

University of Waterloo
SENATE
Notice of Meeting

Date: Monday 20 September 2021
Time: 3:30 p.m.
Place: Microsoft Teams Videoconference

OPEN SESSION		
3:30	<p><u>Consent Agenda</u> Motion: To approve or receive for information by consent items 1-6 below.</p> <ol style="list-style-type: none"> 1. Minutes of the 21 June 2021 Meeting 2. Reports from Committees and Councils <ol style="list-style-type: none"> a. Executive Committee b. Graduate & Research Council 3. Report of the President <ol style="list-style-type: none"> a. Recognition and Commendation 4. Report of the Vice-President, Academic & Provost <ol style="list-style-type: none"> a. Call for Nominations 5. Reports from the Faculties 6. Committee Appointments <p><u>Regular Agenda</u></p>	<p>Decision</p> <p>Information Information</p> <p>Information</p> <p>Information</p> <p>Information</p> <p>Decision</p>
3:35	7. Business Arising from the Minutes	
3:40	8. Reports from Committees and Councils <ol style="list-style-type: none"> a. Executive Committee 	Decision
3:45	9. Report of the President	Information
4:05	10. Q&A Period with the President	Information
4:15	11. Report of the Vice-President, Academic & Provost <ol style="list-style-type: none"> a. Fall Reading Week 	Decision
4:25	12. Report of the Vice-President, Research & International	Information
4:30	13. Other Business	
4:35	BREAK	
CONFIDENTIAL SESSION		
4:40	14. Minutes of the 21 June 2021 Meeting	Decision
4:45	15. Business Arising from the Minutes	
4:50	16. Report of the President	Information

4:55

17. Other Business

KJJ/dg
13 September 2021

Karen Jack
University Secretary
Secretary to Senate

University of Waterloo
SENATE
Minutes of the Monday 21 June 2021 Meeting

Present: John Abraham, Nasser Mohieddin Abukhdeir, Sheila Ager, Jean Andrey, Mike Ashmore, Sandra Banks, Michael Beauchemin, David Billedeau, Anne Bordeleau, Dan Brown, Carmen Bruni, Joan Coutu, Neil Craik, Lori Curtis, Kristine Dalton, Charmaine Dean, David DeVidi, Catherine Dong, Benjamin Easton, Paul Fieguth, Wendy Fletcher, Cindy Forbes, George Freeman, Martha George, Mark Giesbrecht, Moira Glerum, Onurcan Gokkaya, David Ha, Feridun Hamdullahpur (chair), Kevin Hare, Dennis Huber, Natalie Hutchings, Karen Jack (secretary), Martin Karsten, Achim Kempf, Veronica Kitchen, Christiane Lemieux, Robert Lemieux, Xianguo Li, Lili Liu, Kristina Llewellyn, Ellen MacEachen, Blake Madill, Peter Meehan, Samantha Meyer, Ian Milligan, Zoran Miskovic, Graham Murphy, Richard Myers, Cathy Newell Kelly, Erin O'Connell, Daniel O'Connor, Luke Potwarka, William Power, James Rush, Naima Samuel, Emma Schuster, Joanne Shoveller, Siv Sivaloganathan, Siva Sivoththaman, Matthew Schwarze, Chao Tan, Sharon Tucker, Graeme Turner, Twesh Upadhyaya, Diana Vangelisti, Cristina Vanin, Johanna Wandel, Paul Ward, Mary Wells, Stan Woo, Nancy Worth, Clarence Woudsma, En-Hui Yang

Guests: Jean Becker, Kathy Becker, Sonya Buffone, Aldo Caputo, Donna Ellis, Aiman Fatima, Barbara Forrest, Brian Forrest, Mike Grivicic, Candace Harrington, Narveen Jandu, Suzanne Kearns, Andrea Kelman, Meagan Lai, Maryann Latifpoor-Keparoutis, Laura McDonald, Nick Manning, Norah McRae, Dina Meunier, Mary Power, Cynthia Richard, Ian Rowlands, Nadia Singh, Emily Schroeder, Daniela Seskar-Hencic, Alisa Sivak, Allan Starr, Kerry Stryker, Brandon Sweet, Sean Thomas, Ian VanderBurgh

Absent: Dominic Barton*, Lisa Bauer-Leahy, Robyn Clarke, Kelly Grindrod, Jennifer Kieffer*, Alysia Kolentis*, Beth Namachchivaya*, Oudy Noweir*, Troy Osborne, Neil Randall*, Marcus Shantz*, Bruno Tremblay*, Samer Zu'Mot

*regrets

OPEN SESSION

CHAIR'S REMARKS

The chair reminded members that a revised report for item 8.a., Graduate & Research Council was distributed earlier in the day to include two omitted motion. The chair offered thanks to Dan Brown for his service and for whom today's meeting is his last as a senator. The chair advised that Lori Curtis is succeeded Dan Brown as FAUW president.

Consent Agenda

Senate heard a motion to approve or receive for information the items on the consent agenda.

Andrey and Brown.

1. MINUTES OF THE 17 MAY 2021 MEETING

Senate approved the minutes of the meeting.

2. REPORTS FROM COMMITTEES AND COUNCILS

Graduate & Research Council. Senate received the report for information.

Undergraduate Council

New Academic Plan and Related Inactivations

Faculty of Mathematics, Applied Mathematics. Senate heard a motion to approve the creation of an Applied Mathematics Engineering specialization with three themes and inactivate the three separate Applied Mathematics Engineering specializations created in error as of 1 September 2019.

Senate received the remainder of the report for information.

3. REPORT OF THE PRESIDENT

Recognition and Commendation. Senate received the report for information.

4. REPORTS FROM THE FACULTIES

Senate received the reports for information.

5. COMMITTEE APPOINTMENTS

Senate heard a motion to approve the following appointments:

- **Executive Committee:** Kristina Llewellyn (Renison University College) as the Affiliated and Federated Institutions of Waterloo (AFIW) faculty representative, replacing Cristina Vanin, term to 30 April 2022.
- **Finance Committee:** Cristina Vanin (St. Jerome's University) as the Affiliated and Federated Institutions of Waterloo (AFIW) faculty representative, term to 30 April 2022.

The question was called and carried unanimously.

Regular Agenda

6. BUSINESS ARISING FROM THE MINUTES

The chair advised that the Senate Executive Committee approved the roster of graduands at their meeting on 7 June 2021. He also spoke to how much he enjoyed this year's ceremonies which were so well executed over the past weekend. He thanked everyone involved for an excellent celebration of our graduates.

7. PRESENTATION – DAN BROWN, PRESIDENT OF THE FACULTY ASSOCIATION OF THE UNIVERSITY OF WATERLOO

Brown walked senators through his presentation, highlighting: FAUW's role, its organizational structure, the AF&T committee, FAUW at Senate, and current priorities (policy revisions, pandemic issues). He announced the 2021 Hagey Lecture on 27 October by Professor Mark Jaccard of Simon Fraser University titled "Emergency: The Citizen's Guide to Climate Success". In discussion, Hamdullahpur agreed with Brown's comments about Waterloo's collegiality, and he offered his thanks for FAUW's diligent and principled work and respectful discourse over the years. A round of applause followed.

8. REPORTS FROM COMMITTEES AND COUNCILS

Graduate & Research Council

Senate heard the first two motions together.

Authority for Awarding Posthumous Degrees. Senate heard a motion to delegate authority to the co-chairs of Senate Graduate & Research Council to approve posthumous degrees and to report on such activity by ensuring these individuals are included in the lists of graduands that Senate approves in June and October each year.

Academic Calendar Changes. Senate heard a motion to approve new text for Posthumous Degrees and Certificates, effective spring term 2021, as presented at Attachment 1.

Casello and Murphy.

In discussion: circumstances in which a certificate is offered, and, confirmation that recipients will be reported to Senate in the lists of graduands produced in June and October. The question was called and the motion carried unanimously.

New Institute, Waterloo Institute for Sustainable Aeronautics. Senate heard a motion to approve the establishment of the Waterloo Institute for Sustainable Aeronautics, as presented at Attachment 2. This proposed Institute would be a Faculty-level Institute governed by the Faculty of Environment.

Casello and Andrey. Carried unanimously.

The president offered congratulations to Andrey and the Faculty of Environment for the excellent and timely initiative.

Undergraduate Council Academic Plan Changes

Faculty of Mathematics, Applied Mathematics. Senate heard a motion to approve the proposed changes to the Applied Mathematics Minor, as outlined below, effective 1 September 2022.

Devidi and Giesbrecht. Carried unanimously.

Faculty of Mathematics, Computational Fine Arts Specialization

Senate heard a motion to approve the proposed changes to the Computational Fine Art Specialization as outlined below, effective 1 September 2022.

Devidi and Giesbrecht. Carried unanimously.

9. REPORT OF THE PRESIDENT

The president provided an update on recent activities, including: the recent provincial cabinet shuffle resulting in new MCU minister Jill Dunlop, likely pending changes to quarantine requirements by the federal government, the new on-campus rapid screening site, the recent Town Hall, and the fall term. In response to a question, Newell Kelly advised that the University will have a better sense of fall in-person numbers over the summer. She suggested that some insight can be gleaned from the number of course offerings available in the fall which will be in-person, or have an in-person component. Such offerings comprise 41% of undergraduate courses, and 56% of graduate courses.

Hamdullahpur concluded his remarks with an expression of thanks to Senators for their shared responsibility for the academic enterprise of the University. He spoke of his honour in chairing this integral part of Waterloo's bicameral governance and of his certainty that discussions by this body, even when have been disagreements, have been tremendously productive and have assuredly ensured the University's well-being. A round of applause followed.

10. Q&A WITH THE PRESIDENT

There were no questions.

11. REPORT OF THE VICE-PRESIDENT, ACADEMIC & PROVOST

Assessment of Teaching Project Updates. DeVidi provided a general update on the four components of the project: the Student Course Perception Project; the Assessment of Graduate Supervision Project, Complementary Teaching Methods Project (CTAPT), and the Holistic Assessment of Teaching and Institutional Teaching Priorities Project.

DeVidi invited Sonya Buffone to update senators specifically on the Holistic Assessment of Teaching and Institutional Teaching Priorities. Speaking to her slides, Buffone discussed teaching effectiveness, including; work done to date; what's being considered; next steps. DeVidi invited Ian VanderBurgh to update senators specifically on CTAPT. Speaking to his slides, VanderBurgh provided an update on the team's work. Senators heard about: the phases, representation in the teams, and goals; aims and principles; the two-pronged approach under consideration; next activities and steps. In discussion: the value and impact of the variety of options being considered; ongoing discussions with FAUW's equity committee; departments and Faculties retain discretion to select appropriate tools and processes, with the work of the teams' and task forces' directed at overarching principles; the various supports available when areas for improvement are identified, including advice that some further guidance will be ready soon; a suggestion that measuring whether students are learning is needed, and a discussion of the challenges of doing this; perceptions of risks vs rewards.

12. REPORT OF THE VICE-PRESIDENT, RESEARCH & INTERNATIONAL

Dean drew members' attention to the GEDI partnership and the distinguished award winners in her report which was received for information.

13. OTHER BUSINESS

Representatives of several constituencies offered thanks and congratulations to Hamdullahpur as his term comes to a conclusion. In turn, George, Beauchemin, Fletcher, Easton, Samuel, and Freeman offered remarks upon the president's last meeting. A lengthy round of applause followed. There was no other business.

Senate convened in confidential session.

5 July 2021

Karen Jack
University Secretary

CONFIDENTIAL SESSION

The confidential minutes have been removed

The meeting was adjourned at 5:08 p.m.

5 July 2021

Karen Jack
University Secretary

University of Waterloo
SENATE EXECUTIVE COMMITTEE
Report to Senate
20 September 2021

This report is submitted following the committee's deliberations in August 2021.

FOR INFORMATION

On 12 August 2021, the following motion was approved on behalf of Senate. The rationale for the change is included for Senators' awareness. [Secretary's note: circumstances in Ontario may have since changed such that ceremonies as conceived in August may not occur; the date remains approved and available in case they can proceed.]

Motion: To approve on behalf of Senate the addition of Sunday, October 24 as a date for convocation ceremonies for the Fall 2021 term.

Rationale: Currently, the Senate-approved dates for Fall 2021 Convocation are Friday, October 22 and Saturday, October 23. The best information the University has right now regarding public health recommendations for gatherings in September and October suggests that indoor group sizes be limited to 1,000 people and that pre-registration occur.

The University is eager to welcome its graduands to an in-person Convocation ceremony this Fall and has developed plans for a set of modified ceremonies in order to do so in a safe and welcoming manner. Based on estimates of the number of potential graduands, and the normal "show ratios" for participation in Convocation, estimated Faculty and program splits will allow for approximately 300 students per ceremony, with a limit of two guests for each graduand. This breakdown requires that the University host seven Convocation ceremonies, which will require a third day.

Vivek Goel
Chair, Senate Executive Committee

University of Waterloo
SENATE GRADUATE & RESEARCH COUNCIL
Report to Senate
20 September 2021

Senate Graduate & Research Council met on 14 June 2021 and agreed to forward the following item to Senate for information as part of the consent agenda.

Further details are available at: <https://uwaterloo.ca/secretariat/committees-and-councils/senate-graduate-research-council>

FOR INFORMATION

CURRICULAR SUBMISSIONS

On behalf of Senate, council approved new courses, course revisions, and minor program revisions for the Faculty of Environment (geography and environmental management), Faculty of Health (kinesiology and health sciences, recreation and leisure studies, school of public health sciences), and Faculty of Science (pharmacy).

/mh kw Jeff Casello
Associate Vice-President, Graduate Studies and
Postdoctoral Affairs

Charmaine Dean
Vice President, Research & International

University of Waterloo
SENATE
Report of the President
20 September 2021

FOR INFORMATION

Recognition and Commendation

Honours relating to Developing Talent for a Complex Future

The **Certificate in University Teaching (CUT)** program provides a comprehensive teacher development experience that is open to PhD students at the University of Waterloo. Completion of the program is recognized by a certificate issued by Graduate Studies and Postdoctoral Affairs and listed on the student's transcript. Each year, the Centre for Teaching Excellence and Graduate Studies and Postdoctoral Affairs award one CUT program participant in recognition and celebration of effort and reflection that go above and beyond the program requirements.

The **2021 CUT Award has been awarded to Justin Toth**, a PhD student in the Department of Combinatorics and Optimization. The award recognizes Justin's strong commitment to his development as a university instructor.

(adapted from the [*Daily Bulletin*, 2 June 2021](#))

Effective May 1, 2005, in accordance with the 2003 Faculty Salary Settlement, the University of Waterloo established an Outstanding Performance Fund to reward faculty members for outstanding contribution in teaching and scholarship. James Rush, vice-president, academic & provost, announced the Outstanding Performance Award recipients for 2020.

Faculty of Arts: Dillon Browne; Angela Carter; Valerie Cecile Dusillant-Fernandes; Andrew Faulkner; Jean Guillaume Forand; Doreen Fraser; Jonathan Fugelsang; Owen Gallupe; Jasmin Habib; Dorothy Hadfield; Logan MacDonald; Ian Milligan; Adam Molnar; Aimee Morrison; Lennart Nacke; Marcel O'Gorman; Evan Risko; Susan Roy; Jennifer Schulenberg; Mikal Skuterud; Christopher Taylor; Kanstantsin Tsedryk; Bojana Videkanic; Katherine White; Dinghai Xu.

Faculty of Engineering: Lisa Aultman-Hall; Anne Bordeleau; Kyle Daun; Daniel Davison; Cecile Devaud; Ramadan El Shatshat; Vijay Ganesh; Wojciech Golab; Jason Grove; Jean-Pierre Hickey; Christopher Holt; Jennifer Howcroft; Nadine Ibrahim; Fiona Lim Tung; David Mather; Robert McKillop; Tizazu Mekonnen; Andrew Morton; Kshirasagar Naik; Muhammad Shah; Chao Tan; Bryan Tolson; William Wong.

Faculty of Environment: Jennifer Clapp; Amelia Clarke; Christopher Fletcher; Heather Mary Hall; Merrin Macrae; Prateep Nayak; Erin O'Connell; Katie Plaisance.

Faculty of Health: Leeann Ferries; Lora Giangregorio; Bryan Grimwood; Scott Leatherdale; Carrie McAiney; Samantha Meyer; Chris Vigna.

Faculty of Mathematics: Byron Becker; Jason Bell; Eric Blais; Raouf Boutaba; Lori Case; Jan Marius Hofert; Ihab Ilyas; Mohammad Kohandel; Pengfei Li; Anna Lubiw; Kirsten Morris; Alexander Peter Nelson; Jennifer Nelson; Pascal Poupart; William Slofstra; Nathaniel Stevens; Ian VanderBurgh; Chengguo Weng; Dan Wolczuk; Peter Wood; Karen Yeats.

