

## The Special Meeting of Environment Faculty Council, May 17, 2023

**Rob de Loë**  
**Associate Dean, Research <sup>1</sup>**

### **Research Activities**

**Reporting Period: April 1, 2022, to March 31, 2023**

#### **Purpose**

The activities of the Associate Dean Research (ADR), including the ADR's office, are directed towards advancing and supporting research in the Faculty of Environment at the University of Waterloo. This report offers an overview of the research funding that was secured by professors in the Faculty of Environment during the award reporting period of April 1, 2022 to March 31, 2023. Some highlights from the past year and an overview of the key research activities of the ADR and ADR's office are also mentioned.

#### **Faculty Research Funding**

Research funding is critical for supporting our research costs, graduate students, and infrastructure needs. The number of proposals submitted during the reporting period is 147. Per capita, this averages 1.62 submissions per research-stream faculty member.

Total funding for 2022/23 was slightly more than the previous two years (\$12,655,331 in 2020/21, and \$13,113,927 in 2021/22) (Figure 1).

**Figure 1: Faculty of Environment Overall Funding (Last Five Years)**



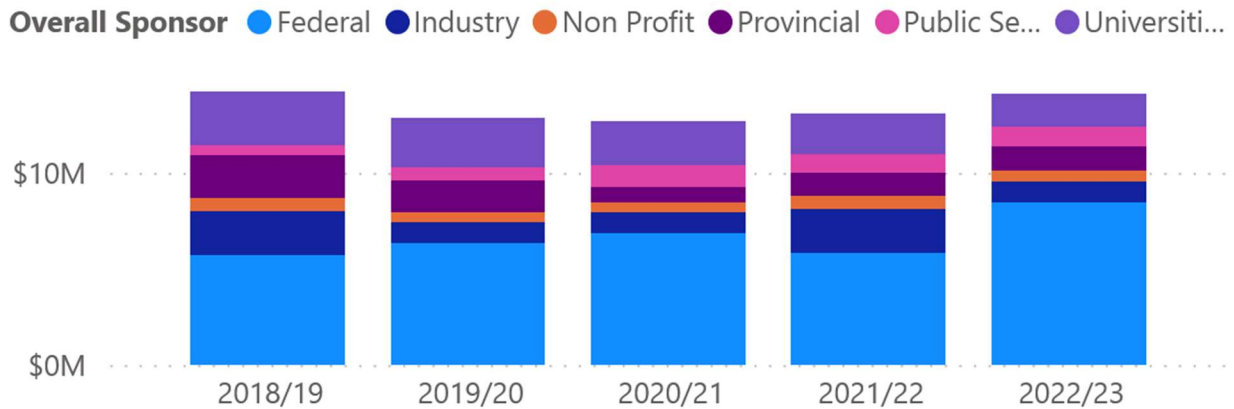
<sup>1</sup> Rob de Loë is ADR from January 1, 2023. Amelia Clarke served as ADR from April 1, 2022 to December 31, 2022.

Funding sources were diverse, with the Tri-Agencies comprising the largest source. The total for the period was \$14,124,851, broken down as follows:

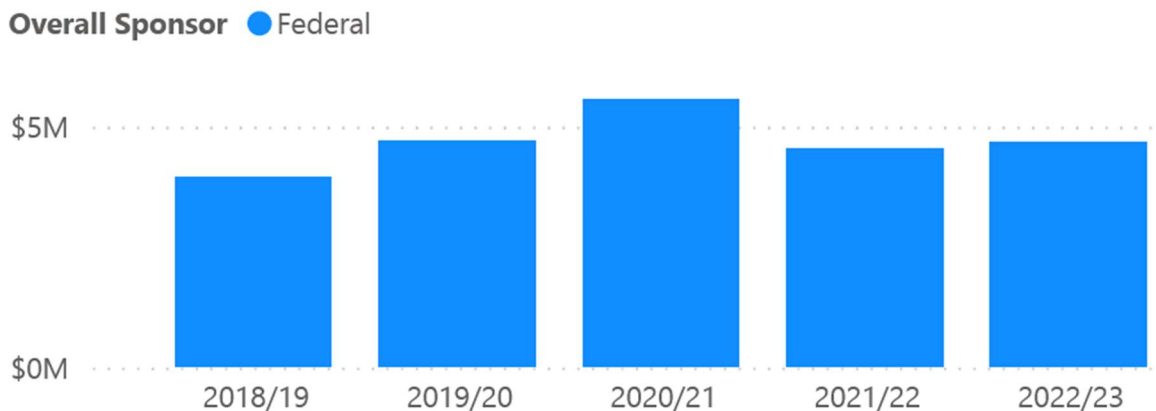
- Federal, excluding Tri-Agency: \$3,782,590;
- Tri-Agency: \$4,670,718;
- Provincial \$1,244,119;
- Industry \$1,063,525;
- Non-Profit: \$591,421;
- Other (e.g., NGOs, local government, MITACs, other universities): \$2,772,478.

