with the Deans, an Internal Research Chairs program (following 12:10a of the WUFA CA) is being developed to establish Internal Research Chairs in each Faculty. More information about the Internal Research Chairs program will be presented at a future Senate meeting.
- 6. **Research Centres and Institutes**: As per Senate Bylaws, Senate-approved Research Centres and Institutes are to be reviewed by the OVPRI every five years. Reviews have been initiated for the Cross-Border Institute (CBI) and the Institute for Diagnostic Imaging Research (IDIR), with reviews for the remaining Centres and Institutes being initiated in 2023. The OVPRI is also working with the Institute Directors to ensure that the Centres are aligned to the new budget model, and that the reputation of the Research Centres and Institutes is effectively leveraged for recruitment and growth of research, scholarship, and creative activity.
- 7. **Communication Strategy:** In collaboration with the Office of Public Affairs and Communication, we are developing a communication strategy for effective and timely promotion of research, scholarship, and creative activity. This is essential for enhancing the reputation of the University of Windsor and establishing community and industry partnerships that support faculty research and provide experiential learning opportunities for students.
- 8. **Research and Academic Partnership with WECHU:** In support of the WECHU move to campus, workshops have been established to identify opportunities for public health research and the establishment of a Master of Public Health and other aligned graduate and undergraduate programs.
- 9. **Research Greenhouse:** A new and exciting partnership with Horteca provides University of Windsor faculty and students an opportunity to conduct research and participate in work-integrated learning in a 2-acre commercial greenhouse. This partnership is being presented at the Ontario Greenhouse Conference and opportunities to learn more about research and academic opportunities at the greenhouse will be announced soon.