Faculty of Science: Michael Balogh; David Blowes; Lisa Christian; Vivian Dayeh; Andrew Charles Doxey; David Edwards; Steven Forsey; Tammy Labreche; Brenda Lee; Richard Marta; Elizabeth Meiering; Linda Nazar; Marcel Pinheiro; Colby Michael Steelman; Nancy Waite
(adapted from the [Daily Bulletin, 4 June 2021](#))

The **Governor General's Gold Medal**, one of the highest honours in academia, was awarded to two exceptional University of Waterloo graduate students. **Tejinder Singh**, who graduated last fall from the Faculty of Engineering, received the award for highest standing in a doctoral program. **Sara Leanne Wyngaarden**, who graduated this spring with an MSc in Health and Health Systems, received the award for highest standing in a master's program. Awards like this allow our community to celebrate the impactful research and scholarly excellence of outstanding students.
(adapted from the [Daily Bulletin, 18 June 2021](#))

Shayan Majidy, a PhD candidate in the Department of Physics and Astronomy, has earned the prestigious **Vanier Scholarship** award for his research achievements and his work in quantum computing education. Majidy, currently studying under Professor Raymond Laflamme, and also a member of the Institute of Quantum Computing (IQC), has been interested in two questions during his PhD: what are the limitations to our current tests of quantum behaviour; and can we gain a thermodynamic advantage from quantum mechanics? (...)

The Vanier Scholarships were developed by the Natural Sciences and Engineering Research Council (NSERC) to attract and retain world-class doctoral students worldwide and establish Canada as a global centre of excellence in research and higher learning. Vanier scholars are chosen based on their academic excellence, research potential, and leadership qualities. Each successful candidate will receive \$50,000 annually for three years, with an additional \$5,000 to \$10,000 annually from the University of Waterloo's President's Graduate Scholarship.
(adapted from the [Daily Bulletin, 27 July 2021](#))

Joy Hutchinson, a Public Health and Health Systems doctoral student, has been awarded a prestigious **2021 Vanier Canada Graduate Scholarship**. The award is designed to strengthen Canada's ability to attract and retain world-class doctoral students and establish Canada as a global centre of excellence in research and higher learning. Vanier scholars demonstrate a high standard of academic excellence, research potential and leadership. (...)

Hutchinson's doctoral research, "Advancing novel methods for characterizing dietary patterns and their relationships with markers of inequity in Canada," will lead to a greater understanding of the relationship between dietary patterns and markers of inequity and, ultimately, inform policy with data-backed research that can improve the lives of Canadians. Her approach to looking at enormous datasets has the potential to identify relationships that traditional methods of data analysis may not uncover. It will use machine learning, or more specifically, deep learning, where artificial networks have the ability to learn from vast amounts of data.

As a Vanier Scholar, Hutchinson will receive \$50,000 per year for three years during her doctoral studies.
(adapted from the [Daily Bulletin, 28 July 2021](#))

The **Faculty of Mathematics Research Office** recently announced its 2021 recipients of the **Golden Jubilee Research Excellence Award**. **Eduardo Martin-Martinez**, an associate professor in applied mathematics, and **Sophie Spirk**, an assistant professor in combinatorics and optimization, were this year's winners. The Golden Jubilee Research Excellence Award recognizes outstanding research

contributions from early and mid-career faculty members. It may be awarded based on a faculty member's overall research program or based on a single, highly influential paper.

Eduardo Martin-Martinez's research focuses on relativistic quantum information. He previously won the John Charles Polanyi Prize for Physics and the Ontario Early Researcher Award. (...)

Sophie Spirkl's research focuses on geometric and structural graph theory. She previously won the Charlotte Elizabeth Procter Fellowship from Princeton University. Spirkl and a team of co-investigators have recently made a significant breakthrough on the Erdős-Hajnal conjecture, with promising indications of further progress coming.

(adapted from the [Daily Bulletin, 29 July 2021](#))

Dr. Lennart Nacke, associate professor of Human-Computer Interaction (HCI) and Director of the HCI Games Group, **was awarded \$350,000 from the Canadian Institutes of Health Research (CIHR)** in the Active and Assisted Living Program as a Canadian partner to fund EXERGETIC, a research program aiming to develop innovative digital solutions that utilize exercise games (Exergames) to improve physical and cognitive functions. EXERGETIC researchers will create exergame training experiences in an ecologically valid and safe setting for geriatric populations, called the ExerCube.

As part of EXERGETIC, Dr. Nacke and postdoctoral fellow **Dr. Katja Rogers** will work with Sphery AG to build an ExerCube at the Stratford School. The ExerCube is an immersive fitness game environment that combines innovative software and hardware design with state-of-the-art training concepts. When working out in the ExerCube, players are surrounded by three walls that serve as projection screens and haptic interfaces for energetic bodily interactions.

(adapted from the [Daily Bulletin, 3 August 2021](#))

The University of Waterloo is building out a pipeline for health innovation in Southwestern Ontario thanks to a **\$10-million investment from FedDev Ontario**.

Of the \$10 million, \$6.5 million is allocated to **Velocity**, the University of Waterloo's flagship entrepreneurship program. The funding will allow Velocity to continue providing critical support for early-stage startups and further the exponential growth of the region's tech ecosystem.

(adapted from the [Daily Bulletin, 11 August 2021](#))

UWaterloo startups rank second in North America for investor ROI. Investors looking for higher returns might be wiser to look to Waterloo companies than ventures started by alumni at Stanford, MIT and Harvard.

A new report from a U.S. platform for investors and startups has found that ventures founded by Waterloo alumni produce a higher-than-expected return on investment than their counterparts at the three American institutions.

The data from AngelList Venture show Waterloo startups generate outsized ROI for their investors, with an average excess markup rate 13 per cent higher than the baseline at 12 and 36 months.

(adapted from the [Daily Bulletin, 23 August 2021](#))

Honours relating to Advancing Research for Global Impact

Congratulations to **Laura Neary** and **Hannah Thibault** who have been chosen as recipients of the **2021 Weston Family Awards in Northern Research**.

Funded by the Weston Family Foundation (formerly The W. Garfield Weston Foundation), these annual awards are some of the most prestigious in the country for students pursuing a master's degree, a doctoral degree or postdoctoral fellowship. Laura and Hannah are both graduate students working with Professor Roland Hall in the Department of Biology, studying environmental processes in Northern Canada to understand the effects of stresses on the lakes and wetlands of the regions. (adapted from the [Daily Bulletin, 12 July 2021](#))

The Water Institute is pleased to announce that two research teams have been awarded funding in the recent 2021 seed grant competition. The Water Institute's seed grant program was initiated in 2014 to stimulate interdisciplinary collaboration, international partnerships, and to encourage the development of research proposals that tackle increasingly complex global water issues.

This year's seed grant projects include diverse initiatives and collaborators:

Supporting decisions about groundwater extraction for irrigation with modern economic risk assessments

- *Primary Applicant:* **Andrea Brookfield**, Department of Earth and Environmental Sciences. *Co-Applicants:* **Margaret Insley**, Department of Economics; **Chengguo Weng**, Department of Statistics and Actuarial Science
- The team will explore the application of risk management strategies developed in the finance literature, in particular the use of conditional value at risk (CVAR), to decisions about groundwater extraction for agriculture. More specifically, the seed grant will be used to develop a decision-making framework using CVAR to characterize the risk-return trade-off of groundwater extraction in an agricultural context. The team will develop this framework focusing on two case studies: 1) irrigation in the severely depleted High Plains Aquifer in Kansas; and 2) expanding irrigation in the Saskatchewan River watershed in the Canadian Prairies.

Data fusion and analysis to predict overland flow flood risk: establishing a proof of concept

- *Primary Applicant:* **Derek Robinson**, Department of Geography and Environmental Management. *Co-Applicants:* **Bruce MacVicar**, Department of Civil and Environmental Engineering ; **Chul Min Yeum**, Department of Civil and Environmental Engineering; **Michael Drescher**, School of Planning
- The team will use the seed grant to support work being undertaken by the City of Kitchener to restore Montgomery and Shoemaker creeks, which will include "daylighting" and reconfiguring water channels, installing new recreation areas, and, in collaboration with a local NGO (Reep Green Solutions), implementing a major educational and assistance campaign to encourage property owners to implement precipitation catchment features. The proposed seed grant will be used to 1) create a proof of concept showcasing how street-view data can be used to identify locations of flood risk, 2) collect baseline data prior to the modification of both the natural and human system, 3) identify critical properties for stormwater retention features, and 4) develop a working relationship with potential partners for future proposal collaboration. (adapted from the [Daily Bulletin, 16 July 2021](#))

Plinio Morita, a professor in the School of Public Health Sciences, has received an **Early Researcher Award (ERA)** from the Ontario government for his project, Mobilizing IoT-Based Health and Environmental Data for Increased Public Awareness. He was one of 11 recipients at the University of Waterloo. Valued at \$140,000, the award goes to the province's most promising researchers in the first five years of their academic careers. The ERA will support Morita's recent research project, which focuses on improving access to real-time air pollution and heatwave surveillance data collected using IoT technologies. (...)

The Ontario government is providing more than \$70.4 million through the ERA to assist research and innovation across Ontario colleges, universities, research institutions and research hospitals. The ERA support will allow Morita to build a research team and develop technology using user-centered design, participatory co-design, rapid analytics and machine learning. The awards were announced earlier this summer. (adapted from the [*Daily Bulletin*, 20 August 2021](#))

Cheriton School of Computer Science **Professor Eric Blais** is one of nine researchers at the University of Waterloo to receive funding from the Ontario Ministry of Colleges and Universities through the Early Researcher Awards program. Professor Blais, whose research interests span theoretical computer science with a special focus on sublinear-time algorithms, randomness in computation, and complexity theory, was awarded \$140,000 in funding through the ERA program for his proposal titled "Sublinear-time algorithms for high-dimensional sets." This funding amount is matched by an additional \$50,000 by the University of Waterloo, bringing the total to \$190,000. (...)

The research made possible through ERA funding will be structured to encourage collaboration among graduate students in the Cheriton School of Computer Science's algorithms and complexity group. In particular, the training and guidance provided by Professor Blais and other faculty members in the algorithms and complexity group will enable a doctoral candidate to develop mentoring skills while working with two master's students and several undergraduate researchers. (adapted from the [*Daily Bulletin*, 24 August 2021](#))

University **Professor M. Tamer Özsu** has received the 2022 IEEE Innovation in Societal Infrastructure Award, an honour conferred for significant technological achievements and contributions that establish, develop and proliferate innovative societal infrastructure systems through the application of information technology with an emphasis on distributed computing systems. He was selected for this award for his many contributions to data science infrastructure and distributed data management. (...)

The IEEE Innovation in Societal Infrastructure Award, sponsored by Hitachi, Ltd. and the IEEE Computer Society, consists of a bronze medal, a certificate, and a \$10,000 USD cash prize. The award will be presented at the 2022 IEEE International Conference on Data Engineering, tentatively scheduled to take place in May 2022 in Kuala Lumpur, Malaysia. The IEEE Innovation in Societal Infrastructure Award was established in 2011. (adapted from the [*Daily Bulletin*, 26 August 2021](#))

Honours relating to Strengthening Sustainable and Diverse Communities

On May 27th 2021, **Sustainable Waterloo Region awarded the University of Waterloo with the Sustainability Breakthrough Award at their 12th Annual Recognition Event.**

Waterloo received the award in recognition of our efforts in establishing short and medium-term greenhouse gas emission reduction targets and development of our Shift: Neutral climate action plan as foundational steps towards carbon neutrality on our campus.

(adapted from the [Daily Bulletin, 3 June 2021](#))

Brad Regehr's (BA '93) journey to become the **first Indigenous president of the Canadian Bar Association (CBA)** began while working a shift at the Turnkey Desk, at what was then called the Campus Centre.

Regehr, named CBA president in fall 2020, has dedicated more than two decades to working on Indigenous issues and has seen how the perseverance and resistance of Indigenous people is strengthening Canadian society.

(adapted from the [Daily Bulletin, 22 June 2021](#))

At the end of this spring term, seven innovation teams pitched their latest ventures to a panel of judges **for GreenHouse's 23rd Social Impact Showcase**.

This termly event celebrates the amazing work that GreenHouse students have accomplished throughout their social innovation journeys. Six out of the seven student teams were awarded funding to support their ventures from the Social Impact Fund, established by St. Paul's University College. This term's students focused their ventures on some of the most relevant health and sustainability issues impacting our daily lives.

mentalED, awarded \$5,000, is focused on creating comprehensive mental health education for Canadian youth and is led by Graeme Beaton, Faculty of Science.

DECOMP, awarded \$5,000, a biotechnology startup providing a better solution for plastic waste pollution, pitched by team member, Isha Simon, an undergraduate student in the Faculty of Science

Bebaha Virtual Health Care, awarded \$3,500, a virtual healthcare platform for women with the aim to help empower, educate and diagnose in a confidential, safe and reliable manner. Bebaha is led by Rashi Jaising, who recently graduated with a Bachelor of Arts and is pursuing a Master of Business, Entrepreneurship and Technology at the Conrad School of Entrepreneurship and Business this fall. Rashi also won the People's Choice Award, earning \$1,000 for her venture.

KELPH, awarded \$1,500, an inland kelp farming system that enables kelp farming all year round. KELPH is led by Caleb Seward, a Master's student in Chemical Engineering.

BioCycle, awarded \$1,500, is seeking to collect and biodegrade single-use menstrual products. BioCycle is led by Krystal Yang, undergraduate student in the Faculty of Science.

Warrior Kidz, awarded \$1,000, is partnering with myTurn and Waterloo Public Library for more intuitive database management and better community outreach for KidsAbility - an organization committed to providing rehabilitation services for differently abled children. Members of the Warrior Kidz team include: Sarankan Thiru, Solana Redway, Prachi Dhanky and Caitlin Li, four undergraduate students from the faculties of Engineering, Science, and Arts.

(adapted from the [Daily Bulletin, 13 August 2021](#))

Vice-President, Research and International **Charmaine Dean** has been elected the Vice-President of the Natural Sciences and Engineering Research Council (NSERC) and Chair of NSERC Council. The roles of Chair of Council and Vice-President of NSERC are concurrent leadership roles at NSERC. NSERC Council is composed of its president and up to 18 other members appointed from the public and private sectors.

(adapted from the [*Daily Bulletin*, 23 August 2021](#))

The **Faculty of Arts** is pleased to announce the **first corporate donation to the Longhouse Labs Project**. **Wawanesa Insurance** donated \$50,000 to support the creation of an art studio space.

The Longhouse Labs is a major undertaking at the University of Waterloo that will enable Indigenous artists from across the country to focus and develop their creative practices within the Department of Fine Arts in ways that will also support student growth through mentorship. The Longhouse Labs aims to dismantle the complex set of barriers that hinder Indigenous artists from fully participating in the cultural life of this country, and to address issues raised by Canada's Truth and Reconciliation Commission, by building an inclusive education system that includes Indigenous self-determination, culture, and knowledge. (...)

(adapted from the [*Daily Bulletin*, 24 August 2021](#))



MEMORANDUM

September 20, 2021

To: Members of Senate
Chairs of Departments and Directors of Schools

Copy: Daily Bulletin

From: James W.E. Rush, Vice-President Academic & Provost

Re: **Call for “University Professor” Nominations**

To date, Waterloo has awarded this distinction to twenty eight individuals: Garry Rempel (chemical engineering), Mary Thompson (statistics & actuarial science) and Mark Zanna (psychology) in 2004; Terry McMahon (chemistry), Cam Stewart (pure mathematics) and Robert Jan van Pelt (architecture) in 2005; Phelim Boyle (accountancy) and Ian Munro (computer science) in 2006; Ken Davidson (pure mathematics), Keith Hipel (systems design engineering) and Jake Sivak (optometry) in 2007; Roy Cameron (health studies & gerontology) and Flora Ng (chemical engineering) in 2008; Ellsworth LeDrew (geography & environmental management) and Ming Li (computer science) in 2009; Stuart McGill (kinesiology) and Janusz Pawliszyn (chemistry) in 2010; Robert Le Roy (chemistry) in 2011; François Paré (french studies) in 2012; Doug Stinson (computer science) in 2013; William Coleman (political science), and William Cook (combinatorics and optimization) in 2015; Linda Nazar (chemistry) in 2016; Xuemin (Sherman) Shen (electrical and computer engineering), Joanne Wood (psychology) in 2017; Tamer Ozsü (school of computer science) in 2018; Claudio Canizares (electrical and computer engineering), Richard Cook (statistics & actuarial science) and Lyndon Jones (optometry & vision science) in 2020; Jennifer Clapp (environment, resources and sustainability) and Weihua Zhuang (electrical and computer engineering) in 2021.