The proportion of funding in 2022/23 derived from federal government sources was larger than in the previous four years (Figure 2). However, this growth was not due to a substantial increase in Tri-Agency success (Figure 3). Instead, this represents considerable success in winning funds from programs such as the Climate Action and Awareness Fund (Environment and Climate Change Canada); FedDev; IDRC; and the Canadian Space Agency.

**Figure 2: Funding by Source Type (Last Five Years)**



**Figure 3: Federal Tri-Agency Funds (Last Five Years)**



Per capita, the 91 Faculty of Environment professors (based on Assistant, Associate and Full Professors, but not Lecturers) were awarded an average of \$155,185 for the reporting period.

## Selected Funding highlights

Currently, there are eight Canada Research Chairs in the Faculty of Environment, four University Research Chairs and one University Professor (Jennifer Clapp). One additional NSERC Tier 2 CRC application was submitted during the period (decision pending).

As illustrated in the previous section, Faculty of Environment researchers are applying for and winning major grants from the Tri-Councils, governments, non-government organizations and industry. Space does not permit identifying all successful projects and project leaders. Therefore, only selected major examples are noted here:

- Several faculty led multi-million-dollar projects that secured funding from Environment and Climate Change Canada under the Climate Action and Awareness Fund (Amelia Clarke, Maria Strack, Vanessa Schweizer and Michael Drescher). Many other Faculty of Environment researchers are involved in these projects as co-investigators.
- WISA, through the leadership of Suzanne Kearns, secured \$12,826,000 in funding as part of the FedDev Ontario Aerospace Regional Recovery Initiative in southern Ontario. Using a competitive process, 39 of 84 proposals, involving 88 researchers in all six UW faculties, were funded from this grant.
- Brent Doberstein is the Faculty of Environment's representative on Flood Impacts, Carbon Pricing, and Ecosystem Sustainability (FINSCAPES), a \$15 million Global Affairs Canada project led from the Faculty of Math.
- During the reporting period, ENV faculty members led large projects that secured funds from a host of government and non-government sources. Examples include Dustin Garrick (New Frontiers in Research Fund); Merrin Macrae (NSERC Alliance); and Susan Elliott (IDRC).
- We have had continued success in major individual Tri-Council Awards with new funding being granted across NSERC and SSHRC base funding programs (Discovery Grants for NSERC, and Insight and Insight Development grants for SSHRC).

## Award Winners

Marie-Claire Cordonier Segger became a Fellow of the Royal Society of Canada (RSC).

## Progress on the Faculty of Environment's Strategic Plan

Goal 2 in our strategic plan seeks to achieve increased impact through national and global leadership in environmental and sustainability research. Our commitments, and some related progress, are linked to the following six priorities:

1. *Be at the forefront of defining and researching emergent environmental and sustainability problems that require an interdisciplinary approach.* The Faculty expanded research capacity in climate, water and future cities through new hires; expanded programming through the research centres; and led and/or participated in a number of large grant applications.
2. *Enhance inter-Faculty research collaborations, especially in areas that align with the University's strategic priorities.* Inter-faculty collaboration in Environment occurs through the leadership of research centres and institutes, and through the efforts of individual faculty. During the

reporting period, the Waterloo Climate Institute and the Waterloo Institute for Sustainable Aeronautics have been especially successful at pulling together researchers from across UW's six faculties.