The selection process is reproduced below for your information. Please ensure that nomination material is submitted to my office before the December break.

UNIVERSITY PROFESSOR

The University of Waterloo owes much of its international reputation and stature to the quality of its eminent professors. University of Waterloo recognizes exceptional scholarly achievement and international pre-eminence through the designation “University Professor”. Once appointed, a faculty member retains the designation until retirement.

Not counting retirees, it is anticipated there will be one University Professor for approximately every 60 full-time regular faculty members, with at most two appointments each year. Such appointments are reported to Senate and the Board of Governors in March and April respectively, and are recognized at Convocation.

Selection Process

1. Annually, nominations will be sought from Faculty deans, directors of schools and department chairs, as well as from the university community generally. A nominee shall have demonstrated exceptional

scholarly achievement and international pre-eminence in a particular field or fields of knowledge. The individual who nominates a colleague is responsible for gathering the documentation and submitting it to the vice-president academic & provost before the December break. The University Tenure & Promotion Committee will act as the selection committee; its decisions are final.

2. A nomination must be supported by at least six signatures from at least two UW departments/schools and must be accompanied by a curriculum vitae and a short, non-technical description of the nominee's contributions.
3. A nomination must also be accompanied by letters from the nominee's Dean, and from at least two and no more than five scholars of international standing in the nominee's field from outside the University. The scholars are to be chosen by the nominee's Chair/Director in consultation with the Dean and the nominator. The letter of nomination should explain why these particular scholars were chosen.
4. Letters soliciting comments from scholars shall be sent by the Chair/Director. Scholars shall be asked to comment on the impact and specific nature of the nominee's most influential contributions, addressing their responses directly to the Vice-President, Academic & Provost.
5. The dossiers of unsuccessful nominees remain in the pool for two additional years. The appropriate Dean should provide updated information each year.

UNIVERSITY OF WATERLOO
REPORT OF THE DEAN OF THE FACULTY OF ARTS TO SENATE
September 20, 2021

FOR INFORMATION

A. APPOINTMENTS

Probationary Term Appointments

MACARTHUR, Cayley (BKI Honours 2013 MA 2015 Ph.D 2021 University of Waterloo), Assistant Professor, Stratford School of Interaction Design and Business, July 1, 2021 to June 30, 2024. Cayley is a welcome addition to the Stratford School of Interaction Design and Business. She brings a depth of knowledge from her work in industry as a user experience researcher as well as graduate research focusing on human-computer interaction.

MAKELA, Ville (BSc 2010 MSc 2013 PhD 2018 Tampere University), Assistant Professor, Stratford School of Interaction Design and Business, July 1, 2021 to June 30, 2024. With a PhD in human-computer interaction, Ville's research focuses on user interfaces, user experience, software development, and research methods. He is highly skilled in web and games development and has worked on a wide variety of projects outside of academia.

Probationary Term Appointment – Change in Date

LOVE, Heather, Assistant Professor, Department of English Language and Literature, **from** July 1, 2018 to June 30, 2021 **to** July 1, 2018 to June 30, 2022.

Probationary Term Reappointment

SVEC, Henry, Assistant Professor, Department of Communication Arts, July 1, 2021 to June 30, 2024.

Definite Term Appointments

CYR, Dylan (BA 2002 MA 2003 University of Waterloo, PhD 2009 University of Western Ontario), Lecturer, Department of History, August 1, 2021 to September 30, 2022. Having taught as a sessional lecturer for the Department of History since 2010, Dylan's research interests are in the area of environment and warfare, while his teaching repertoire includes instruction in History, American Studies, and Arts First.

EZEH, Alphonsus Onyeka (BA 2011 MA 2017 PhD 2018 Moscow State Linguistic University), Lecturer, Department of Germanic & Slavic Studies, August 1, 2021 to July 31, 2024. Dr. Ezech is a welcome addition to the Department of Germanic and Slavic Studies. He has experience teaching a wide range of students in different cultural and educational contexts and the competence to teach undergraduate classes in Russian, German, and English. The focus of his appointment will be teaching in the Arts First program.

HUSAIN, Fauzia (BFA Indus Valley School of Art and Architecture, MA 2009 George Washington University, MA 2014 and PhD 2019 University of Virginia), Lecturer, Department of Sociology & Legal Studies, August 1, 2021 to July 31, 2024. Dr. Husain's research explores how marginalized people combat inequality throughout various aspects of their lives. She brings a strong teaching background, having independently developed and administered undergraduate courses to a diverse group of students, including those in the ESL program. The focus of Dr. Husain's appointment will be teaching in the Arts First program.

NURSE, Jodey (BA 2008 Queen's University, MA 2010 PhD 2016 University of Guelph), Research Assistant Professor, Department of History, July 1, 2021 to December 31, 2022. Jodey's research on the history of Canada's supply-managed dairy, egg, and poultry industries provides an examination of asymmetrical power relations among stakeholders in agricultural marketing systems and the polarized agricultural policies that have emerged in the twentieth and twenty-first centuries. She will be researching and writing a monograph with Dr. Bruce Muirhead about the Canadian system of supply-managed commodities in a transnational context. Her work offers new scholarship and updated perspectives on Canadian agricultural history.

TRENTIN, Lisa (BA 2002 Wilfrid Laurier University, MA 2003 University of Reading, PhD 2007 University of Nottingham), Lecturer, Department of Classical Studies, August 1, 2021 to July 31, 2023. Lisa is an expert in the material culture of the ancient Mediterranean and is a welcome addition to the Department of Classical Studies. She has substantial experience in undergraduate and graduate teaching, both in person and online, and is also an accomplished researcher in her field. Her profile fits well into the Department of Classical Studies and enhances our teaching expertise in material culture.

Definite Term Reappointments

CHENIER, Allison, Lecturer, Department of Sociology & Legal Studies, September 1, 2021 to August 31, 2024.

DOMINGUEZ, Tabatha, Lecturer, Stratford School of Interaction Design and Business, August 1, 2021 to July 31, 2023.

SIEBEL-ACHENBACH, Sebastian, Lecturer, Stratford School of Interaction Design and Business, September 1, 2021 to August 31, 2023.

Visiting Appointments

EL ALFY, Amr, Research Associate, School of Accounting and Finance, May 1, 2021-December 31, 2021.

HUSSAIN, AKM Ghulam, Visiting Researcher, Department of Economics, September 1, 2021 to August 31, 2024.

PITTS, Andrea, Visiting Associate Professor, Department of Philosophy, September 1, 2021 to December 31, 2021.

STOERK, Salome, Guest Lecturer, Department of Psychology, September 1, 2021 to April 30, 2022.

Post-Doctoral Appointment

CHIA, Colin, Department of Political Science, July 1, 2021 to June 30, 2023.

GRETTON, Jeremy, Department of Psychology, August 1, 2021 to December 31, 2021.

PEREIRA, Effie, Department of Psychology, September 1, 2021 to August 31, 2022.

YALCINOZ UCAN, Busra, Department of Psychology, May 1, 2021 to April 30, 2022.

Post-Doctoral Reappointment

DYS, Sebastian, Department of Psychology, September 1, 2021 to December 31, 2021.

KOBERINSKI, Adam, Department of Philosophy, September 1, 2021 to August 31, 2022.

Adjunct Appointments – Instruction

ALSADEN, Amin, Lecturer, Department of Fine Arts, September 1, 2021 to December 31, 2021.

ALZAYAT, Ayman, Lecturer, Stratford School of Interaction Design and Business, September 1, 2021 to December 31, 2021.

BUZZELLI, Alyssa, Lecturer, School of Accounting & Finance, September 1, 2021 to December 31, 2021.

COLLIVER, Stacey, Lecturer, Department of Sociology & Legal Studies, September 1, 2021 to December 31, 2021.

KENNEL, Maxwell, Lecturer, Arts First, September 1, 2021 to December 31, 2021.

LEVESQUE, Kayla, Lecturer, School of Accounting & Finance, September 1, 2021 to December 31, 2021.

TU, Ke (Christy), Lecturer, Department of Economics, September 1, 2021 to December 31, 2021.

Adjunct Appointments – Graduate Supervision

DEA, Shannon, Department of Philosophy, September 1, 2021 to August 31, 2026.

MACDOUGALL, Heather, Department of History, January 1, 2021 to December 31, 2023.

Adjunct Reappointments – Instruction

ABULLARADE GAMEZ, Hector, Lecturer, School of Accounting & Finance, September 1, 2021 to December 31, 2021.

ADAMS, Jillian, Lecturer, School of Accounting & Finance, September 1, 2021 to December 31, 2021.

AQUINO, Sara, Lecturer, School of Accounting & Finance, September 1, 2021 to December 31, 2021.

ARCILA VASQUEZ, Andres, Lecturer, Department of Economics, September 1, 2021 to December 31, 2021.

BALTRUSAITIS, Jonathan, Lecturer, Stratford School of Interaction Design and Business, September 1, 2021 to December 31, 2021.

BARNETT, Richard, Lecturer, Department of Germanic & Slavic Studies, September 1, 2021 to December 31, 2021.

BASHIR, Mohsin, Lecturer, School of Accounting & Finance, September 1, 2021 to December 31, 2021.

BERIAULT, Phillipe, Lecturer, Department of Philosophy, September 1, 2021 to December 31, 2021.

BRASSARD, Brooke, Lecturer, Arts First, September 1, 2021 to December 31, 2021.

BROWNE, Pierson, Lecturer, Department of Sociology & Legal Studies, September 1, 2021 to December 31, 2021.

LUDLOW, Bryn, Lecturer, Stratford School of Interaction Design and Business, September 1, 2021 to December 31, 2021.

BUCHENAUER, Cody, Lecturer, School of Accounting & Finance, September 1, 2021 to December 31, 2021.

CARVER, Matthew, Lecturer, Department of Fine Arts, September 1, 2021 to December 31, 2021.

CHAPUT, Louise, Lecturer, Department of Political Science (MPS), September 1, 2021 to December 31, 2021.

COCARLA, Sasha, Lecturer, Department of Philosophy, September 1, 2021 to December 31, 2021.

CYR, Dylan, Lecturer, Arts First, September 1, 2021 to December 31, 2021.

DE ROOIJ-MOHLER, Geertruida, Lecturer, Department of Germanic & Slavic Studies, September 1, 2021 to December 31, 2021.

DE ROOVER, Megan, Lecturer, Arts First, September 1, 2021 to December 31, 2021.

DELAMERE, D'Arcy, Lecturer, School of Accounting & Finance, September 1, 2021 to December 31, 2021.

DIGNAN, Paul, Lecturer, Department of Fine Arts, September 1, 2021 to December 31, 2021.

DOAN, Tiffany, Lecturer, Department of Psychology, September 1, 2021 to December 31, 2021.

DOLSON, Mark, Lecturer, Department of Anthropology, Arts First, September 1, 2021 to December 31, 2021.

DRECUN, Darlene, Lecturer, Department of Philosophy, September 1, 2021 to December 31, 2021.

DYS, Sebastian, Lecturer, Department of Psychology, September 1, 2021 to December 31, 2021.

EVERITT, Bruce, Lecturer, School of Accounting & Finance, September 1, 2021 to December 31, 2021.

GIGUERE, Frédéric, Lecturer, Department of French Studies, September 1, 2021 to December 31, 2021.

HALL, Julie, Lecturer, Department of Fine Arts, September 1, 2021 to December 31, 2021.

HU, Brubey, Lecturer, Department of Fine Arts, September 1, 2021 to December 31, 2021.

HUNTER, Natalie, Lecturer, Department of Fine Arts, September 1, 2021 to December 31, 2021.

IRISH, Jacob, Lecturer, Department of Fine Arts, September 1, 2021 to December 31, 2021.

JANG, Lauri, Lecturer, Arts First, September 1, 2021 to December 31, 2021.

JORDAN, Jim, Lecturer, Department of Philosophy, September 1, 2021 to December 31, 2021.

KOBERINSKI, Adam, Lecturer, Department of Philosophy, September 1, 2021 to December 31, 2021.

KONRAD, Pawlak, Lecturer, School of Accounting & Finance, September 1, 2021 to December 31, 2021.

LAWRENCE, Michael, Lecturer, Department of Political Science, September 1, 2021 to December 31, 2021.

LEKO, Vesna, Lecturer, Department of Germanic & Slavic Studies, September 1, 2021 to December 31, 2021.

LEROUX, Carlie, Lecturer, Department of Sociology & Legal Studies, September 1, 2021 to December 31, 2021.

LIN, David, Lecturer, School of Accounting & Finance, September 1, 2021 to December 31, 2021.

LOK, Christopher, Lecturer, Department of Psychology, September 1, 2021 to December 31, 2021.

MANJI, Noorin, Lecturer, Department of Sociology & Legal Studies, Stratford School of Interaction Design and Business, September 1, 2021 to December 31, 2021.

MASCELLA, Allison, Lecturer, Master of Public Service, September 1, 2021 to December 31, 2021.

MCMANUS, Scott, Lecturer, Stratford School of Interaction Design and Business, September 1, 2021 to December 31, 2021.

MCTAVISH, Sarah, Lecturer, Arts First, September 1, 2021 to December 31, 2021.

MIAN, Haaris, Lecturer, School of Accounting & Finance, September 1, 2021 to December 31, 2021.

MORTON, Evelyn, Lecturer, School of Accounting & Finance, Arts First, September 1, 2021 to December 31, 2021.

MORTON, Robert Travis, Lecturer, Arts First, September 1, 2021 to December 31, 2021.

O'NEILL, Terry, Lecturer, Stratford School of Interaction Design and Business, September 1, 2021 to December 31, 2021.

PETERS, John, Lecturer, Master of Public Service, September 1, 2021 to December 31, 2021.

PETRESCU, Maria, Lecturer, Department of French Studies, September 1, 2021 to December 31, 2021.

PUURUNEN, Elias, Lecturer, Master of Public Service, September 1, 2021 to December 31, 2021.

RAY, Nicholas, Lecturer, Department of Philosophy, September 1, 2021 to December 31, 2021.

RUFFUDEEN, Zamal, Lecturer, School of Accounting & Finance, September 1, 2021 to December 31, 2021.

SCHRAM, Brian, Lecturer, Department of Sociology & Legal Studies, September 1, 2021 to December 31, 2021.

SIDHU, Tandeep, Lecturer, Department of Sociology & Legal Studies, September 1, 2021 to December 31, 2021.

SMITH, Greg, Lecturer, Stratford School of Interaction Design and Business, September 1, 2021 to December 31, 2021.

SPELTZ, Andrea, Assistant Professor, Department of Germanic & Slavic Studies, September 1, 2021 to December 31, 2021.

STETTNER, Shannon, Lecturer, Department of Philosophy, September 1, 2021 to December 31, 2021.

TODD, Elisabeth, Lecturer, Department of French Studies, September 1, 2021 to December 31, 2021.

TROIT, Anne Sophie, Lecturer, Department of French Studies, September 1, 2021 to December 31, 2021.

WILLIAMS, Amber, Lecturer, Department of Fine Arts, September 1, 2021 to December 31, 2021.

WOOD, Peter, Lecturer, School of Accounting & Finance, September 1, 2021 to December 31, 2021.

WOODFORD, Benjamin, Lecturer, Arts First, September 1, 2021 to December 31, 2021.

B. ADMINISTRATIVE APPOINTMENTS

BATTEN, Alicia, Associate Chair, Undergraduate Studies, Department of Religious Studies, September 1, 2021 to August 31, 2023.

BOYLE, Philip, Associate Chair, Undergraduate Studies, Legal Studies, Department of Sociology and Legal Studies, July 1, 2021 to December 31, 2023.

DIAMOND, James, Acting Chair, Department of Religious Studies, July 1, 2021 to December 31, 2021.

DUSAILLANT-FERNANDES, Valérie, Associate Chair, Graduate Studies, Department of French Studies, July 1, 2021 to June 30, 2023.

HUNT, Andrew, Associate Chair, Undergraduate Studies, Department of History, July 1, 2021 to June 30, 2024.

LEPAGE, Élise, Associate Chair, Undergraduate Studies, Department of French Studies, July 1, 2021 to June 30, 2022.

SEN, Anindya, Associate Dean, Co-op Education and Planning, July 1, 2021 to June 30, 2022.

WILKINS-LAFLAMME, Sarah, Associate Chair, Undergraduate Studies, Sociology, Department of Sociology and Legal Studies, July 1, 2021 to June 30, 2023.

Administrative Reappointment

COWAN, Douglas, Associate Chair, Graduate Studies, Department of Religious Studies, July 1, 2021 to June 30, 2022.

DOLMAGE, Jay, Associate Chair, Undergraduate Communication Outcomes Initiative, Department of English Language and Literature, July 1, 2021 to June 30, 2024.

HOUSTON, Andrew, Associate Chair, Undergraduate Studies, Theatre and Performance, Department of Communication Arts, July 1, 2021 to June 30, 2022.

LAMONT, Victoria, Associate Chair, Undergraduate Studies, Department of English Language and Literature, July 1, 2021 to June 30, 2024.

MACFARLANE, Emmett, Associate Chair, Graduate Studies, Department of Political Science, July 1, 2021 to June 30, 2024.

MUFTI, Mariam, Associate Chair, Undergraduate Studies, Department of Political Science, June 1, 2021 to June 30, 2023

PACI, Timothy, Associate Chair, Undergraduate Communication Outcomes Initiative, Department of Communication Arts, July 1, 2021 to June 30, 2022.

SELJAK, David, Chair, Department of Religious Studies, January 1, 2022 to June 30, 2022.

VOORHEES, Gerald, Associate Chair, Undergraduate Studies, Speech Communication, Department of Communication Arts, September 1, 2021 to August 31, 2022.

CHANGE in DATES

BOYLE, Philip, Associate Chair, Undergraduate Studies, Sociology, Department of Sociology and Legal Studies, **from** September 1, 2020 to August 31, 2022 **to** September 1, 2020 to June 30, 2021.

FRICK, Peter, Associate Chair, Undergraduate Studies, Department of Religious Studies, **from** September 1, 2020 to August 31, 2022 **to** September 1, 2020 to August 31, 2021.

SCHULENBERG, Jennifer, Associate Chair for Undergraduate Studies, Legal Studies, Department of Sociology and Legal Studies, **from** September 1, 2020 to August 31, 2022 **to** September 1, 2020 to June 30, 2021.

SEN, Anindya, Director, Master of Public Service Program, **from** July 1, 2020 to December 31, 2024 **to** July 1, 2020 to December 31, 2021.

C. SABBATICAL LEAVES

For approval by the Board of Governors

HENSTRA, Daniel, Associate Professor, Department of Political Science, January 1, 2022 to June 30, 2022, six months at 85% salary.

JAKOBESH, Doris, Professor, Department of Religious Studies, January 1, 2022 to June 30, 2022, six months at 85% salary.

Approved by the Board of Governors

BOIDO, Mario, Associate Professor, Department of Spanish and Latin American Studies, January 1, 2022 to June 30, 2022, six months at 98.9% salary.

BRUCE, Gary, Professor, Department of History, September 1, 2021 to August 31, 2022, twelve months at full salary.

CHEN, Tao, Associate Professor, Department of Economics, September 1, 2021 to February 28, 2022, six months at 85% salary.

COX, Jordana, Assistant Professor, Department of Communication Arts, January 1, 2022 to June 30, 2022, six months at full salary

FERNANDES, Myra, Professor, Department of Psychology, November 1, 2021 to April 30, 2022, six months at 85% salary.

FORAND, Jean Guillaume, Associate Professor, Department of Economics, September 1, 2021 to August 31, 2022, 12 months at 90.6% salary.

GROSSMAN, Igor, Associate Professor, Department of Psychology, January 1, 2022 to June 30, 2022, six months at 85% salary.

HABIB, Jasmin, Associate Professor, Department of Political Science, September 1, 2021 to February 28, 2022 and September 1, 2022 to February 28, 2022, twelve month split sabbatical at 85% salary.

HARDIMAN, Craig, Associate Professor, Department of Classical Studies, September 1, 2021 to August 31, 2022, 12 months at 85% salary.

KLASSEN, Kenneth, Professor, School of Accounting & Finance, July 1, 2021 to December 31, 2021, six months at full salary.

MCAULEY, Tara, Associate Professor, Department of Psychology, September 1, 2021 to February 28, 2022, six months at full salary.

NIMUBONA, Alain-Désiré, Associate Professor, Department of Economics, July 1, 2021 to December 31, 2021, six months at 85% salary.

PRESSLEE, Adam, Assistant Professor, School of Accounting and Finance, July 1, 2021 to December 31, 2021, six months at full salary.

RANDALL, Neil, Associate Professor, Department of English & Literature, September 1, 2021 to February 28, 2022, six months at full salary.

ROBERTS, Julia, Associate Professor, Department of History, January 1, 2022 to December 31, 2022, twelve months at full salary.

VIDEKANIC, Bojana, Associate Professor, Department of Fine Arts, September 1, 2021 to August 31, 2022, twelve months at 85% salary.

WHITSON, Jennifer, Associate Professor, Department of Sociology and Legal Studies/Stratford, July 1, 2021 to December 31, 2021, six months at 85% salary.

D. ADMINISTRATIVE LEAVES

Approved by the Board of Governors:

ROBERTS, Julia, Associate Professor, Department of History, August 1, 2021 to December 31, 2021, five months at full salary.

A handwritten signature in black ink, appearing to read "Sheila Ager". The signature is fluid and cursive, with the first name "Sheila" written in a larger, more prominent script than the last name "Ager".

Sheila Ager
Dean, Faculty of Arts

UNIVERSITY OF WATERLOO
REPORT OF THE DEAN OF ENGINEERING TO SENATE
September 20, 2021

FOR INFORMATION

A. APPOINTMENTS

Tenure (*Waiting for approval by the Board of Governors at the October 26, 2021 meeting*).

ARAJI, Mohamad T., Associate Professor, School of Architecture, commencing July 1, 2021. PhD, Architecture, with Distinction, School of Architecture, University of Illinois at Urbana Champaign, US, 2008; Master of Architecture, with Distinction, School of Architecture, University of Arizona, USA, 2004; Bachelor of Architectural Engineering, with Best Graduation Project Award 2002, Faculty of Architecture Design & Built Environment, Beirut Arab University, Lebanon, 2002. Mohamad Arajji was an Associate Professor at the University of Manitoba in the Faculty of Architecture in the area of environmental design approaches and technologies. His research expertise focuses on energy efficiency, climate protection and carbon-neutral projects and he holds an NSERC grant. His educational background includes degrees in Architectural Engineering and a PhD in Architecture in Technology and Sustainable Design. He brings a breadth of experience as a practitioner and has accumulated a range of enriching international experiences as a researcher and professor. This hire fulfills the 2nd Architectural Engineering full-time Faculty position for the School of Architecture, approved in the initial Architectural Engineering new program plan.

MORGAN, Horatio, Associate Professor, Conrad School of Business and Entrepreneurship, commencing on July 1, 2021. PhD, Economics, Simon Fraser University, Burnaby, BC, 2010; MA, Economics, York University, Toronto, ON, 2005; MSc, International Business, University of the West Indies, Jamaica, W.I., 2001; BSc, Honours, Economics & Accounting, University of West Indies, Jamaica, W.I., 1999. Dr. Morgan is an economist by training who has come to specialize in international business, entrepreneurship, and particularly the experience of immigrant entrepreneurs.

Definite-Term Appointment

EL-HAG, Ayman, Lecturer, Department of Electrical and Computer Engineering, July 1, 2021-June 30, 2024. PhD, Electrical Engineering, University of Waterloo, Waterloo, ON, 2003; MS in Electrical Engineering, King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia, 1998; BS, Electrical Engineering, King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia, 1993. Dr. El-Hag received his PhD from University of Waterloo in 2003 and has over 15 years of research and teaching experience in UAE in the areas of condition monitoring and diagnostics of electrical insulation, and experiences related to inspection of outdoor ceramic insulators, transformers and design of non-ceramic insulators. Dr. El-Hag is also a very well acclaimed undergraduate instructor and has established an outstanding teaching portfolio at UW (as an Adjunct faculty for past few years) in several undergraduate courses in Electrical Engineering.

HUANG, Ziqiang (Patrick), Lecturer, Department of Electrical and Computer Engineering, July 1, 2021 – June 30, 2024. PhD, Electrical and Computer Engineering, Duke University, Durham, NC, USA, 2019; MSc, Electrical and Computer Engineering, Duke University, Durham, NC, USA, 2014; BSc, Information Engineering, East China University of Science and Technology, (ECUST), Shanghai, China, 2012. Dr. Huang received his PhD in Computer Engineering from Duke University, USA, in 2019. His research interest is in high-performance and power-efficient

computer architecture and his works spans the area of compiler performance optimization and runtime system design for resource allocation.

KARIMINIAAE-HAMEDAANI, Hamid-Reza, Lecturer, Department of Chemical Engineering, September 1, 2021 – August 31, 2023. PhD, Biochemistry and Applied Biosciences, Kagoshima University, Japan, 2004; MSc, Chemical Engineering, Sharif University of Technology, Tehran, Iran, 1997; BSc, Chemical Engineering, Sharif University of Technology, Tehran, Iran, 1994. Dr. Kariminiaae-Hamedani was previously a Visiting Associate Professor at the Department of Chemical Engineering, University of Waterloo, conducting research on water treatment and biodiesel production using enzymatic methods. His appointment as a Lecturer will meet the temporary needs of the department for teaching of important core courses in the areas of transport phenomena and biochemical engineering – areas in which Dr. Kariminiaae-Hamedani has demonstrated research expertise and teaching experience.

SHAKER, George, Research Associate Professor, Department of Electrical and Computer Engineering, July 1, 2021 – June 30, 2024. PhD, Electrical and Computer Engineering, University of Waterloo, Waterloo, ON, 2014; MSc, Electrical and Computer Engineering, University of Waterloo, Waterloo, ON, 2006; BSc, Electrical Communications and Electronics Engineering, Cairo University, Cairo, Egypt, 2003. Dr. Shaker received his PhD from the University of Waterloo in 2013. He has more than ten years of industrial experience, and about five years as an adjunct faculty member in the ECE Department, leading projects related to the application of wireless sensor systems for healthcare, automotive, and unmanned aerial vehicles.

TAVASSOTI-KHEIRY, Pezhouhan, Research Assistant Professor, Department of Civil and Environmental Engineering, July 1, 2021 – June 30, 2023. PhD in Civil Engineering, The Pennsylvania State University, USA, 2016; MSc in Civil Engineering, K.N. Toosi University of Technology, Tehran, Iran, 2010; BSc in Civil Engineering, University of Guilan, Iran, 2007. Dr. Tavassoti-Kheiry will work with the Center for Pavement and Advanced Transportation Technologies on innovative materials research aligned with strategic thrusts of the university, including embodied energy reduction, recycling of waste materials, longer pavement lives for reduced life cycle impact, and improved pavement performance for reduced carbon impact.

ZARNETT, Jeffrey, Lecturer, Department of Electrical and Computer Engineering, July 1, 2021 – June 30, 2024. Professional Engineer (PEng) in Ontario since February 2013. MSc, University of Waterloo, Waterloo, ON, 2010; BSc, University of Waterloo, Waterloo, ON, 2009. Jeff Zarnett, MSc (Waterloo, 2010) has been an accomplished undergraduate instructor in the ECE Department, previously as an Adjunct Lecturer since 2013, with a well-established teaching portfolio in computer operating systems, database systems, and systems programming related subjects.

Definite-Term Reappointment

NORMANI, Stefano, Research Assistant Professor, Department of Civil and Environmental Engineering, June 1, 2021 – May 31, 2024. PhD in Civil Engineering, University of Waterloo, Waterloo, ON, 2009; MSc in Civil Engineering, University of Waterloo, Waterloo, ON, 1998; BSc in Civil Engineering, University of Waterloo, Waterloo, ON, 1995.

SCHMIDT, Philip, Research Assistant Professor, Department of Civil and Environmental Engineering, July 1, 2021 – June 30, 2022. PhD in Civil Engineering, University of Waterloo, Waterloo, ON, 2011; Bachelor of Applied Science, Honours Environmental Engineering, Co-operative Program, Civil Specialization, University of Waterloo, Waterloo, ON, 2005.

XU, Linlin, Research Assistant Professor, Department of Systems Design Engineering, July 1, 2021- October 31, 2023. Post-doctorate, Advanced Machine Learning for Remote Sensing,

University of Waterloo, Waterloo, ON, 2016; Doctorate, Geography, University of Waterloo, Waterloo, ON, 2014; Master's Thesis, Geomatics Engineering, China University of Geosciences, Beijing, China, 2010; Bachelor's Honours, Computer Science and Technology, China University of Geosciences, Beijing, China; 2007; Bachelor's Honours, Geomatics Engineering, China University of Geosciences, Beijing, China; 2007.

Probationary Term Appointments

AIJAZI, Arfa, Assistant Professor, School of Architecture, July 1, 2022 – June 30, 2025. PhD, Architecture – Building Science, Technology and Sustainability, Certificate in Teaching and Learning in Higher Education, University of Berkeley, California, USA, (December 2021 expected); MS, Building Technology, Massachusetts Institute of Technology, Cambridge, Massachusetts, USA, 2017; BS, Material Sciences and Engineering, Minor, International Studies, Massachusetts Institute of Technology, Cambridge, Massachusetts, USA, 2013. Arfa Aijazi brings exceptional skills and expertise in both her teaching and research in the area of environmental performance and building energy and the impacts of climate change and occupant response on building structures and use. This hire fulfills the 3rd Architectural Engineering full-time Faculty position for the School of Architecture, approved in the initial Architectural Engineering new program plan.

NOTOMISTA, Gennaro, Assistant Professor, Department of Electrical and Computer Engineering, October 1, 2021 – June 30, 2025. PhD, Robotics, Georgia Institute of Technology, Atlanta, GA, USA, 2020; MS, Mathematics, Georgia Institute of Technology, Atlanta, GA, USA, 2019; MS, Mechanical Engineering, Università degli Studi di Napoli “Federico II”, Napoli, Italy, 2016; MEng, Automotive Engineering, Technische Hochschule Ingolstadt, Ingolstadt, Germany, 2015; BS, Mechanical Engineering, Università degli Studi di Napoli “Federico II”, Napoli, Italy, 2012. Dr. Notomista was a researcher with the CNRS in Rennes, France; and received his PhD in Robotics from the Georgia Institute of Technology, USA, in 2020. His research and teaching interests are in the areas of energy-aware robotics for long-durations autonomy, safe robot learning and control, human-robot interaction, and design of robotic platforms, which are topical areas of high interest in the field of ECE.

PANT, Yash Vardhan, Assistant Professor, Department of Electrical and Computer Engineering, July 15, 2021 – June 30, 2024. PhD, Electrical Engineering, University of Pennsylvania, (UPenn), Philadelphia, Pennsylvania, USA, 2019; MSc, Electrical Engineering, University of Pennsylvania, (UPenn), Philadelphia, Pennsylvania, USA, 2012; BTech in Electronics & Telecom. Engineering, College of Engineering Roorkee, India, 2010. Dr. Pant received his PhD in Electrical Engineering from University of Pennsylvania, USA, in 2019, and was a Postdoctoral Fellow at the Department of Electrical and Computer Science, University of California, Berkeley, USA. Dr. Pant's teaching and research interests are in autonomous and cyber-physical systems, machine learning, multi-robot and intelligent transportation systems which are currently of very high interest for the industry and society and wherein the ECE Department is seeking to strengthen its research and teaching capabilities.

Probationary Term Reappointments

HAJI REZA, Parsin, Assistant Professor, Department of Systems Design Engineering, July 1, 2021 – June 30, 2024. PhD, Biomedical Engineering, University of Alberta, Alberta, 2015; MSc Photonics and Plasma, University of Alberta, Alberta, 2011; BEng, Honours, Electronics Majoring in Optical Engineering Multimedia, University, Malaysia, 2010; Associate Degree in Electronics, Mirza Kochak Technical Teacher Education University, Iran 2002.

LACROIX, Daniel, Assistant Professor, Department of Civil and Environmental Engineering, July 1, 2021 – June 30, 2024. PhD, Department of Civil Engineering, University of Ottawa, Ottawa, ON, 2017; MSc, Department of Civil Engineering, University of Ottawa, Ottawa, ON,

2013; BSc, Department of Civil Engineering, University of Ottawa, Ottawa, ON, 2011.

YEUM, Chul Min, Assistant Professor, Department of Civil and Environmental Engineering, July 1, 2021 – June 30, 2024. PhD, Civil Engineering, Purdue University, West Lafayette, IN, USA, 2016; MS, Civil Engineering, Korea Advanced Institute of Science and Technology, (KAIST), South Korea, 2010; BS, Civil Engineering, Korea Advanced Institute of Science and Technology, (KAIST), South Korea, 2008.

Continuing Appointments

MILNE, Andrew, Continuing Lecturer, Department of Mechanical and Mechatronics Engineering commencing July 13, 2021. NSERC Postdoctoral Fellowship, Massachusetts Institute of Technology, Cambridge, MA, 2013-2015; PhD in Mechanical Engineering, University of Alberta, Edmonton, AB, 2013; MSc in Mechanical Engineering, Thermo Fluids Specialization, University of Alberta, Edmonton, AB, 2008; BSc in Mechanical Engineering, with Distinction, University of Waterloo, Waterloo, ON, 2005. Professor Milne is a continuing lecturer who teaches courses in thermodynamics, heat transfer, and fluid mechanics. He is also instrumental in the 1st year engineering program for ME. Administratively, Professor Milne continues to track graduate attributes for accreditation of both the ME and MTE programs, as well as a host of jobs in support of the Associate Chair UG for ME and director of MTE.