3. *Ensure a faculty and research staff complement that supports interdisciplinarity in research and teaching.* The Faculty strengthened its interdisciplinary research capacity through nominations for an NSERC CRC and a CERC appointments.
4. *Collaborate with external partners in shaping our research agenda and in co-creating and mobilizing knowledge.* The Intact Centre on Climate Adaptation continued its successful collaborations with industry and government partners and made several important contributions to flood risk policy in Canada. Faculty members strengthened connections and knowledge mobilization capacity with external partners through successful MITACS applications, and numerous industry- and government-funded awards.
5. *Develop and implement an internationalization strategy that prioritizes partnerships and participation that increases the impact of our work.* Projects such as Vulnerability to Viability (V2V) led by Prateep Nayak, and FINSCAPES, strengthened the Faculty of Environment's capacity and expertise for international research partnerships.
6. *Contribute meaningfully to the achievement of the United Nations Sustainable Development Goals (SDGs) in Canada and globally.* The Faculty of Environment continues to play an important role in the Sustainable Development Solutions Network that is hosted by the University of Waterloo. At the same time, a host of projects led by and involving Environment researchers support the SDGs.

## **Research Centres and Institutes**

Research-focused centres and institutes are important vehicles for focusing research capacity, strengthening cross-campus collaboration, and building our interdisciplinary strength. The Faculty of Environment *leads* key University of Waterloo centres and institutes, including the Waterloo Climate Institute, the Intact Centre on Climate Adaptation, and the Waterloo Institute for Sustainable Aeronautics. At the same time, Faculty of Environment researchers are key participants and leaders in major research centres and institutes such as the Water Institute and the Waterloo Institute for Sustainable Energy (WISE). Environment faculty have also created research groups that, while not Senate-approved, are foci for research collaboration. Examples include the Environmental Change and Governance Group, the Waterloo Food Issues Group, Geographies of Health in Place, and the Canadian Cryospheric Information Network/Polar Data Catalogue.

## **Key Activities of the Associate Dean of Research (ADR) and the Faculty Research Coordinator (FRC)**

Some of the main activities of the ADR and FRC are briefly described below:

**Electronic Coversheet:** Following up from the last report, the new Electronic Coversheet (EC) Phase 2 was launched with enhanced features and was favorably received by all researchers. The FRC continues

to provide suggestions and support to the Office of Research, assisting with the EC process flow to ensure continued efficiency, while adhering to the University's guidelines and policies.

**Support and approve research grant applications:** The ADR and the FRC ensure research proposals are compliant with respect to academic content and financial budgeting. All applications and funding received are tracked in a database. The FRC supports proposal submissions by faculty members and facilitates discussions with the Office of Research when necessary. Requests for in-kind or cash support for proposals, and related letters of support, are also handled by the FRC and ADR.

**Support for the Research Proposal Process:** The FRC supports the research proposal process by providing information to researchers about new funding opportunities through weekly notices. The FRC serves as the key contact for all faculty members, responding to research-related questions, and facilitating the research process between the Office of Research and the Faculty. The FRC also manages the Research Funding section on the Faculty's webpage, ensuring guidelines and procedures, research related information, forms, and relevant web links are always up to date. In addition, the FRC tracks and maintains several research related data spreadsheets to enable monitoring and reporting.

**Representation on University governance committees:** The ADR represents the Faculty of Environment on the Senate Graduate and Research Council, the Research Leaders Council, and the Research Operations Committee. The FRC is the staff representative on the University's Waterloo Awards Committee (WAC).

**Representation on the Faculty of Environment governance committees:** The ADR participates in the Faculty Council, the Faculty's Administrative Committee, and the Faculty Leadership Information Exchange. In the last fiscal year, the ADR also chaired the FACA process for the Canada Excellence Research Chair (CERC) nomination and served on the Ad Hoc EDI-J Committee.

## **Acknowledgements**

The ADR would like to thank Sandra Ramautarsingh the Faculty Research Coordinator (FRC), who continues to provide valuable and excellent administrative and communication support to the ADR and all Faculty of Environment faculty members. The ADR would also like to acknowledge all professors and other researchers in the Faculty of Environment and thank them for another successful year. Their ongoing efforts enable the Faculty to engage in impactful research, support meaningful sustainability progress and strengthen the Faculty's overall performance.

Sincere appreciation is also extended to those who have participated in research-related committees. These include Drs. Susan Elliott, Neil Craik, Merrin Macrae, Andrea Collins, and our staff representative, Sandra Ramautarsingh who serves on the University's Waterloo Awards Committee (WAC). Also included are those who served on ad hoc committees for CFI, CFREF, CERC, etc.