PIRNIA, Mehrdad, Continuing Lecturer, Department of Management Sciences commencing July 1, 2021. PhD, Electrical and Computer Engineering, University of Waterloo, Waterloo, ON, 2014; MSc, Management Sciences, University of Waterloo, Waterloo, ON, 2009; Operations Management Diploma, British Columbia Institute of Technology, Vancouver, BC, 2007; BS, Industrial Engineering, Avicenna University (Bu-Ali Sina), Iran, 2003. The continuing Lecturer position is critical for the assessment of Graduate Attributes to ensure continuous improvement in our Management Engineering Undergraduate program for the Outcome-based Accreditation process.

Visiting Appointments

BOURGOIN, Jean-Philippe, Researcher, Department of Electrical and Computer Engineering, July 27, 2021 – July 26, 2022.

CAVALCANTI, Pablo, Gauterio, Scholar, Department of Systems Design Engineering, August 16, 2021 – July 31, 2022.

DUTTA, Pradip, Scholar, Department of Mechanical and Mechatronics Engineering, November 1, 2021 – December 31, 2021.

GONZALEZ, Ricardo, Scholar, Department of Systems Design Engineering, May 1, 2021 – December 31, 2021.

KANG, Juyong, Researcher, Department of Mechanical and Mechatronics Engineering, October 1, 2021 – September 30, 2022.

KIM, Sang Yong, Researcher, Department of Civil and Environmental Engineering, September 1, 2021 – August 20, 2022.

KUMAR MAHATO, Pradeep, Scholar, Department of Systems Design Engineering, June 1, 2021 – December 31, 2021.

LIU, Hailiang, Scholar, Department of Chemical Engineering, December 1, 2021 – November 30, 2022.

MA, Jingxiang, Scholar, Department of Mechanical and Mechatronics Engineering, October 1, 2021 – September 30, 2022.

PEKAR, Vladimir, Scientist, Department of Systems Design Engineering, July 5, 2021 – July 31, 2022.

RAY, Nilanjan, Scholar, Department of Systems Design Engineering, July 1, 2021 - June 30, 2022.

SHUCHEN, Zhang, Scholar, Department of Management Sciences, September 1, 2021- August 31, 2022.

SUN, Bai, Scholar, Department of Chemical Engineering, November 1, 2021 – October 31, 2023.

YACOUB, Mostafa, Assistant Professor, Department of Systems Design Engineering, July 1, 2021 – December 30, 2021.

YU, Hesheng, Scholar, Department of Mechanical and Mechatronics Engineering, July 1, 2021 – May 31, 2022.

YUAN, Xianju, Professor, Department of Systems Design Engineering, November 1, 2021 – October 31, 2022.

ZAGHLOUL, Nouf, Researcher, Department of Chemical Engineering, July 26, 2021 – October 15, 2021.

ZHANG, Ruizeng, Scholar, Department of Mechanical and Mechatronics Engineering, June 18, 2021 – June 17, 2023.

ZHOU, Jumei, Lecturer, Department of Chemical Engineering, December 1, 2021 – June 1, 2022.

Visiting Reappointments

NOEEL, Vahid, Scholar, Department of Chemical Engineering, June 1, 2021 – December 31, 2021.

SCOTT, Christopher, Charles, Scientist, Department of Electrical and Computer Engineering, June 2, 2021- September 1, 2023.

Adjunct Appointments

Graduate Supervision and Research

EBADI, Ashkan, Assistant Professor, Department of Systems Design Engineering, April 1, 2021- March 31, 2024.

KALRA, Naveen, Assistant Professor, Department of Systems Design Engineering, January 1, 2021 – December 31, 2023.

OLIVARES, Daniel, Associate Professor, Department of Electrical and Computer Engineering, July 1, 2021 – June 30, 2024.

SARAFAN, Sheida, Assistant Professor, Department of Mechanical and Mechatronics Engineering, June 1, 2021 – May 31, 2024

SHAFIEE, Mohammad Javad, Assistant Professor, Department of Systems Design Engineering, September 1, 2021 – August 31, 2024.

SHALCHI AMIRKHIZ, Babak, Associate Professor, Department of Mechanical and Mechatronics Engineering, June 1, 2021- May 31, 2024.

Adjunct Appointments

Graduate Supervision, Teaching, Research and Other

FARROKHABADI, Mostafa, Assistant Professor, Department of Electrical and Computer Engineering, July 1, 2021 - June 30, 2024.

Adjunct Reappointments

Graduate Supervision

BENNEKER, Anne, Assistant Professor, Department of Chemical Engineering, September 1, 2021 – August 31, 2024.

Adjunct Reappointments

Graduate Supervision and Research

BAKRI-KASSEM, Maher, Assistant Professor, Department of Systems Design Engineering, April 15, 2021- April 14, 2024.

DENG, Jian, Associate Professor, Department of Civil and Environmental Engineering, May 1, 2021 – April 30, 2023.

LEE, Denny, L., Professor, Department of Electrical and Computer Engineering, July 1, 2021 – June 30, 2024.

NGUYEN, Tam, Assistant Professor, Department of Mechanical and Mechatronics Engineering, January 1, 2021 – December 31, 2023.

PAN, Qinmin, Professor, Department of Chemical Engineering, January 1, 2022 – December 31, 2024.

RECH, Rosane, Professor, Department of Chemical Engineering, September 1, 2021 – August 31, 2024.

ROUHANI, Hossein, Assistant Professor, Department of Mechanical and Mechatronics Engineering, May 1, 2021 – April 30, 2024.

SANGARY, Nagula, Associate Professor, Department of Electrical and Computer Engineering, July 1, 2021 – June 30, 2024.

SHABAN, Kahled, Professor, Department of Electrical and Computer Engineering, June 1, 2021 – June 30, 2024.

WEI, Daniel, Associate Professor, Department of Mechanical and Mechatronics Engineering Engineering, August 1, 2021 – July 31, 2024.

B. ADMINISTRATIVE APPOINTMENTS

AUCOIN, Marc, Associate Chair, Operations, Department of Chemical Engineering, July 1, 2021 – June 30, 2023.

BAAJ, Hassan, Associate Chair for Research, Department of Civil and Environmental Engineering, July 1, 2020 – June 30, 2023.

DABBAGH, Mohamed-Yahia, Director of Academic Integrity, Department of Electrical and Computer Engineering, May 1, 2021 – April 30, 2022.

IOANNIDIS, Marios, Chair, Department of Chemical Engineering, July 1, 2021- June 30, 2025.

OWEN, William, Associate Chair, Undergraduate Studies, Department of Mechanical and Mechatronics Engineering, January 1, 2021 – December 31, 2023.

SCOTT, Andrea, K., Associate Chair, Undergraduate Studies, Department of Systems Design Engineering, September 1, 2021 – August 31, 2023.

ADMINISTRATIVE REAPPOINTMENTS

GROVE, Jason, Associate Chair, Undergraduate Studies, Department of Chemical Engineering September 1, 2021 – August 31, 2023.

Paul Fieguth, Acting Dean

A handwritten signature in black ink, appearing to read 'Paul Fieguth', written in a cursive style.

For

Mary A. Wells, Dean
Faculty of Engineering

University of Waterloo
REPORT OF THE DEAN OF ENVIRONMENT TO SENATE
September 20, 2021

FOR INFORMATION

A. APPOINTMENTS

Definite Term Appointment

NELISCHER, Kate, Lecturer, School of Planning, July 1, 2021 to June 30, 2024. [B.L.Arch. University of Guelph (2010); MA London College of Communication (2011); PhD University of Toronto (2021)] Dr. Nelischer brings a strong background in curriculum design with a critical and reflective approach to planning practice and teaching. She is able to connect design with broader planning issues, and has an ability to communicate design concepts and ideas to non-architects.

Definite Term Reappointments

ESMAIL, Shefaza, Lecturer, School of Environment, Resources and Sustainability, September 1, 2021 to August 31, 2022

MURRAY, Daniel, Lecturer, School of Environment, Enterprise and Development, July 16, 2021 to July 15, 2022.

Adjunct Appointments

Graduate Supervision and Research

PRICE, Jonathan, Professor, Department of Geography and Environmental Management, September 1, 2021 to December 31, 2024.

VERCILLO, Siera, Assistant Professor, School of Environment, Enterprise and Development, June 1, 2021 to June 30, 2024.

Graduate Supervision

CORBIN, Jeffrey, Associate Professor, School of Environment, Resources and Sustainability, June 1, 2021 to May 31, 2024.

EAGLES, Paul, Professor, School of Environment, Enterprise and Development, July 1, 2021 to June 30, 2022.

KIROL, Chris, Assistant Professor, School of Environment, Enterprise and Development, August 1, 2021 to July 30, 2024.

MITCHELL, Clare, Associate Professor, Department of Geography and Environmental Management, September 1, 2021 to December 31, 2024.

SONNEMANN, Guido, Professor, School of Environment, Enterprise and Development, June 1, 2021 to May 31, 2024.

WEEGMAN, Mitch, Associate Professor, School of Environment, Resources and Sustainability, August 1, 2021 to July 30, 2024.

Research

NOBLE, Michael-Anne, Lecturer, School of Environment, Resources and Sustainability, July 1, 2021 to June 30, 2024.

Graduate Teaching

ANDERSON, Dana, Lecturer, School of Planning, September 1, 2021 to December 31, 2021.

COMELLA, Mikaela, Lecturer, Department of Geography and Environmental Management, August 1, 2021 to December 31, 2021.

HERTEL, Sean, Lecturer, School of Planning, September 1, 2021 to December 31, 2021.

KELLY, Janya, Lecturer, Department of Geography and Environmental Management, August 1, 2021 to December 31, 2021.

Graduate and Undergraduate Teaching

LEHMAN, Robert, Lecturer, School of Planning, September 1, 2021 to December 31, 2021.

PARKIN, James, Lecturer, School of Planning, September 1, 2021 to December 31, 2021.

Undergraduate Teaching

ALTON, Christopher, Lecturer, School of Planning, June 1, 2021 to August 31, 2021.

CAMACHO, Liliana, Lecturer, Department of Geography and Environmental Management, September 1, 2021 to December 31, 2021.

STEWART, Doug, Lecturer, School of Environment, Resources and Sustainability, September 1, 2021 to December 31, 2021.

SUTTON, Owen, Lecturer, Department of Geography and Environmental Management, September 1, 2021 to December 31, 2021.

Graduate Students Appointed as Part-Time Lecturers

VAN HUIZEN, Brandon, Lecturer, Department of Geography and Environmental Management, September 1, 2021 to December 31, 2021.

Other

TURLEY-MCINTYRE, Barbara, Practitioner in Residence, School of Environment, Enterprise and Development, September 1, 2021 to August 31, 2024.

Cross Appointments

BURCH, Sarah, Associate Professor, Department of Geography and Environmental Management to School of Environment, Enterprise and Development, October 1, 2021 to December 31, 2024.

FRAYNE, Bruce, Professor, School of Environment, Enterprise and Development to Department of Geography and Environmental Management, July 1, 2021 to June 30, 2024.

WOOD, Laura, Assistant Professor, Recreation and Leisure Studies to the School of Environment, Enterprise and Development, January 1, 2020 to December 31, 2024.

B. ADMINISTRATIVE APPOINTMENTS

MCKENZIE, Ian, Director, Aviation Program (Geography and Science), July 1, 2021 to June 30, 2022.

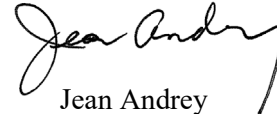
MCKENZIE, Ian, Associate Chair for Undergraduate Studies, Aviation Programs, July 1, 2021 to June 30, 2022.

O'CONNELL, Erin, Associate Chair, Undergraduate Studies, Geography and Geomatics Programs,
July 1, 2021 to June 30, 2024.

C. SABBATICAL LEAVES

Approved by the Board of Governors

Li, Jonathan, Professor, Department of Geography and Environmental Management, January 1,
2022 to June 30, 2022 at 85% salary.



Jean Andrey
Dean

University of Waterloo
REPORT OF THE DEAN OF FACULTY OF HEALTH TO SENATE
September 20, 2021

FOR INFORMATION

A. APPOINTMENTS

Change in Definite Term Appointment

BEACH, Tyson, Lecturer, Department of Kinesiology and Health Sciences, May 1, 2021 – April 30, 2023.

Research Reappointment

LAMBRAKI, Irene, Research Associate, School of Public Health Sciences, September 1, 2021 – December 31, 2021.

Adjunct appointments

Research

MAH, Tina, Research Associate Professor, Faculty of Health, July 1, 2021 – June 30, 2024.

Graduate Supervision

FENTON, Nancy, Associate Professor, School of Public Health Sciences, June 1, 2021 – April 30, 2022.

FRONGILLO, Edward, Professor, School of Public Health Sciences, July 1, 2021 – August 31, 2023.

KERWIN, Shannon, Associate Professor, Department of Recreation and Leisure Studies, July 1, 2021 – June 30, 2024.

McCARVILLE, Ronald, Professor, Department of Recreation and Leisure Studies, September 1, 2021 – August 31, 2022.

MITTELSTAEDT, Walter, Assistant Professor, School of Public Health Sciences, June 1, 2021 – December 31, 2021.

NAEEM, Farooq, Professor, School of Public Health Sciences, July 1, 2021 – April 30, 2023.

REAUME-ZIMMER, Paula, Assistant Professor, School of Public Health Sciences, June 1, 2021 – December 31, 2022.

VIDGEN, Helen, Assistant Professor, School of Public Health Sciences, July 1, 2021 – August 31, 2023.

Graduate Supervision and Research

AMODU, Oluwakemi, Assistant Professor, School of Public Health Sciences, July 1, 2021 – June 30, 2024.

GILCHRIST, Jennifer, Assistant Professor, School of Public Health Sciences, June 1, 2021 – May 31, 2023.

Change in Adjunct Appointment

Research

MIGUEL-CRUZ, Antonio, Assistant Professor, School of Public Health Sciences, Faculty of Health, June 1, 2020 – May 31, 2023.

Adjunct Re-appointments

Graduate Supervision and Research

CARSON, Jennifer, Associate Professor, School of Public Health Sciences, September 1, 2021 – August 31, 2023.

PATTE, Karen, Assistant Professor, School of Public Health Sciences, September 1, 2021 – August 31, 2023.

Cross Appointment

WALLACE, Michael, Assistant Professor, Department of Statistics and Actuarial Science to School of Public Health Sciences, July 1, 2021 – June 30, 2022.

Cross Re-appointments

GRINDROD, Kelly, Associate Professor, School of Pharmacy to School of Public Health Sciences, January 1, 2022 – December 31, 2027.

MAXWELL, Colleen, Professor, School of Pharmacy to School of Public Health Sciences, October 1, 2021 – September 30, 2026.

MINAKER, Leia, Assistant Professor, School of Planning to School of Public Health Sciences, September 1, 2021 – August 21, 2022.

NEPAL, Sanjay, Professor, Department of Geography and Environmental Management to Department of Recreation and Leisure Studies, July 1, 2021 – June 30, 2024.

Special Lecturer Appointments

BARRETT, Jeffery, Department of Kinesiology, September 1, 2021 – December 31, 2021.

DONNOVAN, Renate, Faculty of Health, September 1, 2021 – December 31, 2021.

FERRO, Annalise, School of Public Health Sciences, September 1, 2021 – December 31, 2021.

HASHEMI, Ashkan, Department of Kinesiology and Health Sciences, September 1, 2021 – December 31, 2021.

IZADI SOKHTABANDANI, Siyavash, Department of Kinesiology and Health Sciences, September 1, 2021 – December 31, 2021.

SHANBHAG, Gitanjali, Faculty of Health, September 1, 2021 - December 31, 2021.

Special Lecturer Re-appointment

FERRO, Annalise, School of Public Health Sciences, January 1, 2022 – April 30, 2022.

Postdoctoral Appointment

ACTON, Rachel, School of Public Health Sciences, September 1, 2021 – August 31, 2023.

PEREZ, Hector, School of Public Health Sciences, Faculty of Health, August 28, 2021 – August 27, 2023.

Postdoctoral Reappointment

AMELARD, Robert, Department of Kinesiology, September 1, 2021 – August 31, 2022.

BEDARD, Chloe, School of Public Health Sciences, September 1, 2021 – August 31, 2023.

BELL, Kirsten, Department of Kinesiology, July 1, 2021 – August 31, 2021.

For Approval by the Board of Governors

B. SABBATICALS

STAINES, Richard, Professor, Department of Kinesiology and Health Sciences, September 1, 2022 – August 31, 2023, one year at 100% salary.

C. RESEARCH APPOINTMENTS

DUPUIS, Sherry, University Research Chair and Professor, Department of Recreation and Leisure Studies, July 1, 2021 – August 31, 2024.

D. RESIGNATION

WILSON, Wade, Lecturer, Department of Kinesiology and Health Sciences, September 1, 2021.

E. RETIREMENTS

SMALE, Bryan, Professor, Department of Recreation and Leisure Studies, January 1, 2022.



Lili Liu, Dean, Faculty of Health

University of Waterloo
REPORT OF THE DEAN OF MATHEMATICS TO SENATE
September 20, 2021

FOR INFORMATION

A. APPOINTMENTS (for approval by the Board of Governors)

Tenured

PENG, Richard (BMath, University of Waterloo, 2009; PhD, 2013, Carnegie Mellon University), Associate Professor, David R. Cheriton School of Computer Science, January 1, 2022. Dr. Peng is currently an Assistant Professor at the Georgia Institute of Technology. His research is broadly in the design and analysis of fast algorithms for solving fundamental computational problems. Dr. Peng's line of research revolutionizes the way we think about how to design algorithms for solving combinatorial problems. This is just one line of Dr. Peng's research. His works on dynamic graph algorithms and also numerical linear algebra are as impressive. Dr. Peng has spent much time in outreach activities for high school students and undergraduate students, especially in the programming contest community. He will significantly improve the reputation of the algorithm group in the David R. Cheriton School of Computer Science.

Definite Term - Appointments

GHASWALA, Tyrone (BSc, 2010, University of Melbourne; MMath, 2012; PhD, 2017, both from the University of Waterloo), Lecturer, Office of the Dean, August 1, 2022 – July 31, 2025. Dr. Ghaswala will teach four courses per year, participate in and leadership of workshops for students, school visits, contest preparation and other duties as assigned by the CEMC Director.

GHASEMI, Maryam (BEng, 2004, AmirKabir University of Technology, MSc, 2011, University of Mazandaran; PhD, 2017, University of Guelph), Research Assistant Professor, Dept. of Applied Mathematics, September 1, 2021 – August 31, 2022. Dr. Ghasemi will continue research as well as teach two undergraduate courses.

KANJ, Olga (BBA, 2009; MBA, 2013, both from Notre Dame University; PhD, 2020, Wilfrid Laurier University), Lecturer, Office of the Dean, August 1, 2021 – August 31, 2024. Dr. Kanj's duties will include teaching six courses per year, participate in course and program development, perform student advising and other duties assigned by the Director of Math Business relating to the general operation of the Mathematics Business and Accounting Program.

MINTAH, Comfort (BSc, 2013, University of Ghana; MSc, 2015, Stellenbosch University; MSc, 2016; PhD, 2021, both from the University of Guelph), Lecturer, Office of the Dean, August 1, 2021 – July 31, 2023. Dr. Mintah's duties will include teaching four courses per year, involvement in the CEMC's wide array of outreach activities, leadership in CEMC's partnerships and outreach in Africa including frequent and extensive travel and other duties as assigned by the CEMC Director.

YADAVALLI, Anila (BS, 2012, University of California, San Diego; MS, 2016; PhD, 2019 both from North Carolina State University), Lecturer, Office of the Dean, January 1, 2022 – December 31, 2024. Dr. Yadavalli will teach four courses per year, participate in and leadership of workshops for students, school visits, contest preparation and other duties as assigned by the CEMC Director.

Definite Term - Reappointments

ALIAKBARI, Shahla, Lecturer, Dept. of Applied Mathematics, September 1, 2021 – August 31, 2023.

GESHNIZJANI, Ghazal, Research Associate Professor, Dept. of Applied Mathematics, September 1, 2021 – August 31, 2024.

Change in Appointments

AL FAISAL, Faisal, Lecturer, Office of the Dean (*ref.* Dean's Report to Senate, September 2020)

From: September 1, 2020 – August 30, 2022

To: September 1, 2020 – August 31, 2022

ALBAYRAK, Seda, Lecturer, Office of the Dean (*ref.* Dean's Report to Senate, September 2020)

From: January 1, 2021 – August 31, 2022

To: January 1, 2021 – December 31, 2022

CASTANEDA SANTOS, Diana, Lecturer, Office of the Dean (*ref.* Dean's Report to Senate, March 2020)

From: September 1, 2020 – August 30, 2022

To: August 1, 2021 – July 31, 2024

FORREST, Barbara, Lecturer, Office of the Dean (*ref.* Dean's Report to Senate, September 2020)

From: August 28, 2020 – August 26, 2022

To: August 28, 2020 – August 27, 2022

HACKMAN, Robert, Lecturer, David R. Cheriton School of Computer Science (*ref.* Dean's Report to Senate, April, 2021)

From: May 1, 2021 – April 29, 2023

To: May 1, 2021 – April 30, 2023

HOLTBY, Daniel, Lecturer, David R. Cheriton School of Computer Science (*ref.* Dean's Report to Senate, September 2020)

From: September 1, 2020 – August 30, 2022

To: September 1, 2020 – August 31, 2022

KAMAL, Zille Huma, Lecturer, David R. Cheriton School of Computer Science (*ref.* Dean's Report to Senate, April 2021)

From: September 1, 2021 – August 30, 2023

To: September 1, 2021 – August 31, 2023

KHARAL, Rosina, Lecturer, David R. Cheriton School of Computer Science (*ref.* Dean's Report to Senate, October 2020)

From: September 1, 2020 – August 30, 2022

To: September 1, 2020 – August 31, 2022

LANCTOT, Kevin, Lecturer, David R. Cheriton School of Computer Science (*ref.* Dean's Report to Senate, April 2021)

From: September 1, 2021 – August 30, 2023

To: September 1, 2021 – August 31, 2023

MORLAND, Cameron, Lecturer, David R. Cheriton School of Computer Science (*ref.* Dean's Report to Senate, April 2021)

From: September 1, 2021 – August 30, 2023

To: September 1, 2021 – August 31, 2023

WATSON, Stacey, Lecturer, David R. Cheriton School of Computer Science (*ref.* Dean's Report to Senate, October 2020)

From: September 1, 2020 – August 30, 2022

To: September 1, 2020 – August 31, 2022

XU, Meng, Assistant Professor, David R. Cheriton School of Computer Science (*ref.* Dean's Report to Senate, May 2020)

From: July 1, 2021 – June 30, 2024

To: September 1, 2021 – June 30, 2024

ZACH, Cramer, Lecturer, Office of the Dean (*ref.* Dean's Report to Senate, April 2021)

From: September 1, 2021 – August 30, 2023

To: September 1, 2021 – August 31, 2023

Visiting Appointments

ALKHATIB, Basil, Researcher, David R. Cheriton School of Computer Science, September 1, 2021 – December 31, 2021.

FINKEL, Matthew, Researcher, David R. Cheriton School of Computer Science, May 1, 2021 – April 30, 2023.

MARZOUK, Mirette, Research Associate, David R. Cheriton School of Computer Science, January 1, 2022 – December 31, 2022.

MOHAMMADI, Maryam, Researcher, Dept. of Statistics and Actuarial Science, September 1, 2021 – August 31, 2022.

SINHA, Pulkit, Research Associate, Dept. of Combinatorics and Optimization, October 1, 2021 – January 31, 2022.

ZOU, Shengbo, Research Associate, Dept. of Applied Mathematics, September 1, 2021 – August 31, 2022.

Adjunct Appointments

Instructor

DATTANI, Nikesh, Lecturer, Office of the Dean, September 1, 2021 – December 31, 2021.

MOLINO, Michelle, Lecturer, Office of the Dean, September 1, 2021 – December 31, 2021.

REID, Haley, Lecturer, Office of the Dean, September 1, 2021 – December 31, 2021.

Research

DAVIDSON, Kenneth, Professor Emeritus, Dept. of Pure Mathematics, October 1, 2021 – September 30, 2024.

Adjunct Reappointments

Instructor

De LIMA BARBOSA, Bruno, Lecturer, Office of the Dean, September 1, 2021 – December 31, 2021.

GIRARD, Mark, Lecturer, Office of the Dean, September 1, 2021 – December 31, 2021.

HARRIS, Matt, Lecturer, Office of the Dean, September 1, 2021 – December 31, 2021.

KAFER, Sean, Lecturer, Dept. of Combinatorics and Optimization, September 1, 2021 – December 31, 2021.

KOTECHA, Sachin, Lecturer, Office of the Dean, September 1, 2021 – December 31, 2021.

LaFOREST, Martin, Lecturer, Office of the Dean, September 1, 2021 – December 31, 2021.

MAHMOUD, Ali, Lecturer, Office of the Dean, September 1, 2021 – December 31, 2021.

NIJJAR, Paul, Lecturer, David R. Cheriton School of Computer Science, September 1, 2021 – December 31, 2021.

RESCH, Janelle, Lecturer, Office of the Dean, September 1, 2021 – December 31, 2021.

Research

AHMED, Rashid, Associate Professor, Dept. of Statistics and Actuarial Science, October 1, 2021 – September 30, 2024.

BENNETT, Greg, Associate Professor Emeritus, Dept. of Statistics and Actuarial Science, October 1, 2021 – September 30, 2024.

KALBFLEISCH, Jack (University of Michigan), Professor, Dept. of Statistics and Actuarial Science, October 1, 2021 – September 30, 2024.

NEWCOMBE-WELCH, Patricia, Professor Emeritus, Dept. of Statistics and Actuarial Science, October 1, 2021 – September 30, 2024.

RAO, J.N.K. (Carleton University) Professor, Dept. of Statistics and Actuarial Science, October 1, 2021 – September 30, 2024.

SONG, Peter (University of Michigan), Professor, Dept. of Statistics and Actuarial Science, October 1, 2021 – September 30, 2024.

Cross Reappointments

BEN-DAVID, Shai (Professor, David R. Cheriton School of Computer Science), in the Dept. of Statistics and Actuarial Science, December 1, 2020 – November 30, 2024.

ELIASMITH, Chris (Professor, Dept. of Philosophy and the Dept. of Systems Design Engineering), in the David R. Cheriton School of Computer Science, April 1, 2021 – June 30, 2027.

LABAHN, George, (Professor, David R. Cheriton School of Computer Science), in the Dept. of Statistics and Actuarial Science, November 1, 2020 – October 31, 2024.

POUPART, Pascal, (Professor, David R. Cheriton School of Computer Science), in the Dept. of Statistics and Actuarial Science, April 1, 2021 – March 31, 2024.

Joint Reappointments

HEUNIS, Andrew (Professor, Dept. of Electrical & Computer Engineering), in the Dept. of Statistics and Actuarial Science, March 1, 2021 – February 28, 2023.

Graduate Students appointed as Part-time Lecturers

FITZSIMMONS, Maxwell, Office of the Dean, September 1, 2021 – December 31, 2021.

LAI, Kwan Tsaan, Office of the Dean, September 1, 2021 – December 31, 2021.

LEE, Edward, David R. Cheriton School of Computer Science, September 1, 2021 – December 31, 2021.

WANG, Yuan, Office of the Dean, September 1, 2021 – December 31, 2021.

ZHANG, Mengyao, Office of the Dean, September 1, 2021 – December 31, 2021.

Postdoctoral Fellows appointed as Part-time Lecturers

ALFADEL, Mahmoud, David R. Cheriton School of Computer Science, January 1, 2021 – December 31, 2023.

HALLIFAX, Stuart, David R. Cheriton School of Computer Science, September 1, 2021 – August 31, 2023.

JIMENEZ, Leo, Dept. of Pure Mathematics, July 1, 2022 – June 30, 2023.

LI, Boyu, Dept. of Pure Mathematics, August 1, 2021 – July 31, 2022.

LI, Xin, David R. Cheriton School of Computer Science, January 10, 2022 – January 9, 2023.

MORA, Luis, Dept. of Applied Mathematics, November 1, 2021 – October 31, 2022.

Postdoctoral Fellow reappointed as part-time Lecturers

BINDEL, Nina Laura, Dept. of Combinatorics and Optimization, September 1, 2021 – August 31, 2022.

VAN DER POL, Jorn, Dept. of Combinatorics and Optimization, September 1, 2021 – August 31, 2022.

B. ADMINISTRATIVE APPOINTMENTS

ASOKAN, N., Executive Director, Cybersecurity and Privacy Institute, May 1, 2021 – April 30, 2026.

FUKASAWA, Ricardo, Associate Director of Data Science (Graduate), Office of the Dean, September 1, 2021 – June 30, 2024.

INGALLS, Brian, Associate Chair, Graduate Studies, Dept. of Applied Mathematics, July 1, 2021 – June 30, 2023.

NAGAPPAN, Mei, Associate Director, Graduate Studies, David R. Cheriton School of Computer Science, July 1, 2021 – June 30, 2023.

NEW, Stephen, Associate Chair, Undergraduate Studies, Dept. of Pure Mathematics, July 1, 2021 – June 30, 2024.

SCHEID, Alex, Director of Master of Quantitative Finance Program, Dept. of Statistics and Actuarial Science, July 1, 2021 – June 30, 2024.

TOMPKINS, Dave, Associate Director, Undergraduate Studies, David R. Cheriton School of Computer Science, September 1, 2021 – August 31, 2023.

WAN, Justin, Co-Director, Computing and Financial Management, David R. Cheriton School of Computer Science, July 1, 2021 – June 30, 2023.

WANG, Ruodo, Associate Chair, Research, Dept. of Statistics and Actuarial Science, July 1, 2021 – June 30, 2024.

WONG, Bernard, Director, Graduate Studies, David R. Cheriton School of Computer Science, July 1, 2021 – June 30, 2023.

ADMINISTRATIVE REAPPOINTMENTS

OZSU, Tamer, Director, Waterloo-Huawei Joint Innovation Lab, David R. Cheriton School of Computer Science, June 27, 2021 – June 26, 2022.

SAKHNINI, Victoria, Associate Director of Software Engineering, Office of the Dean, July 1, 2021 – June 30, 2023.

Change in Appointments

ZHU, Mu, Associate Director of Data Science (Graduate), Office of the Dean (*ref.* Dean's Report to Senate, March 2020)

From: January 1, 2020 – June 30, 2022

To: January 1, 2020 – August 31, 2021

C. RETIREMENT

DAVIDSON, Kenneth, Professor, Dept. of Pure Mathematics, effective October 1, 2021.

FERGUSON, Barry, Continuing Lecturer, Office of the Dean, effective August 1, 2021.

D. SABBATICALS (to be approved by the Board of Governors)

BERRY, Daniel, Professor, David R. Cheriton School of Computer Science, January 1, 2022 – December 31, 2022, with 100% salary.

GHOSSOUB, Mario, Assistant Professor, Dept. of Statistics and Actuarial Science, January 1, 2022 – June 30, 2022, with 100% salary. This is a special early sabbatical.

HARE, Kevin, Professor, Dept. of Pure Mathematics, January 1, 2022 – April 30, 2023, with 85% salary January 1, 2022 – December 31, 2022 and 100% salary from January 1, 2023 – April 30, 2023.

LIANG, Kun, Associate Professor, Dept. of Statistics and Actuarial Science, January 1, 2022 – December 31, 2022, with 85% salary.

WILLARD, Ross, Professor, Dept. of Pure Mathematics, January 1, 2022 – December 31, 2022, with 100% salary.

E. SPECIAL LEAVE

ABARI, Omid, Assistant Professor, David R. Cheriton School of Computer Science, July 1, 2021 – June 30, 2022. This is an unpaid leave.

HARE, Kevin, Professor, Dept. of Pure Mathematics, May 1, 2023 – August 31, 2023, with 100% salary. This is an administrative leave.



Mark Giesbrecht
Dean

**UNIVERSITY OF WATERLOO
REPORT OF THE DEAN OF SCIENCE TO SENATE
September 20, 2021**

For information:

A. APPOINTMENTS

Adjunct Appointments

Graduate Supervision

JOGLEKAR, Yogesh N., Professor, Department of Physics and Astronomy, May 1, 2021 to August 31, 2024.

Graduate Supervision and Research

GAUTHIER, Mario, (Professor Emeritus), Professor, Department of Chemistry, September 1, 2021 to August 31, 2024.

GIFFORD, Paul, Associate Professor, School of Optometry and Vision Science, July 1, 2021 to June 30, 2024.

Adjunct Reappointments

Research

JELLIE, Hugh, (Professor Emeritus), Professor, School of Optometry and Vision Science, June 1, 2021 to May 31, 2024.

Other

BRUBACHER, Lewis J., (Professor Emeritus), Professor, Department of Chemistry, September 1, 2020 to August 31, 2023.

Graduate Supervision and Research

CHEONG, Allen, Associate Professor, School of Optometry and Vision Science, July 1, 2021 to June 30, 2024.

CHOU, Ralph, (Professor Emeritus), Professor, School of Optometry and Vision Science, June 1, 2021 to May 31, 2024.

GOMIS, Jaume, Professor, Department of Physics and Astronomy, June 1, 2021 to August 31, 2026.

HESS, Robert, Professor, School of Optometry and Vision Science, June 1, 2021 to May 31, 2024.

LAM, Carly S.Y., Professor, School of Optometry and Vision Science, July 1, 2021 to June 30, 2024.

PEDDLE, Angela, Assistant Professor, School of Optometry and Vision Science, August 1, 2021 to July 31, 2024.

RAAHEMIFAR, Kaamran, Professor, School of Optometry and Vision Science, June 1, 2021 to May 31, 2024.

Cross-Appointments

LAIRD, Brian Douglas, Associate Professor, School of Public Health and Health Systems, cross appointed to Department of Biology, June 1, 2021 to May 31, 2024.

SERVOS, Mark, Professor, Department of Biology, cross appointed to Department of Earth and Environmental Sciences, July 1, 2021 to June 30, 2023.

WU, XiaoYu, Assistant Professor, Department of Mechanical and Mechatronics Engineering, cross appointed to Department of Chemistry, July 1, 2021 to August 31, 2024.

Cross-Reappointments

ABUKHDEIR, Nasser Mohieddin, Associate Professor, Department of Chemical Engineering, cross appointed to Department of Physics and Astronomy, July 1, 2021 to August 31, 2024.

LEONENKO, Zoya, Professor, Department of Physics and Astronomy, cross appointed to School of Pharmacy, May 1, 2021 to April 30, 2025.

MARTIN-MARTINEZ, Eduardo, Associate Professor, Department of Applied Mathematics, cross appointed to Department of Physics and Astronomy, May 1, 2021 to April 30, 2023.

PETERSON, Sean, Professor, Department of Mechanical and Mechatronics Engineering, cross appointed to School of Optometry and Vision Science, August 1, 2021 to July 31, 2024.

POULIN, Francis, Professor, Department of Applied Mathematics, cross appointed to Department of Physics and Astronomy, August 1, 2021 to July 31, 2024.

Changes in Appointment

STANBERRY, Andre, Clinic Director, School of Optometry and Vision Science, administrative appointment dates changed from January 1, 2020 to April 30, 2022 to January 1, 2020 to June 30, 2021.

STEELMAN, Colby, Assistant Professor, Department of Earth and Environmental Sciences, current appointment end date changed from August 30, 2021 to August 31, 2021.

STEELMAN, Colby, Assistant Professor, Department of Earth and Environmental Sciences, reappointment dates changed from August 31, 2021 to August 29, 2023 to September 1, 2021 to August 31, 2023.

WOO, Lisa, Clinical Lecturer, School of Optometry and Vision Science, appointment dates changed from September 1, 2020 to August 30, 2022 to September 1, 2020 to August 31, 2022.

Special Appointments**Undergraduate Instruction**

McKAY, Stephanie, Lecturer, Department of Biology, September 1, 2021 to December 31, 2021.

Special Reappointments**Undergraduate Instruction**

BUCKLEY, Kathleen, Lecturer, Department of Biology, September 1, 2021 to December 31, 2021.

GURSKA, Jola, Lecturer, Department of Biology, September 1, 2021 to December 31, 2021.

HRYCYSYN, Matthew, Lecturer, Department of Biology, September 1, 2021 to December 31, 2021.

LYNCH, Michael D.J., Lecturer, Department of Biology, September 1, 2021 to December 31, 2021.

PFISTERER, Steve, Lecturer, Department of Physics and Astronomy, September 1, 2021 to December 31, 2021.

SHADMEHR, Samaneh, Lecturer, Department of Physics and Astronomy, September 1, 2021 to December 31, 2021.

Staff Reappointed as Part-Time Lecturers

ASSOUD, Abdeljalil, Lecturer, Department of Chemistry, September 1, 2021 to December 31, 2021.

LAVERY, Stacey, Lecturer, Department of Chemistry, September 1, 2021 to December 31, 2021.

RACICOT, Leanne, Lecturer, Department of Chemistry, September 1, 2021 to December 31, 2021.

B. ADMINISTRATIVE APPOINTMENTS

LABRECHE, Tammy, Clinic Director, School of Optometry and Vision Science, July 1, 2021 to December 31, 2021.

TARIO, Allison, Director, Women in Leadership Program, August 1, 2021 to July 31, 2022.

ADMINISTRATIVE REAPPOINTMENTS

McKENZIE, Ian, Director, Aviation Programs (Geography and Science), July 1, 2021 to June 30, 2022.

STANBERRY, Andre, Clinic Director, School of Optometry and Vision Science, January 1, 2022 to April 30, 2022.

C. *RETIREMENTS*

GAUTHIER, Mario, Professor, Department of Chemistry, effective September 1, 2021.

D. *RESIGNATION*

PHAN, Thai, Assistant Professor, Department of Earth and Environmental Sciences, effective September 1, 2021.

FOR APPROVAL BY THE BOARD OF GOVERNORS**D. *SABBATICALS***

KENDALL, Brian, Associate Professor, Department of Earth and Environmental Sciences, January 1, 2022 to June 30, 2022, 100% salary arrangements.

MESSIER, Julie, Assistant Professor, Department of Biology, special early leave, March 1, 2022 to August 31, 2022, 100% salary arrangements.

MUSCHIK, Christine, Assistant Professor, Department of Physics and Astronomy, special early leave, January 1, 2022 to June 30, 2022, 100% salary arrangements.

PATEL, Tejal, Clinical Associate Professor, School of Pharmacy, January 1, 2022 to December 31, 2022, 100% salary arrangements.

SIMPSON, Trefford, Professor, School of Optometry and Vision Science, January 1, 2022 to December 31, 2022, 85% salary arrangements.



R.P. Lemieux
Dean

University of Waterloo
SENATE
Report to Senate
20 September 2021

FOR APPROVAL

Committee Appointments

Motion: To approve the following appointment:

- **University Committee on Student Appeals:** Sarina Nathoo (undergraduate student) as the Faculty of Health student representative, term to 30 April 2023 and Nicholas Palaschuk (graduate student) as the Faculty of Environment student representative, term to 30 April 2023.
- **Senate Executive Committee:** Zabeen Khamisa as a graduate student representative, term to 30 April 2022.

University of Waterloo
SENATE EXECUTIVE COMMITTEE
Report to Senate
20 September 2021

FOR APPROVAL

Election to Board of Governors

Motion: To approve the appointment of Catherine Dong as undergraduate student representative, term to 30 April 2022.

Rationale: Emma Schuster has stepped down from Senate and the Board of Governors and Ms Dong has expressed an interest in serving the remainder of Ms Shuster's term. At the meeting further nominations of eligible undergraduate student Senators (Robyn Clarke, Oudy Noweir, Samer Zu'Mot) will be accepted from the floor. If any other nominations are made, an electronic election will follow after the meeting.

Vivek Goel
Chair, Senate Executive Committee

University of Waterloo
SENATE
Report of the Vice-President, Academic & Provost to Senate
20 September 2021

FOR APPROVAL

Motion: That the University adopt a Fall Reading Week, extending from the Saturday before, to the Sunday after the Thanksgiving Day public holiday in October, as an ongoing part of its calendar of academic dates.

Rationale: Before 2016, the University of Waterloo did not have a pause in instruction during Fall Term to parallel Winter Term reading week. Since 2016, the University has been pilot testing two different approaches to these pauses, under the guidance of a Task Force set up for the purpose. We are currently entering into the third and final year of the second pilot test, and if it is to be implemented in time for Fall 2022 Senate needs to make a decision now. The view of the Task Force is that the evidence gathered during the Pilot Tests, especially with respect to the value students perceive the pauses to have for their well-being, make clear that the University should make some sort of pause during Fall a permanent feature of the academic year. It also judges it to be clear that a full reading week is for many practical reasons and the larger impact on perceived-well-being is clearly the better option.

James Rush
Vice-President, Academic & Provost



Historical context

The Task Force


- In 2014-2015 faculty, staff, and students formed a Task Force to examine testing a fall term break at Waterloo.

Pilot 1: Fall Break (2016-2018)

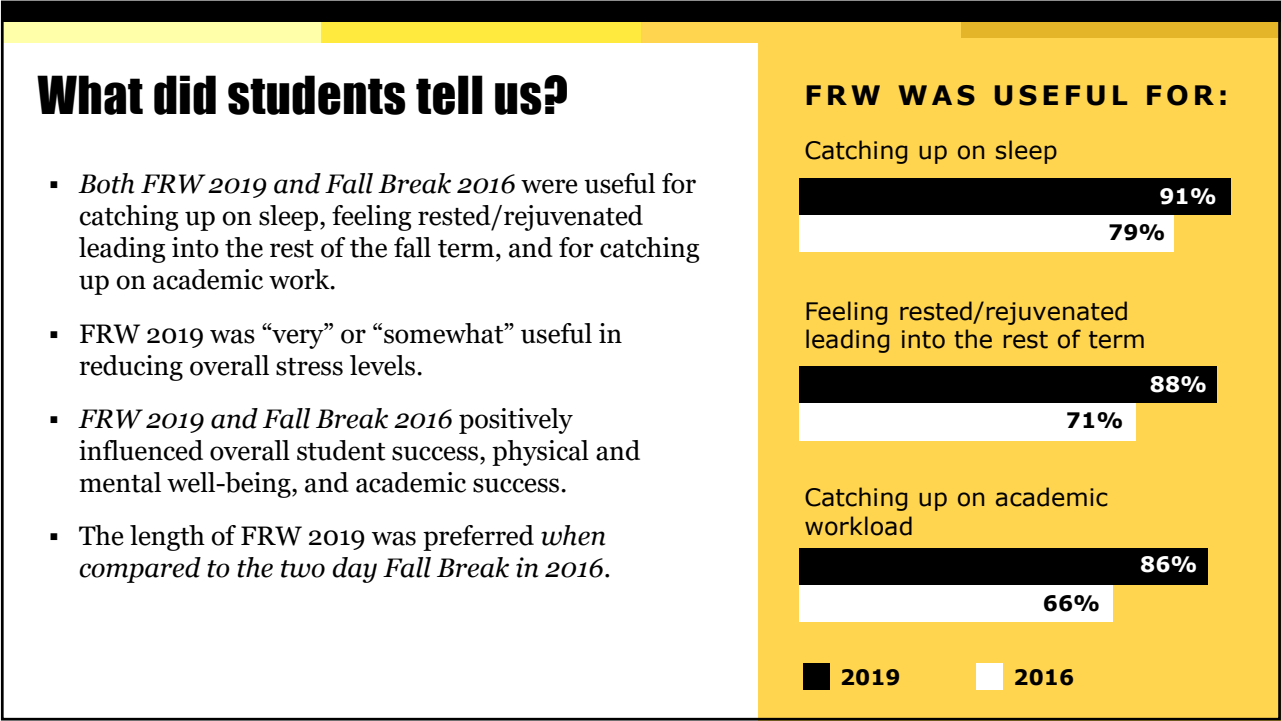
- A two-day break following Thanksgiving Monday in October.
 - Student feedback indicated preference for an extended break

Pilot 2: Fall Reading Week (2019-2021)

- From the Saturday before to the Sunday after Thanksgiving Monday (October 2019, 2020, and 2021)

Evaluation	
Pilot 1 (2016-2018)	Pilot 2 (2019-2021)
Fall Break	Fall Reading Week (FRW)
<ul style="list-style-type: none">▪ Cross-Campus Survey<ul style="list-style-type: none">▪ 7293 student responses, 94% UG and 6% Grad (Survey)▪ Student Consultation Groups<ul style="list-style-type: none">▪ 38 students, 63% UG and 37% Grad▪ Staff/faculty webform	<ul style="list-style-type: none">▪ Cross-Campus Survey<ul style="list-style-type: none">▪ 7390 student responses, 96% UG and 4 % Grad▪ Student Consultation Groups<ul style="list-style-type: none">▪ 47 students, 83% UG and 17% Grad▪ Staff/faculty webform
	

What did students tell us?	HOW WERE STUDENTS SPENDING THEIR TIME?
<ul style="list-style-type: none">▪ More students were on campus for at least 1-day during FRW 2019 <i>than Fall Break 2016</i>.▪ Students reported doing schoolwork, taking time for rest and personal wellness, and spending time with friends and family <i>during FRW 2019 and Fall Break 2016</i>.▪ More students accessed at least one campus resource during FRW 2019 than during <i>Fall Break 2016</i>.▪ TAs reported being unable to take a break from TA duties <i>during both FRW 2019 and Fall Break 2016</i>.	<div>On campus for at least one day</div> <div><div>59%</div><div>43%</div></div> <div>Accessed at least one campus resource</div> <div><div>44%</div><div>38%</div></div> <div>TAs not able to take a break</div> <div><div>58%</div><div>68%</div></div> <div><div>2019</div><div>2016</div></div>




What did students tell us?

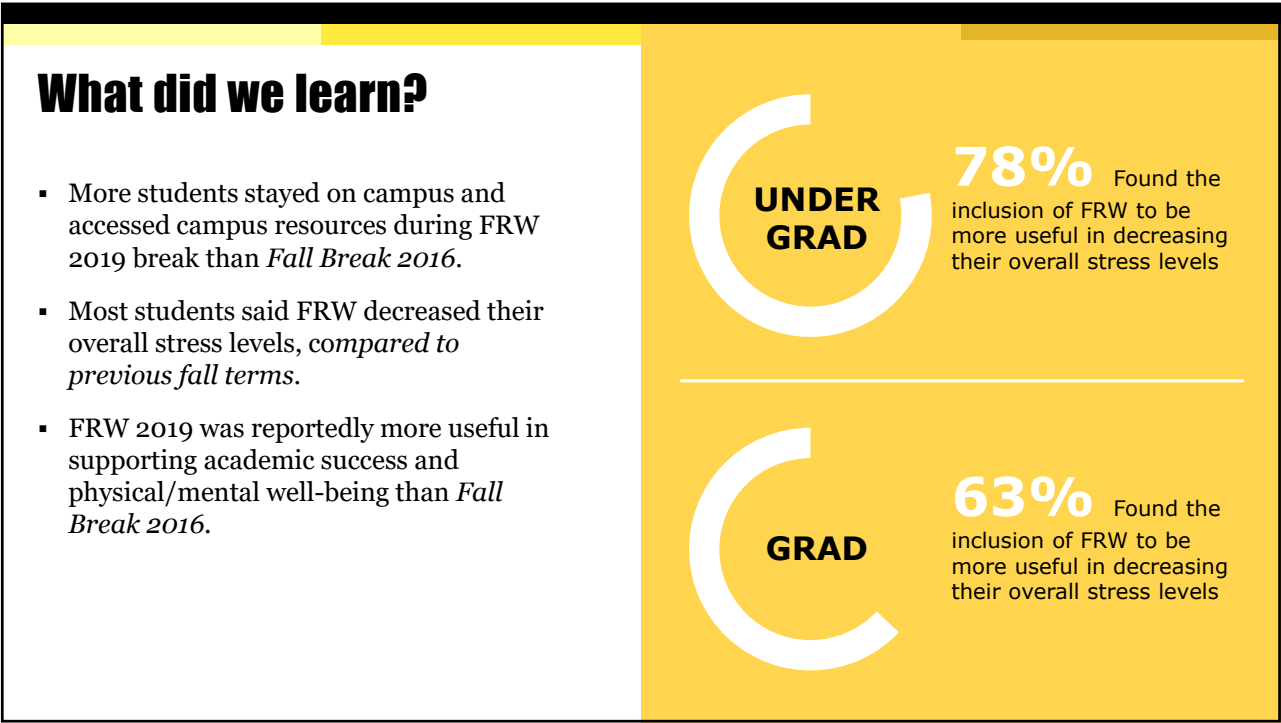
MIDTERMS

Students suggested not scheduling midterms or deadlines immediately before or after *FRW 2019* and *Fall Break 2016*.

WELLNESS

Promotion of wellness initiatives on campus, particularly during the period before FRW, was a recurring recommendation by students.





Where did we share our findings?

- FRW taskforce (December 5, 2019)
- Graduate Student Relations Committee (September 23, 2020)
- Undergraduate Student Relations Committee (September 29, 2020)
- Senate Undergraduate Council (November 10, 2020)
- Senate Graduate and Research Council (December 14, 2020)
- FRW taskforce (June 8 2021)



WINTER 2021 CROSS CAMPUS STUDENT SURVEY

Winter 2021, cross campus student survey

- More than half of responding students used their 2020 FRW to:
 - catch up on schoolwork (84%)
 - take time for rest and personal wellness (67%)
 - spend time with family (64%)
- Like the 2019 FRW, students rated their 2020 FRW as significantly ($p < .001$) more useful for reducing stress than the 2016 two-day break.
- The 2020 FRW was rated as significantly ($p < .001$) *less* useful for reducing stress compared to the 2019 FRW, likely due to COVID-19 (e.g., less than half as many students visited friends in 2020 vs. 2019).



RECOMMENDATIONS

Recommendations

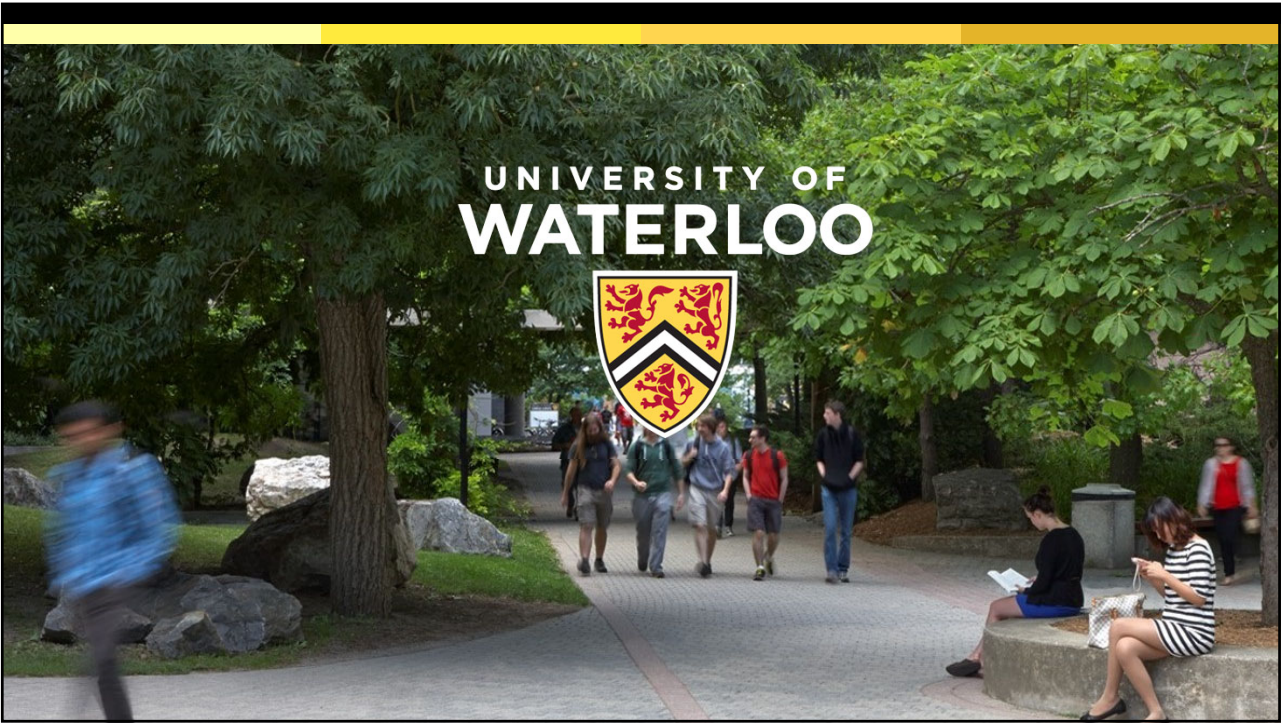
1. Retain the full FRW
2. Encourage instructors to avoid deadlines/exams immediately before/after FRW
3. Encourage students to self assess to determine what they need from their FRW
4. Further disseminate our findings to the University community
5. Use consistent language across the University around Reading Weeks
6. Ensure that TAs can benefit from FRW, within the limitations of their positions
7. Ensure cross-campus UWaterloo surveys include items about 'break-taking'



More information?

Details on both pilot projects can be found on the:
Associate Vice President, Academic website





Vice-President, Research & International Report to Senate September 2021

This report covers research activities from May - June 2021.

Awards and Distinctions

Waterloo received notice of one institutional award and six new Award winners:

- **University of Waterloo, Sustainability Breakthrough Award, Sustainable Waterloo Region - 12th Annual Recognition Event**

This award is in recognition of the University's efforts in establishing short and medium-term greenhouse gas emission reduction targets and launching [Shift: Neutral](#), a roadmap for the campus to achieve carbon neutrality by 2020.

- **President and Vice-Chancellor Vivek Goel, Fields Institute Fellow**

President Goel's recognition as a Fellow marks his outstanding contributions to public health, biostatistics and data analysis. In bestowing this award, Fields also recognizes his leadership on COVID issues through contributions to the COVID19 Immunity Task Force and as a scientific advisor for the national network CanCOVID.

Sarah Burch: Canada's Clean 50 list for Education & Thought Leadership (Environment, Geography and Environmental Management)

This award recognizes Dr. Burch as a remarkable and inspiring leader in sustainability based on her contributions over the last two years.

- **Sushanta Mitra, Foreign Fellow of the National Academy of Sciences in India** (Engineering, Mechanical and Mechatronics)

Dr. Mitra is recognized through The National Academy of Sciences, India - Foreign Fellows designation as a distinguished scientist for his scholarship and contributions to the development of science in India as evidenced by collaborative programmes with the participation of Indian scientists and scientific programs.

- **Jozef Nissimov, Norma J. Lang Fellowship - Phycological Society of America** (Science, Biology)

This award recognizes Dr. Nissimov as an outstanding early career researchers.

- **Dan Scott, Reuters Hot List - Top Climate Scientists (6th in the world)**
(Geography and Environmental Management)

The Hot List recognizes the 1,000 most influential scientists based on their publications and metrics related to their impact.

- **Mei Nagappan, 2020 Outstanding Early Career Researcher Award - CS-Can/Info-Can** (Cheriton School of Computer Science)

This award to Dr. Nagappan from CS-Can/Info-Can, the nation's professional society dedicated to representing computer science and the interests of the discipline to Canadians. recognizes outstanding accomplishments as an early career researcher.

Canada Research Chair

Waterloo secured the following Canada Research Chair in June 2021.

- **Ashley Mehlenbacher**, Tier 2 SSHRC, New, Chair in Science, Health and Technology Communication. Faculty of Arts, Department of English Language and Literature. \$100K/year over 5 years

CFI John R. Evans Leaders Fund (CFI)

Waterloo received eleven CFI JELF awards that totalled \$1.43M.

1. **Aynur Kadir** (Arts, Communication Arts): *The Collaborative Digital Heritage Studio (CoDHerS)*; \$130,000
2. **Gautam Kamath** (Math, Computer Science): *Infrastructure for scalable end-to-end differentially private machine learning*; \$80,000
3. **Jenine McCutcheon** (Science, Earth and Environmental Sciences): *Biofilms as Bioreactors Using Microbial Processes to Sequester Carbon and Remediate Metals in Mine Waste Materials*; \$100,000
4. **Ashley Mehlenbacher** (Arts, English Language and Literature): *Demos Lab*; \$30,000
5. **Lennart Nacke** (Arts, Communication Arts): *The Seamless User-Centred Conscious Experience Study System (SUCCESS)*; \$71,000
6. **Michelle Rutty** (Environment): *deTOUR Lab*; \$32,652
7. **Crystal Senko** (Science, Physics and Astronomy): *Laboratory for Trapped Ion Quantum Computing with Nonidentical Qubits*; \$202,421
8. **XiaoYu Wu** (Engineering, MME): *Understanding the Transport Phenomena and Reaction Kinetics in Mixed Ionic-Electronic Conducting (MIEC) Membranes*; \$79,900
9. **Yimin Wu** (Engineering, MME): *Understanding the Role of Defects in Artificial Leaves Using In-situ Multimodal Characterizations and Calculation*; \$105,000
10. **Kevin Musselman** (Engineering, MME): *Advanced Characterization Facility for Stable Metal Halide Perovskite Materials and Devices*; \$125,619
11. **Valerie Ward** (Engineering, Chem Eng): *Advancing the Next Generation of Biomanufacturing Systems*; \$472,000

ORF- RI Awards

Waterloo was awarded two ORF-RI awards totaling **\$230,000**

1. **Suzanne Kearns** (Science/Environment/GEM): Supporting Sustainable Aviation through Pilot Training and Visual Standard Innovations using a Flight Simulation Device; \$150,000
2. **Anh Pham** (Engineering, Civ & Env): Analysis of PFAS Occurrence, Fate, and Mitigation Strategies; \$80,000

Tri-Council Funding

CIHR Healthy Cities Research Training Platform

Dawn Parker (Environment) and **Sharon Kirkpatrick** (Health), co-applicants on the successful grant titled “*Implementing Smart Cities Interventions to Build Healthy Cities (SMART) Training Platform*,” were the only awardees of this very competitive program, with CIHR awarding only one grant nationally. The grant is being led by Dr. David Ma from the University of Guelph. It is valued at \$4.95M over six years, of which \$359,000 is slated to come to Waterloo. The University (through Environment and Health) is also contributing \$506,600 in cash and in-kind contributions.

The hallmark of the platform is experiential and convergence-by-design learning. Trainees within the program will benefit from interactions with their cohorts across the eight other participating institutions, and partner experiential learning organizations. The grant will provide Waterloo students with valuable opportunities to build their networks through participation in a cross-institution “methods sweep” webinar series, cross-institutional experiential learning design challenges, and biennial student conferences.

SSHRC Insight Development Grants

This year, Waterloo was successful in 9 of 17 (53%) applications for a total award amount of **\$541,853**. Comparatively, the national success rate was 56%. Based on success rate, Waterloo ranked 6th out of the U15 in 20/21 (compared to ranking 3rd in 19/20). Based on amount of funding awarded, Waterloo ranked 11th out of the U15 in 20/21 (and ranked 8th in 19/20). Applications submissions were down from 22 last year and 28 the year before. Specific details of these awards are under embargo.

SSHRC Connection Grants

For the February 2021 cycle, Waterloo submitted one application and this application was successful (100%). The national success rate was 80.6%.

- **Lai-Tze Fan** (Arts, English Language and Literature): Critical Making, Critical Design, Uncovering the Processes of Research-Creation Production through Open-Access Digital Publishing and Dissemination; \$41,210

SSHRC Partnership Engage Grants

In the March 2021 round, Waterloo had two applicants, and both were successful (100%). The national success rate was 85.5%. Total funding amount was **\$49,843**.

1. **Paul Parker** (Environment, Geography and Environmental Management): Comparing Electric and Gas-Powered Flight Training in Canada; \$24,965
2. **Alice Schmidt** Hanbidge (Renison University College): Leadership Training During the Pandemic and Organizational Integration; \$24,878

NSERC/SSHRC/CIHR 2021 Encouraging Vaccine Confidence in Canada Grants

Waterloo had 2 of 3 successful applications (66.7%). The national success rate was 48%. The total funding amount was **\$99,512**.

1. **Feng Chang** (Science, School of Pharmacy): Reaching Rural: Building vaccine confidence in rural Southwestern Ontario; \$49,742
2. **Kelly Grindrod** (Science, School of Pharmacy): Multimedia, Micro-learning products to promote Vaccine Confidence in target populations; \$49,770

CIHR COVID-19 Research Gaps and Priorities

Four of five applicants were successful (80% success rate; national rate currently yet unknown), for a total funding amount of \$ \$1,255,305.

1. **Marty Cooke** (Arts, Sociology and Legal Studies): What impacts COVID-19 vaccine uptake in Métis Citizens in Ontario? A population-based data linkage study; \$181,960
2. **Peter Hall** (Health, School of Public Health and Health Sciences): Mitigating COVID-19 variant spread by leveraging social psychological and neurobiological markers to optimize public health communications during the first vaccine rollout; \$496,656
3. **John Hirdes** (Health, School of Public Health and Health Systems): Identifying and Responding to Person and Facility-Level Determinants of COVID-19 Outbreaks, Mortality, and Adverse Quality of Life Outcomes in Long-term Care; \$360,286
4. **Samantha Meyer** (Health, School of Public Health and Health Systems): Identifying strategies to (re)build trust in Canadian social institutions and increase public acceptance of COVID-19 countermeasures; \$216,403

NSERC CREATE

Waterloo was unsuccessful in the recent round of evaluations. This academic year, the Office of Research, in collaboration with the Faculties, will be leading a broadscale analysis of Waterloo's performance over several years to develop strategies for future success.

International Research and Partnerships

The Office of Research's International Research and Partnerships team, working with other internal stakeholders, have demonstrated concerted efforts to strengthen research connections with strategic international partners, notably with the **University of Bordeaux, Hong Kong Polytechnic University and Technion Israel Institute of Technology**. Significant expansion of research connections with these partners corresponds to research strengths highlighted in Waterloo's Strategic Plan including quantum science, nanotechnology, connectivity and telecommunications; water, energy and climate; information technology and its impact, including intelligent systems, human-machine interfaces, cybersecurity, privacy and data science and, health technologies.

Joint research projects with these strategic partners address global issues in water resources management, alternative energy systems, biomedical sciences and aging based on developing and applying disruptive technologies of materials science, nanotechnology, quantum computing, AI and cybersecurity. Commitments of internal resources and success in securing significant external funding has facilitated long term and consistent research connections with these strategic partners. Plans for the formalization of other strategic partners are currently being developed.

Waterloo International Agreements

In May and June 2021, Waterloo International facilitated the signing of 18 agreements listed below. Where not specified, agreements apply university-wide across institutions.

1. **Chinese University of Hong Kong, Student Mobility Agreement**
2. **Ewha Womans University, South Korea, Memorandum of Understanding:** This is new agreement explores possibilities for cooperation and collaboration on academic and research activities of mutual interest and initially will support the establishment of an exchange agreement.
3. **Ewha Womans University, South Korea, Student Mobility Agreement:** This renewal applies University-wide at Waterloo and Colleges of Liberal Arts, Social Sciences, Natural Sciences, Music, Art & Design, Science & Industry Convergence, and Business Administration, as well as from Scranton College, ELTEC College of Engineering, School of Law (English-taught courses only), and the Graduate School of International Studies at Ewha Womans University.
4. **Monash University, Australia, Student Mobility Agreement**
5. **National University of Singapore, Singapore, Student Mobility Agreement:** This renewal applies university-wide at both Waterloo and NUS

with collaborations across Waterloo IQC and NUS's Centre for Quantum Technologies (CQT) of specific interest.

6. **Norwegian University of Science and Technology, Norway, Student Mobility Agreement**
7. **Seoul National University, South Korea, Student Mobility Agreement**
8. **University of Bordeaux, France, Strategic Partnership Framework**
9. **University of Hong Kong, Student Mobility Agreement:** This renewal applies university-wide at Waterloo and at all faculties at HKU except for the Faculty of Dentistry and the Li Ka Shing Faculty of Medicine.
10. **Bonn International Center for Conversion, Germany, Student Mobility Agreement:** This agreement with Wilfrid Laurier University & Balsillie School of International Affairs allows students from the University of Waterloo's Master of Arts in Global Governance (MAGG) program, and the joint-Wilfrid Laurier University/University of Waterloo PhD Global Governance (PhDGG) program to submit visiting fellow applications to Bonn International Centre for Conversion.
11. **Global Arena Research Institute (GARI), Czech Republic, Student Mobility Agreement:** This agreement, signed in conjunction with Wilfrid Laurier University and the Balsillie School of International Affairs, allows students from the University of Waterloo's Master of Arts in Global Governance (MAGG) program, Wilfrid Laurier University's Master of International Public Policy (MIPP) program, and the joint-Wilfrid Laurier University/University of Waterloo PhD Global Governance (PhDGG) program to submit internship applications to work with the GARI.
12. **Indian Institute of Technology Delhi, India, Student Mobility Agreement:** This renewal allows exchange students from the Faculty of Engineering at Waterloo to go on exchange at the Faculty of Engineering at IIT Delhi.
13. **Lund University, Sweden, Student Mobility Agreement**
14. **RWTH Aachen University, Germany, Student Mobility Agreement**
15. **United Nations Association in Canada, Student Mobility Agreement:** This agreement signed with Wilfrid Laurier University & Balsillie School of International Affairs is a renewal of an internship agreement previously signed in 2014. It allows for internships for students from Waterloo's Master of Arts in Global Governance (MAGG) program, Wilfrid Laurier University's Master of International Public Policy (MIPP) program, and the joint-Wilfrid Laurier University/University of Waterloo PhD Global Governance (PhDGG) program to do placements within agencies of the UN.
16. **Universidad Carlos III De Madrid, Spain, Student Mobility Agreement**
17. **University of Liverpool, United Kingdom, Student Mobility Agreement**
18. **University of Sheffield, United Kingdom, Student Mobility Agreement.**